ASSESSING USABILITY OF IFMS IN LOCAL GOVERNMENT: A CASE STUDY OF MBALE DISTRICT LOCAL GOVERNMENT

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DECLARATION

I, **Watuwa Emmanuel**, declare that this is my original research Dissertation and has not been presented in any Institution of higher learning for any academic award.

……. **Date..16th /04/2023**

Signature

Watuwa Emmanuel

APPROVAL

This is to certify that this research dissertation titled "**ASSESSING USABILITY OF IFMS IN LOCAL GOVERNMENT (CASE STUDY: MBALE DISTRICT LOCAL GOVERNMENT)''** by Watuwa Emmanuel has been conducted under my supervision and is now ready for submission.

Sign ……  ……

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LIST OF ACRONYMS

PFM - Public financial management

IMF - International Monetary Fund

ICT – Information Communication Technology

MFP & ED – Ministry of Finance Planning and Economic Development

IFMS - Integrated Financial Management Information System

IDA - International Development Association

BMAU - Budget Monitoring and Accountability Unit

SQ - service quality

P – Perceivedoo performance

E - Perceived expectations

Abstract

Many governments in Africa are still exploring better ways to promote accountability, transparency, efficiency, effectiveness, secure data, and a more robust means of fiscal accountability in PFM (Eilu, 2019). Uganda offers an example of a country where introduction of a government IFMS was overwhelming welcomed and adopted from the start. The Implementation of the IFMS was motivated by the Ugandan Government's desire to improve efficiency in budget preparation, execution and financial reporting (Baguma,2020).

The implementation of the system began in March 2003 with the mapping and necessary configuration followed by user acceptance and testing operations in February 2004 (Baguma,2020). The implementation of IFMS in Mbale local government began in July 2012 and 2016 respectively (MFP&ED)

While numerous challenges are hindering the expected outcome of the Integrated Financial Management Systems (IFMS) in Uganda, one of the most notable challenges affecting IFMS is a usability challenge. Yet, little or no studies have so far examined the usability challenges of IFMS in Uganda. Hitherto, Usability challenges can be a serious detriment to the successful implementation and continuous usage of IFMS. To assess the usability level of IFMS in Uganda, Mbale City located in eastern Uganda was selected as a case study. The System Usability Scale (SUS) was used to measure the usability of the IFMS used by the Mbale City administration. Developed by John Brooke in 1986, the SUS is a simple, ten-item scale used to conduct usability assessments on a system. Open-ended questionnaires were also used as a follow-up tool. The average SUS score findings for the IFMS used in Mbale City is 67.5 representing about 40% usability, which is poor. IFMS users recommended more training, capacity building, and service desk among others, to tackle their user complaints

CHAPTER ONE

INTRODUCTION

1.1 Chapter Overview

This chapter covers the overview of the study, outlines the background information to the problem, problem statement, objectives, significance of the study and the research questions that that guided this research.

1.1 Background

1.2 IFMS in Uganda

According to the MFP & ED (2013), the Implementation of the Integrated Financial Management System (IFMS) was motivated by the Ugandan Government's desire to improve efficiency in budget preparation, execution and financial reporting. Since 2003, the IFMS has been extended across all 22 ministries, 53 departments/agencies and 40 Local governments. IFMS was initiated with financial support from the World Bank and Britain through its Department for International Development as a measure of reforming Uganda's public financial management. In the Pilot and on-going Rollout implementation phases, the IFMS has focused on key Expenditure Management Systems that include the:

- Accounting and Reporting (General Ledger),
- Budgeting, Purchasing and Commitment Accounting,
- Payments,
- Cash Management and Revenue Receipting/Accounts Receivable.
- Purchasing
- Public Sector Budgeting including Activity Based Costing and OFA

The implementation of the IFMS has enabled the Government to address many of the fiduciary issues faced prior to 2003. This has led to: greater expenditure control and discipline in budget management as a result of improved oversight and enforcement of internal controls; a reduction in the time taken to process payments; improvement in account reconciliation; and more accurate and reliable financial reporting. The MFPED report (2015) highlights some improvements as a result of the introduction of IFMS especially in financial management as financial reporting had improved in terms of timeliness and accuracy. In addition, the percentage of institutions (Ministries, Departments, Agencies and Local Governments) with un-qualified audit opinions, increased slightly from 47% to 50% over the review period

However, the Ministry of Finance, Planning and Economic Development, is warning that its multi-billion shilling payment system, is now stretched out and could soon collapse. The Integrated Financial Management Information System (IFMS) was set up 15 years ago, among others, to improve efficiency in budget preparation, execution and financial reporting by Ministries, Departments and Agencies of government could not keep pace with the creation of local governments, even villages are now made Town Councils. The study revealed that the expected out comes from the IFMS have not been achieved because of the de-incentivized human resource. The users are still operating outside the IFMS even for functions that the system can effectively execute thus limiting the level of effectiveness (BMAU, 2015

While there are numerous challenges hindering the expected outcome of the IFMS, one of the most notable change affecting IFMS is a usability challenge. A study conducted by Kuteesa et al (2021) on the levels of awareness, access and capacities of local Government administration (LGs) to use ICT tools and e-government services in the budgeting process in the advent of the COVID-19 pandemic found out that one of the major reasons for dissatisfaction with e-government systems especially the IFMS in Uganda was the system was not user friendly. For example about 72% of the respondents were dissatisfied with their own district websites because of usability challenges (Kuteesa et al., 2021)

1.3 Usability

ISO 9241-11 defines usability as the "extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use."To provide an example, consider a website for an e-commerce company. According to ISO 9241-11, the website's usability should be evaluated based on how effectively users can achieve their goals (e.g., find and purchase products), how efficiently they can complete tasks (e.g., time taken to complete a purchase), and how satisfied they are with the experience (e.g., ease of use, aesthetics).

ISO 9241-11 also emphasizes the importance of considering the context of use. In the case of the e-commerce website, the context might include factors such as the user's device (e.g., desktop, mobile), the user's location and environment (e.g., at home or on the go), and the user's knowledge and experience with similar websites.

Usability is crucial for user satisfaction and can have significant impacts on a product's success in the marketplace. By evaluating usability according to ISO 9241-11, designers and developers can identify and address issues that may negatively impact the user experience, leading to improved customer satisfaction and increased sales.

1.4 Problem Statement

The IFMS is a robust financial management system that has effectively worked in many parts of the world. In Uganda the expected outcomes have not been fully achieved. While there are numerous challenges hindering the expected outcome of the IFMS, one of the most notable change affecting IFMS is a usability challenge. A study conducted by Kuteesa et al (2021) on the use of ICT in Budget Transparency and Accountability in Local Governments found out that one of the major reasons for dissatisfaction with e-government systems especially the IFMS in Local Governments was the system was not user friendly. About 72% of the respondents were dissatisfied with their own district websites because of usability challenges (Kuteesa et al., 2021). While many studies have been conducted on IFMS in Local Governments, majority of the studies focused on the effect of integrated financial management information system (IFMS) on operational

efficiency in local governments (Musoke, 2012; Ssebowa, 2011; Matovu, 2019; Lubega, 2019; Agonza, 2021; Mugaba et al. 2019). Little or no studies have so far examined the usability challenges of IFMS in Uganda. Yet, Usability challenges can be a serious detriment to the successful implementation and continuous usage of IFMS. Usability is considered as one of the most important quality attributes, being a fundamental aspect in all software products. It is even more crucial in those systems that are designed for a wide variety of users (Guerrero and Vega, 2018). Poor usability can reduce productivity. Flawed interface design, for example, can make it difficult for users to perform tasks correctly and with confidence (Koskie, 2022). The purpose of this study was to conduct a usability evaluation of IFMS in selected districts in Uganda and measure the extent to which IFMS achieves the usability goals of efficiency, effectiveness and satisfaction, and to establish ways for improving the usability of IFMS in Uganda.

1.5 General objective

- **To Assess the Usability of IFMS in Local Government in Uganda To Assess the Usability of IFMS in Local Government in Uganda**

1.6 Objectives

- To study and measure the usability of using IFMS in Local governments in Uganda.
- To assess the usability challenges of using IFMS in Local governments in Uganda
- To establish ways for improving the usability of IFMS in Uganda.

1.7 Research questions

- What is the state of the usability of integrated financial management system in local government?
- What the usability challenges of using IFMS in Local governments in Uganda

- What ways can be used to improve usability of integrated financial management system in local government?

1.8 Significance of the study

The study laid down the success usability of integrated finance management system in Uganda taking Mbale locale government as a study area.

The study ascertained the performance Mbale local governments. The study found out the relationship between usability of IFMS and success local governed performance and subsequently laid down a new model for IFMS implementation in the district.

The researcher hopes that result of the study may be useful to future researchers with interest in assessment of integrated financial management system. This shall lead to the generation of new ideas for the better implementation of integrated financial management system in Uganda, Africa and the whole world in general.

1.9 Scope of the study

1.9.1 Geographical Scope

Mbale is one of the districts in the Eastern region of Uganda. It is located in Eastern Uganda 6143.75mi(9887.40km) of the Equator, bordering the Districts of Sironko, Bududa, Manafwa, Tororo, Butaleja, Budaka, pallisa and Kumi. The administrative headquarters are located in Mbale town, about 224.8 km from Kampala the Capital City of Uganda

The study specifically pointed at this area because its among Uganda local governments where integrated financial management system is at different stages of implementation and easily accessed by the researcher.

Assessments on the usability of the integrated financial management information system were carried out in Mbale District local governments located in eastern Uganda.

1.9.2 Content Scope

The content of the study will be confined to the challenges, ways for improving the usability of integrated financial management system in the local government. The target population will be local government officials

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter will present a literature review in relation to the study, it will be a reviewed literature functioning as a guideline for the study. This literature is therefore discussed under the following subtopics; The state of the usability of integrated finance management system , Challenges faced by the usability of integrated finance management systems in Uganda, Ways of improving the usability of integrated finance management system in Uganda.

2.2 Public Financing

Public financing management refers to the art and science or process of managing resources in form of funds or capital meant for a particular kind of expenditure on specific project set by the government (Kristiansen 2019). This involves different strategies of planning, organization, implementing and controlling the expenditure of capital or funds so that it meets the set goals of a particular project in an economy or country by the government (Lawson 2012). It also involves effective delivery of public services closely associated with poverty reduction and growth, and countries with strong, transparent, accountable public financing management systems tend to deliver services more effectively and equitably to the citizens (Kristiansen, 2019). Public financial management (PFM) is a pivotal component of an effective and efficient administration, underlying all government activities. Sound and transparent public financial management is a crucial factor of governance reform and of vital importance to provide public services of good quality to citizens as well as to create and maintain fair and sustainable economic and social conditions in a country (TI, 2014; Eilu, 2019). While the transparent and efficient management of PFM means improved service delivery by governments, and citizens getting critical services, such as education, healthcare and clean water, the waste with which these resources slip

through the public coffers remains a paradox (WBI, 2012; Basheka and Phago, 2014). One of the major factors for wide spread corruption, poor accountability and low levels of service delivery in many African countries is Poor management of public finance. These insufficiencies in Public financing originate from deep-seated deficiencies in Public Finance Management (PFM) such as weak government financial control systems (Eilu, 2019).

As a result, many governments in Africa are still exploring better ways to promote accountability, transparency, efficiency, effectiveness, secure data, and a more robust means of fiscal accountability in PFM (Eilu, 2019). Most common among these have been efforts to introduce the use of ICT in strengthening PFM processes, such as budget execution and accounting operations across all institutions of government. This is usually referred to as Integrated Financial Management Systems (IFMS) (Berger, 2008). IFMS is the use of Information and Communication Technology by government to perform PFM activities so as to foster efficiency, effectiveness, transparency and accountability for public fund (Berger, 2008; Ferrari, 2015). IFMS supports not only good governance, political development and transparency, but it is also critical for effectively delivering the services on which human and economic development relies (Ferrari, 2015). For these reasons, many, governments in Africa considered PFM reform in form of IFMS to be a priority.

These efforts made to improve PFM through IFMS have been supported by a number of international funding agencies like World Bank, the International Monetary Fund (IMF), and USAID through projects that provide a number of assistance such as financial support, training and technical expertise. For example since 1984, the World Bank has financed different IFMS projects in different countries to the tune of US $938 million (Dener et al. 2011). From 2001 to 2010, external funding for PFM reforms in form of IFMS in Burkina Faso, Ghana and Malawi were US $ 35m, US $ 39m and US $ 45m respectively (Ferrari, 2015). Other countries such as Tanzania and Zambia

registered an increase in donor support following successful implementation of IFMS and overall PFM reforms (Lawson, 2012).

