ST. MARRY UNIVERSITY

SCHOOL OF GRADUATE STUDIES

FACTORS AFFECTING EFFECTIVE IMPLEMENTATION OF INTERGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEMS (IFMIS) PROJECTS IN ETHIOPIA

BY

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ADDISABABA ETHIOPIA

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DECLARATION

The undersigned declare that this paper entitled "factors affecting effective implementation of Integrated Financial Management Information System projects in Ethiopia" is my original work. I have carried out this research work independently with the guidance and support of my research paper advisor. This study has not been submitted any institution and all source of material used for the study have been duly acknowledge.

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ENDORSEMENT

This thesis has been submitted to St. Mary's University student of graduate studies for examination with my approval as a university advisor.

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University Advisor   Signature

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Acknowledgment

LIST of ABBREVIATIONS

BPR   Business process re-engineering or redesign

EBS   Electronic Business Suite

IBEX   Integrated Budget and Expenditure System

IFMIS   Integrated Financial Management Information System

IMF   International Monetary Fund

IT   Information Technology

MoFEC   Ministry of Finance and Economic Cooperation

USAID   United States Agency for International Development

LIC   low-income Countries

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ABSTRACTS

Since the 1980s, several major international aid agencies, such as the World Bank, have promoted IFMIS as a core element in reforming PFM in low-income countries (LICs). The expectation is that IFMIS will make information on public finances comprehensive, efficient, secure and transparent. However, these expensive systems frequently fail to realize the promised benefits. The top risks are the scope, schedule and budget of IFMIS. Federal Government of Ethiopia under Ministry of Finance and Economic Cooperation has successfully initiated a number of major PFM reforms over the last few years among these Reforms, this study will focus only on Integrated Financial Management Information System (IFMIS).

The objective of this study is to identify major factors affecting the successful implementation of IFMIS project in Ethiopia; a case study on twelve federal public bodies currently uses the system. In this Public finance Management reform Implementation and enable the Reform owner i.e. Ministry of Finance and Economic Cooperation (MoFEC), to work with the factors hindering the implementation and not to happen on the future implementation at federal and Worda (at regional) level. On focus were determined change management, political and institutional factors, capacity and skills of IFMIS users, technological infrastructure and project planning affected IFMIS implementation. The study employed descriptive survey research design. The target population constituted 720 employees. The study adopted quota sampling design. Structured questionnaires were used for data collection. The Statistical Package for Social Sciences tool aided in data analysis. Both descriptive statistics were employed in data analysis. The findings were presented in form of statistical tables. The study revealed that the institutional, political, staffing and staff capacity, technical factors and resistance to change challenging the IFMIS implementation not to Moving forward as desired. The study recommended that the government of Ethiopia, IFMIS project office should uphold the strategic plan to overcome the identified constraints that derail implementation of IFMIS project.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Countries all around the world are being strongly encouraged to modernize and enhance their Public Financial Management systems. In a bid to strengthen their public expenditure management systems, many developing countries pushed for or obliged to embrace Integrated Financial Management Information Systems (IFMIS) adoption and IFMIS project implementation, (Rodin-Brown, 2008). According to Diamond and Khemani (2005), the introduction of an IFMIS system should be regarded as a major project requiring a structured project management approach. In order to suitably implement the system establishment of the project management office is mandatory.

According to Hendricks (2012), found that lack of commitment, lack of capacity, institutional and technical challenges were risk factors to successful implementation of IFMIS projects. In addition Rodin-Brown (2008), identified challenges which were common to IFMIS projects around the world specially in developing countries , these include: inadequate planning, poor change communications, shortage of technical capacity and technical resources, institutional and political challenges in systems design documents without full agreement; poorly implemented trainings besides its causes for the project failure or delay due to unnecessary and spurious project expenditures, time overruns ,incompetent run into the project scope , quality and stakeholder satisfaction.

According to a report by the United States Agency for International Development (USAID, 2008), The introduction of government wise IFMIS project needs to be accompanied by strong political commitment, sufficient manpower and solid project management plan, adequate Funding, Technological infrastructure, an agenda for effective change management and its requires the organizational arrangement ,update of legal framework and business process reengineering . Unless these are in place, the chances of success are limited, (Hendricks, 2012). The previous studies identifying different critical success factors for IFMIS project implementation. According to Umble and Umble (2002), the top management commitment and support leads to overall organizational commitment across an organization and it results the key successful IFMIS implementation. The Balancing conflicts between staff and technology and effectively managing employees in

the change process are key elements for the successful IFMIS implementation (Ash and Burn, 2003). However Nah and Delgado (2006), argues that the effective project management is critical for the successful IFMIS project implementation, (Nah and Delgado, 2006). Whereas according to Bajwa et al. (2004), end user training has been recognized a most critical factor for IFMIS project implementation.

According to USAID (2011), Ethiopia's comparatively underperforming information communication technology infrastructure places considerable systemic constraints on a real-time integrated IFMIS. Reliability, security, and overall system integrity are a concern for a system hosted and supported on Ethiopia's nascent information communication technology infrastructure. Information communication technology assimilation in the public sector has limitations. While Ethiopia possesses a strong but relatively small core of technology savvy professionals, sufficient human capacity does not appear to scale to the demands of 850 planned IFMIS locations within the next 5 years. For example, the legacy IBEX system in operation for nearly a decade has not been adopted at several sub-national locations and illustrates either capacity limitations or resistance to automation.

1.2   Statement of the Problem

According to Rodin-Brown (2008), states that an IFMIS provides timely, accurate and consistent data for management and budget decision-making. The Project implementation for users allows anywhere within the IFMIS network to access the system and extract the specific information they need. A variety of reports can be generated to address different budgeting, funding, treasury, cash flow, accounting, audit and day-to-day management concerns, (Rozner, 2008). One of the major benefits of a successful implementation of IFMIS project implementation is the impact that it can have on Auditing and corruption, by increasing the risk of detection ,(Chêne, 2009).

According to Aiken (2002), IFMIS changes the entire organizational environment by reengineering the entire business process; Therefore, IFMIS project implementations need accurate estimation, preparation with a holistic view, and systematic management of the entire implementation process. The implementation of Integrated Financial Information System projects successfully is not easy for any organization. This is because the implementation process often leads to significant organizational changes and may result in fundamental reorganization of the business processes, (Boddy and Macbeth, 2000).The studies conducted in various African countries such as Tanzania, Ghana ,Uganda and Malawi indicated that there are a number of challenges that may influence the successful

implementation of an IFMIS projects including lack of highly knowledgeable technical staff, network infrastructure don't meet the requirements of IFMIS, lack of readiness from sites or high level of change resistance, Institutional and Political Challenges related to organizational arrangements, Legal framework, business process re-engineering , Staffing and Staff Capacity challenges of lack of staff with IT knowledge and experience and salary and terms of employment .This causes for the failure or the postponement of the project,(Diamond and Khemani, 2006).

In Ethiopia, the automation projects faced major challenges of resource, capacity, technological infrastructure, change resistance , institutional and political commitment and dependency on foreign aid policies, (Chêne, 2009). The IFMIS project office established under Ministry of Finance and Economic Cooperation as of September, 2010, for a five years plan of implementing the system within 850 public bodies throughout the country. Through this project implementation Ethiopia's stated goal is to: "support public bodies and regions to generate accurate, accessible, and timely government-wide financial information and reports which contribute to the improved quality of the nation's financial decision making". At the outset of an IFMIS project, it is necessary to ensure the availability of adequate financial resources. The Funding for this project is achieved through partnerships between the development partners and the Ethiopian government besides budgeted adequate fund for the project, (Hendricks, 2012). The implementation undertaking in alliance with the implementing agency and changed the project manager as well as reviewed the project structure and the salary arrangements of the project staffs repeatedly. However, the project by now consumed Seven years of time but the system implemented within twelve federal public bodies only. This is almost 1% of the plan consequently, in order to appropriately identify the challenges the area requires investigation. In spite of internal and external analysis and assessments on the project none has studied in detail the challenges of adopting IFMIS project and more specifically in the federal public bodies of Ethiopia. This study therefore seeks to scientifically confirm the prevalence above mentioned challenges, explore other challenges peculiar to Ethiopia and to fill research gap by assessing the current challenges of the Implementation of Integrated Financial Management Information System in federal public bodies of Ethiopia federal public bodies.

1.3 Research Question

The research will answer the following basic questions;

- ➢ What are the major challenges of Integrated Financial Management Information System (IFMIS) project Implementation?
- ➢ To what extent did change management affected IFMIS project implementation?
- ➢ To what extent is the technological infrastructure affected IFMIS project implementation?
- ➢ Do the project and implementation sites have adequate human resource having the capacity to successfully implement IFMIS project?
- ➢ To what extent is the institutional and political factors affected IFMIS Project implementation?
- ➢ Do the project and implementation sites have adequate planning to successfully implement IFMIS project?

1.4 Objective of the Study

1.4.1 General Objective

The overall objective of the study is to assess the challenges that affect effective implementation of IFMIS project with a focus in twelve federal public bodies of the governments of Ethiopia.

1.4.2 Specific Objectives

The study achieved the following specific objectives;

- ➢ To assess the major challenges of Integrated Financial Management Information System (IFMIS) project implementation in Ethiopian public bodies ,
- ➢ To discuss change management is a challenge for effective implementation of IFMIS project in Ethiopian public bodies,
- ➢ To determine technological infrastructure is a challenge for effective implementation of IFMIS project in Ethiopian public bodies,
- ➢ To assess staffing and staff capacity is a challenge for effective implementation of IFMIS project in Ethiopian public bodies,

- To determine institutional and political is challenges for the implementation of IFMIS project in Ethiopian public bodies and
- To determine planning is challenges for the implementation of IFMIS project in Ethiopian public bodies

1.5 Definition of Terms

Integrated Financial Management Information System (IFMIS): Integrated Financial Management Information System (IFMIS) is a fiscal tool for government that bundles all financial management functions into one suite of applications. It is an Information Technology (IT) based budgeting and accounting system designed to assist the government entities on how to plan budget requests, spend their budgets, manage and report on their financial activities, and deliver services to the public more efficiently, effectively and economically,(Diamond & Khemani, 2005).

