

THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Factors Influencing Implementation of Integrated Financial Management Information System in Devolved Government in Kenya

Karugu Zablon Mwaura

Student, Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract:

The growing adoption of ICT by governments worldwide is a testimony to its role as an effective tool for public service delivery. In Kenya, it has been adopted as one of the cornerstones of the government's strategy for making services accessible to its citizens. Consequently, various initiatives have been started and some already implemented with aim of automating the service delivery whereby the common mwananchi will access better services through automation of Government processes. Implementation of Integrated Financial Management Information System (IFMIS) project started in 2003 and it is being used in both national and county governments. The main focus of the study was to identify what are the factors that are affecting implementation of the IFMIS project emphasis on the devolved government who have been facing the various challenges. The specific objectives of study were to determine the effect of human resource capacity in counties in IFMIS implementation, determine the ICT infrastructure related factors that influence the implementation of IFMIS and establish whether staff are willingness influence implementation of IFMIS project in counties. The study was guided by the Kurt Lewin Change Theory and Technology Acceptance Model (TAM). The model is an information systems theory that models how users come to accept and use a technology. The study used a population size of forty-seven devolved governments in Kenya, where the five counties implementing Integrated Financial Management Information System were surveyed. A sample size of twenty-one respondents were used in the study. The data was collected using a questionnaire with maximum return rate. The framework described the three factors influencing implementation of IFMIS system in devolved Government, which are human resource capacity, ICT Infrastructure and staff willingness to change. IFMIS implementation and relationship between variables were also captured in the questionnaire. The information was therefore, available to the respondents. Quantitative data was collected and analysed using SPSS and presented through percentage, mean, frequencies. Pearson correlation was used to assess the significance of the relationship between the independent variables, and dependent variable. The findings of the study were for effective implementation of IFMIS system in devolved government needs the adequate human resource capacity is needed before and after its implementation. County ICT Infrastructure need to be improved in order for the system accessible to the users. The study shows that one of the major challenges of IFMIS implementation was staff willingness to change. Therefore, the study recommended that the national government to train adequately the users of the IFMIS system before and after its implementation. The ICT systems implementers should improve the county ICT infrastructure to be stable and reliable where they will improve connectivity to IFMIS system easily. The management should be in support of the use of IFMIS system through the sensitization on the benefit of IFMIS system where it will improve staff willingness to migrate to IFMIS system.

1. Introduction

1.1. Background of the Study

Governments have been constantly under pressure to improve public services quality while containing costs and enhancing public accountability at the same time. Since 1980s, many developed and developing countries have been working on public sector management reforms with the aim of improving public sector inefficiency and ineffectiveness.

Information and Communication Technologies (ICTs) plays a critical role in sustainable human development and governance. ICT is a powerful enabler of development goals because of the way it improves communication and exchanges knowledge and information necessary for development processes. ICT is pervasive and cross-cutting, impacts the full range of human activity and has become one of the main enablers in the pursuit of poverty alleviation, wealth creation in developed and developing countries (Ondigi, 2009).

1.1.1. IFMIS Implementation

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 Integrated Financial Management Systems (IFMIS) has been promoted as a core component -and in many cases a driver of public financial reforms in many developing countries. Yet, experience shows that in spite of the considerable amount of

resources allocated to such schemes, IFMIS projects tend to stall in developing countries, as they face major challenges of institutional, political, technical and operational nature. Case studies of more successful countries such as Tanzania and Ethiopia indicate that factors supporting successful implementation of IFMIS include a clear commitment of the relevant authorities to reform objectives, ICT technical and infrastructure readiness, a sound project design, a phased approach to implementation, a proper change management capability, as well as adequate resources and human resource capacity allocated to the project (Chêne, 2009).

1.1.2. IFMIS Implementation in Kenya

Kenya Government through the then Ministry of Finance, embarked on a countrywide ICT project with the aim of unifying main service by implementation Integrated Financial Management Information System (IFMIS) project. IFMIS is an Enterprise Resource Planning (ERP) Software applications comprised of large-scale computer software and hardware systems that attempt to integrate all data and processes of an organization into a unified system housed in a centralized database which is accessed through a secure network. It has capabilities for handling enterprise wide business processes ranging from functions such as manufacturing, logistics, distribution, inventory, shipping, invoicing, and accounting. (National Treasury, 2015). Integrated Financial Management Information Systems (IFMIS) has the ability to improve public sector management because it has the ability to provide financial information to the users to provide timely information for users and accountability to the public. The introduction of an IFMIS can be regarded as an organizational reform which deeply affects work processes and institutional arrangements governing the management of public finance (Baloyi, 2011). It can also aid in the control of business activities like sales, marketing, quality control, and human resource management. IFMIS implementation in Kenya commenced in 2003, originating from gaps and weaknesses within the SIBET system that was in use at the time. (National Treasury, 2015)