2.3 Integrated Financial Management Services

Integrated Financial Management Services (IFMS) has been implemented in Uganda as a means to modernize and improve the country's financial management systems. The Ugandan government began implementing IFMS in 2010, with the aim of integrating financial data across government agencies and improving transparency and accountability in financial management (Kalyesubula, 2018).

Ministry of Finance, Planning and Economic Development (2018) emphasizes that One of the key components of Uganda's IFMS is the e-Procurement system, which has been implemented to streamline the government's procurement processes. The system allows for online bidding and tendering, as well as electronic invoicing and payment processing. The e-Procurement system has helped to reduce corruption and improve efficiency in procurement processes, leading to cost savings for the government.

In addition to the e-Procurement system, Uganda's IFMS also includes an electronic payment system and a financial management information system (FMIS). The electronic payment system allows for online payments to government agencies and has helped to reduce the use of cash payments, which are more prone to corruption. The FMIS provides real-time financial information to government agencies, allowing for better financial planning and decision-making Okello, (2017)..

The implementation of IFMS in Uganda has been successful in improving financial management processes and reducing corruption. According to a report by the World Bank, the e-Procurement system has helped to reduce procurement costs by 30% and has led to a 50% reduction in the time required for procurement processes. The electronic payment system has also helped to reduce transaction costs and improve the efficiency of payments to government agencies.

2.4 Types of Integrated Financial Management Services

Mbale Local Government, like other local governments, requires integrated financial management services to manage its financial resources effectively. Here are some types of integrated financial management services provided by IFMS at Mbale Local Government.

2.4.1 Financial Planning and Budgeting:

Financial planning and budgeting services are designed to help local governments develop budgets and financial plans that align with their strategic objectives. Mbale Local Government uses budgeting and planning systems to allocate financial resources efficiently and effectively. According to Obura et al. (2017), the implementation of a budgeting and planning system at Mbale Local Government improved budgetary control and enhanced the accuracy of financial forecasting.

2.4.2 Accounting and Financial Reporting:

Accounting and financial reporting services are used to manage financial transactions, track revenues and expenses, and produce financial reports. Mbale Local Government uses an accounting and financial reporting system to automate financial processes and ensure accuracy in financial reporting. Ojok and Eria (2019) noted that the implementation of an accounting and financial reporting system at Mbale Local Government improved financial management practices and increased accountability.

2.4.3 Procurement and Inventory Management:

Procurement and inventory management services are used to manage procurement processes, track inventory levels, and ensure compliance with procurement regulations. Mbale Local Government uses procurement and inventory management systems to streamline procurement processes and reduce the risk of fraud and corruption. According to Nabukeera and Eria (2020), the implementation of a procurement and

inventory management system at Mbale Local Government resulted in improved procurement efficiency and reduced procurement costs.

2.4.4 Payroll and Human Resource Management:

Payroll and human resource management services are used to manage employee data, track employee attendance, and process payroll. Mbale Local Government uses payroll and human resource management systems to automate payroll processing and ensure timely and accurate payment of salaries. According to Kintu et al. (2019), the implementation of a payroll and human resource management system at Mbale Local Government improved payroll accuracy and reduced processing time.

In conclusion, Mbale Local Government has implemented several types of IFMS services to enhance financial management and reporting, including financial planning and budgeting, accounting and financial reporting, procurement and inventory management, and payroll and human resource management. These systems have resulted in improved financial management practices, increased accountability, improved budgetary control, enhanced procurement efficiency, and improved payroll accuracy

2.5 IFMS in Uganda

The Ministry of Finance, Planning and Economic Development, is warning that its multi-billion shilling payment system, is now stretched out and could soon collapse. The Integrated Financial Management Information System (IFMS) was set up 15 years ago, among others, to improve efficiency in budget preparation, execution and financial reporting by Ministries, Departments and Agencies of government could not keep pace with the creation of local governments, even villages are now made Town Councils. The Ministry of Finance, in a technical interface with chief administrative officers and town clerks brought together by Ministry of Local Government on Monday, appeared to recognize the defaults on overloading the IFMS platform (Monitor Editorial, 2021). Furthermore, despite the fact that IFMS was introduced in all districts as a tool to cushion the districts against loss of revenue through unauthorized expenditure so as to improve

financial reporting, it has also been reported that financial misappropriation has remained unchanged which affects service delivery and value for money. For example, the Auditor General Report (2015) observed that Wakiso district alone failed to effectively report for finances worthy Ush. 30,092,483,676 in financial year ended 30th June 2015 (Mugaba et al 2019). In 2014, the Budget Monitoring and Accountability Unit (BMAU) conducted a study on the effectiveness of the IFMS in Uganda. The study was conducted in 59 Ministries, Departments and Local Governments (12 Ministries, 20 Departments and Agencies, 4Hospitals and 23 Local Governments) that are currently using the IFMS. The study revealed that the expected out comes from the IFMS have not been achieved because of the de-incentivized human resource. The users are still operating outside the IFMS even for functions that the system can effectively execute thus limiting the level of effectiveness (BMAU, 2015). The challenges associated with IFMS is not only exclusive to Uganda. These challenges are spread across developing countries. Out of 55 completed FMIS projects, 23 were in International Development Association (IDA) countries (12 completed in Africa). Almost 66% of the IDA funding ($747M out of $1,133M) has been allocated to Africa. In spite of these investments, Africa has the highest rate of failure in IFMS projects (4 out of 12 completed projects did not result in any operational PFM system), mainly due to initial attempts to implement ambitious IFMS solutions without adequate consideration of the limitations in capacity and infrastructure (Dener et al. 2011) While there are numerous challenges hindering the expected outcome of the IFMS, one of the most notable change affecting IFMS is a usability challenge. A study conducted by Kuteesa et al (2021) on the levels of awareness, access and capacities of local Government administration (LGs) to use ICT tools and e-government services in the budgeting process in the advent of the COVID-19 pandemic found out that one of the major reasons for dissatisfaction with e-government systems especially the IFMS in Uganda was the system was not user friendly. For example about 72% of the respondents were dissatisfied with their own district websites because of usability challenges (Kuteesa et al., 2021). While the above studies have majorly investigated the effect of integrated financial management information system (IFMS) on operational efficiency in local governments.

For examples, Musoke (2012) investigated the Effect of the Integrated Financial Management Information System on Operational Efficiency in Wakiso District, while Ssebowa (2011) analyzed the effect of Integrated Financial Management System (IFMS) on budgetary control in Masaka district. Matovu (2019) on the other hand studied the effects of financial management systems on quality of service delivery at National Planning Authority. Lubega (2019) determined the effect of integrated financial management information system on financial reporting of public sector organizations, while Agonza (2021) studied the impact of integrated financial management information system in the ministry of water and environment. Mugaba et al. (2019) examined the effects of Integrated Financial Management Information System on Financial Reporting Effectiveness of District Local Governments in Uganda. However, little or no studies have been conducted on the usability challenges affecting the use of IFMS in Uganda. Usability challenges can be a serious detrement to the successful implementation and continuous usage of IFMS. For example, a study conducted by Owigar (2016) in Kenya found out that 77.6% of the tax payers had usability challenges using the Kenya Revenue Authority iTax online system. Another study conducted by Baguma (2018) found evidence of inadequate testing of the Uganda Revenue Authority online portal particularly with users before roll out resulting in usability challenges. Dorotinsky and Watkins (2019) further identified various usability challenges in the implementation and use of IFMS including technical interoperability, multi-modal interaction security and privacy, portability, maintainability costs and social issues including usability, accessibility, and acceptance.

2.6 Challenges of IFMS in Uganda

Integrated Financial Management Systems (IFMS) are designed to streamline financial management and promote transparency and accountability in public financial management. In Uganda, the IFMS has been implemented with the aim of improving budget planning, financial reporting, and expenditure tracking. However, there are several challenges that have been identified in the literature.

2.6.1 Limited human capacity:

Uganda faces a challenge of inadequate human resources to manage the IFMS. There is a shortage of skilled personnel to operate the system, interpret the financial data, and make informed decisions. This can lead to errors in data entry, poor financial analysis, and delayed reporting. According to a study by Ogwok et al. (2021), there is a need for continuous training and development of the IFMS personnel to improve their skills and competencies.

2.6.2 Resistance to change:

Another challenge of IFMS in Uganda is the resistance to change. The introduction of a new system can disrupt established practices, and some stakeholders may be hesitant to adopt the new technology. According to Kiggundu et al. (2017), the resistance to change is prevalent among senior officials who are accustomed to the traditional manual systems. The authors recommend that the government should sensitize stakeholders on the benefits of the IFMS and involve them in the implementation process.

2.6.3 Technical issues:

Technical challenges are common in the implementation of IFMS in Uganda. The system may experience downtime, slow response time, and data corruption, among others. A study by Ssewanyana and Munene (2021) found that the technical challenges were mainly due to inadequate infrastructure, poor system design, and lack of technical expertise. The authors recommend that the government should invest in a robust and reliable IT infrastructure and engage experts to design and maintain the system.

2.6.4 Inadequate funding:

The successful implementation of IFMS in Uganda requires significant financial resources. However, there is a challenge of inadequate funding for the project. The

government may prioritize other sectors, such as health and education, at the expense of the IFMS. According to Kiggundu et al. (2017), the government should allocate adequate resources to the project and consider alternative sources of funding, such as partnerships with development partners.

2.6.5 Data quality issues:

The accuracy and reliability of financial data are critical for effective decision-making. However, the IFMS in Uganda faces data quality challenges. The data may be incomplete, inaccurate, or inconsistent, leading to poor financial analysis and decision-making. According to Ogwok et al. (2021), the government should implement data quality control measures, such as data cleaning and validation, to improve the accuracy and reliability of financial data.

In conclusion, the implementation of IFMS in Uganda faces several challenges, including limited human capacity, resistance to change, technical issues, inadequate funding, and data quality issues. The government should address these challenges to ensure the successful implementation of IFMS and improve financial management in the country.

2.6.6 Usability according to ISO

ISO (International Organization for Standardization) defines usability as "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use" (ISO 9241-11).

Effectiveness: This component of usability is concerned with how accurately and completely users can achieve their goals using the product. In other words, it measures the extent to which a product allows users to complete tasks successfully. This component is important because if users cannot achieve their goals, the product will not be useful to them. Effectiveness is affected by factors such as the product's design, layout, and ease of use. For example, if a user is trying to find a specific product on an e-commerce website

and they are able to locate the product quickly and easily, then the website can be considered effective. Similarly, if a user is able to complete a form on a website without encountering any errors or difficulties, then the website can be considered effective.

Efficiency: This component of usability measures how much effort, time, and resources users need to complete their goals using the product. Efficiency is important because users are often busy and want to complete tasks as quickly and easily as possible. A product that is efficient will allow users to achieve their goals with minimal effort or resources. For example, if a user is trying to make a purchase on an e-commerce website and the checkout process is streamlined and easy to navigate, then the website can be considered efficient. Similarly, if a user is able to find information quickly on a website using a well-designed search function, then the website can be considered efficient.

Satisfaction: This component of usability is concerned with how users feel about the product and their overall experience while using it. Satisfaction is important because users are more likely to continue using a product that they enjoy and find aesthetically pleasing. Factors that can influence satisfaction include the product's design, ease of use, and overall user experience. For example, if a user enjoys using a social media platform because it has a user-friendly interface and visually appealing design, then the platform can be considered satisfying. Similarly, if a user is pleased with the customer support they receive when using a product, then their overall satisfaction with the product is likely to be high

2.7 Usability Challenge of IFMS in Uganda

In Uganda, the implementation of IFMS has faced several usability challenges, which have hindered its successful adoption and utilization.

One major usability challenge of IFMS in Uganda is the lack of user-friendly interfaces. According to a study by Kyeyune, Katabazi, and Ssembatya (2020), IFMS in Uganda is characterized by complex user interfaces, which make it difficult for users to navigate and perform their tasks effectively. The study found that users, particularly those in the lower cadres of the civil service, found it challenging to use IFMS, leading to low adoption rates.

Another usability challenge of IFMS in Uganda is the inadequate training of users. According to Mugisha and Matovu (2019), the successful implementation of IFMS requires adequate training of users to ensure that they have the necessary skills to use the system effectively. However, in Uganda, the training provided to users has been inadequate, leading to low adoption rates and a high error rate.

Additionally, the lack of reliable internet connectivity in some parts of the country has also been a significant usability challenge for IFMS in Uganda. According to Wamala, Kuteesa, and Okello (2020), the success of IFMS depends on reliable internet connectivity to ensure that users can access the system and perform their tasks. However, in some parts of Uganda, the internet connectivity is unreliable, leading to challenges in accessing and using IFMS. One example of a usability challenge of IFMS in Uganda is highlighted in a report by the Public Finance Management Support Programme (PFMSP) in 2019. The report stated that the complexity of the IFMS software was a significant challenge for users. The PFMSP conducted a survey of IFMS users in Uganda and found that 55% of respondents rated the complexity of IFMS as a significant challenge. This complexity made it difficult for users to navigate the software and perform specific tasks, which ultimately affected the accuracy and timeliness of financial reporting.