1.6 Significance of the Study

The findings of the study may be beneficial to the following groups in a number of ways. For the policy makers and IFMIS implementation public bodies; it will provides vital information on how to manage changes for coming similar reforms, able to identify and address what makes the implementation of the project not to be effective and will be used for readiness and reengineering the future IFMIS project implementation thus improving performance and flexibility. The outcome of the study will also be useful to development partners interested in ensuring effectiveness and efficiency in public financial management. Since there are no detail studies in the area, finally, academic researchers can now carry out further research in this as suggested in the concluding statements of the study.

1.7 Scope of the Study

The scope of the study was the 12 budgetary institutions at federal level namely: Addis Ababa University, Ethiopian Mapping Agency, Ethiopian Revenue and Customs Authority, Ethiopian Roads Authority, House of Federation, House of Peoples Representatives, Ministry of Public Service and Human Resource Development, Ministry of Education, Ministry of Finance and Economic

Cooperation, Ministry of Health, Public Procurement and Property Administration Agency and Public Procurement and Property Disposal Service focuses on the assessment of challenges of implementing IFMIS Project. The study targeted a population of 720 respondents from currently IFMIS system user's sites and 257 staffs are sample population in the data collection process.

1.8 Limitation of the Study

The study analyzed only the major factors that are believed to have significant influence on the effective implementation of IFMIS projects. The factors which also had influenced the system effectiveness but in a less significant manner were not analyzed because of the limited time frame of the study. There is also a limitation of difficulty to get related references and relevant data or information concerning to the problem likewise difficult to find similar empirical studies on the topic of the research in Ethiopia context. The researcher restricted the study only to the government ministries that are based at Addis Ababa region and also Private sectors were not included. So their views on factors affecting IFMIS projects are not included in the study.

1.9 Organization of the Study

This study is organized into five main chapters. The chapter one of the study presents the general introduction of the study includes; background of the study, statement of the problem with basic research question, objective of the study, significance of the study, limitation of the study and definition of terms. The second chapter is dedicated to review of related literature. The third chapter presents a method of the study. It described the type and design of the research to be per sued, detail description of participants/sample/ of the study, data sources, data collection tools and procedures, methods of data analysis and the like. The fourth chapter covered results and discussions about the research topic based on the result of third chapter. Here, the results/findings of the study summarized and discussed with the use of related literature review will be explained. Finally, the fifth chapter will explain the summary, conclusion and recommendation part of the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews extant literature related on the implementation Integrated Financial Management Information System projects. The chapter is organized along the following themes: challenges affect the effective implementation of IFMIS projects, guidelines for successful implementation of IFMIS projects, also the empirical review of literature part consist of cases from other developing countries that have experience in the implementation IFMIS project and finally, the study has reviewed conceptual frame work about IFMIS projects implementation.

2.2 Challenges Involved in the Implementation of an IFMIS Project

The IFMIS project is a very complex information system and thus, poses some significant challenges and a number of risks to its successful implementation, (Hendriks, 2012).The factors for failure are those occurrences that constraint proper/smooth implementation of information communication technology projects in governments, (Saul and Zulu, 1994). The Studies conducted in various countries such as Tanzania, Ghana, Uganda, Malawi, Kenya and Rwanda indicated that there are a number of challenges that may influence the successful implementation of an IFMIS project. Some of the most common factors for failure include; poor technological infrastructure, poor data systems and lack of compatibility, lack of skilled personnel, political and institutional factors, resistance to change and poor project planning and coordination (Diamond & Khemani, 2006; Bhatia ,2003). According to Rodin-Brown (2008), once the decision is made to introduce an IFMIS project, the main challenges needs to be anticipated and planned for are: institutional and political factors of legal framework, business/functional processes, and organizational arrangements, change management, technological infrastructure, capacity and training and project planning. Some of the most common challenges that may be faced by developing countries are discussed in the subsections that follow. It is necessary for these challenges to be discussed in order to develop guidelines for better implementation of an IFMIS.

2.2.1 Lack of Capacity

According to Diamond and Khemani (2006), mentions lack of capacity in project management and information technology as one of the key challenge faced by countries that have been unsuccessful in the implementation of the IFMIS projects. IFMIS is an information technology based system and thus, requires personnel with the requisite knowledge and skill. The effective implementation, operation and maintenance of an IFMIS require staff with the necessary knowledge and skills. Lack of capacity including the project management is regarded as one of the main causes for the delay in the implementation process, whilst the emphasis that was put on capacity building through training, (Diamond and Khemani, 2006). In addition Chêne (2009), lack of staff with project management, information technology knowledge and experience cannot be easily remedied by training and hiring. 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 levels. The trained personnel also leave the government service; often for better job opportunities. According to Brar (2010), argues that low capacity for system implementation is one of the major challenges in the implementation of an IFMIS in developing countries. The system may causes for the procurement and property management systems electronic. Accordingly the system users of the department expected to be shaped. According to Soja (2008) and Schuppan (2009), concluded that, low staff capacities is one of the critical issues that affect the effective implementation and use IFMIS projects especially in developing countries.

According to Murphy (2004), notes that weak human resource management and management capacity has been responsible for the delay of IFMIS project implementation in Kenya. Systems improvements are typically undermined by failure to address complimentary human resource (manpower planning, recruitment, incentives, training), organizational restructuring and improved management capacity (delegation, middle management empowerment, team building). He further posits that IFMIS implementation is hindered by over-complex change projects requiring high levels of technical and management capacity. The Kenya's ministries found that the capacity and technical knowhow was low due to lack of training and hurried implementation of the system. He recommends that the users of the system need to undergo on-the-job training in order to improve their skills and capacity to use the system, (Kwena, 2013).

2.2.2 Weak Commitment to Change

The change management is one of the most critical, but also one of the most neglected, aspects of IFMIS project implementation. Despite the obvious advantages of a new IFMIS system, opposition is to be expected. Resistance will come from all angles. There will be vested interests that have benefited from the way things have traditionally been done. While opposition is not always easy to overcome, any systems implementation that ignores change management flaunts with failure, (Rodin-Brown, 2008). The new reform or public financial management programs or systems bring about changes in organizational processes and functions. According to Jiang, Muhanna and lein (2000), these changes in organizational processes leads to changes in job content and thus creates uncertainties of the new system. Due to the hangs in the organizational work processes and contents, the affected persons or forces within the organization may resist the introduction of the new system for fear of job loss, (Hong and Kim, 2002, Laughlin, 1999). According to Motwani, Mirchandani, Madan and Gunasekaran (2002), individuals or groups within the organization resist changes that are perceived to pose threats to their job security.

According to Chene (2009), Most people resist to adopt a certain new strategy such as IFMIS due to the fear of venturing to the unknown or not wanting to leave the past behind. The change resistance comprises of two main categories: active and passive resistance. Passive resistance entails accepting the strategy implementation verbally, but not following the proposed plan either through ignorance or following what they think to them is right. Active resistance, on the other hand, refers to where the employees reject the intended strategy verbally through critic, for example, by ridiculing or expressing the shortcomings of the intended plan. The organizational resistance to information technology projects significantly inhibits effective implementation, (Cooper and Zumud, 1990).According to Muriuki (2009), the change management is not addressed, and then the project will constantly be faced with resistance and obstacles from executive staff and elected officials all the way down to the civil service personnel who use the system most regularly. The challenges facing the ministry of finance of Kenya in managing change from legacy accounting systems to IFMIS. The study concluded that the major challenge was resistance to change brought about by fear of the unknown, not enough training, fear of redundancy and the fact that IFMIS ensured transparency leading to detection of fraud thus challenging the existing corrupt systems ,(Chêne, 2009).

2.2. 3 Institutional and Political Challenges

2.2. 3.1 Institutional Challenges

The introduction of an IFMIS involves more than only the automation of public finance tasks and processes. These institutional issues include, amongst other organizational arrangements, the legal framework and business functional processes. The IFMIS projects must be carefully designed to meet the needs of government or public agencies and functional requirements. Thus, they must be designed to the multitude of the distinctive public sector-oriented functions and organizational arrangements. According to Chêne (2009), an IFMIS implies both efficiency reforms and reforms that change existing procedures. It involves organizational reform, which deeply affects work processes and institutional arrangements governing the management of public finance. Institutional reform is not easily achieved and it takes time, commitment, champions and courage to achieve. Indeje and Zheng (2010), contend that the introduction of a new information system fundamentally changes the way operations are carried out and therefore requires a carefully managed process. Due to the definition of workflow engine in the system the implementation of IFMIS project may require additional approver, verifier and recommender's positions or representative otherwise remove the existing once .This process results in the creation of a new organizational culture, that is, change in the way the organization operates. In Rwanda, for example, there were three teams responsible for the development of the IFMIS. Lack or little co-ordination between the teams resulted in the IFMIS being mismatched with the system developed for the Rwanda Revenue Authority, (Hove and Wynne, 2010).

According to Diamond and Khemani (2006), requires time, finance and management commitment to update of legal framework for changes in the operating manuals, procedures, vouchers and chart of accounts. For instance the sites public budget and cash requirements request to government –Treasury department and also the procurement and the property administration may become electronic. It needs bring up-to-date the cash management, budget, account, procurement and property administration manuals and regulations timely. Not completed the task it makes challenging and turn out to be source of resistance due to the difference in the un-updated manual and the practice and its one of the causes of delay for the implementation of the IFMIS projects in the developing countries like Kenya, Rwanda and Ghana. According to Chêne (2009), the implementation of IFMIS project in Tanzania was distinguished by revising and developing an enabling legislation which contributed to the success of

the system. An IFMIS project must be sinned by a coherent legal framework governing the overall public finance system.

An IFMIS project implementation generally point toward fundamental changes in operating procedures and should be preceded by a detailed functional analysis of processes, procedures, user profiles and requirements that the system will support, (Chêne 2009). It makes the tasks challenging in order to satisfy the entire functional, procedures, user profiles and requirements of the implementing organization. It requires long period of time, have need of high technical capacity for design and requires funds. In Ghana IFMIS project the design and development was not satisfying, because of problems with the reporting functionality. This was because of a lack of clear specifications on the reporting requirements and approval from government on the design of various reports, (Diamond and Khemani, 2006). In Rwanda implies years consumed for the investigation, analysis, design of the business process. Most IFMIS projects especially in developing countries delayed with requirement gathering and designing the system with the current business process. The main issues here are unable to get clear requirements well timed then time consumed for the design and development, (Chêne 2009).

