# Factors Influencing Implementation of Integrated Financial Management Information System (IFMIS) In Puntland's Public Institutions: A Case of Garowe City

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Abstract: Not only Puntland State of Somalia government has found it difficult to provide an accurate, complete, and transparent account of their financial position to parliament or to other interested parties, including donors and the general public aimed lack of IFMIS implementation, but also hindered transparency and the enforcement of accountability in government, and has only contributed to the perceived governance problems in Puntland. To promote accountability and financial management practices in Puntland state's public sector, implementation of Integrated Financial Management Information System commenced in 2015. However, the setting up phase has not progressed well as expected apart from recruiting some technical staff in some key institutions. What is not clear is why this project has not yet been implemented successfully in Puntland after three years of its inception? The study was guided by three objectives; to; -determine the influence of management commitment on implementation of IFMIS, determine the influence of technical capacity of staff on implementation of IFMIS and tomeasure the influence of project financing on the implementation of IFMIS. The target population was 65 high levels, middle level management personnel and technical staff of Ministry of Finance, Puntland bank and Accountant General. Office. Why these institutions were selected is for their relevancy as they are mandated to implement the IFMIS in Puntland. The study was descriptive in nature. Three key institutions for the implementation of IFMIS were assessed; Ministry of Finance, Office of Accountant General and State Bank of Puntland. Data was collected 65 staff from the selected institutions using structured questionnaires that addressed each of the research objectives. Data collected was quantitative in nature. The descriptive statistical tools helped the researcher to describe the data and determine the extent used. In addition, multiple regressions were used so as toestablish the extent to which the combined effect of Staff technical capacity, Project financing and Management commitment effect on the Implementation of IFMIS in the assessed institutions. The study found that Management commitment and Project financing have a significant impact on successful implementation of IFMIS Project while the technical capacity of the staff was found to be insignificantit means not effect Implementation of IFMIS. The study recommends that Puntland State of Somalia should adopt appropriate leadership, adequate budget allocation, devolving IFMIS to the district administrations and other ministries and development of staff capacity enhancement.

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#### I. Introduction

#### 1.1 Background of the Research Project

Sound budgeting and financial management are based on the following principles: comprehensiveness, legitimacy, flexibility, predictability, contestability, honesty, transparency, and accountability the promotion of efficiency and effectiveness security of data management and comprehensive financial reporting. To achieve these principles, well-functioning accounting and financial systems are among the basics that underpin governmental capacity to allocate and use resources efficiently and effectively (World B., 2011)Therefore, a strong financial management system is a key component for economic growth and development. It ensures that the government and its departments raise, manage and spend public resources in an efficient and transparent way. The government of Kenya has recently undertaken a number of public financial management reforms aimed at enhancing transparency and accountability targeting public procurement among others (Republic, of kenya, 2011)Developing countries have invested heavily in information management systems in order to benefit from advances in information technology which enables firms or organization to redefine business processes and develop new business models (Hoe, 2013) These countries particularly in Africa have reported positive progress in better procurement performance across countries in the adoption of integrated financial management

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information systems (Wainaina, 2014)According to (Hendriks, 2012)IFMIS is an information system that tracks financial events and summarizes financial information. It supports adequate management reporting, policy decisions, fiduciary responsibilities and the preparation of auditable financial statements. IFMIS also refers to the computerization of public financial management processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for the purpose of financial management, in the sphere of government operations ( (Republic, of kenya, 2011) (Wainaina, 2014)). The role of IFMIS is to connect, accumulate, process and then provide information to all parties in the budget system on a continuous basis. It is therefore imperative that the system should be able to provide the required information timely and accurately, because if it does not it will not be used and cease to fulfill its central function as a system (Wainaina, 2014)The introduction of integrated financial management system (IFMIS) was seen as a core driver to public financial reforms in the developing countries and that factors that can lead to successful implementation of IFMIS include clear commitment by the relevant authorities on financial objective reforms, ICT readiness, project phased implementation as well as adequate resources and human capacity (Chêne, 2009) The goal of an integrated financial management system is to support the achievement of fiscal discipline, strategic and efficient allocation and use of funds, value for money and probity in the use of public funds (Republic, of kenya, 2011)IFMIS assists management in ensuring accountability for the deployment and use of public resources and in improving the effectiveness and efficiency of public expenditure programs. By tracking financial events through an automated financial system, management is able to exercise improved control over expenditure and to improve transparency and accountability in the budget cycle as a whole (Wainaina, 2014)

According to (Kilby, 2009)it is widely accepted within Somalia that the effective and strategic use of public resources is a critical ingredient of its development strategy, and that transparent and accountable utilization of public resources is required to restore popular trust in government. For this reason, improving public financial management is a priority in the development plans of Somaliland and Puntland. Moreover, a good financial management system is an essential requirement if development partners are to have the confidence in government that is necessary to underpin expanded development assistance.

At present, the financial management systems across all levels of government are extremely rudimentary, leading to weaknesses in financial controls and low levels of public information on budget intentions or outcomes.

Therefore, in 2014, Somalia launched a new Financial Management Information Systems (FMIS), the overall objective is to provide a system with adequate audit trails to improve administrative accountability in processing transactions. Also, improved timeliness, accuracy and comprehensiveness of financial reports will aid effectiveness of decision making. This new system will focus on Budgeting, Expenditures, Revenue Collection and that will result in improved reporting capabilities and establishing an accurate audit trail. In addition to that, expenses and revenue related data will be entered in the system (Radio))This new system will help the federal government of Somalia and other regional states including Puntland managing procurement processes across Ministries, Departments and other government institutions. Ministry of Finance (MoF) is committed to control contracts and procurement processes. After bids accepted by the MoF, vendors will send invoices to Ministries, Departments or Agencies, which then request payment of the invoice to the Accountant General Office.

Each specific payment authorized to a vendor by the Accountant General's Office made directly from the Central Bank to vendors' bank accounts held with commercial banks, inside and outside of Somalia. The Central Bank of Somalia (CBS) reports daily to the Accountant General's Office on a consolidated Treasury Single Account System.

The Central bank processes payments instructions to pay a specific vendor. Transfer is made from the Treasury Single Account to a settlement account held at the Central Bank by a commercial bank.

The new system requires vendors to obtain a Business Registration Number (BRN) from the Ministry of Commerce.

This FMIS is being supported by the World Bank and is expected to be implemented in Puntland regional state which currently uses manual system which lacks transparency and government makes difficulty to pay the salaries of employees on time.

The FMIS will support five reform priorities areas. Establishing sound and transparent public financial management systems. Conducting accountant training; prepare financial management policies and procedures; equip staff; generate annual financial reports and establish oversight mechanisms. Strengthening procurement capacity, procurement of law and regulations with developing standard bidding documents, training programs; elevating the Somaliland and Puntland tender board to procurement oversight authorities.