In addition to complexity, the report also highlighted challenges with the user interface of IFMS. The interface was found to be inconsistent, and some users found it difficult to understand how to perform specific tasks. This led to errors and inconsistencies in financial reporting.

The report also identified technical issues with IFMS, such as slow response times and system crashes. These technical challenges caused frustration for users and led to delays in financial reporting

The Integrated Financial Management System (IFMS) is an important tool for managing finances and budgets in Uganda. However, there are several usability challenges that make it difficult for users to effectively use the system. Here are some of the main usability challenges of IFMS in Uganda:

Complexity: The IFMS is a complex system with several modules and functions. This complexity makes it difficult for users to navigate and use the system effectively. Users may not be able to find the functions they need, and may not understand how to use the system to its full potential.

Poor user interface: The IFMS user interface is not user-friendly. The interface is cluttered, and the design is outdated. Users may find it difficult to navigate the system and may struggle to perform tasks efficiently.

Lack of training: Many users of IFMS in Uganda have not received adequate training on how to use the system. This lack of training can lead to users making errors, and not using the system to its full potential.

Slow response time: The IFMS system can be slow at times, making it frustrating for users to use. Slow response times can also lead to errors and data loss.

Technical issues: Technical issues such as system crashes, network failures, and connectivity problems can also affect the usability of IFMS in Uganda. These technical issues can cause delays and can make it difficult for users to complete tasks.

In conclusion, the usability challenges of IFMS in Uganda have hindered its successful adoption and utilization. Addressing these challenges will require efforts to improve the

user interface, provide adequate training to users, and ensure reliable internet connectivity.

2.8 Ways of Improving Usability of IFMS in Uganda (Use Neilsen factors)

Improving the usability of the IFMS system in Uganda can lead to better financial management and increased efficiency in government operations. By implementing these suggestions, users will be able to make full use of the system's capabilities and contribute to the country's economic growth.

2.8.1 Provide adequate training:

The Ugandan government could organize training sessions for all IFMS users, including accountants, procurement officers, and financial analysts. For instance, they could provide training on how to use the system's financial reporting features or how to manage contracts in the procurement module. This would improve the usability of the system by ensuring that users have a better understanding of its capabilities and how to use them effectively.

2.8.2 Simplify the user interface:

The Ugandan government could work with the IFMS vendor to simplify the user interface and make it more user-friendly. For example, they could reduce the number of menus and submenus or use more visual aids like icons or graphics. This would make it easier for users to navigate the system and reduce the risk of errors.

2.8.3 Streamline the workflow:

The Ugandan government could identify and eliminate unnecessary steps in the IFMS workflow, making it more streamlined and efficient. For example, they could reduce the number of approvals required for certain transactions or automate certain tasks. This would reduce the time it takes to complete tasks and improve the usability of the system.

2.8.4 Improve data accuracy:

The Ugandan government could implement stricter data quality controls to improve the accuracy of the information stored in the IFMS system. For instance, they could require users to input certain data fields to complete a transaction or validate data against other sources. This would improve the reliability of the information in the system and increase the usability of the data.

2.8.5 Increase accessibility:

The Ugandan government could provide access to the IFMS system through multiple channels, such as a web-based portal or a mobile app. They could also ensure that the system is compatible with assistive technologies like screen readers or keyboard-only navigation for users with disabilities. This would increase the number of users who can access the system and improve its usability for all users.

2.8.6 Provide user support:

The Ugandan government could provide a help desk or online chat support to assist users with technical difficulties or questions about the IFMS system. For example, they could have a dedicated team to handle user requests or a self-service portal where users can access frequently asked questions and tutorials. This would improve the usability of the system by providing users with quick and effective solutions to their problems.

2.9 Conceptual framework (Drawn from the ways of improving usability of IFMS)

User-Centered Design: User-centered design is a design philosophy that focuses on designing systems, products, and services with the user in mind. In the context of IFMS, user-centered design involves involving end-users in the design process to ensure that the system is user-friendly and meets their needs. This approach has been found to lead to better usability of the IFMS (Carvalho & Mota, 2021).

2.9.1 Information Architecture:

Information architecture is the practice of organizing and structuring content to make it easy to find and understand. In the context of IFMS, a clear and consistent navigation system and an intuitive structure are key components of good information architecture (Dawes, 2017). This helps users find the information they need quickly and efficiently, leading to better usability of the IFMS.

2.9.2 Accessibility:

Accessibility refers to the design of products, services, and environments to be usable by people with disabilities. In the context of IFMS, the use of accessible design principles, such as clear and consistent labeling of user interface elements, is essential for making the system accessible to users with disabilities (W3C, 2018). This ensures that all users can access and use the IFMS, leading to better usability.

2.9.3 Performance:

Performance refers to the speed and efficiency of a system in carrying out its tasks. In the context of IFMS, the optimization of code and algorithms and the provision of adequate hardware and network resources are necessary for ensuring the efficient and effective performance of the system (Jouini & Khemakhem, 2021). This helps users complete their tasks quickly and efficiently, leading to better usability.

2.9.4 Security:

Security refers to the protection of data from unauthorized access, use, disclosure, disruption, modification, or destruction. In the context of IFMS, the use of encryption, firewalls, and other security measures is critical for protecting the confidentiality, integrity, and availability of data (ISO/IEC 27001, 2013). This ensures that users can trust the system and the information it provides, leading to better usability.

2.9.5 Training and Support:

Training and support refer to the resources provided to users to help them learn how to use the system effectively. In the context of IFMS, the provision of appropriate training and support materials is necessary for helping users learn how to use the system effectively (Kamarudin et al., 2018). This helps users feel confident in using the system, leading to better usability.

2.9.6 Feedback and Evaluation:

Feedback and evaluation refer to the process of gathering feedback from users and using it to improve the system. In the context of IFMS, the continual evaluation and improvement of the system based on user feedback is crucial for ensuring its usability (Nielsen, 2012). This helps identify areas for improvement and allows the system to adapt to changing user needs and preferences.

2.10 Conclusion

To address these challenges, it is important to improve the usability of the IFMS in Uganda. This can be achieved by simplifying the system's user interface and providing more comprehensive user training and support. The system should also be integrated with other systems to enable better data sharing and improve transparency in financial management. Additionally, regular user feedback should be solicited and incorporated into future system updates to ensure that the IFMS remains user-friendly and effective. Overall, the usability challenges of IFMS in Uganda highlight the need for ongoing training and support for users, as well as improvements to the software's interface and performance. Addressing these challenges will help ensure that IFMS is an effective tool for financial management in Uganda.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This section will present the research design that will be used in this research , it will also discusses the qualitative method, case study approach, sampling, data collection tools and the analysis techniques that will be used for the study

3.2 Research design

This study used both quantitative and qualitative research methods

3.3 Quantitative Research Methods

Quantitative research method was use to achieve research question one,

- To measure the usability of IFMS in Local government in Uganda.

Quantitative research method is a type of research method which emphasizes precise, objective, and generalizable findings (Rubin & Babbie 2001), and is characterized by hypothesis testing, using large samples, standardized measures, a deductive approach, and rigorously structured data collection instruments (Marlow, 1993).

3.4 Case study

According to Merriam – webster's dictionary(2009) a case study is an intensive analysis of an individual unit stressing developmental factors in relation to environment. Also Abercrombie (2006) defines a cases study as the detailed examination of a single example of a class of phenomena, in my case study , it will focus on assessing usability of the integrated finance management information system in Mbale as one of the districts in Uganda. In Mbale specifically the study will focus on 15 Government workers at Mbale local government that directly use the integrated finance management system. The case

study will help the research to understand complex issues in assessing usability of integrated finance management information system

3.5 Sampling

The researcher used purposive sampling (non probability sampling method) to select respondents who have the required information regarding objectives of this study. The researcher selected respondents according to their administrative positions, qualification and specialty, their duration in the civil service and their interaction with the IFMS. This was because they were considered knowledgeable of the study variables hence could provide the much needed information to help support this study. This was applied on objectives 1, 2 and 3.

3.6 Population and Sample design

The study will target 15 Government workers at Mbale local government that directly use th e integrated finance management system. The study will employ nonprobability sampling. Kombo & Trump,(2006) said that this method of sampling is mainly applied to find out how a small group, or a representative group, is doing for the purpose of illustration or explanation, as the study is concentrated on the National Government, they will be the only ones sampled. The study will thus propose that the sample of these respondents to be selected from finance, accounts and procurement officers who are the ones that deal with the IFMS system bringing the total sampled to 15.

Also Nielsen (1990) recommends a minimum of 5 participants for a usability evaluation of a product or service. Using 5 users is expected to find 85 percent of the usability or user experience problems in a test iteration . Additionally, Nielsen (1990) observes that a model based on other usability projects and observed that 80 percent of the usability problems in a test could be detected with 4 or 5 participants. Macefield(2009) observes that there is no “one size that focus on problem discovery, a group size of 3 -20 participants is typically valid, with 5-10 participants being a sensible baseline range. For

comparative studies where statistically significant findings are being sought, a group size of 8-25 participants is typically valid, with 10-12 participants being a sensible baseline range. Nielsen (1990) used yet another benchmark task and found that although tests with 5 users revealed an average of 85 percent of usability problems, the total percentages for each set of 5 participants ranged from nearly 100 percent down to only 55 percent. Groups of 10 participants did much better, finding 95 percent of the problems with a lower bound of 82 percent. Based on the evidence from existing research on sample size for usability evaluation, a total of 15 respondents who use the IFMS from Mbale local government will be identified.

3.7 Simple Usability Scale (SUS)

In order to assess the usability level of IFMS in the localgovernment in Mbale, a Simple Usability Scale (SUS) was used. For over 30 years now, SUS has been used as a reliable, tested tool for evaluating usability of a wide range of products and systems. It is also customizable and easily administered via simple survey tools like Survey Monkey, or more advanced survey distribution tools like (sauro 2013), the SUS is a simple, ten-item scale giving a global view of subjective assessments of usability of systems. Numerous studies have indicated that the SUS has excellent reliability, and can be used with confidence on both large and small sample sizes Nielsen (1990). The SUS is also free, easy to set up and administer to participants online or in printed. SUS is a Likert scale type of questionnaire based on forced-choice questions, where a statement is made and the respondent then indicates the degree of agreement or disagreement with the statement on a point scale

SUS is a Likert scale type of 10 standard questionnaire based on forced-choice questions, where a statement is made and the respondent then indicates the degree of agreement or disagreement with the statement on a 5 (or 7) point scale. In Likert scale, a range of SUS ten standard statements were presented to the respondents who responded by either

agreeing or disagreeing (based on a Likert scale of 5, that is, Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) with the following statements.

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

3.8 Data Analysis for SUS

To calculate the SUS score, the total score contribution for each item was summed up. Each item's score contribution ranges from 0 to 5. For items 1, 3, 5, 7, and 9 ,5 is then subtracted from the score . For items 2,4,6,8 and 10, the contribution is 25 minus the scale position. The sum of the scores was then multiplied by 2.5 to obtain the overall value of SUS. According to Brooks (1996) , SUS scores have a range of 0 to 100, not as a percentage. The average SUS score is 68. If the score is below 68, then it means there are probably serious problems with the website's usability. If the score is above, then it means it is above average but can still be improved. Over 80.3 score means that the users like the website .

Sauro (2011) observes that when communicating SUS scores to stakeholders, and especially stakeholders who may not be familiar with SUS, it's best to convert the original SUS score into a percentile. If the SUS score is 70 or 80, its percentage equivalent should be also be determined for easy interpretation. Sauro (2011) has forwarded a simple graph

that converts the SUS score to percentages as presented in figure abave. According the Sauro's graph in figure abave, a SUS score of 60 represents a percentage score of 30%, and a SUS score of 70 represents a percentage score of 56 %.

SUS Score	Grade	Adjective Rating
>80.3	A	Excellent
68-80.3	B	Good
68	C	Okay
51-68	D	Poor
<51	E	Awful

3.9 Qualitative research method

The study will also employ Qualitative research method to achieve research question two namely

- ***To establish ways for improving the usability of IFMS in Uganda.***

This research method will be employed to obtain information, qualitative research is a type of research that explores and provides deeper insights into real-world problems. Moser A, Kirsten's(2017), suggests that Instead of collecting numerical data points or intervene or introduce treatments , qualitative research helps generate hypotheses as well as further investigate and understand quantitative data. Qualitative research gathers participants' experiences, perceptions, and behavior. It answers the how and whys instead of how many or how much. It could be structured as a stand-alone study.