2.2. 3.2 Political Commitment Challenges

The experience indicates that the best designed project will fail without firm commitment from all stakeholders involved, including politicians, as well as senior and middle management. According to Diamond and Khemani (2006), a public management reform program like IFMIS projects implemented with absence or lack of support and approval from political and administrative figures it becomes the causes of unnecessary interruptions and delays and enables officials to implement public reform programs without confidence. The continual political and administrative support absence causes for possible initial resistance to the smooth implementation of public management reforms. The case study in Tanzania and Malawi shows that, the deficiency in political commitment causes for the interruption of projects due to not get adequate resources timely for infrastructure, human resource, funding and absences of willingness for project initiated legal change to support reform programs, not get continuous support after a shift or change in the political leadership or governance system of a country. The information technology projects like IFMIS requires the decision makers must be sold the idea

that benefits exceed risks, while the incentive structure that may undermine political will for reform has to be adequately assessed from the early stage of the project, (USAID, 2008).

According to Chêne (2009), the Ethiopian case study has proven that what matters most in the process is mid-level management's commitment to reform, as the changes ultimately have to be implemented at this level. In Ethiopia there is a lack of political or bureaucratic will to use the budget as the authoritative tool in resource allocation or to use the output of the IBEX to hold people to account. At an absolute minimum, the Ministry of Finance Accountant General's Department may not be willing and able to substantially influence the accounting operations of spending Ministries, (DFID, 2003).

2.2. 4 Technical Challenges

IFMIS projects often fail because the basic system does not meet the requirements and tasks it should perform, (Chêne 2009). The main aim of an IFMIS project is to integrate all aspects of the government's budgetary cycle and provide suitable interfaces to other systems and entities. The Technological factors are defined as the basic system functionality that includes both the software and the hardware of the IFMIS. Several researchers have indicated that technology impacts on the successful implementation and adoption of management information system, (Hendriks and Chêne, 2012). The Implementation of IFMIS projects also requires that making the right and simple technical choice for automation is critical to the successful adoption, Chêne (2010). According to Touray and Salminen (2013), the failure or the delay of many IFMIS projects can be traced to unresolved technical issues, such as the infrastructure, absence of high level technical staffs this causes for dependency , not timey resolved technical issues , poor system configuration, inaccessibility of Wide Area Network or Local Area Network, inappropriately design or customization of the public bodies requirements including reports, security and privacy issues of the system, inconsistency of the solution provided specially the customized once, poor integration with other systems like banks and revenue authorities. Many IFMIS projects have failed because the basic system functionality was not clearly specified from the beginning of the intervention. According to, in Ethiopia context the government critical requirement of the system interface with Ethiopian Revenue and Customs Authority two systems and interface with national bank of Ethiopia not yet completed .it creates frustration for users of the system as well as the management.

According to Chêne (2009), it is important to note that a determining factor in the success of the implementation is not in the type of system, (i.e. off-the-shelf or custom-built) but rather in the complexity of the system. One of the reasons Original Research for the success of Tanzania's project is, for example, their decision to purchase a less complex, mid-range commercial package, (Diamond and Khemani 2006). In Ethiopian context sometimes the system down for four or five successive days, the Ethiopian Road Authority and Ministry of Health still using additional parallel system of Peachtree and hack-pack for day to day transaction recording due to unsatisfied report requirements, the IFMIS interface with Ethiopian Revenue and Customs Authority two systems and with National Bank of Ethiopian not yet completed. This may become as source of resistance to use the system, its cause's duplication of efforts for users and affects the user's confidence over the system, (IFMIS project office assessment report, 2016).

2.3 Guidelines for Successful Implementation of IFMIS Projects

The requirements for the introduction of an Integrated Financial Management Information System (IFMIS) may differ from country to country, but there are critical success factors or best practices that are important for the project to succeed .The definition of project success is various based each authors and priority modification with the nature of the projects well. According Kerzner (2003), the definition of project success has been including completion:

- o Within the allocated time period,
- o Within the budgeted cost,
- o At the proper performance or specification level,
- o With acceptance by the customer/user,
- o With minimum or mutually agreed upon scope changes,

In addition according to Atkinson (1999), the project success measures with weather or not the project met the scope, objectives and costs defined. On the other hand the project can be also considered a success even if some of the aspects of the previous criterion are not met, but the customer is satisfied with the main aspects of the project. This criterion is becoming increasingly effective and many organizations nowadays focus on the evaluation of customer's satisfaction with the project. They use the information obtained as a basis for overall evaluation of project success, (Joslin and Müller, 2015). Consequently in order to attain the success of the project a lot of factors are presents. According to Rodin-Brown (2008), the requirements for the introduction of an Integrated Financial Management

Information System (IFMIS) may differ from country to country, but there are critical success factors or best practices that are important for the project to succeed. The best practices include the following.

2.3.1 Project Management

The effective project management is critical for the successful IFMIS project implementation, (Umble, Haft and Umble, 2003; Nah and Delgado, 2006). Bingi, Sharma, and Godla (1999) found that "a lack of proper understanding of the project needs and the inability to provide leadership and guidance to the project" are the main factors when IFMIS implementation fails. Thus, effective project management should define clear project objectives, develop a work and resource plan, and carefully track the project's progress. According to Vickland and Nieuwenhuijs (2005), when implementing an IFMIS, strong project management is critical for the success of the initiative. Project management entails more than managing the technical aspects of implementation. It also involves project planning methodologies to plan, implement and monitor the project, with project management responsibilities clearly identified. An adequate project implementation team should therefore be established, ideally comprising a project manager, a public finance economist, a qualified accountant, a change management or training specialist, an IT-system specialist and a logistics specialist ,(Chêne, 2009). At the same time, the programmer manager must have the necessary managerial and leadership skills to direct and co-ordinate diverse activities executed by a wide range of specialists. The team should strive to adhere to the project implementation plan, but there should be flexibility to address inevitable changes, with approval through a programmer governance structure.

2.3.1 Project implementation plan

According to Kerzner (2003), the most important responsibilities of a project manager are planning, integrating, and executing plans. Almost all projects, because of their relatively short duration and often prioritized control of resources, require formal, detailed planning. The integration of the planning activities is necessary because each functional unit may develop its own planning documentation with little regard for other functional units.

There are four basic reasons for project planning:

> ➢ To eliminate or reduce uncertainty,
> ➢ To improve efficiency of the operation,
> ➢ To obtain a better understanding of the objectives and

> ➤ To provide a basis for monitoring and controlling work.

According to Rozner (2008), the project implementation plan should cover immediate, medium-term and long-term IFMIS tasks and objectives, whilst a clear mission statement will help control the project direction, participant expectations and, ultimately, project costs.. Because the time span involving the implementation of an IFMIS is so long, it is inevitable that governmental changes, which often lead to structural changes, will occur. The project management implementation plan should therefore be revisited regularly to ensure that the situation has not changed substantially.

2.3.2 Change Management

IFMIS project implementation can help an organization to benefit from higher levels of efficiency and improved performance. Therefore, IFMIS project implementation may cause changes that lead to resistance among employees, (Prawitt and Romney, 1999). The balancing conflicts between staff and technology and effectively managing employees in the change process are key elements for the successful IFMIS implementation, (Ash and Burn, 2003).The project change management can be described as the creation, maintaining and systematic evaluation of changes in an organization, (Barcan, 2010). It aims at maximizing an organization's ability to achieve success through involved, educated and committed people. According to O'Sullivan (2008), the project change management includes a stakeholder management model, a communication strategy, a change-readiness assessment framework and certain design elements. According to Kerzner (2003), it has often been said that the most difficult projects to manage are those that involve the management of change. The successful development and implementation of a project management methodology requires:

> ➤ Identification of the most common reasons for change in project management,
> ➤ Identification of the ways to overcome the resistance to change and
> ➤ Application of the principles of change management

According to Rozner (2008), a change management strategy should be developed as soon as an IFMIS project is conceived, taking into consideration the change implications for diverse stakeholders, that is, from politicians and senior officials to heads of departments, civil servants and the IT personnel who will support the new systems. If this aspect is not addressed early in the project, the project will constantly be faced with resistance and obstacles from elected politicians, executive officials and personnel who will use the systems regularly. The best way to overcome resistance to change will be

through clear communication, education and training, as well as through 'quick wins' that demonstrate the benefits of the change, (Rozner, 2008). The communication can be done through a variety of media, workshops, seminars, training sessions, a website or conferences (Rodin- Brown, 2008).

2.3.3 Solving Technical Challenges

Technical issues are very important to the effective implementation and use of the IFMIS and thus, must be addressed during the development stage of the reform program. According to Touray and Salminen (2013), technical issues or factors concerns issues such as the infrastructure, system configuration, security and privacy issues.

2.3.3.1 System Functionality and Integration

According to Diamond and Khemani (2006), the IFMIS project should the system carefully designed to meet the needs of government or public agencies and functional requirements and properly interface or integrates with other systems if required. Which means the report and other requirements of the public bodies should properly and timely done, timely provision solution for technical issues, interface with other system to avoid duplication of efforts. Thus, they must be designed to the multitude of the distinctive public sector-oriented functions and organizational arrangements, (Hendriks, 2012).

2.3.3.2 Security and Privacy

The implementation of IFMIS project security and privacy issue concerns such issues as computer security, confidentiality and privacy of data as well as authorization, (Smith and Jamieson, 2006). The security and privacy issues are considered as one of the critical issues to be taken into consideration in the implementation of IT programs or projects due to the sensibility of information or data. To this Weerakkody and El-Haddadeh (2011), notes that building a system that can handle access authorization and authentication for shared information is critical for the security of information or data. It is therefore imperative, at the development and initial implementation stage, to build a system that provides a high level of data security. The provision of high data security would in turn enhance the integrity of the information generated from the system.

2.3.3.3 Information Technology Infrastructure

According to Turban and Volonino (2010), the information technology infrastructure includes hardware, software, processes, networks and users of the infrastructure. The importance of an effective and efficient information technology infrastructure in the implementation of IFMIS project in the public sector is further accentuated, (Krishna and Walsham, 2005). The level infrastructural development in the public sector is relatively high in larger cities that, to some extent, are financially autonomous from the central government. This thus suggests that relatively larger district assemblies may be relatively better positioned or prepared to implement information technology based programs or projects. The system should in operation for 24 hours without network interruption. At the time of grounding the implementation of the project make sure that hardware, software, processes, networks are available and operational and also strong technical team should be formed for support and maintenance.