Also, it establishes participatory, transparent and gender-sensitive budget preparation processes at all administrative levels as it promotes effective and equitable fiscal decentralization. It helps implementation of planned fiscal and functional decentralization; strengthens district level financial planning and budgeting; designing criteria for targeted pro-poor and pro-women transfers; and develop local revenue generation.

Furthermore, it ensures transparent monitoring of public financial management and procurement through the active involvement of parliament, civil society, NGOs, the private sector and the media (World B., 2015)The design and setting up FMIS in the government -wide institutions, with World Bank Support, still faces problems with the management commitment to the new system. The overarching concern is the significant limited involvement and ownership of the system by the various government staff in the design and development of the IFMIS. Somehow, at this development process is largely driven by consultants and donors in the formative period of the project. On the other hand, the Oracle team has not been able to make much progress in this area because of lack of clear specifications on the government reporting requirements. The complex nature of the system has encountered significant design and implementation problems and delays. The capacity and knowhow of the government staff is the question and is still the major issue, and the government will hugely rely on consultants. Consequently, several significant issues need to be addressed before IFMIS can effectively be used. In general, the setting up phase has not progressed well, primarily because of clearly limited involvement and some neglect of the system by the main players, including the MoF, Accountant General (AG) office and pilot Ministries. With the aforesaid in mind, effective use of FMIS may be at stake in spite of the colossal amount planned in this project as the government tries to roll out this system to computerize fully its operations. Therefore, this study intends to answer the question; what factors influence effective implementation of FMIS in government institutions in Puntland State of Somalia.

#### 1.2 Statement of the Problem

In Somalia in general and Puntland State of Somalia in particular, budget execution and accounting processes are either manual or supported by very old and inadequately maintained software applications. This has had deleterious effects on the functioning of their public expenditure management (PEM) systems that are often not adequately appreciated. The consequent lack of reliable and timely revenue and expenditure data for budget planning, monitoring, expenditure control, and reporting has negatively impacted budget management. The results have been a poorly controlled commitment of government resources, often resulting in a large buildup of arrears; alleged corruption, tax evictions, delays of government staff salaries, and misallocation of resources, undermining the effectiveness and efficiency of service delivery. Further, Puntland government has found it difficult to provide an accurate, complete, and transparent account of their financial position to parliament or to other interested parties, including donors and the general public. This lack of information has hindered transparency and the enforcement of accountability in government and has only contributed to the perceived governance problems in Puntland (TJNA, 2014)).

To promote accountability and financial management practices in Puntland state's public sector, implementation of Integrated Financial Management Information System commenced in 2015.

The system was meant to promote accountability and best financial management practices in the public sector and hence improve state corporations' performance (World B., 2015)

However, the setting up phase has not progressed well as expected apart from recruiting some technical staff in some key institutions. What is not clear is why this project has not yet been implemented success fully in Puntland after three years of its inception?

In the neighboring Kenya, researchers including (Cherotich, 2016)examining implementation of integrated financial management information systems by the County Governments of Kenya found that implementation of IFMIS was not successful due to lack of support by political class and the counties had not allocated enough resources to implementation. This echoed by (Kimwele, 2012) who found that the laxity of top management to support the use of the IFMIS system had affected its effective use by government employees.

The impending question is which factors constitute to successful implementation of IFMIs among state institutions noting that successful implementation of IFMIS will lead to improvement on the institutions' financial sustainability and transparency.

The research project report was sought to investigate the factors influencing successful implementation of IFMIS project among the state institutions in Puntland.In particular, the research project was examining the influence of management commitment, technical staff capacity and project financing on successful implementation of IFMIS in Puntland's state institutions.

## 1.3 Objectives of the Research Project Report General objectives

The main objective was to assess the factors that affect the implementation of integrated financial management information system in Puntland's public institutions.

# **Specific Research Objectives**

1. To determine the influence of management commitment on implementation of IFMIS in Puntland's public institutions: a case of Garowe city.

- 2. To determine the influence of technical capacity of staff on implementation of IFMIS in Puntland's public institutions: a case of Garowe City.
- **3.** To Measure the influence of project financing on the implementation of IFMIS in Puntland's public institutions: a case of Garowe City.

#### 1.4 Research Questions

- 1. To What extent does the management commitment influence of IFMIS in Puntland's public institutions: Case of Garowe City.?
- 2. How does technical staff capacity influence implementation of IFMIS in Puntland's public institutions: Case of Garowe City.?
- 3. How does project financing influence implementation of IFMIS in Puntland's public institutions: Case of Garowe City.?

## 1.5 Significance of the Research Project

This Research Project will assist for the Puntland government as it highlighted the challenges of the staff are going through while implementing IFMIS, especially capacity building needs and availing adequate equipment with this information, the government will be able to develop a strategy to bridge the identified gaps and improve implementation of the IFMIS. Also theresearch project will also provide information to agencies implementing World Bank as the donor the programme, the research gives them information that will help them in taking corrective actions aimed at maximizing the value that the Puntland State can get by having fully implemented information systems.

The research project also adds to the existing literature by bridging the gap on the implementation and impact of IFMIS on accountability and transparency. The findings of the research project are beneficial to future researchers since it highlighted areas requiring further research.

## 1.6 Scope of the Research Project

Puntland State of Somalia was established as an autonomous regional administrative entity in August 1998, envisaged as part of future federal state of Somalia through broadly consultative process in which traditional elders and local elites played a critical role. This clan based political structure maintained single administrative body with legislative, judicial and executive arms of a state government. Unlike Somaliland, Puntland does not seek international recognition as an independent state but advocates a federal Somalia in which it would exist as an autonomous entity. Puntland considers itself as part of the Somali Federal Government formally, but boasts its own constitution, political institutions and armed forces, and conducts its own foreign and trade policies.

This research project mainly examines status of IFMIS in Puntland State public institutions in Garowecity with focus on the factors that affect implementation of FMIS. The reason for selecting Garowe is that all headquarters of public financial management institutions such as Ministry of Finance, Accountant General and the Central Bank locate in the city as it is the administrative capital of Puntland State of Somalia and therefore, the information gathered from there could be generalized to the other sub-offices in the state. The research project covers the period between October 2016 to December 2017 with focus on how management commitment, financing and technical staff influence implementation of IFMIS in Puntland.

# 1.7 Limitations of the Research Project

The research was constrained by several factors that might have affected the results as well as the scope. The research project used primary data alone to make the study findings and conclusions. Primary data suffers from accuracy concerns where the accuracy of the information cannot be verified. Further, the data tend to be subjective since it reflects the opinions of high level decision makers. This challenge was addressed by use of likert scale and designing research questions to be as objective as possible.

Another limitation faced was that as the IFMIS system is still very new in Puntland State of Somalia, data from local sources for literature review was not readily available and the researcher had to rely on literature from outside the country and in some instances for general ICT adoption principles. Despite these challenges the validity of the findings emanating from this research project cannot be compromised.

#### **II.** Literature Review

## 2.1 Introduction

This chapter presents the review of theoretical literature relating to FMIS adoption, conceptual framework, and literature review of the research project and critique of existing literature. The review provides a theoretical ground for the study through identification of the research gaps that needs to be address and a detailed outline of the underlying concepts and variables.