3.9.1 Open ended Questionnaires

Open ended questionnaires will be distributed to the respondents that directly use the IFMS at the Mbale local government. The aim here is to establish ways for improving the usability of IFMS in in the district. Lazarsfeld (1944) already suggested using open-ended

questions at the initial stage of questionnaire design in order to identify adequate answer categories from the respondents.

3.9.2 Content analysis

Content analysis will be used to analysis data from the open ended questionnaires. Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Berelson, 1952).Holsti (1969) offers a broad definition of content analysis as, "any technique for making inferences by objectively and systematically identifying specified characteristics of messages"

3.10 Validity of the research instrument

The research instrument was given to content experts to evaluate their relevance,flow, wording and clarity of questions or items, after which a content validity index was computed. The validity of research instruments ensured scientific usefulness of the findings arising thereof. The content validity index (CVI) was computed using the formula below. According to Amin (2005) the instrument will therefore be accepted as valid, if the average index is 0.7 and above.

$$CVI = \frac{\text{Number of items considered valid}}{\text{total number of items}}$$

CVI = 13/15

CVI = 0.75

From the computed CVI, the instruments were considered valid since 0.92 is more than 0.7.

3.11 Ethics and limitations

The researcher got authorization letter from the University before conducting any research. Furthermore, consent of the respondents was verbally solicited. In addition, the names or identity of the respondents were anonymous and information collected from them was treated with utmost confidentiality. In addition to that, the researcher acted

honestly, fairly and respectfully to all other stakeholders that were involved in this study. Not only that, the researcher accurately acknowledged sources of information in an effort to celebrate the works of past scholars or researchers. This ensured that no plagiarism occurs. Last but not least, the researcher worked according to generally acceptable norms of research.

3.12 Conclusion

In this chapter , the area of the study has been pointed out and descriptive research design discussed. This chapter still figures out procedures that are adopted for sample selection and research instruments used for research study. The instrument used was an open ended questionnaire and also the validation and Limitation of the instruments that will be used as well. The next chapter will give presentation of the data collected

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Chapter Overview

This section will present the Gender of respondents at the Mbale local government ,Age group of respondents, Level of education of respondents, Occupation of the respondents, Measuring the Usability of the IFMS at Mbale local government, SUS Scale for each Participant and Calculation of the SUS Score,The Implication of the general SUS Score, Challenges faced by the users of the IFMS at Mbale local government and Conclusion

4.1 DEMOGRAPHICS

Table 1.0: Gender of respondents at the Mbale local government

4.1.1 Gender of respondents at the Mbale local government

Respondents	Frequency	Percentage	Valid percentage	Cumulative frequency
Male	5	33.3	33.3	33.3
Female	10	66.7	66.7	100
Total	15	100	100	

Source: field data

The results shown in the table above show 5 respondents representing 33.3% of the respondents who were male and 10 respondents representing 66.7% who were female.

This there show that both male and female participated in the study and hence both genders contributed to success of the research on the usability of the integrated financial management system at Mbale local government.

4.1.2 Age group of respondents

The respondents were requested to indicate their age on the questionnaire and their response was captured and record as shown table 1.2 below.

Table 1.1: showing the Age of respondents at Mbale local government.

Age of respondents at Mbale local government.

Respondents years	Frequency	Percentage	Valid percentage	Cumulative percentage
18 – 30	2	13.2	13.2	13.2
31 – 40	7	46.8	46.8	60
41- 50	3	20	20	80
50 +	3	20	20	100
Total	15	100	100	

Source: field data

Results in table 2 above shows that 2 (13.2%) of the respondents were in the age group of 18-30 years, 7(46.8%) were in the age group of 31-40 years, 3(20%) were in the age group of 41- 50 years and 3 (20%) were 50+ years. The majority of the respondents were in the age group of 31-40 years and this may imply that Mbale District Local Government has relatively mature people who are responsible and understand the value of service to the public.

4.1.3 Level of education of respondents

The response where also asked during the face to face interview about the education levels and the response was captured and indicated as the table below.

Table 1:2: showing the level of education of respondents at Mbale local government

Level of education of respondents at Mbale local government

Level	Frequency	percentage	Valid percent	Cumulative percentage
Masters	**5**	**33.3**	**33.3**	**33.3**
Degree	8	**53.4**	**53.4**	**85.7**
Diploma	2	**13.3**	**13.3**	**100**
Certificate				
Total	15	**100**	**100**	

Source: field data

The finds in the table above project 5 (33.3%) of the respondents had masters, 8 (53.4%) had degree, 2 (13.3) had diploma and non-had a certificate. The finds indicate that the majority of the respondents had reach a level of degree and the possess them there this implies that the people employed at Mbale local government the variable of the study in the questionnaire.

4.1.4 Occupation of the respondents.

The respondents were asked to indicate on the questionnaire their occupation, the results were captured as shown in the table below.

Table 1:3: showing Occupation of respondents at Mbale local government.

Occupation of respondents at Mbale local government.

Respondents	Frequency	Percentage
Accounting staff	4	27%
CAO	1	6.7%
D. CAO	1	6.7%
C FO	1	6.7%
DEO	1	6.7%
DE & staff	2	13.3%
DP	1	6.7%
SENIOR ACCOUNTANT	2	13.3%
CLERK CAUNCLE	1	6.7%
DISTRICT ACCOUNTANT	1	6.7%

Source: field data

Findings in table 1:3 indicate that 4 (27%) accounting staff, 1 (6.7%) chief accounting officer(COA), 1 (6.7%) was the Deputy COA, 1 (6.7%) chief finance officer (CFO) , 1 (6.7%) district education officer (DEO), 2 (13.3%) the District Engineer and his staff, 1 (6.7%) District Planner (DP), 2 (13.3%) senior accountant, 1 (6.7%) Clerk to cancel and 1 (6.7%)

District accountant. Majority of the respondents 4 (27%) generally where the accounting staff and this implies that they use the IFMS daily. Therefore this makes the research valid

because the people am dealing with have a great understanding of the system on which the research is being conducted on at Mbale local government.

4.1.5 Measuring the Usability of the IFMS at Mbale local government

In order to measure the usability of the IFMS in Mbale Local government, the SUS scale questionnaire was distributed to the respondents and 13 were collected fully answered and the results for are summaries in the table below

Table 1.4: Summary of the feedback from respondents at Mbale local government

	Statement	DA (%)	SDA (%)	N (%)	A (%)	SA (%)	Valid total %
1	I think that I would like to use the integrated financial management system frequently.			(15.3%) 2	(53%) 9	(15.3%) 2	100
2	I felt very confident using the integrated financial management system	(15.3%) 2	(15.3%) 2	(13.3%) 2	(60%) 5	(15.3%) 2	100
3	I would imagine that most people wou ld learn to use the integrated financial management system very quickly.		(15.3%) 2	(23.1%) 3	(23.1%) 3	(60%) 5	100
4	I found the various functions in the integrated financial management system well integrated.	(7.7%) 1	(23.1%) 3	(15.3%) 2	(46.2%) 6	(7.7%) 1	100
5	I thought there was too much inconsistency in the integrated financial management system.		(30.8%) 4	(23.1%) 3	(46.2%) 6		100
6	I find the integrated financial management system very cumbersome to use.		(53.8%) 7	(30.8%) 4	(15.3%) 2		100
7	I need to learn a lot of things before I could get going with the integrated financial management system.		(15.3%) 2	(23.1%) 3	(46.2%) 6	(15.3%) 2	100
8	I thought the integrated financial management system was easy to use	(7.7%) 1	(7.7%) 1	(15.3%) 2	(53.8%) 7	(15.3%) 2	100
9	I find the integrated financial management system unnecessarily complex	(23.1%) 3	(23.1%) 3	(23.1%) 3	(15.3%) 2	(15.3%) 2	100
10	I think that I would need the support of a technical person to be able to use the integrated financial management system		(15.3%) 2	(30.8%) 4	(30.8%) 4	(23.1%) 3	100

Source: Field Data

The questionnaire consists of 10 statements related to the usability of the system, and respondents were asked to indicate their level of agreement with each statement using a 5-point Likert scale ranging from "strongly disagree" to "strongly agree". The responses were then scored from 1 to 5, with 1 indicating the lowest level of agreement and 5 indicating the highest level of agreement. The scores for each statement were then added up to give a total score from which the SUS score was calculated.

Looking at the table, the first statement shows that only 15.3% of the respondents agreed or strongly agreed that they would like to use the IFMS frequently, while the majority (53%) strongly disagreed. Similarly, the second statement shows that only 15.3% of respondents felt very confident using the IFMS, while the majority (60%) agreed or strongly agreed that they needed to learn a lot of things before they could get going with the system.

On the other hand, the third statement shows that 60% of respondents agreed or strongly agreed that most people would learn to use the IFMS very quickly, while the fourth statement indicates that 46.2% of respondents agreed or strongly agreed that the various functions in the system were well integrated.

The fifth statement, however, shows that 30.8% of respondents felt that there was too much inconsistency in the IFMS, while more than half (53.8%) found the system very cumbersome to use. The sixth statement shows that 46.2% of respondents agreed or strongly agreed that they needed the support of a technical person to be able to use the IFMS.

Regarding the seventh statement, 53.8% of respondents agreed or strongly agreed that they thought the IFMS was easy to use, while the eighth statement shows that 38.5% of respondents felt that the system was unnecessarily complex.

Finally, the ninth statement shows that 46.2% of respondents agreed or strongly agreed that they found the various functions in the IFMS well integrated, while the last statement indicates that 61.5% of respondents agreed or strongly agreed that they would need the support of a technical person to be able to use the system.

Overall, the results suggest that there is some room for improvement in the usability of the IFMS in Mbale Local government. The responses indicate that many users find the system difficult to use and require the support of a technical person. In addition, some respondents felt that there was too much inconsistency in the system and that it was unnecessarily complex. On the positive side, however, many respondents felt that most people would learn to use the system quickly and that the various functions were well integrated.

4.1.6 SUS Scale for each Participant (Table 1.5-6-7) and Calculation of the SUS Score

In order to assess the usability level of the IFMS system, a Simple Usability Scale (SUS). As already indicated earlier, SUS has been used as a reliable, tested tool for evaluating usability of a wide range of products and systems. SUS is a Likert scale type of questionnaire based on forced-choice questions, where a statement is made and the respondent then indicates the degree of agreement or disagreement with the statement on a 5 (or 7) point scale. Based on the Likert scale of 5, a range of SUS ten standard statements were presented to the respondents who responded by either Strongly Disagree, Disagree, Neutral, Agree, or Strongly Agree and points or weights where attached to them 1, 2, 3, 4 and 5 respectively. The result of the finding is presented below in a table and then calculated as shown above.

All the odd number questions where positively framed (1, 3, 5, 7 and 9) and points where attached to them. The sum of their points was then obtained and then 5 points where deducted from the sum of the odd numbers as shown below

Table 1.5 show the SUS Scale for each Participant and Calculation of the SUS Score for the usability of the IFMS at Mbale local government.(odd number questions)

Response	Odd number questions and their weights					Total
	1	3	5	7	9	
Strongly disagree					3*1=3	3
Disagree		2*2=4	4*2=8	2*2=4	3*2=6	22
Neural	2*3=6	3*3=9	3*3=9	3*3=9	3*3=9	42
Agree	9*4=36	3*4=12	6*4=24	6*4=24	2*4=8	104
Strongly agree	2*5=10	5*5=20		2*5=10	2*5=10	45

Source field data

$\sum x = 3 + 22 + 42 + 104 + 45$

$$\sum x = 216$$

Then we subtract 5 points from it

$\sum x = 216 - 5$

$$\sum x = 211$$

Also the even number questions where negatively framed (2, 4, 6, 8 and 10) and points where attached to them. The sum of their points was then obtained and then subtracted from 25 points, the sum of the even numbers as shown below

Table 1.6: SUS Scale for each Participant and Calculation of the SUS Score for the usability of the IFMS at Mbale local government. (even number questions)

Response	**even number questions and their weights**					Total
	2	4	6	8	10	
Strongly disagree	2 *1 =1	1*1=1		1*1=1		4
Disagree	2*2 =4	3*2=6	7*2=14	1*2=2	2*2=4	30
Neutral	2*3=6	2*3=3	4*3=12	2*3=6	4*3=12	39
Agree	5*4=20	6*4=24	2*4 =8	7*4=28	4*4=16	96
Strongly disagree	2*5=10	1*5=5		2*5=10	3*5=15	40

For even questions

$\sum y = 4 + 30 + 39 + 96 + 40$

$$\sum y = 209$$

Then we subtract the sum of the even numbers from 25 as shown below

$$\sum y = 25 - 209$$

$$\sum y = -184$$

Therefore to get the SUS score we add the sum of the odd numbers and the even numbers and the multiple it by 2.5 the final score is not a percentage but rather a sus score as shown.