2.3.4 Capacity Building and Training

According to Bajwa et al., (2004) , do the complexity of the integrated IFMIS system, end user training is essential for a robust understanding of how the system works and how to use it. Consequently, appropriate end user education and training will maximize IFMIS benefits and increase user satisfaction. Capacity building is a major factor affecting the success of IFMIS implementation, especially in developing countries (Chêne 2009). An IFMIS project comprises more than only implementing a project. it also means planning for capacity building. A comprehensive training program is therefore vital for the success of the project and should be compiled as early as possible. Training is essential to unlocking client readiness and is the best way to ensure sustainability of a system, (Vickland and Nieuwenhuijs, 2005). In order to build the necessary capacity, it is important to create a learning environment early in the project and to treat the whole process as a learning opportunity with training being part of an ongoing process. Training should be provided to senior managers, technical staff and end users, and should teach users how to use the new system and how it affects business processes. Diamondand Khemani (2006), argue that the training will not only include training in the use of the IFMIS for the respective operations and functions, but will also entail training in the new legal and regulatory framework, the new codes and classifications, and the new business procedures put in place. A well-defined training program will also assist in building capacity and help build confidence amongst users who, through the process, are reassured that there will be some

constants amidst the change. Given the nature of institutions and organizations, capacity building is a never-ending process. It needs to be ongoing and permanent (Rodin-Brown, 2008).

2.3.5 Institutional and Political Factors

The Case studies of more successful countries, such as Kosovo, the Slovak Republic and Tanzania, indicate that the clear commitment of the relevant authorities is one of the main factors supporting successful implementation of an IFMIS, (Chêne 2009). The Various writers such as Peterson (1998), Chêne (2009), argue that the importance of commitment by politicians and management is vital to ensure success of the implementation of an IFMIS projects. Thus, Diamond and Khemani (2006), posit that ensuring project commitment at the highest levels of the political system and of management and continuous participation from the direct users of the system is necessary in all phases of the project. The Political and/or administrative commitment and support for the implementation of public management reform programs can be demonstrated in several ways. According to Robinson (2007), one way is through the timely release or provision of adequate resources. The timely release of adequate resources is very important for the effective implementation of IT/IS reform programs in the public sector. The provision of resources (for example, infrastructure, human resource, funding) facilitates the effective implementation of IFMIS. According to Imran and Gregor (2007), the commitment could also be demonstrated through continuous support after a shift or change in the political leadership or governance system of a country. This therefore suggests that, the success or otherwise of public management reforms, to some extent, depends on the stability of the political system of the country. This means that, continued political support is a prerequisite for effective implementation of the project.

There are two approaches to implementing IFMIS projects in an organization: reengineering business processes and IFMIS customization, Business process reengineering creates deep changes in organizational processes in order to fit them to IFMIS functions. On the other hand, when an organization wishes to maintain its existing processes using an IFMIS system, it can customize IFMIS functions. However, many researches indicate that IFMIS customization should be avoided or minimized in order to achieve the full of benefits offered by IFMIS systems, (Garcia and Mooney, 2004). The business process re-engineering or redesign (BPR) is, therefore, a critical aspect of any IFMIS projects. This will require a review of all systems, functional processes, methods, rules and

regulations, legislation, banking arrangements and related processes. New procedures will have to be established and standardized throughout government. New job descriptions will have to be formalized, (Rodin-Brown, 2008).

The implementation of IFMIS projects affects all public financial management practices and/or processes. Hendriks (2012) argues that, there is the need to develop or formulate appropriate legislative framework to provide the needed legal push for the IFMIS project. Eriksson and Goldkuhl (2013), the relative significance of an appropriate legislation for the implementation of an Information Technology based reform program in the public sector. The appropriate regulation or legislation is a necessary precondition or fundamental to the success of any Information Technology related program in the public sector. This view is consistent with the views of (Peterson, 2007), argued that, the formulation of the appropriate legal framework would ensure smooth and uninterrupted implementation of the IFMIS project. The formulation of the legislative framework must precede the eventual implementation of the IFMIS project in the public sector.

2.4 Empirical Review of Literature

This section covers a review of the cases from other countries that have implemented IFMIS project and the literatures are reviewed in line with the objectives of the study.

2.4.1 IFMIS Project Implementation in Kenya

The government of Kenya must overcome a number of major challenges to fully realize the benefits of the system while ensuring the security is not compromised. From an accounting financial reporting perspective failure to address specific issues relating to the sustainability, functionality and extension of the system are liable to result in higher rather than lower levels of fiduciary risk". Further the associated country financial accountability assessment reported the following risk: "should the IFMIS fail there is no current back up at the moment other than the continued use of existing systems in parallel" (GAO, 2004).

Since 1997, the government of Kenya has been implementing a project for the "strengthening of government finance and accounting functions" to improve financial management, accountability, and transparency of public funds. During the first two phases over the first three years, a number of diagnostic reviews were conducted and a financial management information systems Strategy was developed. Following a procurement delay of almost two years, a contract for the purchase of the

software implementation was finally awarded during late 2002. Hardware procurement was undertaken separately from the software. The pilot phase started with the setting up of core procurement and accounting modules in the treasury as well as two pilot ministries during 2003/04. The project roll-out of the system is delayed due to lack of Information Technology and communications wide-area network architecture, (SIDA, 2006).

According to Diamondand Khemani (2005), the implementation of the budgeting and cash management modules has been delayed for a number of reasons, and their pilot testing may commence with the 2005/06 budget cycle. The pilot implementation has raised a number of issues. The engagement of internal and external audit staff has been inadequate, poor project management plan, limited availability of skilled manpower, resistance to change and resulting in limited quality control assurance. The technical challenges related to the revised classification and chart of accounts developed for IFMIS is not fully consistent with the IMF's 2001 standards, and it is necessary to eliminate inconsistencies and ensure conformity with that rubric. Further, the new classification structure is still to be adopted for compilation of the budget estimates. The Most important, project management needs to be strengthened to ensure strategic direction, leadership, and communication. Given this situation, the fiscal year 2004/05 continues to be a pilot testing period and being utilized for resolving the current outstanding software and IT issues.

2.4.2 IFMIS Project Implementation in Malawi

Since 1995, the government of Malawi has introduced a number of initiatives to improve public expenditure management, most notably the medium-term expenditure framework to improve the budget process, and the implementation of Integrated Financial Management Information System (IFMIS) to computerize the budgetary and accounting processes. In the latter case, the conceptual framework including technical specifications was completed in time. The governance structures including the steering committee, the project management team, and the implementation structure between the contractor and the government were properly set up.

The design and procurement process was completed in 2000 with the purchase of a package solution, and the pilot run of the customized software started in 2001. There have been significant implementation delays, and the pilot implementation is yet to be approved by the government as

successful. The pilot implementation did not follow the standard implementation methodology for this type of software. Some of the planned core modules for implementation have not been completed, while others have not been implemented at all, (SIDA, 2006).

According to Diamond and Khemani (2005), this project has encountered numerous difficulties. The project implementation team was not well resourced, and was dismantled even before the implementation was completed. The change management and communication activities did not receive adequate attention, and there are inconsistent views within the implementation team and implementing ministries. The software support arrangements have changed over the years, and there have been various contracts for implementation activities. Some of the contractual work has not been properly fulfilled. The auditing aspects of the system have not been adequately planned and tested for live operations. A fast review of the system conducted by the Auditor General with the help of an outside expert in July 2004 revealed a number of problems with the functionality of the system, so that the roll-out has been delayed until the problems have been resolved. These problems included technical serious deficiencies in expenditure control and tracking processes. In general, the implementation phase has not progressed well, primarily because lack of political commitments reflected by clearly limited involvement and some neglect of the system by the main players, including the Ministry of Finance, Auditing General and pilot ministries. There are several significant issues to be addressed before the system can be made fully functional and rolled out.

2.4.3 IFMIS Project Implementation in Uganda

Uganda chooses to implement a comprehensive financial management reform program to improve budget and expenditure processes both at the central and decentralized levels. The design and development phase of the IFMIS got considerably delayed and only in 2003 was a company awarded the contract for the provision of a turnkey solution including hardware, software, a Wide Area Network (WAN) and supporting training/change management. This constituted the second attempt to set up a government- wide IFMIS with World Bank financing. The project encountered key design problems and the pilot - run in six line ministries and four local governments - brought out a number of issues in the system's functionality as well as treasury procedures. The main design problem was associated with the chart of accounts that the government has approved, and the costs involved to rebuild the system were considerable. The system was put into operation with the defects unaltered. As

a result, the Uganda IFMIS project is performing under its potential with piecemeal, ad-hoc solutions that decrease the efficiency of the system. Further problems encountered are common to the Implementation of most IFMIS projects, including Inadequate planning poor communication between implementers, donors and government; shortage of management capacity and resources changes in system design without full agreement of all poorly implemented trainings. These examples illustrate the numerous challenges involved in implementing IFMIS; Lack of high level commitment, ineffective project coordination, loose project design and planning, institutions change resistance, inadequate technology and lack of human resource capacity are some of the factors often cited for the failure of such schemes, (Diamond and Khemani, 2006).

According to USAID (2008), IFMIS Project Implementation in Uganda various other problems were encountered, these included: Poor communications between implementers, donors and government; Shortage of management capacity and resources; changes in systems design documents without full agreement; poorly implemented trainings and Unnecessary and spurious project expenditures. These types of problems are common to many public sector reforms, whether donor-funded or Self-financed.

2.7 Conceptual Framework

The main objective of this research is to assess factors that Challenges the effective implementation of IFMIS projects in Ethiopian Federal Public bodies. The contributing factors for effective implementation of IFMIS projects are change management, project planning, technological infrastructure, institutional and political commitment and human capital development.

FIGURE 2.1:   Conceptual Framework

Change Management

➢ Preparation for change to

➢ Communications to use of IFMIS

Project Planning

➢ Comprehensive Project Plan

➢ Monitoring and Evaluation

Institutional and

Political

➢ Top Management Commitments

➢ IFMIS Support by legal Frame work

Effective Implementation of IFMIS

Human Capital Development

➢ Training of staff on IFMIS

➢ Systematic long term capacity building plans

Technological Infrastructure

➢ Reliable network connectivity

➢ Modern ICT equipment

2.5 Summary of Literature Review

This chapter was dedicated to the review of extant literature on IFMIS project implementation. A synthesis of extant literature on IFMIS project implementation indicates that lack of capacity, weak commitment to change, firms poor commitment from politicians, as well as senior and middle management, Institutional issues include, amongst other organizational arrangements, the legal framework and business functional processes, technological factors that includes both the software and the hardware of the IFMIS and the change resistance from executive staff and management all the way down to the civil service personnel are the most common challenges of the IFMIS project implementation.