The introduction of the integrated financial management information system as a PFM reform initiative was aimed at automating and streamlining Governments financial management processes and procedures. However, the implementation of such a project has proved to be a very demanding undertaking and has not been met with resounding success. The following processes have been linked and integrated with the IFMIS system: planning and budgeting, procurement, accounting, electronic funds transfer, auditing asset management and financial reporting. The IFMIS system in Kenya ensures the provision timely accurate and quality financial information. It enhances financial controls for improved expenditure management, increases transparency and accountability and improves public service delivery for economic growth and development. The Kenyan Government is involved in several projects and there are usually large amounts of funds involved in the projects. To ensure proper management of funds, efficiency and the effectiveness in the implementation of the projects is key because of the continued increase in demand for accountability. (IFMIS Report March 2015)

After passing of the new constitution in 2010, devolved government were created after 2013 election. Being part of the government, they were required in implement IFMIS so that they can access the financial services from the government.

The implementation of the IFMIS project in the counties has been faced with a several challenges which has limit the level of expected output and benefits from a well implemented IFMIS system. IFMIS should be regarded as a major project requiring a structured project management approach. However, a hurried installation of the system may be the government undoing (Gibson & Nolan, 2003). Reports produced, including those by Controller of Budget and Office of Auditor General, reveal the types of problems that counties are experiencing while operationalizing financial management. These problems arise, partly due to lack of capacity, fragmented and weak financial systems, lack of effective links with the National Treasury systems, and lack of prior preparation. For these reasons, linking Counties to IFMIS together with capacity building, both human and technical, will mitigate some of the current problems. However, IFMIS will also need improvement to expand outreach and stabilize (Auditor General Report 2013-2014).

1.2. Statement of the Problem

Governments around the world have engaged in the process of implementing a wide range of (ICT) systems in order to improve services delivery and provide a credible source of information (Kaul & Odedra 2006). The modern day challenge of organizations is to have in place information technology systems that can effectively service the needs of the organization, meet the rapid technological changes and be flexible to accommodate enhancements. It is imperative that a new management information system should be adequately planned for and accommodates the needs of its myriad users to forestall the eventuality of system failure. (Ngibuini, 2010). Various factors determine the success of IFMIS development and implementation in developing countries. Though, the national government of Kenya has made ambitious steps in adopting and implementing IFMIS, the devolved Governments are yet to embrace the same. Due to the fact that financial mismanagement has been almost the norm in many Counties since they came into existence on April, 2013. Turkana County Government has not implemented the Integrated Financial Management Information System (IFMIS) despite the National Treasury having supplied the required equipment and offered training to some of the finance staff on the use of IFMIS also it was noted to be grossly understaffed and not well equipped. In Murang'a County they had carry out an assessment of the ICT status and infrastructure of the county where the ICT assets and connectivity of the Sub County offices are evaluated and found that they were not adequate enough. There was no established Wide Area Network at the County to connect various Sub County offices. The County should ensure that all its Sub-County offices are inter-connected to the head office to ensure efficient monitoring of each Sub-County processes (Kenya National Audit Report, 2014)

The complexity and changes presents challenges in the process of implementation and these challenges are more than just those failures in technology. Technical failures are common experiences in the implementation of any systems. An IFMIS project changes the way county staff operate which cause resistance. It also involves a lot of public resources that present an opportunity for corruption. The lack of training of staff members also pose a challenge to how effective the systems will be in the management of

project funds. Politicians are at the heart of management of project funds and are known to benefit largely through lack of accountability and the existence of bureaucratic systems and any public finance management system intends to introduce internal controls. The internal controls eliminate loop holes for misuse of the project funds and usually explain lack of political commitment in the implementation of IFMIS. Counties have been using IFMIS for funding of their expenditure and reporting but there has been constant excuse by the county head that use of IFMIS is causing delay in implementation and funding of projects in respective county. This can have a negative effect on the implementation and consequently use of a management information system and should not be underestimated because they lead to low utilization of the system and in some cases failure (Otundo 2015). Therefore, the study was conducted to establish the factors influencing implementation of integrated financial management information system (IFMIS) project in devolved government.

1.3. Objectives of the Study

1.3.1. General Objective

The general objective of the study was to establish the factors influencing implementation of integrated financial management information system (IFMIS) project in devolved government.