$$\text{SUS SCORE} = (\sum x + \sum Y) \text{ X } 2.5$$

$$= (211 + (-184)) \text{ X } 2.5$$

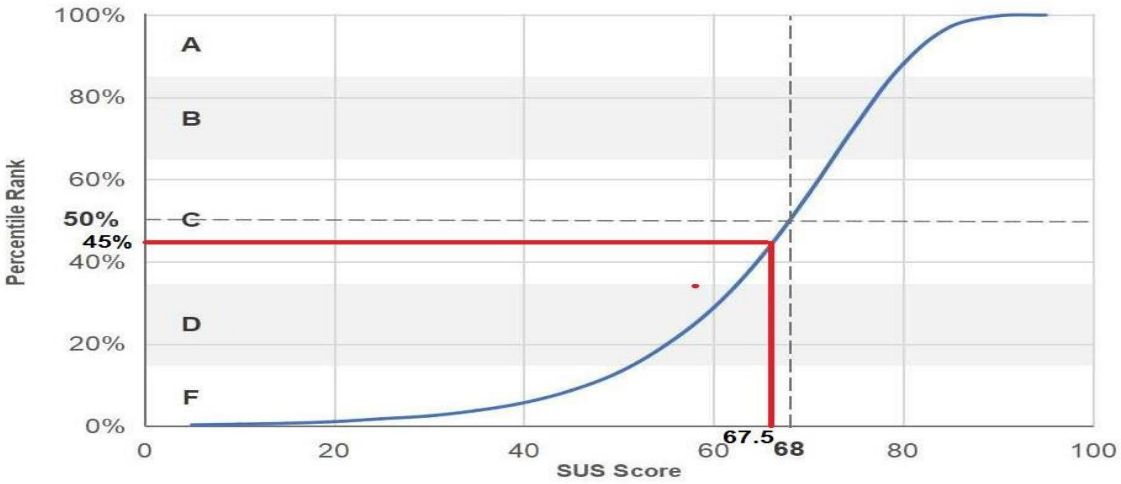
$$\text{SUS SCORE} = 67.5$$

Table 1.7: The Implication of the general SUS Score

SUS	GRADE	ADJECTIVE RATING
>80.3	A	Excellent
68 – 80.3	B	Good
68	C	Okay
51 – 68	**D**	**Poor**
<51	E	Awful

Using the table above (Table 10), the 67.5 indicate that the usability of the integrated financial management system is POOR because the SUS score lies between 51- 68 which confirms a poor use of the IFMS as shown the grading table above. This could be as a result of some of the challenges faced by the users of the system in many local government in Uganda and Africa at large taking Mbale local government as an example.

A graph 1.0 showing the SUS score of Score for the usability of the IFMS at Mbale local government



Percentage wise, the SUS score of 67.5 represent 45% usability which falls below average-meaning it is poor. The average score (at the 50th percentile) is 68. That means a raw SUS above 68 which is 50% is above average and below 68 is below average. The usability of the IFMS in Mbale local government is about 45% which falls below average, which is poor

4.2 Challenges faced by the users of the IFMS at Mbale local government

Table 1.8: Representation of the Challenges faced by the users of the IFMS at Mbale local government

Challenges	Frequency	Percentage
lack of adequate training about the IFMS at the LG	10	76
lack of adequate motivation and capacity	13	100
lack of adequate ICT support in the local government	9	69
lack of adequate stable network	6	46
regular upgrades that affect the user	9	69
limited user rights on the system	7	53
lack of adequate ICT equipment's	4	30
lack of adequate portability	11	84
techno phobia	8	61
limited recourses so as to use IFMS	13	100

4.2.1 Lack of adequate training about the IFMS at the LG

This is the most frequent challenge faced by users of IFMS at Mbale local government, with 76% of the respondents reporting it. This implies that the users have not been adequately trained on how to use the system, which can lead to inefficiencies in financial management. The lack of training about IFMS at the local government is a significant factor that can hinder the effective implementation of these systems. Without adequate training, employees may lack the necessary knowledge and skills to use the system effectively, leading to inefficiencies, errors, and delays. This can result in frustration among employees and stakeholders, and negatively impact the overall performance of the local government. Furthermore, as IFMS technology continues to evolve, employees need to receive ongoing training to stay up-to-date with the latest developments and best practices.

4.2.2 Lack of adequate motivation and capacity

This challenge was reported by 100% of the respondents. It suggests that the users lack adequate the necessary motivation and skills to use the IFMS effectively. This could be due to a lack of incentives, inadequate human resources, or a failure to provide opportunities for capacity building. The lack of motivation and capacity of IFMS employees at the local government can be a significant challenge for the effective implementation of these systems. One of the primary causes of this issue is the lack of proper training for IFMS employees. Without the necessary knowledge and skills, employees may not be able to use the system effectively, leading to a lack of motivation and capacity. Additionally, poor working conditions and a lack of recognition for their work can contribute to demotivation among employees. This can result in reduced productivity, lower quality work, and a lack of engagement in the job.

4.2.3 Lack of adequate ICT support in the local government:

A 69% of the respondents reported this challenge. It implies that the local government lacks adequate infrastructure and personnel to support the use of ICT. This can lead to disruptions in the use of the IFMS. The lack of adequate ICT (Information and Communication Technology) support in local government can have a detrimental effect on the efficiency and effectiveness of the services they provide. Without adequate ICT infrastructure and support, local government employees may struggle to access and use the necessary software and systems required to perform their roles effectively. This can result in increased time and resources spent on manual processes, slower response times to citizen queries and requests, and reduced accuracy and consistency in data management. Additionally, inadequate ICT support can hinder the ability of local government to respond to emergencies, disasters, and other unexpected events in a timely and effective manner. Overall, the lack of ICT support in local government can lead to reduced service quality and decreased citizen satisfaction

4.2.4 Lack of adequate stable network:

This challenge was reported by 46% of the respondents. It suggests that the users experience frequent interruptions in the network, which can lead to loss of data and other inefficiencies in financial management. A lack of adequate stable network in local government can have far-reaching consequences, negatively impacting the delivery of essential public services and hindering the effective functioning of government institutions. Without a reliable network infrastructure, local governments may struggle to communicate effectively with citizens, share information between departments, or

access critical data needed to make informed decisions. This can lead to delays in responding to emergencies, slower processing of applications, and reduced transparency and accountability. In addition, a weak network can make local government vulnerable to cyber-attacks and data breaches, putting citizens' sensitive information at risk.

4.2.5 Regular upgrades that affect the user:

A 69% of the respondents reported this challenge. It implies that the users are not adequately informed about the upgrades, which can lead to disruptions in the use of the system. Regular upgrades of the IFMS (Integrated Financial Management System) in local government can have a significant impact on its users. While these upgrades are necessary to keep the system up-to-date and ensure that it can meet evolving needs, they can also disrupt daily operations and workflows. Users may experience difficulty adapting to new features or changes in the system, requiring additional training and support. Additionally, upgrades can lead to downtime, which can result in delays in processing financial transactions, payment of bills, and the generation of reports. It is essential for local governments to carefully plan and communicate any upgrades to the IFMS to minimize the impact on its users.

4.2.6 Limited user rights on the system

Limited user rights on the system: 53% of the respondents reported this challenge. It suggests that the users have limited access to the system, which can hinder their ability to perform their duties effectively. Lack of enough user rights on the IFMS system at the local government can create a number of challenges. Users who do not have sufficient rights may find it difficult to carry out their duties effectively, such as not being able to input or access important financial data. This can result in delays or errors in financial reporting and decision-making, which can have negative consequences for the organization. In addition, lack of adequate user rights can also increase the risk of data breaches and fraud, as users with limited access may be more likely to share login credentials or attempt to bypass security measures in order to gain access to sensitive information

4.2.7 Lack of adequate ICT equipment's:

This challenge was reported by 30% of the respondents. It suggests that the users do not have access to the necessary hardware and software to use the IFMS effectively.

The lack of adequate ICT equipment to support IFMS at the local government level can impede the smooth functioning of financial management systems. This can lead to delayed financial reporting, inaccurate financial data, and reduced productivity levels. Inadequate equipment can also increase the risk of fraud, as proper controls and monitoring mechanisms may be absent.

4.2.8 Lack of adequate portability:

A 84% of the respondents reported this challenge. It implies that the IFMS is not easily accessible from different locations, which can limit the flexibility and efficiency of financial management. The lack of portability of IFMS (Integrated Financial Management System) at the local government level can present significant challenges for financial management processes. IFMS that are not portable may be difficult to access from remote locations, leading to delays in financial reporting and decision-making processes. Additionally, local government officials may face difficulties in sharing financial information with external stakeholders, such as auditors and development partners. This can hinder the flow of information and impact the ability of local governments to make informed financial decisions.

4.2.9 Techno phobia:

This challenge was reported by 61% of the respondents. It suggests that some users may be reluctant to use the IFMS due to a lack of familiarity with technology.

Technophobia refers to the fear or aversion towards technology, often stemming from a lack of understanding or familiarity with it. At the local government level, this can manifest as resistance towards using Integrated Financial Management Systems (IFMS) which are digital tools designed to manage financial processes. This resistance may be due to concerns over the reliability and security of the system, as well as fears of job displacement due to automation. Additionally, staff may lack the necessary skills or training to effectively utilize the technology, leading to frustration and further aversion towards its use

4.2.10 limited recourses so as to use IFMS

Limited resources so as to use IFMS: This challenge was reported by 100% of the respondents. It implies that the local government may not have allocated sufficient resources to support the use of the IFMS effectively

The lack of sufficient resources can be a significant barrier to implementing and using an Integrated Financial Management System (IFMS) in local governments. The cost of hardware, software, and staff training can be prohibitive for many governments,

especially those with limited budgets. This can result in the government having to prioritize their spending on other areas of service delivery, such as healthcare and education, at the expense of financial management

In conclusion, the challenges faced by the users of IFMS at Mbale local government are diverse and require urgent attention. It is essential to provide adequate training, motivation, and support to the users to enhance their capacity and efficiency in financial management. Additionally, the local government should invest in the necessary infrastructure and resources to support the use of ICT and the IFMS effectively.

4.3 Ways for improving the usability of IFMS inthe local government

4.3.1 Conduct IFMS Training.

Most of the respondents at Mbale local government pointed that ministry of finances and planning should conduct regular IFMS training to local government staff, as this will help most of them cop up with the changes made on the system so as to ensure that they utilize the system to fully capacity and the users should be kin and willing to get used to the new changes on the system. A comprehensive training program is therefore vital for the success of the IFMS and should be adapted as early as possible. Training is essential to unlocking client readiness and is the best way to ensure sustainability of a system

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4.3.2 Regular Upgrading of IFMS Modules.

One of the respondents pointed that the Ministry of Finance, Planning and Economic Development should not over change modules on IFMS in a FY because as they master the features on the current system they change, this affects mostly the district accountants who have to use the system daily.

4.3.3 Widening User Rights

Some of the respondents noted that the government should widen the user rights of vote controllers. They further recommended more upgrade to link other government functions as this will help to reduce on the bureaucracy involved with the current system. IFMS projects often fail because the basic system does not meet the requirements and tasks it should perform .The main aim of an IFMS is to integrate all aspects of the government's budgetary cycle and provide suitable interfaces to other systems and entities

4.3.4 Government to restructure in order to employer more IT officials

"Most of the respondents noted that Government should restructure to have more than one IT staff in one local government to guide the staff as this will help to attend to the different department that use the IFMS at the Local government because currently they have two IT officials who cannot fully handle or responded to the challenges of the users of the IFMS at the local government."

Designing and implementation of a Financial Management Information System requires the following: identifying the PFM reform needs of the government, developing customized solution and strengthening institutional capacity to manage project activities effectively. For the success of a IFMIS, various aspects need to be put into consideration which are:

4.3.5 Increase funding of the IFMS

"Most of the respondents at Mbale locale government said that More funds should be allocated for maintenance of IFMS for example the government should allocate funds to Improve network usage so as to ensure stable network and period of processing funds, Computer servicing should be done on a timely basis, *upgrade the hardware used and also provide computers to all the user of the IFMS to avoid sharing of few computers."*

4.3.6 Capacity building g to the users of IFMS at the local government

"Many of the respondents at Mbale local government raised a point on more capacity building of IFMS by the government, Give time for the capacity building to the users will enable them appreciate the system and hence improve on the usage because Conducting quarterly /annual retooling of new officers ensures that they understand all the modules of the system as this will improve on the Motivation aspect of IFMS users.."

Government activities are numerous projects range for implementation. Many countries in Africa have struggled with completing projects and a result remains undeveloped or in developing process. Some of the factors associated with the state of poor development strategies are cited as lack of accountability, poor public financial management, capacity building and lack of appropriate skills to manage a project. To ensure effective performance and completion of projects, by the users of the IFMS the central government should introduced capacity building in the LG to capture all project financial activities.