# 2.2 Theoretical and Conceptual frameworks

### 2.2.1 Theoretical Framework

The research project relied on a number of theories pertinent to financial management in general and IFMIS in particular.

## 2.3 System Theory

Elliot developed systems theory by looking at related and interacting components, which work together to achieve a desired purpose or set of objectives (Florio, 2014). according to (Wang, 2005) it refers to information in the sense that assuming information does not necessarily involve any conscious mind, and patterns circulating (due to feedback) in the system can be called information. In other words, it can be said that information in this sense is something potentially perceived as representation, though not created or presented for that purpose. According to (Kang 'ethe, 2002)a system is a group of related and Interacting components, which work together to achieve a desired purpose or set of objectives. (Opiyo, 2017)asserts through this theory, there is need for efficiency and effectiveness therefore brings forth another need of ensuring harmony and synergy between the human resource as the core resource that controls other resources on the one hand and the other tools of trade, in particular modern ICT on the other hand so as to realize the objectives of office secretarial management.

There is therefore the clear need to understand the perception of human resource and areas with potential for conflict in the course of interaction between the human resource and modern ICT. When computer and communication technologies are combined, the result is information technology systems, or "InfoTech". Information technology is a general term that describes any technology that helps to produce, manipulate, store, communicate, and/or disseminate information. Presumably, when speaking of information technology as a whole, it is noted that the use of computers and information are associated (Wang, 2005)According to (Opiyo, 2017)emerging Information and Communication Technology (ICT) can play an important role in fighting corruption in public finance systems by promoting greater comprehensiveness and transparency of information across government institutions. As a result, the introduction of IFMIS has been promoted as a core component of public financial reforms in many developing countries. The IFMIS system is made up of different components that work interdependently to ensure that proper financial management and cash management is achieved in Puntland State of Somalia. Based on the discussion on the components of the IFMIS as a system, each component affects implementation of IFMIS and forms part of the proxy variables that will be used to measure how far the IFMIS implementation is successful.

## 2.4 Rodger's Theory of Diffusion of Innovation

Diffusion of innovation (DOI) theory was developed by Rodgers in 1962 and is argued to be one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously (that is, purchase or use a new product, acquire and perform a new behavior, etcetera). The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible (Sahin, 2006)This theory categorize adopters of innovation into five categories; innovators, individuals who want to be the first to try the innovation, Early Adopters, people who represent opinion leaders, Early Majority individuals who need to see evidence that the innovation works before they can adopt it, Late Majority, skeptical individuals who only adopts an innovation after it has been tried by the majority and Laggards, individuals who are very skeptical of change and are the hardest group to involve in the innovation process (Rotich, 2015)According to Medlin (Kahari, 2015) Rodger's theory of innovation's diffusion is the most appropriate in understanding the adoption of a given technology. Therefore, in the context of the current study, the aforementioned theory enables the investigation of adoption of IFMIS by Puntland's government institutions. As Rodgers posits, adoption is a decision of full use of an innovation as the best course of action available, while rejection is a decision not to adopt an innovation. This reasoning will be applied to explain embracing of and resistance to FMIS in Puntland's government institutions.

In tandem with Rodgers theory, four main elements in the diffusion of innovations ought to be understood. These are the innovation, communication channels, time, and social system (Sahin, 2006)As Rodgers (2003) defined, an innovation is an idea, practice, or project that is perceived to be new by an individual or other unit of adoption. In this light, Puntland State public finance institutions regard IFMIS as an innovation since it fits the aforementioned description. Communication is asserted to be the process in which participants create and share information with one another with the aim of reaching a mutual understanding. Communication is occurring through channels between sources. To enhance the diffusion of FMIS in Puntland's government institutions, it should be ensured that the system is communicated through the most effective

channels. It is further observed that innovation diffusion process includes a time dimension. More so, the nature of social system affects individuals' innovativeness, which is argued to be the main criterion for categorizing adopters.

It is recommended that, as one way of enhancing the diffusion of a technology (or innovation), it is of particular importance to understand the innovation decision process. The process entails five phases which include knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003)The current study sought to investigate how the respective users are informed of the introduction of IFMIS in the system of Puntland's government institutions. Also, it would be ration to understand how the elements of elative advantage, compatibility, complexity, trialability, and observability, are of essence in persuading the pertinent Puntland's Government officials to embrace FMIS in their operations. In addition, understanding, the decision made by the relevant personnel (if at all they have a choice on the same) and how the IFMIS is implemented will be of utmost importance. Conclusively, by applying the Rodgers theory, the researcher is in a position to confirm the potential effects of implementation of FMIS by the Puntland's government institutions.

However, the theory has a number of limitations. The theory does not foster a participatory approach. It is therefore only able to work best with adoption of behaviors. Lastly, the theory does not take into account an organization's resources and social support in adoption of new methods (Rotich, 2015)

### 2.5 Conceptual framework

# Independent Variables

# Dependent Variable

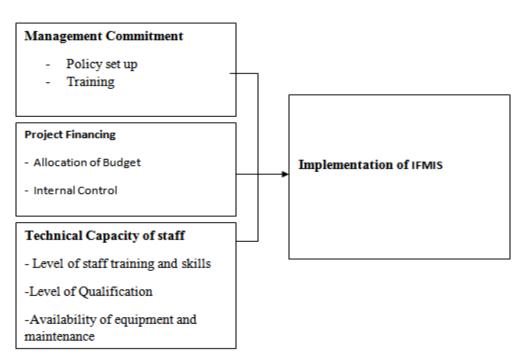


Figure 2.1: Conceptual Framework

## 2.6 Empirical review

# 2.7 Management commitment affects implementation of FMIS

Management commitment is hypothesized to play important role on IFMIS implementation. (Wabala.S., 2017) recognize that project leadership significantly influence successful implementation of IFMIS projects among Kenya's state corporations. There is capacity building and training need to be which enhance proficiency of the staff in IFMIS. The important aspects of leadership include management commitment, leaders' attitude towards IFMIS implementation, and positive influence of other stakeholders, management skills, proficient communication and adequate allocation of human resources to projects.

(Hendriks, 2012) in his study on Integrated Financial Management Information Systems: Guidelines for effective implementation by the public sector of South Africa, found that implementation of an IFMIS is a complex, risky, resource-intensive process that requires major procedural changes and often involves high-level officials and a commitment to change: change in technology; in processes and procedures; as well as changes in skills, responsibilities and behaviours.

According to Peterson (Chebet, 2013), the commitment of senior managers is one of the most frequently cited factors deciding the success or failure of an information system. This confirmed by (Chêne, 2009)on his study on the Implementation of Integrated Financial Information Management Systems arguing that 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. Therefore, according to (Combaz, 2015) advocates using change management and 'selling' reforms to users through communication, education and training, using a variety of channels such as media, workshops and conferences.