1.3.2. Specific Objectives

The study was guided by the following specific objectives:

- i. Determine the effect of human resource capacity in counties on implementation of IFMIS project;
- ii. Determine the ICT infrastructure-related factors that influence implementation of IFMIS project.
- iii. Establish whether staff willingness influences implementation of IFMIS project.

1.4. Research Questions

The study was conducted to answer the following research questions:

- i. What is the effect of human resource capacity in counties on implementation of IFMIS projects?
- ii. To what extent does ICT infrastructure-related factors influence implementation of IFMIS project?
- iii. How does staff willingness influences implementation of IFMIS project?

1.5. Significance of the Study

The purpose of this study was to determine the factors influencing successful implementation of IFMIS in counties. The study will be significant to many stakeholders who want to implement information system in their organization and reap numerous benefits.

1.5.1. Devolved Governments

Devolved government who are implementing the IFMIS project, they will be able to analyze areas that the study focuses on which may cause the implementation to fail and use the study to improve the adoption of the system. This will help in reducing chances of failure in implementation of IFMIS and be able to get the benefits of county using the system.

1.5.2. National Governments

National Government policy makers can now address the identified shortcomings of the system implementation process they are currently using to make it more effective. This will assist in the roll out of the system to the other government agency without hitches experienced in the county and national government.

1.5.3. Systems Developers

ICT systems implementers, the study will assist on the factors to look at when implementing an ICT system. This will assist in reduce implementation time, cost and be successful in adoption of the system.

1.5.4. General Public and Academia

The general public can now have confidence in the financial information being generated from county government whom has fully implemented the IFMIS system. The study will also be important to the citizen of the different counties as they seek assurance the public funds are efficiently utilized. Academic researchers can now carry out further research in this area of an integrated financial system in both county and national governments focusing on other areas such the efficiency of service delivery post IFMIS implementation.

1.6. Scope of the Study

The study was focusing on the implementation of IFMIS in the devolved governments where the project is being implemented. The respondents of the study were selected from the Counties which are implementing or already implemented IFMIS system. These are Nakuru County, Migori County, Kakamega County, Muranga County and Kiambu County. These counties are involved in the implementation of the IFMIS and they are in different level of adoption. Some have almost fully implemented the system. This was to assist in my research in establishing the challenges they have encountered as they implemented the IFMIS.

The focus of the study was descriptive in nature since it focused on identifying factors that influence successful implementation of IFMIS where questionnaires were used as instrument of collecting data. The study was guided The Kurt Lewin Change theory model that provided a high-level approach to change. It gave a framework to implement a change effort, which is always very sensitive and must be made as seamless as possible.

The study focused on the objective of the study which included the effect of human resource capacity in counties on implementation of IFMIS project, determine the ICT infrastructure-related factors that influenced implementation of IFMIS project and established whether staff willingness influences implementation of IFMIS project.

2. Literature Review

2.1. Introduction

The chapter details out the existing studies regarding the study and supports new findings that have added to the existing pool of knowledge. The researcher reviewed the literature on factors affecting IFMIS implementation including Capacity and Technical skills of implementing staff, the level of infrastructure requirement for successful implementation of IFMIS project and how Staff willingness affected system implementation, and made conclusion from these studies.

2.2. Theoretical Framework

2.2.1. Kurt Lewin's Change Theory

Kurt Lewin developed a change model involving three steps: unfreezing, changing and refreezing. The model represents a very simple and practical model for understanding the change process. For Lewin, the process of change entails creating the perception that a change is needed, then moving toward the new, desired level of behavior and finally, solidifying that new behavior as the norm. The model is still widely used and serves as the basis for many modern change models.