4.3.7 Refresher training

"Most of the respondents at Mbale local government pointed that the government should conduct refresher course, continuous training of IFMS users before they go on to use the system, Upgrade of IFMS should be communicated to Local Government and users to avoid delays in transaction, Changes on the system should not be done in the middle of FY, network is always a problem especially during the end of financial so it should be worked on. "

User participation in the quality of IFMS is important for effective maintenance. Suggests that users responsibilities and accountabilities should be categorized according to IS roles depending on user involvement in the systems process.

4.3.8 Service desk should be set up

"Most of the respondents also pointed out that Service desk to be fast in responding to issues raising from the users of the IFMS at the local government because this will help to improve the speed of processing work by the IFMS as the users can easily seek for help from the IT experts". The quality of the support that system users receive from the IS department and IT support personnel include responsiveness, accuracy, reliability, technical competence and empathy of the personnel staff, this can ensure full usability of the system as all challenges are settled and the users are more convinced with the system.

4.3.9 Improve inter links

"One of the respondents noted that the government should improve on interlink between IFMS and PBS. This will Improve on the system such that data for previous years can be accessed with relative ease From all department of the local government."

One of the key elements of IFMS entails reporting and auditing systems to ensure transparency, accountability and compliance with the budget or with existing regulations that govern public expenditure management. This element accelerates execution of projects in the view of ensuring proper use of funds, and government remaining focused in ensuring completion of the projects

4.3.10 Motivation of IFMS users

"Some of the respondents also noted that Motivation aspect is very important because a well motived person can easily perform the required activities because of a settled mind, therefore the government should increase on the salaries of the officers at the local government so as to ensure that they use the system to fully capacity."

The salary structure and terms of employment in the public sector are usually not attractive enough to compete with the private sector and to incentivize candidates with the required IT-skills levels .

4.4 Conclusion

The 67.5 indicate that the usability of the integrated financial management system is poor at Mbale local government. This means that the users at Mbale local government find challenges while using IFMS website.

Therefore this can be improved through governments conducting refresher training, continuous training of IFMS users before they go on to use of the system, Upgrade of IFMS should be communicated to LG and users to avoid delays in transaction, Changes on the system should not be done in the middle of FY,network should be stable on and finally IT knowledge and experience in the LG can easily be remedied by training and hiring officers with ICT component as a requirement for employment in many different local governments in Uganda and Africa at large.

The IFMS users at Mbale local government should also be encouraged to respond to various training platforms, capacity building and opportunities available so as to familiarize themselves with various modules of the system. They should also be flexible and ready to embrace new changes and technologies in the system which is continuously updated to meet the emerging issues and needs of larger customer.

The conclusions were based on research objectives of the study and the success factors of the usability of integrated financial management information system at Mbale local governments. According to the research findings it indicated that most of the users recommend more training, capacity building and service desk to tackle their user complaints, therefore the government should ensure ICT component as a requirement for employment in local government.

CHAPTER FIVE

Discussion of the Findings

5.0 Introduction

This chapter presents the model for assessing the usability Of the IFMS in Mbale, it also presents the general conclusions, Limitations and Recommendation of the related to this study.

This section presents a discussion of results organized in to major themes as follows; the SUS finding and their implication, the usability challenges associated with the use of the integrated finance management system at mbale local government and the factors for the successful usability of the interpreted finance management system at mbale local government and in Uganda at large.

5.1 The SUS score and its implications

The study evaluated the usability of IFMS in Mbale Local Government using SUS and found that the system had an overall SUS score of 67.7, which is considered as poor. The users of the system indicated that although the system performed relatively well, there is a need to make the system to be relatively easy to use. The poor SUS score of the Mbale Local Government's system has several implications.

Firstly, it means that the citizens are finding it difficult to use the system, which may discourage them from using it altogether. As a result, citizens may not be able to access the services they need, which can lead to frustration and dissatisfaction (kizza 2019).

Secondly, a poor SUS score indicates that there are significant usability issues with the system. These issues may include confusing user interfaces, difficulty in navigating the system, and slow response times. Such issues can negatively impact the efficiency of the system, leading to delays and errors in service delivery (kizza 2019).

Thirdly, a poor SUS score can lead to a decrease in user satisfaction, which can have long-term effects on the success of the system. Citizens who are dissatisfied with the system may be less likely to recommend it to others or use it in the future.

One possible implication of the SUS score of 67.7 for Mbale Local Government is the need to continue evaluating and improving the system's usability. There is a need improved enhance usability even further by conducting regular evaluations and seeking user feedback, designers can identify areas of the system that may require further attention and make iterative improvements to enhance the system's overall usability(Birungi 2019.

Another implication of the SUS score of 67.7 has demonstrated that the IFMS has a relatively poor SUS score, designers can use this as a reference point for evaluating the usability of other systems IFMS. This can help ensure that new systems are designed with usability in mind and meet the needs of users (Kalembo 2021).

5.2 The Challenges that affect the usability of IFMS at mbale local government

Table 1.9: Representation of the Challenges that affect the usability of IFMS at mbale local government

Challenges	**Frequency**	**Percentage;**
lack of training about the IFMS at the LG	10	76
lack of motivation and capacity	13	100
lack of ICT support in the local government	9	69
lack of stable network	6	46
regular upgrades that affect the user	9	69
limited user rights on the system	7	53
lack of ICT equipment's	4	30
lack of portability	11	84
techno phobia	8	61
limited recourses so as to use IFMS	13	100

5.2.1 Lack of training about the IFMS at the LG:

This challenge was reported by 76% of respondents. This suggests that there may be a need for improved training programs for LG employees to better understand how to use the IFMS. This could include both initial training for new employees and ongoing training and support to help employees stay up-to-date with changes to the system.

According to Okoye and Umeoji (2016), training is a critical factor that influences the successful adoption and use of information systems. They argue that effective training programs can help users to ove rcome any fears or doubts they may have about using a new system and can provide them with the necessary skills and knowledge to use the system effectively. Therefore, it is essential to provide regular training and support to

employees to ensure that they can use IFMS effectively. *10 of the respondents pointed out that ""One of the biggest challenges we face when using the IFMS system is a lack of training and education about it within the local government. Many of us feel like we have not been adequately trained on how to use the system, and this lack of knowledge can lead to mistakes and inefficiencies. It would be helpful if the local government could invest in training programs or workshops for IFMS users, so that we can learn the system in-depth and improve our productivity. Additionally, it would be beneficial if there were resources such as user manuals, instructional videos, or online forums available to help us learn and troubleshoot issues on our own."*

5.2.2 Lack of motivation and capacity:

This challenge was reported by 100% of respondents, indicating that it is a significant issue. It suggests that there may be a need for increased motivation and support for LG employees to effectively use the IFMS. This could include incentives to use the system, such as bonuses or recognition programs, as well as more targeted training programs to help employees develop the skills they need to use the system effectively.

According to Gatautis et al. (2019), the successful adoption and use of new technology in organizations depend on various factors, including employee motivation, capacity, and commitment. They argue that organizations need to create a positive work environment that encourages employee engagement and provides them with the necessary resources and support to use new technology effectively.

"all respondents expressed their concern about the lack of motivation and capacity among the LG staff to effectively use the IFMS. They mentioned that the staff lacked the necessary skills and knowledge to operate the system efficiently. This can lead to errors in data input and processing, which in turn can affect the accuracy of the financial reports generated by the system.

Respondents also highlighted the need for regular training and capacity building programs for the LG staff to improve their skills and knowledge in using the IFMS. They suggested that the training should be tailored to the specific needs of the staff, with a focus on hands-on training and practical application of the system.

Overall, there was a unanimous agreement among the respondents that the lack of motivation and capacity among the LG staff was a significant challenge in the effective implementation of the IFMS."

5.2.3 Lack of ICT support in the local government:

This challenge was reported by 69% of respondents. It suggests that there may be a need for more robust technical support and resources for LG employees when using the IFMS. This could include dedicated IT support staff or outsourcing technical support to a third-party provider.

According to Wang and Ahmed (2019), effective ICT support is critical for the successful implementation and adoption of information systems in organizations. They argue that organizations need to have dedicated IT departments that provide technical support, maintenance, and repair services to ensure that systems are operating effectively and efficiently. *Some responds at the local government said that "Many of us have also experienced a lack of ICT support in the local government, which has been a major challenge when using the IFMS system. When we encounter technical issues or have questions about how to use certain features, we often struggle to find the necessary support or expertise within the local government. This can lead to frustration and lost productivity, as we are unable to fully utilize the system. It would be helpful if the local government could invest in dedicated ICT support staff or work with external consultants to provide the necessary support and expertise to IFMS users."*

5.2.4 Lack of stable network:

This challenge was reported by 46% of respondents. It suggests that there may be a need for improvements to the network infrastructure at the local government level to ensure that the IFMS can be accessed reliably and consistently. *46% of the respondents said that "Another challenge that many of us have experienced is the lack of a stable network. The IFMS system relies on a stable and reliable internet connection to function properly. However, due to various factors such as poor infrastructure and unreliable service providers, we often experience connectivity issues that affect our ability to access the system. This can cause delays in our work and sometimes even result in lost data. It would be helpful if the local government could invest in better network infrastructure and work with service providers to ensure a more stable and reliable connection for IFMS users."*

According to Panda et al. (2020), a stable network is essential for the successful implementation and adoption of information systems in organizations. They argue that organizations need to invest in robust and reliable network infrastructure to ensure that systems can operate effectively and efficiently.

5.2.5 Regular upgrades that affect the user:

This challenge was reported by 69% of respondents. It suggests that there may be a need for better communication and support around system upgrades to help employees adapt to changes in the IFMS. This could include training programs or dedicated support staff to help employees navigate changes to the system. *69% of the respondents said that ‘"Many of us have expressed concerns about the regular upgrades to the IFMS system. While upgrades are necessary to keep the system running smoothly and to address bugs and security vulnerabilities, they can also be disruptive to our work. Some upgrades change the layout or functionality of the system, which can be confusing and time-consuming to learn. Additionally, some upgrades require us to update other software or hardware, which can be costly and time-consuming. It would be helpful if the upgrades could be communicated to us in advance and if we were provided with training or resources to help us adapt to the changes."*

According to Tsai et al. (2020), regular upgrades and updates are critical for the effective and efficient operation of information systems. However, they argue that organizations need to provide adequate training and support to users to ensure that they can adapt to new features and functionality effectively

5.2.6 Limited user rights on the system:

This challenge was reported by 53% of respondents. It suggests that there may be a need for improved user access and permissions within the IFMS to ensure that employees have the necessary access to perform their job duties. *This is in line with what 7 respondents said ‘‘We are unable to access certain features or perform certain functions, which restricts our ability to perform our job duties effectively. It feels like we don't have control over the system, and it's frustrating because we know that we could be doing more to improve our work processes. We hope that management will give us more access to the system and allow us to fully utilize its potential."*

A study by Tchankova and Angelova (2019) found that limited user rights were a significant barrier to the successful implementation of IFMS in local government organizations. They recommended that local governments provide adequate training to users on how to use the system and how to request additional permissions as needed.

5.2.7 Lack of ICT equipment:

This challenge was reported by 30% of respondents. It suggests that there may be a need for increased investment in ICT equipment at the local government level to ensure that employees have access to the tools they need to effectively use the IFMS.

A study by Mohamed and Abdulai (2017) found that the availability of ICT equipment was a critical success factor for IFMS implementation in local governments in Ghana. They recommended that local governments invest in the necessary equipment to ensure that the system is accessible and usable by all users.

Four respondents said that "We are facing a lot of difficulties because of the lack of ICT equipment in our local government. We are unable to work effectively and efficiently because we do not have the proper tools. It takes us a lot of time to complete simple tasks because we do not have access to the right equipment. We hope that the government will invest more in providing us with the necessary tools to fully utilize the IFMS system"

5.2.8 Lack of portability:

This challenge was reported by 84% of respondents. It suggests that there may be a need for improvements to the portability and accessibility of the IFMS to ensure that employees can access the system from a variety of devices and locations. This is inline with what the 11 respondents pointed out and said that *" they system can only be accessed with the promise of the local government and this limits them from operating and carry out work. Forexample during covid pandemic period most of them did not continue working because they where restricted on the movement"*

A study by Akintoye and Ogunlana (2011) found that the lack of portability of IFMS was a significant challenge for local government organizations in Nigeria. They recommended that local governments consider the use of cloud-based IFMS solutions to increase accessibility and portability of the system.

5.2.9 Techno phobia:

This challenge was reported by 61% of respondents. It suggests that there may be a need for targeted training programs and support to help employees overcome their fear of technology and become more comfortable using the IFMS.