The review of the extant literature indicates list of contributing factors as guidelines for successful implementation of IFMIS Projects, especially the project implementation immediate, medium-term and long-term plan should be prepared and revisited regularly, a change management strategy must be developed and clearly communicate, educate and trained the benefits of the change required, the system carefully designed, the security and privacy issues are need to considered, the capacity and skills of the users is an important component to effective utilization of the IFMIS system. Thus, it is important to create a learning environment early in the project and to treat the whole process as a learning opportunity with training being part of an ongoing process. The Management must fully commit, to dissuading the staff from resistance. It's therefore critical that management commitment take center stage, during introduction and implementation of new systems.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

The study adopted a descriptive research design. According to Kothari (2004), descriptive research is used when the problem has been well designed. It is concerned with describing, recording, analyzing and interpreting conditions that either exist or existed. A descriptive design was adopted for this study because it will enable an in- depth understanding of the phenomena. This design was preferred because of proximity of the case and faster access to information. More importantly, it permits an in-depth inquiry of the phenomena at hand. Consequently, the study focuses on a specific twelve federal sites as opposed to the study of the entire government ministries.

3.2 Population and Sampling Technique

Research population refers to or represents all the cases of people, organizations or institutions of interest to the researcher (Neumann, 2007). The population of the study was the twelve budgetary institutions at federal level currently implementing the IFMIS. Which are Quota sampling method was used to select a sample of 252 Senior and junior system users. The sampling frame was senior administrative officers, financial officers and junior officers from different department of the twelve sampling organizations. The main reason quota samples used are that it allows sampling a subgroup that is of great interest to the study. Hence, the 252 sample units were based on proportionate representation of the total population. The government of Ethiopia purchased nine IFMIS modules for implementation. Consequently, the quota assigned to each sites based on the number of users in implemented nine modules.

Table 3.1:   Quota for selection of respondents based on module for each sites

No.	Modules	Total Population	Sample Size
1	Account Payables	110	3*12 = 36
2	Account Receivables	30	1*12 = 12
3	Public Sector Budgeting	71	2*12 = 24
4	Payroll	29	1*12 = 12
5	General Ledger	92	3*12 = 36
6	Cash Management	103	3*12 = 36
7	Inventory	67	2*12 = 24
8	Purchasing	103	3*12 = 36
9	Fixed Asset	36	1*12 = 12
10	Technical Staffs	79	2*12 = 24
Total		**720**	**21*12=252**

3.3 Instruments of Data Collection

The study was based on both primary and secondary data. The primary data was gathered through a structured self-administered questionnaire. A questionnaire consists of a number of questions printed or typed in a definite order on a form. According to Kothari (2004), the use of questionnaire method ensure low cost even when the universe is large, it is free from the bias of the interviewer, respondents have adequate time to give well thought out answers and the use of self-administered questionnaire ensured privacy of the respondents and therefore recorded a high rate of response. The questionnaire used to collect data is shown as Appendix 1.

The secondary data for this research purpose was obtained from IFMIS implementation review reports by the World Bank, IMF and the government IFMS project implementation strategies published, the IFMIS project office reports available for the year 2013-2016 and other published IFMIS project related data. The secondary data purpose of literature review and was sourced from libraries, internet and journals.

3.4 Procedures of Data Collection

The questionnaire in this research is close ended and subdivided into two subgroups. Part one is about the respondent demographic characteristics information includes gender, age, educational level and working experience. The part two of questioner categorized based on five major factors affects the successful implementation of IFMIS projects which are change management, institutional and political ,project planning, staffing and staff capacity and Technological infrastructure.

3.7 Methods of Data Analysis

According to LeCompte (2010), data analysis is the transformation of data into research results. The study used descriptive statistics to analyze the data. The collected data was carefully examined and checked for completeness and comprehensibility. Data collected was validated, edited and coded then interpreted using statistical package for social sciences (SPSS20) tool. The data presented with calculating the means and correlation on each five variables. The data results were presented in tables to give a clear picture on the findings.

3.8 Reliability Test

According to Mugenda and Mugenda (2003), a reliable measurement is one that if repeated a second time gives the same results as it did the first time. Reliability analysis used to measure the consistency of a questionnaire. There are different methods of reliability test, for this study Cronbach's alpha is considered to be suitable. Cronbach's alpha is the most common measure of reliability. For this study the Alpha coefficients for expected and perceived the service quality dimensions and the overall scale calculated as a reliability indicator was presented in the following table. As described by Andy (2006) the values of Cronbach's alpha more than 0.7 is good. The alpha values in this study were far from 0.7 and had very good reliability for the questioners. Reliability analysis of the questionnaire is made through SPSS 20 demographic variables of the questionnaire are excluded for the purpose of this analysis 5 variables are included the Cronbach's alpha of the questionnaire is 0.904 that means 90.4% of respondents have similar way of understanding for the questionnaire that is filled by them.

Table 3.2: Result of reliability analysis for the questionnaire

Contribution Factors	Number of attribute	Cronbach's alpha
Change of Management	5	0.748
Institutional and Political Challenge	6	0.720
Project planning factors	5	0.797
Staffing & Staff Capacity	7	0.771
Technological Infrastructure	5	0.832
Overall reliability analysis	**28**	0.904

Source: own survey, 2017

CHAPTER FOUR

RESULTS & DISCUSSIONS

4.1. Introduction

This chapter explains the results of the findings. The research sought to establish how selected factors (sabotage, management commitment, complexity and capacity of users of IFMIS) influence effective use of IFMIS system in Government ministries. The data has been analyzed and presented in frequency and ANOVAs tables, with brief discussion on the finding. The results of findings form the basis of conclusions well explained in the next chapter. The chapter is structured based on the variables of the study.

4.2. Response Rate

The study targeted a sample size of 252 respondents from which 186 respondents filled and retuned the questionnaires .Therefore, the response rate was 74% (186/252). This response rate was very good to make conclusions for the study. According to Mugenda and Mugenda (2003) observed that a 50% response rate is adequate, 60% good and above, while 70% rated are very good.

4.3. General information of the respondents

Table 4.1: Gender and usage of IFMIS

Statistics	Distribution of the gender of the respondent	Distribution of the age of the respondent	Distribution of the highest-level education of the respondent	Distribution of years of service of the respondent	Distribution How frequently do you use IFMIS as part of your work
N	186	186	186	186	186
Mean	1.27	2.01	2.05	2.67	1.31
Mode	1	2	2	3	1
Percentage Frequency	73%	86%	74%	53%	84%

Source: Research Data

Table 4.1 indicates that majorities (73%) of the staff in charge of IFMIS in all twelve public bodies are male and 27% were female. This means that there is a gender disparity of the respondents. From the findings, it was noted that most respondents were between the ages of 26-40 years old; this age bracket was noted to have the highest percentage of 86% respondents. From the findings, it can be determined that the respondents were old enough to provide reliable insights relevant to the study. Findings in this study indicated that a majority of the respondents 74% had bachelor degree level. In addition, 16% of the respondents had post graduate level of education while 11% had college level of education. No other response was obtained for these variables. This implies that all the respondents were informed and knowledgeable in their areas of specialization. And finally, 84% of the respondents indicated that they are deeply involved in the use of IFMIS which for their daily work. They could therefore competently to respond to questions regarding the adoption of IFMIS as key persons.

4.2 Change Management has significant influence on the effective implementation of IFMIS project

Table 4.2: Significance of aspects of Change management on effective Implementation of IFMIS

Factors	N	Mean	Std. Deviation
To what extent does IFMIS complexity to ordinary staff and government transactions influenced by change management in effective implementation of IFMIS project?	186	4.0699	1.0758
To what extent do you think advocating IFMIS expected impact and benefits influences the effective implementation of IFMIS?	186	4.1667	1.0022
Effective change communication workshops to share experience and provision of relevant information among IFMIS system users important in order to reduce staffs resistance?	186	4.2688	0.9769
To what extent does change management agent's timely update IFMIS changes to the legal and regulatory frameworks influences the implementation of IFMIS projects?	186	4.1452	1.0631
To what extent development of change management effective strategy required to resolve resistance to change has influence implementation of IFMIS projects?	186	4.1774	1.1744
Aggregate mean and sd. Deviation	186	4.1656	1.0585

Source: Survey Questioner, (November, 2017)

Table 4.2: respondents level of agreement with statements about the change management e Significance of aspects of Change management on effective Implementation of IFMIS

Statement	N	Mean	Std. Deviation	Min	Max
There is adequate IFMIS project change management strategy prepared and communicated to all stockholders	186	2.14	1.12	1	5
There is effective IFMIS change agents were in Advocating continuously for IFMIS expected impact and benefits?	186	2.28	1.36	1	5
The project office continuously prepared change management Effective change communication workshops are prepared to share experience or /and timely provision of relevant information among IFMIS system users	182	2.31	1.36	1	5
The change management agents were timely update IFMIS changes to the legal and regulatory frameworks	186	2.27	1.30	1	5
IFMIS change agents successfully reduced resistances within currently IFMIS user's public bodies	186	2.35	1.39	1	5

Source: survey data, 2017

Genral almost all of the respondents agree that

As shown in table …. Above, the respondents overall mean rating regarding change management scored a mean 4.12 and the standard deviation lies at 1.01 and 1.138 .which shows individual response deviates more than one .respondents answer shows that change management high challenge since the value lies 3.41 and 4.20 . onew . respondents answer shows that it impliesGAO (2004). Critical factors in developing automated accounting and financial management

that

of   The finding of the study indicated that project change Management has a great influence for the successful implementation FMIS projects. This was shown by respondent's response of staffs resistance to change influence the effective implementation of IMFIS project attained a mean of 4.07, the advocating for IFMIS expected impact and benefits influences the effective implementation of IFMIS attained a mean of 4.17, Effective change communication workshops to share experience and provision of relevant information among IFMIS system users important in order to reduce staffs resistance attained a mean of 4.23, change management agent's timely update IFMIS changes to the legal and regulatory frameworks influences the implementation of IFMIS projects attained a mean of 4.15 and development of change management strategy and communicate to all stakeholders required to resolve resistance to change has influence implementation of IFMIS projects attained a mean of 4.18. The respondent overall mean rating regarding change management was 4.12 implies that it has great effect on effective implementation of IFMIS project in government public bodies (because this results 4.2).