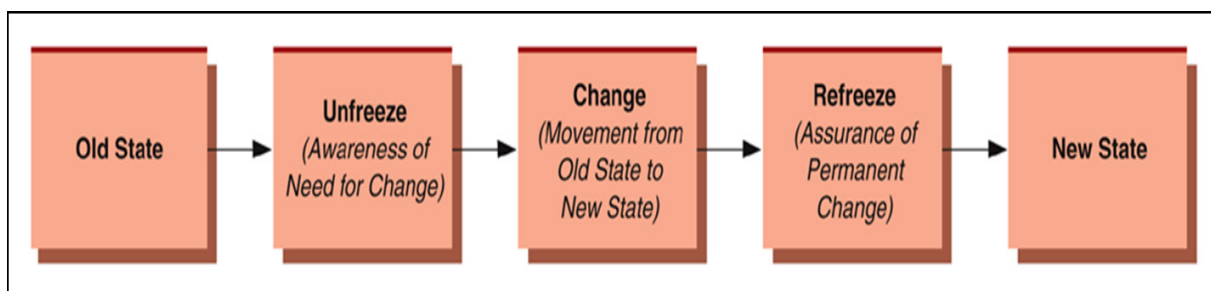


Figure 1: Kurt Lewin Change Theory

Before a change can be implemented, it must go through the initial step of unfreezing. Because many people will naturally resist change, the goal during the unfreezing stage is to create an awareness of how the status quo, or current level of acceptability, is hindering the organization in some way. Old behaviors, ways of thinking, processes, people and organizational structures must all be carefully examined to show employees how necessary a change is for the organization to create or maintain a competitive advantage in the marketplace. Communication is especially important during the unfreezing stage so that employees can become informed about the imminent change, the logic behind it and how it will benefit each employee. Lewin recognized that change is a process where the organization must transition or move into this new state of being. This changing step, also referred to as 'transitioning' or 'moving,' is marked by the implementation of the change. This is when the change becomes real. It's also, consequently, the time that most people struggle with the new reality. It is a time marked with uncertainty and fear, making it the hardest step to overcome. During the changing step people begin to learn the new behaviors, processes and ways of thinking. The more prepared they are for this step, the easier it is to complete. The final stage of his change model freezing, but many refer to it as refreezing to symbolize the act of reinforcing, stabilizing and solidifying the new state after the change. The changes made to organizational processes, goals, structure, offerings or people are accepted and refrozen as the new norm or status quo (Hartzell 2008).

2.2.2. Technology Acceptance Model

This study is guided by the Technology Acceptance Model (TAM). This model is an information systems theory that models how users come to accept and use a technology. The TAM was initially proposed by Davis in 1986. It comprises two beliefs, the perceived usefulness and the perceived ease of use of the application, which determine attitudes to adopt new technologies. The attitude toward adoption will decide about the adopter's positive or negative behavior in the future concerning new technology. One of the most frequently employed models for research into new information technology acceptance. The TAM suggests that when users are presented with a new technology, a number of factors determine their decision about how and when they will use it. This is a theoretical framework designed where it proposes a relationship between users' acceptance of a new information system and the users' perceptions of the ease of use and usefulness of the information system. People who perceive technology as useful and easy to use will accept it more readily than those who do not, with usefulness more important than ease of use. Theoretical framework developed by

Davis in 1986 which identify perceived usefulness, ease of use, and cultural orientation of the decision maker as key drivers of technology adoption (Yogesh, 2013)

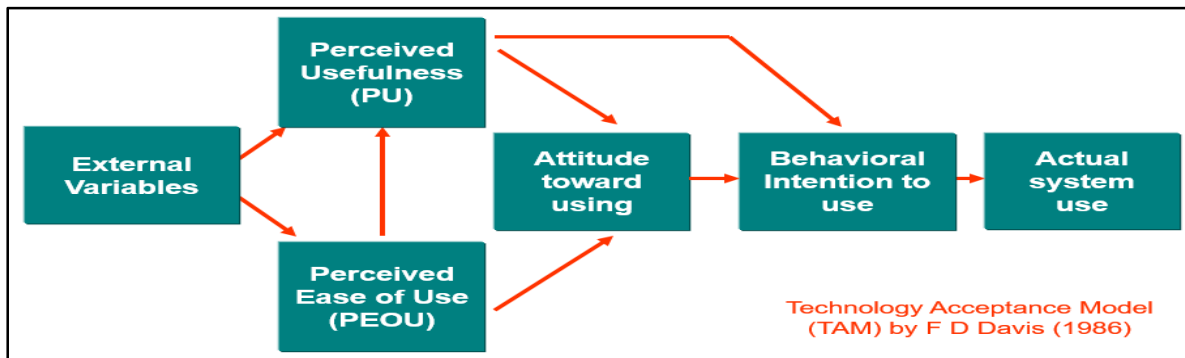


Figure 2: Theoretical framework – Technology Acceptance Model

This theory applies to IFMIS implementation where by the external variables such as the functionality of the system, system interface, available infrastructure, contribute in the perceived ease of use of IFMIS system which contribute towards the attitude of using the system which create the behavioral use and overall organization use. The perceived usefulness of the system in brought about by the benefits of the system where the external variable like the human resource capacity and adequate training create awareness of system usefulness which in turn creates attitude change towards IFMIS and lead to actual system use.

2.3. Conceptual Framework

The conceptual framework outlines the dependent and independent variables as discussed in the literature review and elaborated in the Figure 3 below. It helps one to understand the relationship between the variables of the study.