The (World B., 2015)asserts importance of management commitment when it comes for overcoming the resistance that may stem from complications during implementation and that clear declaration of reform objectives, regular updates on the progress and challenges, interactions with key stakeholders, and demonstration of intermediate are needed to help in managing potential resistance, building confidence, and maintaining the momentum of reform process.

This research project tends to echo findings (Lundu, 2015) on effect of integrated financial management information system (IFMIS) implementation on supply chain management performance in the devolved government systems in Kenya: A case of Nairobi city county government establishing that top level management support has a significant effect in IFMIS implementation in SCM in Nairobi City County Government. The study therefore recommends that commitment of top level management should be emphasized as it affects IFMIS implementation in the County Government to considerable levels. This would involve offering back up (support) to the top management to increase their commitment and self-motivated towards attending their responsibilities in order to realize the intended results of IFMIS and SCM performance within the County Government.

The research project found that top management support on IFMIS implementation affect SCM performance in Nairobi City County Government to a great extent. From the results, top managers ensure that all the necessary resources are available to a great extent, top management champions for IFMIS to be implemented in the organization for SCM to a great extent, top management shows initiative by attending IFMIS implementation meetings and training sessions and top management support affect the effective IFMIS implementation to a great extent.

According to (Dener, 2011)IFMIS is a complex and risky system that requires motivation to change so as to be implemented effectively. This requires both the top management and the staff to be willing and committed to change in the use of technology. Considering its complexity, the commitment will greatly influence how the IFMIS will be implemented or adopted into the organization. The lack of commitment to change may be attributed to factors such as a need for status quo on the use of old manual systems, fear of risks that may occur in implementing the IFMIS and also fear of not knowing how to operate the new systems or a perception of ease of the system usage (Hendriks, 2012)

Another study conducted by (Micheni, 2017)analyzing the Critical Success Factors of Integrated Financial Management Information Systems in Selected Kenyan Counties echoed that the political class is not supportive of IFMIS as evidenced by over 87% disagreement with research items. Resources allocated to IFMIS implementation were low as evidence by low percentage agreement of only 21%. It was not evident if plans are underway to roll out IFMIS to sub counties revealed by over 90% disagreement with research items. Lastly, the county's strategic plans do not outline long term plans to support IFMIS as revealed by over 88% disagreement with research items.

### 2.8 Project Financing Affects Implementation of IFMIS

Financial systems reforms are complex and risky, make intensive use of resources, and require major procedural changes (Chêne, 2009). Further, high-level officials and individual agencies often have no incentive for IFMIS implementation and tend to allocate inadequate funds to the project. Inadequate funding is also due to wide-ranging resistance to change towards IFMIS, from those who benefit from existing practices to end users whose work might be radically transformed by new systems (Combaz, 2015)

(Kimwele, 2012)) asserts that implementation of IFMIS had been hindered by financing due to reliance on donor funding. The study acknowledged that in Kenya's public sector, most ICT projects on financial management were majorly donor funded IFMIS included. Donations were made without prior consultation or carrying out a needs analysis by the recipient organization and hence misapplication of funds. Further, operational/running costs were met by the government with donor funding (capital and human resource requirements) ending with the first project phase.

Another study conducted by in Jordan on Challenges and Factors Affecting the Implementation of E-Government in Jordan found that number of challenges hinder implementation of E-government including the IFMIS such as poor funding.

The budgets for such projects were inadequate, there lacked ICT policies and master plans to guide investment. The importance of financing was challenged by (Peterson, 2006) in Ethiopia where IFMIS

implementation recorded immense success though the country had limited resource, capacity, infrastructure, as well as changes in government and dependency on foreign donors. Yet, a prudent and pragmatic approach ensured that IFMIS were promptly delivered at a relatively low cost, and then gradually updated into technically robust, sophisticated systems meeting international standards. Automation was delivered on budget, ahead of schedule, and beyond specification.

This is consistent with findings of (Gichoya, 2005), (Odago, 2013), and (Al-Shboul, 2014)who noted that lack or poor funding, poor infrastructure and bureaucracy is considered as major factors for failure of ICT adoption at government institutions. Therefore (Hoe, 2013)reports that developing countries have invested heavily in information management systems in order to benefit from advances in information technology which enables firms or organization to redefine business processes and develop new business models.

(Kimwele, 2012) asserts that implementation of IFMIS had been hindered by financing due to reliance on donor funding. The study acknowledged that in Kenya's public sector, most ICT projects on financial management were majorly donor funded IFMIS included. Donations were made without prior consultation or carrying out a needs analysis by the recipient organization and hence misapplication of funds. Further, operational/running costs were met by the government with donor funding (capital and human resource requirements) ending with the first project phase. The budgets for such projects were inadequate, there lacked ICT policies and master plans to guide investment.

## 2.9 Technical staff capacity affects IFMIS's implementation

(Hendriks, 2012) that the effective implementation, operation and maintenance of IFMIS require staff with the necessary knowledge and skills. However, lack of capacity he argues that it is an inhibition to effectiveness of IFMIS. Lack of capacity, according to this scholar, is regarded as one of the major causes for the delay in the implementation process experienced by Ghana.

Similarly, lack of capacity has been pointed out by (Hendriks, 2012) in his study as one of the most poignant derailments to the effectiveness of an IFMIS. It is noteworthy that according to (Brar, 2010) low capacity for system implementation at the sub-national level such as provincial and regional governments is one of the main challenges in the implementation of the IFMIS in developing countries. This factor according to him is very pertinent to the South African context with its nine provinces and the consequent demand that the duplication of efforts creates for skills and knowledge, of which a shortage already exists.

In their study of developing countries specifically Ghana, Malawi, Tanzania, Uganda and Kenya, Diamond and Khemani (Hendriks, 2012) argue that necessary measures should be taken to reinforce the capacity in the IFMIS project team as well as the Attorney General's (AG's) office and the budget office through all the project phases. At the same time, they note that it is equally important to develop the necessary skills and capacity of the central IT department to provide strong support to the IFMIS. For the success of the IFMIS project it ought to be ensured that there is continuity of key personnel involved in the system's development and implementation.

According to the World Bank ( (Opiyo, 2017), most reforms fail not only because of the contents or technical aspects of the reform programs, but because of the human resource capacity and the implementation strategy. The lack of clear government policy for training of staff members also pose a challenge to how effective the systems will be in the management of funds.

### 2.10 Summary

For the summary, the literature reviewed and discussed above, which is primarily focused on the factors that affect implementation of IFMIS in public sector identify a number of potential factors that might affect the adoption of IFMIS within the public sector in different countries in Africa, namely Kenya, South Africa and Tanzania. The above studies provide an important aspect regarding IFMIS and its components. They also provide results and conclusions of researches done on IFMIS in different countries and environments.

# 2.11 Critique of the Literature

For the critique of these studies, it has been found that none of the studies have tackled factors affecting efforts of introducing IFMIS to the financial management of the public sector in Somalia or Puntland State of Somalia and here there is a clear gap of knowledge that need to be addressed.