4.3 Institutional and Political factors has significant influence on IFMIS Projects

Table 4.3: the Descriptive statistics on Institutional and Political factors on Users

Factors	N	Mean	Std. Deviation
To what extent is IFMIS requirement of fundamental changes in operating procedures influence in IFMIS projects implementation?	185	4.1459	1.1588
To what extent is IFMIS implementation started in the organization with full readiness assessment of user profile and proper assignment of experts influence in IFMIS projects?	186	4.1774	1.0834
To what extent IFMIS implementation started in the organization with full functional analysis of processes and procedures influence in	186	4.1505	1.1573

IFMIS projects?			
At all level, management proper and timely follows up and evaluation of IFMIS progress influence in IFMIS projects?	186	4.5269	0.7366
At all level, management commitments to implement and being part of the implementation process have effect on the successful implementation of IFMIS projects?	186	3.7258	1.1602
IFMIS accurately satisfy all requirements of the implementation organization influence in IFMIS projects Implementation?	186	4.2378	0.9599
Valid N (listwise)	186		
Aggregate mean	186	4.1607	1.0427

Source: Research Data

From the study majority of the respondents agreed that Institutional and Political factors has great influence for successful implementation and achievement of IFMIS project objectives. This was shown by respondent's response of IFMIS requirement of additional staffing and capacities and fundamental changes in operating procedures during implementation of road construction projects attained a mean of 4.15 respectively and IFMIS implementation started in the organization with full readiness assessment of user profile and proper assignment of experts scored a mean of 4.18, IFMIS implementation started in the organization with full functional analysis of processes, procedures and requirements during implementation attained a mean of 4.15, At all level, management proper and timely follow up and evaluation of IFMIS implementation progress attained a mean of 4.53, At all level, management commitments to implement and being part of the implementation process influence on the IFMIS project attained a mean of 3.73 and finally, IFMIS accurately satisfy all requirements of the organization during implementation influence on the IFMIS project scores 4.24. The response was

strong enough in showing the necessity of institutional and political factors in IFMIS projects and influence it has on IFMIS projects.

4.4 Project planning has influence on the effective Implementation of IFMIS

Table 4.4 Significance of the aspects of Project planning on effective Implementation of IFMIS

Factors	N	Mean	Std. Deviation
Project plan development and communications to all stockholders have effect on the successful implementation of IFMIS projects?	186	4.1774	1.0834
The development subsidiary scope, cost, schedule and quality management plans have effect on the successful implementation of IFMIS projects?	186	4.1505	1.1573
The project plan take in implementation methodology, critical milestones and success factors have effect on the successful implementation of IFMIS projects?	185	4.5269	0.7366
The cascade of the project implementation plan at all level influence in IFMIS projects?	186	3.7258	1.1602
To what extent does adequate measures were put in place to monitor and control the progress according to the plan influence IFMIS projects?	186	4.2378	0.9599
Valid N (listwise)	186		
Aggregate mean	186	4.1637	1.0195

From Table 4.10, it's clear that majority of the respondents said that proper project planning has great influence for successful implementation IFMIS project objectives. This was shown by respondent's response on the Project plan development and communications to all stockholders have effect on the successful implementation of IFMIS projects scored a mean of 4.18, The development subsidiary scope, cost, schedule and quality management plans have effect on the successful implementation of IFMIS projects attained a mean of 4.15, The project plan take in implementation methodology, critical milestones and success factors have effect on the successful implementation of IFMIS projects achieved a mean of 4.53, cascade of the project implementation plan at all level influence in IFMIS projects reached a mean of 3.73 and adequate measures were put in place to monitor and control the progress according to the plan influence IFMIS projects attained a mean of 4.24. Consequently the project proper planning is necessary and high emphasis should be given to time, budget and design of projects.

4.5 Staffing & Staff Capacity affects for the Implementation of IFMIS

Table 4.5 Significance of the aspects of Staffing & Staff Capacity on effective Implementation of IFMIS

Factors	N	Mean	Std. Deviation
Proper recruitment, selection and training of staffs have effect on the successful implementation of IFMIS projects?	186	4.0914	1.0792
Management of staff turnover through attractive salary structure and terms of employment have effect on the successful implementation of IFMIS projects?	186	4.2258	1.0667
To what extent does implementation team business and technical knowledge have effect on the successful implementation Of IFMIS projects?	186	4.1720	1.0967

System user's technical knowledge to operate the system has effect on the successful implementation of IFMIS projects?	186	4.2366	1.1333
To what extent are capacity buildings for IFMIS users having effect on the successful implementation of IFMIS projects?	186	4.1290	1.2146
To what extent does project team organized with sufficient manpower and knowledgeable in implementation of Information systems have Effect on the Successful implementation of IFMIS projects?	186	4.0914	1.0792
To what extent recruitment of competent firms and consultants Supported the implementation have effect on the Successful implementation of IFMIS projects?	186	4.2258	1.0667
Valid N (listwise)			
Aggregate mean		4.1710	1.1181

These descriptive statistics imply that majority of the respondents agreed that Staffing and staff Capacity has great influence for successful implementation and achievement of project objectives. This was shown by respondent's response on for proper recruitment, selection and training of staffs have effect attained a mean of 4.09, Management of staff turnover through attractive salary structure and terms of employment got a mean 4.23, implementation team business and technical knowledge attained a mean 4.17, System user's technical knowledge to operate the system attained a mean of 4.24, capacity buildings for IFMIS users reached a mean of 4.13, project team organized with sufficient manpower and knowledgeable in implementation of information systems achieved a mean of 4.09 and recruitment of competent companies and consultants supported the implementation attained a mean of 4.23. Based on the responses collected from questionnaire change management has great effect on effective implementation of IFMIS project in government public bodies.

4.6 Technological Infrastructure affects for the Implementation of IFMIS

Table 4.6 Significance of the aspects of Technological Infrastructure on effective Implementation of IFMIS

Factors	N	Mean	Std. Deviation
To what extent the network interruption and power shortage Have effect on the Successful implementation of IFMIS projects?	186	4.0914	1.0792
The project office brings proper technical support for IFMIS users have effect on the Successful implementation of IFMIS projects?	186	4.2258	1.0667
Availability of required Reports including vouchers and generated from The system quickly and immediately influences IFMIS projects?	186	4.1720	1.0967
Availability of required and reliable Hardware's (computers, printers and data center) and software's (JAVA) influence IFMIS projects?	186	4.2366	1.1333
Availability of proper system interfaced (integrated) with other systems (Revenue, Banks systems…) influence IFMIS projects?	186	4.1290	1.2146
Valid N (listwise)			
Aggregate mean		4.1710	1.1181

Source: Research Data

From the study majority of the respondents agreed that Institutional and Political factors has great influence for successful implementation and achievement of IFMIS project objectives. This was shown by respondent's response of network interruption and power shortage attained a mean of 4.09, project office brings proper technical support for IFMIS users have effect on the Successful implementation of IFMIS projects attained a mean of 4.23, Availability of required Reports including vouchers and generated from the system quickly and immediately influences IFMIS projects scored a mean of 4.17 , Availability of required and reliable Hardware's and software's scored a mean of 4.24

And finally Availability of proper system interfaced with other systems (Revenue, Banks systems…) influence IFMIS projects scored a mean of 4.13. Grounded on the responses collected from questionnaire change management has great effect on effective implementation of IFMIS project in government public bodies.

4. 7 Correlation Analysis

This study employs correlation analysis, which investigates the strength of the relationships between the studied variables. Pearson correlation analysis was used to provide evidence of convergent validity. Pearson correlation coefficients reveal magnitude and direction of relationships (either positive or negative) and the intensity of the relationship (-1.0 + 1.0). Correlations are perhaps the most basic and most useful measure of association between two or more variables (Marczyk, Dematteo and Festinger, 2005).

Pearson Correlation analysis

According to Shukran (2003), the relationship is expressed by value within the range -1.00 to + 1.00 as Pearson product–moment indicates. Pearson correlation is +1 in the case of a perfect increasing (positive) linear relationship (correlation), -1and1 in all other case indicating the degree of liner dependency between variable. To determine the relationship between Change Management, Institutional and Political Change, Institutional and Political Change and Technological Infrastructure and Effective implementations of IFMIS, Pearson correlation was presented on Table 4.5.

Table 4.5 Correlations results of Change Management, Institutional and Political Change, Institutional and Political Change and Technological Infrastructure and Effective implementations of IFMIS.

	Effective implementations of IFMIS	Change Management Factor	Institutional and Political Change	Project and Planning	Staffing and Staffing Capacity Change	Technological Infrastructure
Effective implementations of IFMIS	1					

Change Management Factor	.582[**]	1				
	.000					
Institutional and Political Change	.620[**]	.812[**]	1			
	.000	.000				
Project and Planning	.612[**]	.787[**]	.837[**]	1		
	.000	.000	.000			
Staffing and Staffing Capacity	.659[**]	.750[**]	.802[**]	.834[**]	1	
	.000	.000	.000	.000		
Technological Infrastructure	.674[**]	.749[**]	.819[**]	.818[**]	.848[**]	1
	.000	.000	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: SPSS Correlation result output, 2017

According to the Table 4.5, there were significant positive relationship between the Effective implementations of IFMIS with Change Management, Institutional and Political Change, Institutional and Political Change and Technological Infrastructure. From the result the strongest positive correlation was between technological Infrastructure and staffing and staffing capacity (0.848) followed by Institutional and Political Change with Project and Planning (0.837), and Staffing and Staffing Capacity with Project and Planning (0.834). The least correlation was between Change Management Factor and Effective implementations of IFMIS (582). In general, there were positive correlation between the Effective implementations of IFMIS with Change Management, Institutional and Political Change, Institutional and Political Change and Technological Infrastructure.