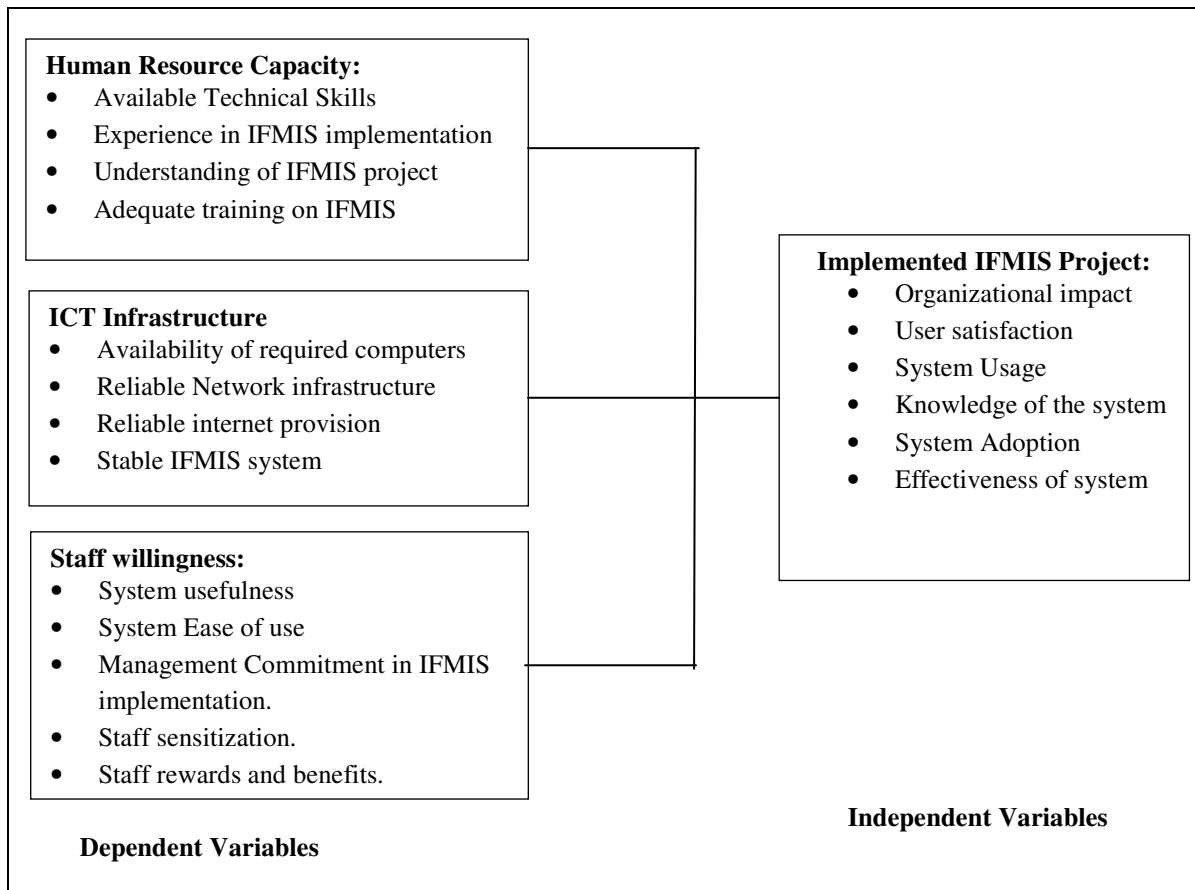


Figure 3: Conceptual framework

Based on the review variables below, the following conceptual framework can be drawn.

2.3.1. Human Resource Capacity in IFMIS Implementation

IFMIS implementation involves considerable human resources requirements and capacity building needs throughout the entire organization. The low level of technical literacy in counties must first be adequately addressed before such projects can be truly viable. The lack of staff with required IT knowledge can easily be remedied by training and hiring. On the other hand, they also found that at individual level of analysis, staffing sufficiency showed a significant and negative indirect effect on performance (Kinyua 2015).