Therefore, this research was sought to fill that existing gap by seeking to establish the factors that might influence the level implementation IFMIS in financial management in the public sector in Puntland State of Somalia. Whilst this study is explicitly built upon the factors identified in prior studies, it is envisaged that it would provide a far deeper and richer data set, upon which to draw conclusions.

# **III. Research Methodology**

#### 3.1 Introduction

This chapter covers the various steps that will be used to facilitate execution of the research project to satisfy the research project objectives. These steps include research design, study Population, sample and sampling techniques, data collection instruments, validity and reliability of research instruments, data collection procedures and data analysis techniques.

#### 3.2 Research Design

The research project was descriptive in nature since it will focus on identifying factors that influence successful implementation of IFMIS with questionnaires as the main instrument of collecting data. (Kathuri, 1993) assert that a survey research usually uses questionnaires in order to determine the opinions, attitudes, preferences and perceptions of groups of people of interest in the research.

# 3.3 Target Population

Target population represents people or organizations which possess certain characteristics; it is the larger group from which a sample is taken (Mugenda, 2003) For this research project, the target population was 65 high levels, middle level management personnel and technical staff of Ministry of Finance, Puntland bank and Accountant General.Office. Why these institutions were selected is for their relevancy as they are mandated to implement the IFMIS in Puntland.

## 3.4 Sampling Frame

A sampling frame describes a list of all population from which a sample is selected ((Cooper, 2003). The research project population selected from departments and units under the Ministry of Finance, state bank and office of accountant general. The sampling frame for this research project came from the list containing the names of the respondents that were sourced from the Human Resource Departments of the ministry of finance, Puntland Bank and office of Accountant General.

# 3.5 Sampling technique

(Chandran, 2004)defines a sample as a small proportion of an entire population; a selection from the population. "Sampling is the process of selecting a number of individuals for a study in such a way that the individual selected represents the large group from which they are selected." (Mugenda, 2003)also defines Sampling is the process of selecting a number of individuals for a study in such a way that the individual selected represents the large group from which they are selected. Probability sampling occurs when the population has equal chances of being selected. This includes simple random, stratified random sampling and cluster sampling. This research project adopted a stratified sampling technique where the study population was stratified into strata.

Since the population was not large, and there are well organized structures where the respondents can be found easily, the researcher conducted a census of all the respondents from respective institutions. According (Kothari, 2004)a complete enumeration of all items in the population is known as a census inquiry. It can be presumed that in such an inquiry, when all items are covered, no element of chance is left and highest accuracy is obtained and especially when the population is small hence there is no need for further sampling and the 65-target group from management and technical level employees were all interviewed.

# 3.6 Data Collection

Both primary and secondary data were used for the research project. The research projectused a questionnaire as a key instrument for primary data collection. Secondary data was obtained from relevant literature like project documents, journals, internet and books. The use of questionnaires as it is suitable for ensuring confidentiality is upheld, save on time, and was easy to administer (Bell, 1993)The questionnaire was ideal because it gives a greater feeling of anonymity hence encourage open responses to sensitive questions and become free from bias and so accurate and valid data gathered.

The questionnaire was structured (close ended) to elicit specific responses for quantitative analysis respectively. Some of the close ended questions require responses on a five-point Likert scale (see Annex 1), showing to what extent each factor influences implementation of IFMIS.

The questionnaire was organized into five sections. The first section of the questionnaire dealt with demographic statistics such as name, age, years of service of the employees. The other sections included questions from the three objectives. A covering letter provided for the first page. 65questionnaires were distributed to respondents. To make high response rate, the researcher delivered questionnaires individually by making an appointment. As a strategy aimed at minimising the time it may take to carry out this exercise, the researcher adopted both self-administered and drop and pick strategies in questionnaire administration.

#### 3.7 Pilot Study

According to (Sekaran, 2003)a pilot test is necessary for testing the reliability of data collection instruments. Pilot study is thus conducted to test weaknesses in design and instrumentation to provide proxy data for selection of a sample. Reliability refers to the consistency of a measure. A test is considered reliable if the same result is got repeatedly (Cooper, 2003) The pilot study was done by selecting five respondents from the population and issuing them with the questionnaire. The data obtained was evaluated to ensure that questions were properly answered. However, the findings from the pilot test was not included in the final results.

#### 3.8 Reliability of Data

Reliability of an instrument is the degree to which the instrument consistently measures whatever it is measuring. An instrument is reliable if it produces the same results whenever it is repeatedly used to measure trait or concept from the same respondents even by other researchers (Amin, 2005)In order to improve the reliability of the instrument, an assessment of the consistency of the responses on the pilot questionnaires was made to make a judgment on their reliability. Therefore, the instrument was administered twice to three staff of Ministryof financeat interval of one week in the test retest procedure and out of the sample frame.

Pearson's coefficient correlation for the test-retest was used to establish the extent to which the contents of the instruments were consistent in eliciting the same responses every time they were administered. Then the scores were correlated using Pearson following Pearson's formula:

$$r = \frac{\sum XY - (\sum X) (\sum Y)}{\sum X^2 - (\sum X)^2 (\sum Y^2 - \sum Y)^2} \left[ \frac{1}{\sum X^2} \right]$$

#### Where:

r = Pearson product moment correlation coefficient

Y= score for first administration;

X= score for second administration;

N= Number of respondents i.e. 1% of the anticipated respondents (Mugenda and Mugenda 2003).

Through this formula, a correlation coefficient of 0.83 was obtained as recommended by Orodho (2005).

### 3.8 Data Analysis techniques

The questionnaires were first edited then coded to facilitate statistical analysis. Data collected is quantitative. Quantitative data was analyzedthrough the use of frequency distribution, mean scores. These analyses were used to address specific objectives IV to DV. With the help of Statistical Package for Social Science (SPSS), thefindingswere presented in form of frequency distribution tables. The data was summarized according to the study's specific objectives.

# IV. Research Findings and Discussion

#### 4.1 Introduction

The research project employed different statistical techniques aided by SPSS 16.0 version to explore factors influencing the implementation of IFMIS in Puntland public institutions. This chapter describes the analysis of data followed by a discussion of the research findings. The findings relate to the research questions that guided the study. The presentation of the results is done in line with specific objectives that guided the study.

## 4.2 Description of respondents' background Information

This section deals with the description of the background information of the respondents. The background information specifies gender, age and experience level of respondents. The background information of the respondents is presented in Tables 4.1 to 4.4.

### 4.2.1 Respondents by gender

Respondents were asked to indicate their gender. This sought to ensure proportionate representation in the study by both the male and the female respondents. Data collected is presented in Table 4.1 below.

**Table 4.1: Gender of the respondent** 

Gender	Frequency	Percent	
Male	45	69	
Female	20	31	
Total	65	100	

Results from tables 4.1 indicated concern gender, there were more male (69.2%) than female (30.8%). This implies that government's employees are dominated by males. The reason could be themalesare more educated than females, so many of them qualify to be hired in government institutions, however, cultural and social factors that hamper women to work in public institutions could not be ruled out.