4.8 Multiple Regression Analysis

Model Summary

Multiple regressions are the most common and widely used to analyze the relationship between a single continues dependent variable and multiple continues on categorical independent variable

(George et al, 2003). In this study multiple regression analysis was employed to examine the effect of Change Management, Institutional and Political Change, Institutional and Political Change and Technological Infrastructure on Effective implementations of IFMIS. The following table presents the results of multiple regressions analysis. Here the squared multiple correlation coefficients (R^2) which tells the level of variance in the dependent variable (Effective implementations of IFMIS) that is explained by the model.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.704[a]	.495	.481	.89243

a. Predictors: (Constant), Technological Infrastructure, Change Managment Factor, Project and Planning, Staffing and Staffing Capacity Change, Institutional and Poletical Change

Source: SPSS Regression results output, 2017

The results of multiple regressions, as presented in table 4.6, above, the adjusted R^2 of 0.481 indicates 48.1% of the variation in Effective implementations of IFMIS can be explained (predicted) by the Technological Infrastructure, Change Management Factor, Project and Planning, Staffing and Staffing Capacity Change, Institutional and Political Change. The remaining 51.9% of the variation of Effective implementations of IFMIS that can be explained by other variables.

ANOVA Table

From the ANOVA table 4.7. Shows that accepting at least one of the Technological Infrastructure, Change Management Factor, Project and Planning, Staffing and Staffing Capacity, Institutional and Political Change had significant effect on the Effective implementations of IFMIS that can be explained by other variables, since the p-value for F-Statistics (0.000) less than the significance level 0. 05.

Table 4.7. ANOVA

<div align="center">ANOVA[a]</div>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	139.711	5	27.942	35.084	.000b
	Residual	142.562	179	.796		
	Total	282.273	184			

a. Dependent Variable: Effective implementations of IFMIS

b. Predictors: (Constant), Technological Infrastructure, Change Management Factor, Project and Planning, Staffing and Staffing Capacity Change, Institutional and Political Change

Coefficients

Based on the table 4.8, show the unstandardized beta coefficient, which tell us the unique contribution of each factor to the model. A high beta value and a small p value (<0.05) indicate the predictor variable has made a significance statistical contribution to the model. On the other hand, a small beta value and a high p value ($p > .05$) indicate the predictor variable has little or no significant contribution to the model. (Ggorge et al., (2003). Table 4.8, also indicates that Technological Infrastructure and Staffing and Staffing Capacity, have a significant positive influence on Effective implementations of IFMIS at 95% confidence level, since their p-values (0.003 and 0.036 for technological infrastructure and staffing capacity change responsiveness) less than the significance level 0.05. But Change Management Factor, Institutional and Political Change and Project and Planning had no any significant contribution to Effective implementations of IFMIS at 95% confidence level, because their p-values 0.587, 0.364, and 0.979 respectively greater than the significance level 0.05. The significant and insignificance factor extent to which resistance and sabotage affects effective use of IFMIS have been included for the establishment of the function.

Extent to which resistance and sabotage affects effective use of IFMIS = 0.411 + 0.068change management factor + 0.130institutional and Political Change – 003Project and Planning + 0.06staffing and Staffing Capacity Change + 0.388Technological infrastructure.

Table 4.8: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.411	.228		1.808	.072

Change Managment Factor	.068	.125	.053	.544	.587
Institutional and Poletical Change	.130	.143	.106	.909	.364
Project and Planning	-.003	.132	-.003	-.026	.979
Staffing and Staffing Capacity	.272	.128	.243	2.116	.036
Technological Infrastructure	.388	.127	.350	3.067	.003

a. Dependent Variable: Extent to which resistance and sabotage affects effective use of IFMIS

SPSS Regression results output, 2017

CHAPTER FIVE

Conclusions and Recommendations

5.1 Introduction

This chapter presents the summary, conclusions as well as recommendations for the study. This chapter is organized into four main sections. The first section of the chapter presents the summary of key findings of the study. The second and third sections of the chapter present the conclusions of the study and recommendations for the study respectively. The directions for future studies are also presented in the fourth section of the chapter.

5.2 Summary of Key Findings

Public financial management reform programs have been dominant in the public sector reform programs. This notwithstanding, most of these public financial management reform programs have failed to produce their intended benefits. Implementation has been identified as the main obstacle to the realization of the intended benefits of these public financial management reform programs. The main objective of the study was to identify the Challenges the implementation of IFMIS in Ethiopia's public financial management system.

The objective of the study was to determine the challenges facing the ministry of finance in managing change from legacy accounting systems to Integrated Financial Management Information Systems (IFMIS). From this study, findings indicated that majority of ministry departments were both networked by a local area network and a wide area network. In addition IFMIS was found to be the most preferred financial system.

The determination of challenges facing the ministry of finance in the implementation of IFMIS was the main objective of this study. Findings from this study indicated that there were numerous challenges in the implementation of IFMIS. There were three that were common to all respondents and they included resistance to change, inadequate access to training facilities by the staff and lack of properly trained staff. Other challenges included high turnover of staff due to poor remuneration ambitious and unrealistic implementation time frames, poor national communication network, funding allocated to IFMIS project is negligible, poor national communication network, lack of ICT facilities and equipment, lack of ministerial ICT policy, low staff ICT awareness, slow implementations of reforms in the Ethiopian ICT law and regulatory regime and lack of commitment by senior government staff.

Findings in this study indicated that there were numerous possible causes of the challenges in the implementation of IFMIS. These were fear of unknown, there wasn't enough training and IFMIS detected irregularities and fraud. It was also said that IFMIS was too transparent, employees feared losing job and it is not easy to manipulate. In addition, employees lacked of trust of implementers and that they were not involved during design. IFMIS was too slow, it was down most of the time and it had no shortcuts.

Though there were several challenges, there were benefits nevertheless. It was found that IFMIS had timely, accurate reporting, control of finances by Government of Ethiopia, data consistency, proper allocation of resources and efficient and effective use of funds, transparency and accountability, security of data management and improved service delivery. In addition, it had accuracy and completeness of information, good economic governance, prevented corruption and fraud and it increased processing efficiency while it had real time provision of information and it prevented overspending.

This section presents a summary of the key findings of the study. The presentation of the key findings of the study is organized into paragraphs. Thus, each paragraph focuses on a major Finding of the study.

Most countries in sub-Saharan Africa, including Ethiopia, have embarked on a number of reform programs aimed at promoting efficiency in the public sector. Public financial management reform programs have been dominant in the public sector reform programs. This notwithstanding, most of these public financial management reform programs have failed to produce their intended benefits. Implementation has been identified as the main obstacle to the realization of the intended benefits of these public financial management reform programs. The main objective of the study was to identify the Challenges the implementation of IFMIS in Ethiopia's public financial management system.

5.3 Conclusions

The study sought to establish what factors influenced effective use of the IFMIS in budgetary institutions. Hence, the researcher tested five main contributing factors that seemingly affected use of the system. The first factor was the staff resistance and the researcher scientifically sought to establish whether this factor influenced effective use of the system.

This section of the chapter presents the conclusions of the study. The conclusions drawn herein are informed by the findings of the study. From the presentation and analysis of the data, it can be concluded that did not undertake proper change management when Integrated Financial Management Information Systems (IFMIS) were introduced to their respective public bodies. The goals and objectives of IFMIS were not clearly communicated and management is not actively involved and supportive of the implementation process. These factors contributed to the resistance and negative attitudes towards IFMIS, thereby making the implementation process ineffective.

Human capital development issues seem not to have been dealt with properly. The project did not provide adequate training on IFMIS to their users, there are no regularly planned skills upgrading courses for IFMIS and low motivation to retain IFMIS trained staff.

The study noted that most counties had provided the technological infrastructure required for the implementation of IFMIS in terms of software, hardware and internet connectivity. However, no county has rolled out IFMIS beyond the headquarters to their sub counties. This means that all IFMIS operations are still handled centrally, which leads to slower processing of transactions rather than real time, and creates a loophole for more transactions at the sub counties to be handled manually.

Rodin-Brown (2008) proposes that capacity building and training need to be scoped out early in the implementation process.

The different user groups have to be identified; their levels of knowledge determined; recruiting needs established; and training curricula explored. Training programs need to address various audiences, from senior members of the bureaucracy down to mid- and entry-level civil servants.

The study determined that the political class is not supportive of the IFMIS implementation process; the counties have not allocated enough resources towards IFMIS; the counties do not currently have plans to roll out IFMIS to the sub counties; and their strategic plans do not have long term plans towards the support of IFMIS. Political will is very important

towards the success of the implementation as Rodin-Brown (2008) notes that successes like the Slovak Republic were the result of real acceptance, at the highest levels of the political system.

According to Mzyece (2006), funding e-government programs such as IFMIS should be viewed as investments rather than merely as an expense. The aggregate "return" on these investments

in terms of service delivery, operational efficiencies, cost savings and increased revenues could then be quantified in a well-defined index. The use of IFMIS has helped to curb corruption, and

made preparation of reports easier and more transparent.

For the counties to have a more effective implementation of IFMIS, they should seek internal acceptance of IFMIS by all stakeholders by educating them more on the benefits; consulting them more; and management should lead by example by being more proactive and supportive. Skills upgrading courses should be planned more regularly for staff working with IFMIS both by the counties and the National Treasury; and motivation provided to retain the trained staff in the counties. The technological infrastructure required to roll out IFMIS to the sub counties should be provided to decentralize operations from the county headquarters. The political class should also change their attitudes towards IFMIS and provide more support and leadership; adequate resources should be allocated towards the implementation of IFMIS; and the counties should include long term plans towards the support of IFMIS in their strategic plans since the benefits of IFMIS are already being realized.

It is clear from the findings that most counties did not undertake proper change management when Integrated Financial Management Information Systems (IFMIS) were introduced to their respective counties. The goals and objectives of IFMIS were not clearly communicated; implementation was not gradual and consultative; and management is not actively involved and supportive of the implementation process. These factors contributed to the resistance and negative attitudes towards IFMIS, thereby making the implementation process ineffective.

According to Rodin-Brown (2008), the best way to overcome resistance is to sell the changes, relying on credible national resources to deliver the message. The selling can be done through a variety of media: workshops, seminars, training sessions, a website, conferences, or newsletters. The study noted that most counties had provided the technological infrastructure required for the implementation of IFMIS in terms of software, hardware and internet connectivity. However, no county has rolled out IFMIS beyond the headquarters to their sub counties. This means that all IFMIS operations are still handled centrally, which leads to slower processing of transactions rather than real time, and creates a loophole for more transactions at the sub counties to be handled manually.