The effective implementation, operation and maintenance of an IFMIS require staff with the necessary knowledge and skills. Lack of capacity is regarded as one of the main causes for the delay in the implementation process experienced by Uganda and Tanzania, whilst the emphasis that was put on capacity building through training in Tanzania was one of the main contributors to their success. (Diamond & Khemani 2005). The lack of the necessary skills cannot be easily corrected with staff training. The salary structure and terms of employment in the public sector are usually not attractive enough to compete with the private sector and to incentivize candidates with the required IT-skills levels (Chêne 2009). The most experienced personnel in the society often leave public sector jobs for more attractive jobs in the private sector. Brad (2010) argues that low capacity for system implementation at the county level and some state agency, is one of the major challenges in the implementation of an IFMIS in developing countries. This aspect is especially relevant in the Kenyan context with its forty-seven county governments and the consequent demand that the duplication of efforts creates for skills and knowledge, of which a shortage already exists. It is content that the human resource development issue within government needs prioritization, the education system needs to be aligned with the information and communication technologies (ICT) demands of the country and scarce ICT skills need to be attracted and retained particularly within government (Farelo & Morris, 2006). Capacity building is a major factor affecting the success of IFMIS implementation, especially in developing countries (Chêne 2009).

2.3.2. ICT Infrastructure in IFMIS Implementation

According to (Wafula & Wanjohi 2009) around the world, governments are undertaking ambitious reforms to further revitalize or transform their public sectors. The drivers for reform include: on the demand side – the increasing expectations by citizens for efficient and effective services and for a voice in their design and delivery, and on the supply side – the increasing pressures on government budgets, more severe since the global financial crisis, requiring that they do more with considerably less.

To accomplish this revitalization, governments are introducing innovations in their organizational structures and practices, and in the ways in which they mobilize, deploy and utilize human, financial and ICT resources (United Nations 2011). The use of ICT in the public sector, or e-government as it is known, is playing a critical role in governments' efforts to revitalize their public sectors. Modern ICT is a significant strategic tool for lifting public sector performance, offering benefits of greater efficiencies and effectiveness in government operations and service delivery, improved communication and coordination across organizational boundaries and levels of government, and greater transparency and accountability in government functions (Ameen & Ahmed, 2011). Consequently, over the past 10 to 15 years, governments around the world have utilized information and communication technologies, particularly digital technology (OECD 2009) which has significantly changed the ways in which they deliver their services. E-government is no longer viewed only as the provision of information or services via the internet but as a way of transforming how citizens interact with government and how government interacts with itself (Rose & Grant 2009). Many IFMIS projects have failed because the basic system functionality was not clearly specified from the onset of the intervention. (Chêne 2009) posits that an IFMIS must be carefully designed to meet the needs and functional requirements, including the accounting and financial management tasks the system should perform. Consideration must be given to the type of systems that will be implemented, for example, off-the-shelf (OTS) or custom-built systems that fit the requirements of the specific country. An analysis of the different systems used by developing countries indicates that they make use of both off-the shelf systems as well as custom-built systems. For example, Ghana and Uganda opted for a system designed and developed to fit their specific requirements, whilst Tanzania, Malawi and Kenya opted for off the shelf systems. 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 for the success of Tanzania's project is, for example, their decision to purchase a less complex, mid-range commercial package (Dzidonu, 2011).

Infrastructure is important and will be the backbone of the system from the servers, network and work stations and issue of security and data integrity. Lack of necessary tool such as computers and laptop or use of nearly obsolete computer that were formerly used in municipal and county governments hinder proper implementation of the IFMIS as the project becomes as the specifications of the equipments cannot accept new configurations. Network connection and reliable internet provision is one major factor that implementation of IFMIS relies on. If an organization wants to interact with IFMIS it is done using Virtual Private Network (VPN) whereby if the internet is not reliable then your interaction with the IFMIS system might be affected. The usual blame within the counties has been the connection to the IFMIS server which centrally placed in National Treasury (Nation Treasury 2015).

2.3.3. Staff Willingness in System Implementation

Organizational readiness for change is considered a critical precursor to the successful implementation of complex changes in the organization. Indeed, some suggest that failure to establish sufficient readiness accounts for one-half of all unsuccessful, large-scale organizational change efforts. Drawing on Lewin's 1951 Field theory, three-stage model of change, change management experts have prescribed various strategies to create readiness by 'unfreezing' existing mindsets and creating motivation for change (Lewin 1951). These strategies include highlighting the discrepancy between current and desired performance levels, fomenting dissatisfaction with

the status quo, creating an appealing vision of a future state of affairs, and fostering confidence that this future state can be achieved (Narine 2006).

While this advice seems reasonable and useful, the scientific basis for these recommendations is limited. Unlike individual readiness for change, organizational readiness for change has not been subject to extensive empirical study (Weiner 2008). Unfortunately, simply calling for more research will not do. As two recently published reviews indicate, most publicly available instruments for measuring organizational willingness to change exhibit limited evidence of reliability or validity (Holt & Armenakis 2008).