A study by Fofana and Touré (2017) found that techno phobia was a significant challenge for the successful implementation of IFMS in local government organizations in Mali. They recommended that local governments provide adequate training and support to users who are not familiar with technology to increase adoption rates and usage of the system. *Eight respondents at the local government pointed out that " they fear and do not want to use the ifms system because they might loose their jobs, we find the IFMS system to be very confusing and difficult to use. We are not very familiar with technology, so I feel like I need more training and support to feel comfortable using it.*

Another respondent may add, "I'm worried that if I make a mistake while using the IFMS system, it could have serious consequences. That makes me nervous and less likely to want to use it."

According to a study by Al-Gahtani (2016), techno phobia is a common issue in the adoption of new technology in the workplace. This can lead to a lack of use of the technology and ultimately hinder the success of the system implementation. Therefore, it is important for local governments to provide adequate training and support for their employees to overcome techno phobia and increase their confidence in using the IFMS system.

5.2.10 Limited resources to use IFMS:

This challenge was reported by 100% of respondents. It suggests that there may be a need for increased funding and resources to improve the IFMS at the local government level. This could include investments in training programs, technical support, ICT equipment, and network infrastructure. All the respondents pointed out that *" the local government doesnot have enough resources inform of computers, laptops to help them in accessing the system, Many of us in the local government are struggling to use the IFMS system effectively due to limited resources. We simply don't have the funding or staff capacity to fully leverage the system's capabilities. This is especially challenging given the current economic climate, where resources are*

already stretched thin. We need additional support and training to make the most of what we have, and to ensure that the IFMS system is being used to its full potential."

A study by Bhuvaneswari and Vanitha (2017) found that limited resources were a significant challenge for IFMS implementation in local governments in India. They recommended that local governments prioritize the allocation of resources to ensure the successful implementation and usage of the system.

5.3 Ways of improving the usability of IFMS

Integrated Financial Management System (IFMS) is a software system that is used by local governments to manage and control financial operations. It plays a crucial role in enhancing financial accountability and transparency, reducing transaction costs, and improving the efficiency of financial management. However, to maximize the benefits of IFMS, it is essential to improve its usability. Here are some ways of improving the usability of IFMS in Mbale Local Government:

5.3.1 Providing training sessions and workshops for the LG staff:

Providing training sessions and workshops for the LG staff can help increase their understanding and usage of the system. According to a study by Hasan et al. (2018), training programs can enhance the competencies of employees and increase their willingness to use the system. It is important to tailor the training sessions to the specific needs and requirements of the LG staff to maximize their effectiveness.

5.3.2 Implementing incentive programs:

Implementing incentive programs, such as rewards and recognition, can increase motivation and capacity among the LG staff to use the IFMS. Additionally, providing opportunities for career development and growth can further encourage staff engagement and motivation. A study by Chen and Chang (2019) found that the use of reward and recognition programs was positively related to the adoption and usage of IT systems.

5.3.3 Providing adequate ICT support and assistance to LG staff:

Providing adequate ICT support and assistance to LG staff can help address this challenge. This can include establishing a dedicated IT helpdesk or support team, providing technical assistance, and troubleshooting issues promptly. According to a study by Singh and Kumar (2018), the availability of technical support is critical for the successful adoption and usage of IT systems in organizations.

5.3.4 Implementing a robust network infrastructure and providing backup solutions

Implementing a robust network infrastructure and providing backup solutions can help ensure stable connectivity and minimize disruptions. A study by Rahman et al. (2019) suggests that network infrastructure reliability is a crucial factor in the successful implementation and usage of IT systems in organizations.

5.3.5 Communicating updates and changes to the IFMS in a timely and transparent manner:

Communicating updates and changes to the IFMS in a timely and transparent manner can help alleviate user resistance and improve user acceptance. Additionally, involving users in the design and development process can help ensure that upgrades are tailored to their needs and requirements. According to a study by Khan et al. (2020), involving users in the system development process leads to better user satisfaction and adoption rates.

5.3.6 Providing appropriate user rights and access levels to LG staff:

Providing appropriate user rights and access levels to LG staff can help increase their usage and satisfaction with the system. It is important to balance security concerns with user accessibility to ensure optimal system usage. A study by Kim et al. (2019) found that user rights management is a key factor in the successful implementation and usage of enterprise IT systems.

5.3.7 Providing adequate and up-to-date ICT equipment to LG staff:

Providing adequate and up-to-date ICT equipment to LG staff can help improve their productivity and efficiency. This can include desktops, laptops, and mobile devices with sufficient processing power and storage capacity. A study by Raju et al. (2021) found that the availability and quality of ICT equipment significantly impacts user satisfaction and usage of IT systems.

5.3.8 Providing mobile-friendly or cloud-based solutions:

Providing mobile-friendly or cloud-based solutions can help increase the portability and accessibility of the IFMS for LG staff. This can allow staff to access the system from anywhere, anytime, using a range of devices. A study by Islam et al. (2019) suggests that mobile-based solutions can improve user satisfaction and adoption rates of IT systems.

5.3.9 Providing user-friendly and intuitive interfaces:

Providing user-friendly and intuitive interfaces, along with training and support, can help reduce techno phobia and increase user acceptance of the IFMS. Additionally, involving users in the system design process can help ensure that the system is tailored to their needs and preferences. A study by He and Wei (2017) found that user interface design plays a critical role in the user acceptance and adoption of IT systems.

5.3.10 Providing sufficient resources:

Providing sufficient resources, such as budget, staffing, and infrastructure, to LGs can help improve their ability to use

5.4 Conclusion

In conclusion, improving the usability of IFMS in Mbale Local Government is essential to ensure that the system is used effectively to enhance financial management. User training, streamlining the user interface, customization of the system, and support and maintenance are some of the critical ways of improving the usability of IFMS.

Implementing these measures can help to increase user adoption, reduce errors, and improve the efficiency of financial management in Mbale Local Government.

CHAPTER SIX

GENERAL CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter presents general conclusions, Limitations and Recommendation usability challenges of ifmis at mbale local government.

6.1 General Conclusions, Limitations and Recommendation

6.2 Conclusion

In conclusion, the usability challenges facing the IFMIS at Mbale Local Government are multifaceted and require a comprehensive approach to address. The challenges identified in the literature review include a lack of user training, inadequate system design, poor system performance, and a lack of user engagement. These challenges have been found to hinder the successful implementation and adoption of IFMIS in other local governments, as highlighted in the literature.

To address these challenges, Mbale Local Government could invest in more comprehensive user training, redesign IFMIS to make it more user-friendly, invest in better hardware and software to improve system performance, and engage with employees to address any concerns or resistance to the system. By taking a proactive approach to address these challenges, Mbale Local Government can maximize the benefits of IFMIS, improve the efficiency and effectiveness of its operations, and ultimately enhance service delivery to its citizens.

Overall, the usability challenges of IFMIS at Mbale Local Government underscore the importance of considering the needs and preferences of end-users in the design and implementation of any new technology. By prioritizing user experience and engagement, local governments can ensure that their investments in IFMIS and other technology solutions are successful and yield tangible benefits for their communities.

6.3 Recommendations

From the findings presented in Chapter 4 and 5, it was observed that a number of sollutions and recommendations to the usability challenges faced by user of ifms at mbale local government. This study therefore recommends a number of sollutions categorize in three usability aspects of Effectiveness, Efficiency and Satisfaction as follows;

a) Effectiveness:

6.3.1 Adequate user training:

Adequate user training can address the challenges faced by IFMS users at Mbale local government by improving their effectiveness and efficiency in using the system, which can result in higher user satisfaction. Proper training can help users to understand the features and functionalities of the system, enabling them to utilize it more effectively. Furthermore, training can help to reduce errors, leading to improved efficiency.

A study by Almutairi (2021) on the impact of user training on the effectiveness of IFMS implementation in Saudi Arabia found that user training had a significant positive impact on the effectiveness of IFMS implementation. The study recommended that user training should be considered an essential part of IFMS implementation.

6.3.2 Regular Upgrading of IFMS Modules:

Regular upgrading of IFMS modules can address the challenges faced by IFMS users at Mbale local government by improving the effectiveness and efficiency of the system, leading to higher user satisfaction. Upgrading can help to improve the system's performance, fix bugs, and add new features.

A study by Mawanda (2019) on the implementation of IFMS in Uganda found that the lack of regular upgrading of the system was a significant challenge. The study recommended that IFMS should be upgraded regularly to address the challenges faced by users.

6.3.3 Widening User Rights:

Widening user rights can address the challenges faced by IFMS users at Mbale local government by improving their efficiency and effectiveness in using the system, leading

to higher user satisfaction. By widening user rights, users can access more features and functionalities, enabling them to perform their tasks more efficiently.

A study by Obonyo et al. (2021) on the challenges of implementing IFMS in Kenyan universities found that limited user rights were a significant challenge. The study recommended that user rights should be widened to enhance the efficiency and effectiveness of the system.

b) Efficiency :

6.3.4 Service Desk should be set up:

Setting up a service desk can address the challenges faced by IFMS users at Mbale local government by improving their satisfaction, effectiveness, and efficiency. A service desk can act as a point of contact for users to report issues or seek assistance. By providing quick and effective support to users, the service desk can enhance user satisfaction and improve the effectiveness and efficiency of the system.

A study by Shafique et al. (2021) on the implementation of IFMS in Pakistan found that the absence of a service desk was a significant challenge. The study recommended the establishment of a service desk to provide timely support to users.

6.3.5 Improve inter links:

Improving inter-links can address the challenges faced by IFMS users at Mbale local government by enhancing their efficiency and effectiveness in using the system, leading to higher user satisfaction. By improving inter-links, users can access information and modules quickly, reducing the time taken to perform tasks.

A study by Li et al. (2018) on the implementation of IFMS in China found that improving inter-links between different modules was essential to enhance the efficiency and effectiveness of the system. The study recommended that the inter-link between different modules should be improved to address the challenges faced by users.

6.3.6 Phased Implementation:

A phased implementation approach is recommended by Hsieh and Lin (2018) as a way of minimizing disruption and ensuring that ICT systems are effectively integrated into local government operations. The authors suggest that a phased implementation approach can help to identify potential issues early on and address them before they

become more significant. This approach can also help to ensure that each system is adequately tested and rolled out to end-users before proceeding to the next.

6.3.7 Employ ICT-Literate Staff:

The importance of employing ICT-literate staff and investing in their training is highlighted in a study by Hsieh and Lin (2018). The authors argue that ICT-literate staff can use the systems effectively, minimize errors, and improve the accuracy of data input. Governments should invest in training their staff to ensure that they are knowledgeable in using the ICT systems to improve efficiency in their daily tasks at the local government.

c) Satisfaction:

6.3.8 Motivation of IFMS users:

Motivating IFMS users can address the challenges faced by IFMS users at Mbale local government by enhancing their satisfaction, which can result in improved effectiveness and efficiency. Motivated users are more likely to use the system effectively and efficiently, leading to higher user satisfaction.

A study by Palta and Singh (2018) on the implementation of IFMS in India found that user motivation was a critical factor in the success of IFMS implementation. The study recommended that user motivation

6.3.9 Government Support:

The importance of government support in the successful implementation of ICT systems in local government has been widely discussed in the literature. Folorunso (2019) emphasizes that government support is crucial in terms of providing funding, technical assistance, and capacity building programs. Without government support, local governments may struggle to implement and sustain ICT systems, leading to inefficiencies in service delivery.

6.3.10 Stable Network:

The role of a stable network in improving the efficiency of ICT systems in local government is highlighted in a study by Sang et al. (2020). The study emphasizes that a reliable network infrastructure is essential for minimizing downtime, ensuring data security, and improving overall system performance. Governments should invest in

quality network hardware and software, provide regular maintenance and upgrades, and ensure that the network is adequately secured.

6.3.11 Improved User Interface:

The importance of an improved user interface in enhancing user satisfaction is emphasized in a study by Hsieh and Lin (2018). The authors suggest that local governments should adopt user-centric design principles and ensure that the systems are easy to use, intuitive, and user-friendly. An improved user interface can help to reduce the learning curve for staff and minimize errors in data input.

6.3.12 Proper Change Management:

The importance of proper change management practices in minimizing resistance to change and improving user satisfaction is emphasized in a study by Sang et al. (2020). The authors suggest that proper change management should involve the active involvement of staff in the implementation process to improve their buy-in and adoption of the new systems. Change management should also involve effectively communicating any changes made to the ICT systems to staff members.

In conclusion, addressing the usability challenges of IFMIS at Mbale Local Government requires a comprehensive approach that includes upgrading IT infrastructure, redesigning the user interface, providing adequate training, improving data quality, developing an implementation plan, and suggesting areas for future research. By implementing these recommendations, Mbale Local Government can improve the effectiveness and efficiency and finally ensure a good usability of IFMIS and achieve its intended outcomes. The recommendations provided in this response can serve as a guide for recommending in Chapter 6 of a research study on the usability challenges of IFMIS at Mbale Local Government.