#### 4.2.2 Respondents by Age

Respondents were requested to indicate their ages. In this research project, age of respondents was categorized into four groups namely: 21–30, 31-40, 41-50 and 50 years and above .Results are presented in Table 4.2

Table 4.2: Age of the respondents

Table 4.2. Fige of the respondents			
Age	Frequency	Percent	
21-30 years	28	43	
31-40	24	37	
41-50	12	18	
over 50 years	1	2	
Total	65	100	

Table 4.2 indicates that 43.1% of the respondents belonged to the age of (21-30), 36.9% belonged to the age (31-40), 18.5% belonged to (41-50) and 1.5% of the respondents are the age of over 50 years. Therefore, the age between 21 to 30 years dominate over assessed institutions, because this productive age of the employee in terms of experience and qualifications. The least hired age in the institutions are those of 50 years at 1.5% and those of 41-50 years at 18.5%.

#### 4.2.3 Respondent by Institutions

Respondents were also asked to indicate their respective institutions.

Table 4.3 presents the results:

**Table 4.3: Institution** 

Institution	Frequency	Percent
Ministry of Finance	33	51
State Bank	10	15
Accountant General Office	22	34
Total	65	100

Table 4.3 showed that the majority of the respondents were from the ministry of finance at 50.8%, followed 33.8% from office of the Accountant General and 15.4% working with the State bank.

## 4.2.4 Experience of Respondents

Table 4.4: For how long have you been working with the government?

Experience	Frequency	Percent	
less than 6 years	30	46	
6-10 years	22	34	
11-20 years	11	17	
Over 20 years	2	3	
Total	65	100	

Results in table 4.4 above have indicated that the majority of the respondents working with the targeted institutions have less than 6 years of experience (46.2%), 33.8% have 6-10 years of experience and it is followed by those with 11-20 of experience at (33.8%) and over 20 years of experience at (3.1%).

# 4.2.5 Respondents by theirknowledge on Integrated Financial Management Information System and its components

#### Table 4.5: Do you know Integrated Financial Management Information System and its components

According to table 4.5, when respondents were asked about if they know Integrated Financial Management Information System and its components, their response positive at 93.8% of, while only 6.2 percent said we do not know about the FMIS.

# 4.2.6 Respondents bytheir involvement in the use of IFMIS for recording and accounting transactions

Table 4.6: Is your department involved in the use of IFMIS for recording and accounting transactions?

	Frequency	Percent
Yes	52	80
No	13	20
Total	65	100

Results from table 4.6 has indicated that the majority of the respondents were involved in the use of IFMIS as 80% responded with yes while only 20% have said no.

## 4.2.7 Respondents by their deeply involvement in the use of IFMIS in their departments

Table 4.7: Are you deeply involved in the usage of IFMIS in your department?

	Frequency	Percent	
Yes	50	77	
No	15	23	
Total	65	100	

In table 4.7, when respondents were asked if they are deeply involved in the usage of IFMIS in their respective departments, 76.9% said they are deeply involved, while the remaining 23.1% said they are not deeply involved.

#### 4.3 Findings as per Research Project Objectives

# 4.3.1 Influence of Management Commitment on implementation of IFMIS in Puntland's Public Institutions

The objective one of the research project sought to determine the influence of management commitment on implementation of IFMIS in Puntland's public institutions. Based on a five-point Likert scale (Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree), respondents were presented with a number of items to measure the extent to which management commitment influences on the implementation of IFMIS in Puntland's public institutions.

**Table 4.8:** Influence of Management Commitment on implementation of IFMIS in Puntland's public institutions.

motitutions.	
Management Commitment	Mean
The institution has a policy for IFMIS	3.15
The management has a way of enforce the implementation	3.55
The management has set up fund for IFMIS implementation	3.55
The management skills favor implementation of IFMIS	3.25
The management has established a department for IFMIS implementation	2.92
Average mean	3.29

According to table 4.8, the average shows that the majority of the respondents have agreed that management commitment has influence on the implementation of IFMIS in Puntland's Public institutionwith(Average mean =3.29).

This result is consistent with studies of (Wabala.S., 2017), (Hendriks, 2012), (Combaz, 2015) and (Lundu, 2015) whose findings asserted the influence of Management commitment on successful implementation of IFMIS.

# 4.3.2 The Influence of Project financing on the Implementation of IFMIS in Puntland's Public Institutions.

This objective two of the research project sought to determine the Influence of project financing of on the implementation of IFMIS in Puntland's public institutions based on a five-point Likert scale (Strongly

Disagree, Disagree, Neutral, Agree, and Strongly Agree), respondents to measure the extent to which project financing Influences on implementation of IFMIS in Puntland's public institutions.

Table 4.9 influence of project financing on the implementation of IFMIS in Puntland's public institutions

Project financing	Mean
There is proper budget allocation to the IFMIS project	3.68
The internal controls ensuring effective money allocation	3.62
There is timeliness of releasing funds of the implementation process	3.68
There is an effective plan on how the money allocated to projects	3.34
The financial management ensures effective approval of funds	3.77
Average Mean	3.6

According to table 4.9, majority of the respondents have agreed that the project financing have influence on the implementation of IFMIS In Puntland's public institutions (with **average mean of 3.6**). The results are in agreement with those findings (Peterson, 2006) (Brar, 2010), (Musee, 2011) and (Opiyo, 2017) which asserted the influence of financing or funding on successful implementation of IFMIS.

# 4.3.3 Influence of Technical Capacity of Staff on implementation of IFMIS in Puntland's Public institutions.

This objectivethreethe research project sought to determine the Influence of technical capacity of staff on implementation of IFMIS in Puntland's public institutions, the results are shown in the below table.

Table 4.10: Technical capacity of staff

Technical capacity of staff	Mean
The institution has adequate staff for IFMIS implementation	3.37
There are qualified staff in your institution to oversee the effective use of the system	3.2
You receive proper training on the use of IFMIS during after implementation	2.8
The staff are well training in IFMIS	3.20
The institution has enough computer for IFMIS implementation	2.52
The institution has input in place regular service and maintenance mechanisms	2.65
Average mean	2.9

Result from table 4.10 have shown that majority of the respondents have agreed that technical capacity of the staff was very low (average mean of 2.9). This means that the system needs to be improved.

In their study of developing countries specifically Ghana, Malawi, Tanzania, Uganda and Kenya (Diamond, 2006)argue that necessary measures should be taken to reinforce the capacity in the IFMIS project team as well as the Attorney General's (AG's) office and the budget office through all the project phases. At the same time, they note that it is equally important to develop the necessary skills and capacity of the central IT department to provide strong support to the IFMIS. For the success of the IFMIS project it ought to be ensured that there is continuity of key personnel involved in the system's development and implementation.