To respond to change today, many organizations invest heavily in capital-intensive expenditures such as new equipment and/or technology such as ERP packages like SAP and Oracle in the hope that these will reduce cost and increase productivity. They have these hopes because they believe the slick presentations provided by consultants and sales representatives which promise positive results over-night. Alternatively, they adhere to a century-old belief, which has since been largely debunked, that has said that through technological innovation alone survival and prosperity will be assured (Hornstein 2008). Academic research has shown that it is not the "hard" technology acquisitions by themselves that guide organizational success, but the integration of these assets into organizational change management processes that elevate the importance of the human system. It is the integration that really makes the difference. In many cases, IFMIS reforms have been introduced as a process innovation involving a radical and comprehensive restructuring of procedures to jumpstart and improve the financial management system. In such an approach, IT is being used as the driver of change rather than in support of the financial management reform process (Chêne 2009).

The change challenge that faces IT and other departments when new technology initiatives are introduced is to engage the staff most impacted, exactly those who often feel quite threatened by these kinds of initiatives. They have these emotional reactions because they often have insufficient information about the scope of the change, the training implications, and the potential impact on role changes. The information vacuum is often filled with rumors instead of integrating and engaging all employees with the technology and business process improvement activities. Change management, must be addressed early in the needs assessment as well. It is all very well to work out system needs, but the human needs are just as important, if not more. If these are not addressed, 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. Clearly, identifying the various audiences and their needs is important in this first step. 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 techniques are evolving rapidly and often becoming cheaper as time moves forward (Edwin 2008).

2.3.4. Implementation of ICT Systems

It is evident that adoption of ICT systems has resulted in a variety of significant benefits for organizations. Improved quality of tasks, time parsimony, improved job performance, staff productivity, operation efficiency, improvement in decision-making, and enhanced competitiveness are examples of IT benefits for organizations (Benitez-Amado 2010). For individual level of analysis, perceived usefulness or job impact is the most common measure while in organizational level, profitability measurements are mostly preferred (Petter 2008). However, (Peters 2006) suggested that IT benefits fall under three classification including enhanced productivity, business expansion, and risk minimization. In the context of SMEs, benefits of IT which are known as organizational impacts are characterized as the positive effects of IT on firm performance (Thong 2011). We draw on the resource-based theory of the firm to define the organizational impacts regarding the effects of the IT on the firm's competitive position. This theory argues that firm can possess better performance based on resources that are firm-specific, valuable, rare, imperfectly imitable and not strategically substitutable by other resources (Neumann 2009) and (Liang 2010)

According to the updated Delone and McLean model of IT success (Delone & McLean 2009), user satisfaction as a dimension of ICT systems success is posited to have positive effects on IT-enabled benefits. This positive relationship between user satisfaction and IT-enabled benefits were empirically confirmed by prior IS research (Iivari 2006). It shows that user satisfaction has resulted in improved firm performance, enhanced job satisfaction, more agile decision-making, and increased productivity (Klobas 2005), it also assumes that IT usage and user satisfaction are closely interrelated so that increased user satisfaction will lead to increased intention to use and thus IT usage, which would generate IT-based business value. Relationship between user satisfaction and IT use was strongly supported by previous research, in particular when the frequency and duration of use, as well as number of applications and tasks for which the IS, is used are measured.

User attributes such as user's experience with IT have an important role in the eventual success of IT (Sabherwal 2006). Similarly, staffs' IT knowledge and experience is another trait affecting IT success in SMEs (Drew 2008), With regard to the general lack of IT expertise in SMEs and difficulty in recruiting IT professionals (due to financial constraints), users with adequate IT knowledge can make a more effective contribution to the IT implementation by their involvement in decision-making and implementation phase (Thong 2011). One the subject of CEO IT knowledge, a study by Thong demonstrated that firms with CEOs who are more knowledgeable about IT are more probable to implement IT. Moreover, it was found that CEOs with higher levels of computing skills are more satisfied with the implemented IT rather than those having inferior IT knowledge (Palvia 2009). A successful implementation of IT needs sharing of knowledge, training, and higher levels of skills by the employees who are also the users of IT (Egbu 2005) Skilled, knowledgeable employees tend to reinforce their self-efficacy and self-esteem through the use of a new IT since being good with the IT will provide them with a preponderant position, recognition and status in the company which at the end might increase their level satisfaction with IT.

2.4. Empirical Review Literature

The IFMIS provides a critical financial management solution for countries whose administrative and economic infrastructure is obsolete or has been destroyed (Oliver, 2011). Employees resist change because they have to learn something new. In many cases there is not a disagreement with the benefits of the new process, but rather a fear of the unknown future and about their ability to adapt to it.