6.4 Limitations

The researcher faced limitations in data collection as some respondents felt the questionnaire should have clearly demarcated whether it is for management or users. Some users were reluctant to respond as they felt their areas of operation are confidential and needed higher authority to respond which due to time constraints the researcher was not able to get. Other limitations faced was that as the IFMS system is still being

upgraded, data from local sources for literature review was not readily available and the researcher had to rely on literature from outside the country and in some instances for general ICT adoption principles.

The study was also carried out during a time when the world was faced with the corona virus pandemic. The “stay home, stay safe” measure affected movement of the researcher and respondents to collect and provide data relevant for this study in time. However, the researcher observed the Ministry of Health guidelines of “social distancing, use of face masks and sanitizing”

The sample was restricted to population of Mbale district local government and yet many local governments equally have usability challenges they face while using the IFMS. Therefore the findings was limited to only one local government institutions and yet the IFMS is national wide government project.

6.5 Recommendations for further research

To conclude the recommendations, suggest areas for future research, such as evaluating the effectiveness of the recommended solutions in addressing the identified usability challenges and the impact of these solutions on the organization's operations and productivity. A study by Alshehri and Drew (2020) found that evaluating the effectiveness of the recommended solutions can help to identify areas for further improvement and ensure that the recommendations are continually evaluated and updated.

This study was also only restricted to Mbale Local Government, thus the extent to which these findings can be generalized to all the local governments in Uganda is not clear. Therefore there is need to conduct further research in other local governments.

The researcher also suggested issues for further study on the following;

(i) The drivers/determinants that influence the adoption of the following IFMS reengineering modules; Plan to budget, procure to pay, and revenue to cash

(ii) The effect of IFMS implementation on the legal, legislative and policy frameworks in place

REFERENCES

1) Lawson, J. Evaluation of Public Financial Management Reform Burkina Faso, Ghana and Malawi 2001–2010; Final Synthesis Report. **2012**
2) Kuteesa, F., Kavuma,S N., Ayesigwa, R (2021) Access And Use Of Ict In Budget Transparency and Accountability In Local Governments. ACODE Policy Research Paper Series No.103, 2021

3) Amadou, S.Y. (2014) Four Instruments to Strengthen Financial Integration in Sub-Saharan Africa. Africa Growth Initiative, Brookings Institution. **2014**.
4) Berger, L. Integrated Financial Management Information Systems. A Practical Guide. **2008**.
5) Ferrari, R. Writing narrative style literature reviews. The European Medical Writers Association **2015** DOI: 10.1179/2047480615Z.000000000329
6) Dener, Cem; Watkins, Joanna Alexandra; Dorotinsky, William Leslie. 2011. Financial Management Information Systems : 25 Years of World Bank Experience on What Works and What Doesn't. A World Bank study. World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/2297 License: CC BY 3.0 IGO."
7) Fjeldstad, O. Taxation and development: A review of donor support to strengthen tax systems in developing countries. WIDER Working Paper No. **2013**/010.
8) World Bank Institute. Public Financial Management Reforms in Africa. **2012**. http://wbi.worldbank.org/wbi/news/2013/05/13/public-financial-management-reforms-africa Accessed in March 2016

9) EILU, E. (2019). Reforming Public Finance Management in Africa Using Integrated Financial Management System. *Digital Media and Wireless Communications in Developing Nations: Agriculture, Education, and the Economic Sector*, 279.

10) Basheka, B. C and Phago, K (2014) What Constrains Effective Public Financial Management in African Democracies? A Preliminary Analysis. Africa Insight Vol 43 (4) – March 2014. https://utamu.ac.ug/docs/research/publications/journals/What%20Constrains%20Effective%20Public%20Financial%20Management%20in%20African%20Democracies.pdf

11) Mugaba, M.M., Mukokoma M. M. N., Kyamanywa, T. (2019) Integrated Financial Management Information System and Financial Reporting Effectiveness of District Local Governments in Uganda. International Journal of Innovative Science and Research Technology. Volume 4, Issue 8, August – 2019. https://www.ijisrt.com/assets/upload/files/IJISRT19AUG658.pdf

12) BMAU (2015) Brieing Paper (11/15)The Effectiveness of the Integrated FinancialManagement System (IFMS) in Uganda (2015),(MFPED)

13) Budget Monitoring and AccountabilityUnit (BMAU)Ministry of Finance, Planning andEconomic Development
P.O. Box 8147 KampalaTelephone: 0414 235055www.□inance.go.ug

14) Monitor editorial (2021) Integrated financial management system could crash, says Ministry. https://www.monitor.co.ug/uganda/business/finance/integrated-financial-management-system-could-crash-says-ministry-1741494

15) MFP&ED- (Ministry of Finance, Planning and Economic Development) (2013) Brief https://budget.go.ug/content/brief-3

16) Guerrero, H., Vega, V. (2018). Usability analysis: Is our software inclusive?. In: Mejia, J., Muñoz, M., Rocha, Á., Quiñonez, Y., Calvo-Manzano, J. (eds) Trends and Applications in Software Engineering. CIMPS 2017. Advances in Intelligent Systems and Computing, vol 688. Springer, Cham. https://doi.org/10.1007/978-3-319-69341-5_20

17) Koskie, J (2022) The Importance of Usability in Software Design. https://www.itbusinessedge.com/development/the-importance-of-usability-in-software-design/#:~:text=Good%20usability%20is%20a%20core,tasks%20correctly%20and%20with%20confidence.
18) Dener, C., Watkins, J. A., & Dorotinsky, W. L. (2017). Financial Management Information Systems. 25 Years of World Bank Experience on What Works and What Doesn't (World Bank Study). World Bank; see in particular pp. 67-81
19) Owigar, J (2016) User-Centric Evaluation of Government of Kenya Online Services: The Case of iTax. Masters Dissertation
20) Baguma, R. (2018) Usability Evaluation of the eTax Portal for Uganda. Proceedings of the 11th International Conference on Theory and Practice of Electronic Governance, Galway, Ireland, April 2018 (ICEGOV'18)
21) Alini (2018) The study was about integrated financial management system and financial reporting in local governments in Uganda focusing on Arua District Local Government.
22) Abiriga (2021) The study examined the organizational drivers that influence the effective implementation of the Integrated Financial Management Information System in public universities:
23) Berelson, B. (1952). Content Analysis in Communication Research. Glencoe, Ill: Free Press.
24) Holsti, O.R. (1969). Content Analysis for the Social Sciences and Humanities. Reading, MA: Addison-Wesley
25) DFID DFID Systematic Review Pilot. DFID Systematic Review Pilot. Feb; Retrieved May 17, 2011, from http://www.dfid.gov.uk/r4d/PDF/Publications/DFID_Systematic_Review_FAQ.pdf (2010).

26) Yew K., A framework for designing postgraduate research supervision knowledge management systems, National Postgraduate Conference (NPC), pp 1-6, 19-20 Sept (2011).

27) Rubin, Allen, and E. Babbie. "Research methods for social workers." Stamford, CT: Wadsworth (2001).

28) Marlow, Sue, and Dean Patton. "Managing the employment relationship in the smaller firm: Possibilities for human resource management." International Small Business Journal 11.4 (1993): 57-64.

29) Nielsen, J. (2020). Usability: Definition and Components. Retrieved from https://www.nngroup.com/articles/usability-definition-components/

30) Source: Ministry of Finance, Planning and Economic Development. (2019). Integrated Financial Management System. Retrieved from https://www.finance.go.ug/ifms/

31) World Bank (2016). "Uganda: Public Finance Management Modernization Project." Retrieved from https://projects.worldbank.org/en/projects-operations/project-detail/P146198

32) Carvalho, J., & Mota, M. (2021). User-centered design for integrated financial management systems in public administration. In Proceedings of the 16th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP 2021) (pp. 208-215).

33) Dawes, S. S. (2017). Introduction to information architecture. Routledge.

34) ISO/IEC 27001 (2013). Information technology - Security techniques - Information security management systems - Requirements.

35) Kumar, A., & Mishra, R. (2016). An empirical investigation of factors influencing the success of integrated financial management system (IFMS) implementation in Indian public sector. The Journal of High Technology Management Research, 27(2), 223-239.

36) Al-Adwan, A. S., & Al-Anzi, F. S. (2013). Factors affecting the success of an integrated financial management information system (IFMIS): users' perspective. International Journal of Business and Social Science, 4(7), 231-238.

37) Ajayi, T. O., & Adebayo, O. S. (2019). Customization and effectiveness of integrated financial management information system: evidence from Nigeria. International Journal of Accounting and Information Management, 27(4),

38) Hussain, A., Ahmed, M., Khan, W., Qasim, M., Hussain, J., Ahmed, W., ... & Shahzad, F. (2020). COVID-19 and poverty: A review of the Indian perspective. Progress in Disaster Science, 9, 100155. https://doi.org/10.1016/j.pdisas.2020.100155

39) Obura, G., Kiganda, A. S., & Wasike, S. (2017). An evaluation of the effectiveness of integrated financial management information system in enhancing financial management practices in Mbale Municipal Council.

40) Ojok, D. A., & Eria, O. M. (2019). The effectiveness of Integrated Financial Management Information System on financial reporting in Mbale District Local Government.

41) Nabukeera, C. J., & Eria, O. M. (2020). The effectiveness of integrated financial management information system on procurement processes in Mbale District Local Government, Uganda.

42) Kintu, M. J., Abigaba, R., & Naluwooza, J. (2019). Effects of integrated financial management system on payroll management at local government level: A case study of Mbale district local government

43) Kyeyune, R., Katabazi, M., & Ssembatya, R. (2020). Analysis of usability and user satisfaction with integrated financial management information systems in Uganda. International Journal of Scientific and Technology Research, 9(2), 2012-2022

44) Mugisha, E., & Matovu, J. (2019). Factors affecting the adoption of integrated financial management information systems: A case study of Uganda. Journal of Information Technology and Economic Development, 10(1), 28-45.

45) Wamala, E., Kuteesa, M., & Okello, G. (2020). Factors affecting the adoption of integrated financial management systems in developing countries: A case of Uganda. Journal of Management Information Systems and E-commerce, 7(2), 1-13.

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SCHOOL OF RESEARCH & POSTGRADUATE STUDIES
DISSERTATION CORRECTION COMPLIANCE FORM (POST VIVA FORM)

Date: **29TH /06 /2024**
Name of Candidate: **watuwa Emmanuel** Reg.No: **S22M10/004**

Title of Dissertation: **ASSESSING USABILITY OF IFMS IN LOCAL GOVERNMENT (CASE STUDY: MBALE DISTRICT LOCAL GOVERNMENT)**

S/N	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	There is a need to follow the UCU format, right from the face page. The candidate indicates: "A PROPOSAL SUBMITTED TO THE FACULTY OF ENGINEERING, DESIGN AND TECHNOLOGY...." The Paragraphs should be clearly differentiated.	This section is improved to "A dissertation submitted to the faculty of engineering, design and technology in partial fulfilment of the requirements for the award of the master science of information technology of Uganda Christian university ."	Cover page
2	In the abstract, the implication of your contribution is not provided. Generally, the abstract is poorly written. Preliminary pages need to be numbered differently according to UCU format.	The action taken to provide my contribution and also fully improve on the abstract	Page 12
3	In addition, the candidate	Action was taken to this as indicated	From page 12

	should structure the background under: i. Global perspective: How is your problem area on a global scale? ii. Regional perspective: How is it regionally speaking iii. National perspective: How is the situation from a national point of view?	within the dissertation.	

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1	Problem statement need to be improved. Although the problem seems to exist according to literature, there is a need to validate the problem with your case study.	Action was taken to this as indicated within the dissertation	From Page 15
2	Each chapter should start on a new page	Action was taken to this as indicated within the dissertation	From page 1 onwards
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S/N	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
1	Need to state the literature that informed the choice of Mbale in terms of usability of IFMS compared to other districts in Uganda.	Action was taken to literature that informed the choice of Mbale in terms of usability of IFMS compared to other districts in Uganda as indicated in the dissertation	From Page 19
2	What indicators/measures/parameters were used to assess the usability of IFMS and to come up with the poor SUS score? and clearly show which scholars used/suggested the indicators/ parameters above	Action was taken to establish indicators that were used to assess the usability of IFMS and to come up with the poor SUS score as indicated in the dissertation	From Page 43
3	Compare the findings from your	Action was taken to compare the finding	From page 43

	study with other studies to justify the poor SUS score.	with other studies as indicated in the dissertation	
4	Some challenges faced by users of IFMS do not correspond to respondents used. clearly show data collected and how it relates to the study	Action was taken to improve some challenges faced by users of IFMS to correspond to the respondents as indicated in the dissertation.	From page 48
5	Methodology should speak to the research objectives	Action was taken to improve the methodology so as it corresponds to the objectives as indicated within the dissertation.	From Page 16

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