Similarly, lack of capacity has been pointed out (Hendriks, 2012)in his study as one of the most poignant derailments to the effectiveness of an IFMIS. It is noteworthy that according to (Brar, 2010)low capacity for system implementation at the sub-national level such as provincial and regional governments is one of the main challenges in the implementation of the IFMIS in developing countries. This factor according to him is very pertinent to the South African context with its nine provinces and the consequent demand that the duplication of efforts creates for skills and knowledge, of which a shortage already exists.

# 4.4 Implementation of IFMIS

This is the dependent variable of the research project which indicates the IFMIS of the institutions in Puntland. Based on a five-point Liker scale (Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree), respondents were presented with a number of items to measure the Capacity of the institutions.

**Table 4.11:** Implementation of IFMIS

Implementation of IFMIS	Mean
IFMIS is being implemented in phases	3.2
There is Coordination among user departments.	1.9
Qualified personnel and adequate resources allocated to IFMIS implementation.	2.3
Average mean	2.45

According to table 4.11 Respondents were asked whether use of IFMIS is being implemented in phases, their response was somehow good; they were also asked if there is coordination among user

departments. There seems to be a general agreement that the use of IFMIS has not made coordination among user departments any easy. The findings reveal that there are no adequate resources and qualified personnel allocated to IFMIS implementation. This can be shown by 2.3 mean of respondents who agree to a very small extent.

# 4.5 Regression Analysis Results

Table 4.12: Model Summary

	Tuble 1112. 1110act Stilling					
Model	R	R Square	Adjusted R Square			
1	.851	.724	.676			
a. Predicto	rs: (Constant), STAl	FF, FINANCING, MANA	AGEMENT			

R-squared is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination, or the coefficient of multiple determinations for multiple regressions. 0% indicates that the model explains none of the variability of the response data around its mean. The adjusted R-squared is a modified version of R-squared that has been adjusted for the number of predictors in the model. The adjusted R-squared increases only if the new term improves the model more than would be expected by chance. It decreases when a predictor improves the model by less than expected by chance.

The model summary of the regression analysis in Table 4.12 shows that independent variables accounted for 72.4 % of the variance in of the dependent variable (R square = 0.724). This shows that 27.6% of the variance in dependent variable was explained by factors not in the research project.

The general objective sought to assess the factors that affect the implementation of integrated financial management information system in Puntland's public institutions. The Pearson Correlation analysis which determines the strength and direction of the relationships was used. The Pearson correlation coefficient ranges from 0 (if no relationship exists) to 1 (for a perfect relationship). Correlation coefficients (in absolute value) which are  $\leq 0.35$  are generally considered to represent low or weak correlations, 0.36 to 0.67 moderate correlations, and 0.68 to 1.0 strong or high correlations with r coefficients > 0.90 very high correlations(Field,2005)

Table 4.13: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.274	3	7.425	10.320	.000a
	Residual	43.885	61	.719		
	Total	66.160	64			

a. Predictors: (Constant), STAFF, FINANCING, MANAGEMENT

b. Dependent Variable: Implementation of IFMIS

The significance value is .000 which is less than 0.05 thus the model is statistically significant in predicting independent variables this shows that the two variables model was significant but one variable of this research project insignificance.

**Table: 4.14 Coefficients** 

Model		Unstanda	rdized Coefficients	Standardized Coefficients	T	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.678	.683		2.457	.017
	Management commitment	.617	.162	.546	3.808	.000
	Project financing	0.324	0.116	.367	2.793	.004
	Staff technical capacity	313	.221	158	-1.416	.162

The Unstandardized beta coefficients column in Table 4.14 above were used to obtain the overall equation as suggested in the conceptual framework. When these beta coefficients are substituted in the equation, the model becomes:

 $Y = 1.678 + 0.617X1 + 0.324X2 - 0.313 X3 + \epsilon$ 

#### Where

- Y =Implementation of IFMIS
- X1 = Management commitment
- X2 = Project financing
- X3 = Staff technical capacity

The results also show the unique contribution to the explaining of the independent variable. The standardized coefficients assess the contribution of each independent variable towards the prediction of the

dependent variable, since they have been converted in the same scale to show Comparison. Table 4.14 indicates that Management commitment was the most significant with p-values of 0.000 followed by Project financing management with p-values of 0.004 respectively. The t-test statistic shows that two independent variables of the B coefficients of are significant (since p<0.05) while Technical staff capacity shows insignificance.

Table 4.15: Pearson's Correlation Analysis

		Management commitment	Project financing	Staff technical capacity	IFMIS
Management commitment	Pearson Correlation	1	.650**	361**	.559**
_	Sig. (2-tailed)		.000	.003	.000
	N	65	65	65	65
Project financing	Pearson Correlation	.650**	1	230	.324**
-	Sig. (2-tailed)	.000		.066	.009
	N	65	65	65	65
Staff technical capacity	Pearson Correlation	361**	230	1	340**
	Sig. (2-tailed)	.003	.066		.006
	N	65	65	65	65
IFMIS	Pearson Correlation	.559**	.324**	340**	1
	Sig. (2-tailed)	.000	.009	.006	
	N	65	65	65	65
**. Correlation is significant a	at the 0.05 level (2-tailed)	•			

The general objective was analyzed using multiple regression analysis. Multiple regression analysis was carried out to establish the extent to which the combined effect of Staff technical capacity, Project financing and Management commitment effect on the Implementation of IFMIS of the institution. Before the regression analysis was carried out, Pearson's correlation analysis was carried out to ensure that there was no multicollinearity. Multicollinearity exists when there is a strong correlation between two or more independent variables and this poses a problem when running multiple regressions. According to (Field, 2005)multicollinearity exists when correlations between two independent variables are at or in excess of 0.80. In this study, the highest correlation was between project financing and management commitment (r = 0.65) which rules out multicollinearity.

# V. Summary, Conclusions and Recommendations

#### 5.1 Introduction

This chapter deals with the summary, conclusions, recommendations and areas for further research. This research project set to achieve the objectives: To determine the influence of management commitment on implementation of IFMIS in Puntland's public institutions, specifically Ministry of Finance, State Bank and office of Accountantand, To determine the influence of technical capacity of the staff on implementation of IFMIS in Puntland's public institutions, specifically Ministry of Finance, State Bank and office of Accountant General, and To determine influence of project financing on implementation of IFMIS in Puntland's public institutions, specifically Ministry of Finance, State Bank and office of Accountant General. The chapter further provides possible areas of further research in order to provide guidance to future researchers on Implementation of Integrated Financial Management System, In this chapter, the findings of research are summarized and conclusions drawn.

#### **5.2 Summary**

The objective one of the research project sought to determine the influence of management commitment on implementation of implementation of IFMIS in Puntland's public institutions, specifically Ministry of Finance, State Bank and office of Accountant General based on a five-point Likert scale (Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree). Various factors were established to influence IFMIS in terms of management commitment such as institutional policy setting, policy enforcement, funds allocated for the implementation of the IFMIS, the management skills and establishing specialized department for the project implement within the institution. The findings reveal that management commitments significant impact on implementation of IFMIS influence the implementation of IFMIS in Puntland.