Human capital development issues seem not to have been dealt with properly. Most counties did not provide adequate training on IFMIS to their staff; there are no regularly planned skills upgrading courses for IFMIS; and low motivation to retain IFMIS trained staff in the counties. Rodin-Brown (2008) proposes that capacity building and training need to be scoped out early in the implementation process. The different user groups have to be identified; their levels of knowledge determined; recruiting needs established; and training curricula explored.

Training programs need to address various audiences, from senior members of the bureaucracy down to mid- and entry-level civil servants. The study noted that most counties had provided the technological infrastructure required for the implementation of IFMIS in terms of software, hardware and internet connectivity. However, no county has rolled out IFMIS beyond the headquarters to their sub counties. This means that all IFMIS operations are still handled centrally, which leads to slower Processing of transactions rather than real time, and creates a loophole for more transactions at the sub counties to be handled manually.

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With reference to the objectives and analysis conducted, it was possible to realize the aim of the project was reached. Challenges facing the ministry of finance in managing change from legacy accounting systems to Integrated Financial Management Information Systems (IFMIS) were analyzed. Resistance to change was found as the major challenge thus all the causes of challenges were referenced to resistance. However, regardless of these challenges, IFMIS was found to be the most preferred type of financial system. The researcher identified potential benefits of adopting IFMIS such as timely, accurate reporting, control of finances by implementation Government Sites, data consistency, proper allocation of resources, efficient and effective use of funds, transparency and accountability, security of data management and improved service deliver as accuracy and completeness of information, good economic governance, prevented corruption and fraud and it increased processing efficiency, real time provision of information and it prevented overspending.

5.4 Recommendation

The study required to establish what factors influenced effective use of the IFMIS project in Ethiopian government public bodies. The internal acceptance of IFMIS by all stakeholders is mandatory. The study recommends that the change management strategy needs to be developed, taking into consideration the change implications for diverse stakeholders, from politicians up to civil servants and the IT personnel who will support the new systems. A core team needs to be designated to continuously enhance their capacity to make changes and to manage changes and "sell" the changes. The best way to overcome resistance will happen through clear communication, education and training that demonstrate the benefits of change for system users on continues basis. This can be done through a variety of media: workshops, seminars, training sessions, a website, conferences, or newsletters.

There was significant influence of staffing and staff capacity on effective use of the system. The study recommends that, the different user groups have to be identified, their levels of knowledge determined, recruiting needs established and training programs explored. Provide adequate training based on user's levels and motivation provided to retain the trained staff in the counties. It needs to be ongoing and permanent. This requires, therefore, establishment of a sound permanent institution within government, empowered to carry these functions forward.

When designing a government IFMIS, it is critical to review the legal and regulatory framework and assess the necessary changes to the overall framework for public financial management. The study recommends that, the IFMIS project implementation teams must carefully address legal and regulatory requirements if the IFMIS is to be successful and sustainable. The project office should review of all systems, functional processes, methods, rules and regulations, legislation and related processes. New procedures will have to be established and standardized throughout government. The political class should also change their attitudes towards IFMIS and provide more support and leadership .the government should include long term plans towards the support of IFMIS in their strategic plans.

The technological infrastructure required to the successful implementation of IMFIS project. The project should give high emphasis for hardware and software requirements of IFMIS. A detailed architectural and infrastructure review of all IFMIS related Data Centers and network systems to identify the detailed technical requirements for IFMIS implementation and roll-out. Proactively monitoring database and application to identify all the issues in the database, forms, report, concurrent manager and interfaces. The key outputs are a negotiated Memoranda of Agreement (MOA) and Service Level Agreement (SLA) with Ethiopia Telecom along with a multi-year infrastructure improvement plan that realistically supports IFMIS to avoid network interruption and to improve system performance.

Also, recommends that comprehensive project management plan should be prepared at all levels and it should including the system objective and scope, the overall system conceptual design, expected impact and benefits, critical milestones and success factors, project implementation methodology, risk assessment or mitigation strategy, estimated costs and the financing arrangements. Monitoring and evaluation should be done accordingly.

5.5 Contribution of the Study

The previous sections presented the summary and conclusions of the study. This section thus presents the contribution(s) of the study. This study examined the implementation of public sector financial management reforms in Ethiopia, with particular emphasis on the implementation of the IFMIS

project. Since devolution is still a relatively new phenomenon in Ethiopia, and IFMIS was introduced shortly after, not many studies have dealt with the issue of IFMIS in the counties. Further research therefore, should be done on the impact of IFMIS on the public financial management of the county governments of Ethiopia; the influence of political will on effective implementation of IFMIS in the county governments of Ethiopia; and challenges faced by the county governments in the implementation of IFMIS.

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APPENDIX 1: Survey Questionnaire for IFMIS Implementation sites all sampled system users

Introduction letter

Dear Respondent,

I am MBA student at Saint Marry University undertaking a Master in Project Management and I wish to conduct a research titled "**Assessment on Challenges the Implementation of Integrated Financial Management Information System (IFMIS) Project in Ethiopia**" as part of fulfilling the course requirements. A questioner has been designed to gather relevant information to address the research objectives of the study. Kindly take few minutes to complete the questioner as guided your input will be of value to this study.

Please note that the study will be conducted as an academic research and the information provided will be treated with utmost confidentiality.

The close ended questions are answered by putting a **(√)** or **(X)**. Any enquiries concerning this research can be directed using below address.

Yours Sincerely

Henock Tariku

(09-13-38-55-44)

henamen04@gmail.com

Part I: General Information

1. Age:

18-25 ☐   26-40 ☐   41 – 55 ☐Above 55 ☐

2. Gender: Male ☐   Female ☐

3. Highest level of education:

Diploma ☐   BA/BSC ☐ Master's and above ☐   PHD ☐

Other Specify   ---------------------------

4. How many years have you worked with the Government Office?

Less than 5 Years ☐   6 - 10 Years ☐1 - 20 Years ☐1 Years and above ☐

5. How frequently do you use IFMIS as part of your work?

Daily ☐   Weekly ☐   Monthly ☐   Quarterly ☐   Annually ☐

Part II:

Project Implementation

S.No	Statement	1	2	3	4	5
1	To what extent the project implementation is in line with the schedule of the project?					

		1	2	3	4	5
2	To what extent the project implementation of the project in line with quality plan					
3	To what extent the project implementation of the project in line with cost plan					

Section A: Change Management Factors for the Implementation of IFMIS

Please indicate to what extent the statement applies by placing (√) or (**x**) inside the appropriate box
Where, 1= strongly disagree, 2= Disagree, 3=Uncertain, 4= Agree, 5= Strongly Agree

S.No	Statement	1	2	3	4	5
1	IFMIS project change management strategy prepared and communicated to all stockholders IFMIS project has faced major challenges from employees because they preparer traditional method?					
2	IFMIS change management agents were effective in Advocating continuously for IFMIS expected impact and benefits					
3	Effective change communication workshops are prepared to share experience or /and timely provision of relevant information among IFMIS system users					

S.No	Statement					
4	The change management agents were timely update IFMIS changes to the legal and regulatory frameworks					
5	IFMIS change agents successfully reduced resistances within currently IFMIS users public bodies					

Section B: Institutional and Political Challenges for the Implementation of IFMIS

Please indicate to what extent the statement applies by placing (√) or (**x**) inside the appropriate box

Where, 1= strongly disagree, 2= Disagree, 3=Uncertain, 4= Agree, 5= Strongly Agree

S.No	Statement	1	2	3	4	5
1	IFMIS not require additional staffing and capacities and imply fundamental changes in operating procedures					
2	IFMIS implementation started in the organization with full readiness assessment of user profile and proper assignment of experts					
3	IFMIS implementation started in the organization with full functional analysis of processes, procedures and requirements					
4	At all level ,management have proper and timely follow up And evaluation of IFMIS implementation progress					
5	At all level, managements are committed to implement and being part of the implementation process					
6	IFMIS accurately satisfy all requirements of your organization (IFMIS process much with Manual process)					

Section C: Project planning factors for the Implementation of IFMIS

Please indicate to what extent the statement applies by placing (√) or (**x**) inside the appropriate box

Where, 1= strongly disagree, 2= Disagree, 3=Uncertain, 4= Agree, 5= Strongly Agree

S.No	Statement	1	2	3	4	5
1	IFMIS Project Management effective Plan developed and were cascaded to all stockholders					
2	The project comprehensive plan includes Subsidiary scope ,cost ,schedule , quality, communication and procurement management plans					
3	The project comprehensive plan take account of project implementation methodology, critical milestones and success factors					
4	The project comprehensive plan includes risk assessment or mitigation strategy (Risk management plan)					
5	Adequate measures were put in place to monitor and control the progress of the implementation according to the plan (all levels)					

Section D: Staffing & Staff Capacity challenges for the Implementation of IFMIS

Please indicate to what extent the statement applies by placing (√) or (**x**) inside the appropriate box

Where, 1= strongly disagree, 2= Disagree, 3=Uncertain, 4= Agree, 5= Strongly Agree

S.No	Statement	1	2	3	4	5
1	Proper processes for recruitment, selection, and training of members were set up and undertaken.					
2	Management able to manage staff turnover through					

		1	2	3	4	5
	Attractive salary structure and terms of employment					
3	The implementation team have business and technical knowledge to carry out the implementation process					
4	All experts timely obtained proper training and have Sufficient knowledge to Operate the system					
5	Effective training programs were drawn and Capacity building was undertaken on time based on users requirement					
6	The project team organized with sufficient manpower and knowledgeable in implementation of Information systems					
7	Competent firms and consultants supported the implementation					

Section E: Technological Infrastructure Challenges for the Implementation of IFMIS

Please indicate to what extent the statement applies by placing (√) or (**x**) inside the appropriate box

Where, 1= strongly disagree, 2= Disagree, 3=Uncertain, 4= Agree, 5= Strongly Agree

S.No	Statement	1	2	3	4	5
1	The Network interruption and Power shortage is not a challenge for the use of the system					
2	The project office is providing proper support immediately when Problems happens					
3	All Reports including vouchers generated from the system are very fast and immediate					
4	Required and reliable Hardware's (computers, printers and data center) and software's (JAVA) was available for the implementation process.					
5	IFMIS system appropriately interfaced (integrated) with other systems (Revenue, Banks systems…)					