The objective two of the research project intended to determine the influence of technical capacity of the staff on implementation of IFMIS inPuntland's public institutions, specifically Ministry of Finance, State Bank and office of Accountant General based on a five-point Likert scale (Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree). Various factors were established to measure the influence of technical capacity of the staff on the implementation of the IFMIS such as qualification of the staff, training of the staff, availability of enough computers and service and maintenance. The findings showed thatthe majority of the respondents have agreed the technical capacity of the staff is very low at average mean of 2.9. This means that the technical staff of respective assessed public institutions needs to be improved.

The objective three of the study also aimed at measuring the influence of project financing on implementation of IFMIS inPuntland's public institutions, specifically Ministry of Finance, State Bank and office of Accountant General based on a five-point Likert scale (Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree). Various factors were established to influence IFMIS in terms of financing such as the proper budget allocation of the project, internal controls, timelines of releasing funds and effective financial management in place. The findings establishedthat the project financing have influence on the implementation of IFMIS In Puntland's public institutions at average mean of 3.6 which means that level of financing or funding available for the implementation of the IFMIS has significant impact on successful implementation of IFMIS in Puntland public institutions.

Multiple regressions were used so as to establish the extent to which the combined effect of Staff technical capacity, Project financing and Management commitment effect on the Implementation of IFMIS in Puntland public institutions, specifically Ministry of Finance, State Bank and office of Accountant General. The outcome of the regression analysis indicates that IFMIS that the highest correlation exists between the project financing and management commitment (r = 0.65, p < 0.000) which rules out multicollinearity.

#### **5.3 Conclusions**

Based on the findings, the research project concludes that the level of influence of management commitment on the implementation of IFMIS is significant. Management commitment in terms of policy frame, enforcing implementation, setting up funds and establishment of departments for the program implementation were found to influence on the implementation of the IFMIS in Puntland's public institutions.

The research project also concludes that the technical capacity of the staff in terms of qualification and training the staff, availability of enough computers and service and maintenance does not affect implementation of IFMIS in Puntland public institutions. This means that there is capacity building and training which enhance proficiency of the staff in IFMIS.

The research project also established that the level of project financing or funding influences the successful implementation of the IFMIS in public institutions. The financing aspects leading to successful implementation of IFMIS include adequate budget allocation to the IFMIS projects, internal controls, timeliness of releasing funds securing adequate funding, effective plan on allocation of funds and effective approval of funds.

On the relationship that exists between the variables, the research project found that management commitment, projectfinancing of the project affects positively on implementation of IFMIS. This means that a change in these variables would affect how procurements performed. While the Staff technical capacity does not effect

### **5.4 Recommendations**

Based on the findings, the research project recommends that:

- Puntland State of Somalia should adopt appropriate staff capacity enhancement to ensure quality, reliability
  and sustainability of the system. Also establish maintenance mechanism to avoid system persistent system
  breakdowns.
- Puntland State of Somalia should allocate budgetfor implementation of IFMIS projects to ensure sustainability of the programmeafter World Bank Phase-out.
- Puntland State of Somalia should emphasize and decentralize the implementation of IFMIS to the district
  administration levels. this would involve offering back up (support) to top management to increase their
  commitment. As an indicator to enhancing accountability and transparency at lowest constituencies.

# **5.5 Suggestions for Further Research**

The researcher analysed three major factors that were believed to have significantly affected IFMIS implementation. Further research could be conducted by incorporating more factors.

The Research Project Population involved the Ministry of Finance, the State Bank and the Office of Accountant General based in Garowe. Further studies could be undertaken on wider Somalia government institutions Somalia. The study will be important since implementation of IFMIS at the state level from Federal National government.

Additionally, further research should be emphasized on the determinants of IFMIS implementation. This will shed more light on the variables that need to be included in future research when studying performance of IFMIS in public sector.

This Research Project analyzed factors that had hindered effectiveness of the system. Those factors behind its success, though limited, could form a basis for a further research.

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# APPENDIX A: QUESTIONNARE FOR INSTITUTIONS SECTION A: BACKGROUND INFORMATION

**1.** Gender:

Male	
Female	

**2.** Age

Less than 20 yrs	
21 – 30 yrs	
31 – 40 yrs	
41 – 50 yrs	
Over 50 yrs	

**3.** Institutions:

Ministry of Finance	
State Bank	
Accountant General office	

**4.** For how long have you been working with the government?

Less than 6years	
6- 10 years	
11-20 years	
Over 20 years	

**5.** Do you know IFMIS and its components?

 ponents.	
Yes	
No	

**6.** Is your department involved in the use of IFMIS for recording and accounting transaction?

Yes	
No	

7. Are you deeply involved in the usage of IFMIS in your department?

_		V	 ,	acher	******
	Yes				
	No				

**Section B: Management commitment** 

This section is seeking your opinion on the given statements. Please indicate [(1) = Strongly Disagree; (2) = Disagree; (3) = Unilateral; (4) = Agree and (5) = Strongly Agree] by circling the number corresponding to the statements.

	SA	A	U	D	SD
The institution has a policy for IFMIS					
The management has a way of enforce the implementation of IFMIS					
The Management has set up fund for IFMIS implementation					
The management skills favor implementation of IFIMS					
The management has stablished a department for IFMIS					
implementation					

# **Section C: Project financing**

This section is seeking your opinion regarding the factors affecting implementation of IFMIS. Please indicate [(1) = Strongly Disagree; (2) = Disagree; (3) = Unilateral; (4) = Agree and (5) = Strongly Agree] by circling the number corresponding to the statements

	SA	A	U	D	SD
There is proper budget allocation to the IFMIS project.					
The internal controls ensuring effective money allocation					
There is timeliness of releasing funds of the implementation process.					
There is an effective plan on how the money allocated to projects					
The financial management ensures effective approval of Funds					

#### **Section D:** staff technical capacity

This section is seeking your opinion regarding the factors affecting implementation of IFMIS. Please indicate [(1) = Strongly Disagree; (2) = Disagree; (3) = Unilateral; (4) = Agree and (5) = Strongly Agree] by circling the number corresponding to the statements

	SA	A	U	D	SD
The institution has adequate staff for IFMIS implementation					
The staff are well trained in IFMIS					
There are qualified staff in your institution to oversee the					
effective use of the system					
you receive proper training on the use of IFMIS during after					
implementation					
The institution has enough computer for IFMIS					
implementation					
The Institution has input in place regular service and					
maintenance mechanisms					

#### **Section E: Implementation of IFMIS**

Please indicate [(1) = Strongly Disagree; (2) = Disagree; (3) = Unilateral; (4) = Agree and (5) = Strongly Agree] by circling the number corresponding to the statements

	SA	A	U	D	SD
IFMIS is being implemented in phases					
There is Coordination among user departments.					
Qualified personnel and adequate resources allocated to IFMIS implementation.					

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