In a research by Kimwele in 2011, he found out that the level of awareness by employees of the Government ministries was 100%. He also found out that 70% of the departments used IFMIS. 73% of the respondents to the research questions said that there was sabotage of IFMIS. 37% of the respondents said that IFMIS supported proper planning of work. There is a great percentage of abuse of the system but IFMIS offers security to personal data (Kimwele, 2011). In his research, Kimwele put forward several factors which are important in IFMIS implementation.

In their study of developing countries specifically Ghana, Malawi, Tanzania, Uganda and Kenya, Diamond and Khemani (2005) argue that necessary measures should be taken to reinforce the capacity in the IFMIS project team. At the same time, they note that it is equally important to develop the necessary skills and capacity of the 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. Lack of capacity has been pointed out by Hendrick (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. Farelo and Morris (2006) further contend that the personnel development issue within government needs prioritization, the education system needs to be aligned with the information and communication technologies (ICT) demands of the country and scarce ICT skills need to be attracted and retained particularly within the government.

To achieve effective implementation, operation and maintenance of an IFMIS require personnel with the required knowledge and expertise. Diamond and Khemani (2006) posit that lack of capacity is regarded as one of the primary causes for the delay in IFMIS implementation process in Ghana. On the other hand, the emphasis on capacity building through training was one of the major contributing factors to the success of IFMIS in Tanzania.

2.5. Critique of Literature Review

According to Diamond and Khemani, their research focused on lack of capacity which was regarded as one of the main causes for the delay in the implementation process experienced by Uganda and Tanzania in their journal introducing IFMIS in developing countries. Most of the emphasis that was put on capacity building through training in Tanzania which was one of the main contributors to their rapid implementation of IFMIS. (Diamond & Khemani 2005) the study left other factors like availability of reliable infrastructure within the government institutions that will be using the system.

Chêne 2009 highlighted that the 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 Integrated Financial Management Systems (IFMIS) has been promoted as a core component and in many cases a driver- of public financial reforms in many developing countries. Yet, experience shows that in spite of the considerable amount of resources allocated to such schemes, IFMIS projects tend to stall in developing countries, as they face major challenges of institutional, political, technical and operational nature. Case studies of more successful countries such as Kosovo, the Slovak Republic, Tanzania and Ethiopia indicate that factors supporting successful implementation of IFMIS include a clear commitment of the relevant authorities to financial reform objectives, ICT-readiness, a sound project design, a phased approach to implementation, a project management capability, as well as adequate resources and human resource capacity allocated to the project. The study failed to focus on the impact the staff have especially on the implementation of the IFMIS project. Relevant authority may be committed to implement the project but failure by the implementing staff to take up the project can jeopardize the success of implementation.

Holt and Armenakis in their study on a framework of readiness for change which seeks to explain the factors influencing individuals' affect about consequences of a potential change and subsequently their willingness to support the change. They found that readiness for change is a multidimensional construct consisting of four dimensions: Readiness for change was defined as a comprehensive attitude that is influenced simultaneously by the content - what is being changed, the process - how the change is being implemented, the context - circumstances under which the change is occurring, and the individuals - characteristics of those being asked to change

2.6. Research Gaps

The complexity of the IFMIS system and changes it bring about in the institutions presents challenges in the process of implementation and these challenges are more than just those failures in technology. Technical failures are common experiences in the implementation of any systems. An IFMIS project changes the way county staff operate which cause resistance. It also involves a lot of public resources that present an opportunity for corruption. The lack of training of staff members also pose a challenge to how effective the systems will be in the management of project funds.

The studies done by most of the researcher have failed to focus on other factors that can influence the implementation of IFMIS project. The studies have extensively discussed on the implementation on county government but they failed to focus on the impact of

reliable infrastructure within the government institutions that will be using the system. How the adequate and reliable ICT infrastructure will impact overall implementation of any ICT related project.

Other area that has been left out is the issue of human resource capacity. Focus on other study was not on the qualification of the people implementing the project. There was a gap in the research on the necessary capacity that will influence the successful implementation of information systems projects.

Staff willingness to change is another gap that has been identified in the studies conducted which focuses on change management and a clear commitment of the relevant authorities to financial reform objectives (Chene 2009) this leaves out the other staff who are key to success of the project where when they don't accept to implement the project will never succeed.

2.7. Summary of Literature Review

Previous research has mainly focused on the implementation of the IFMIS in the government ministries which are centrally located within Nairobi with myriads of challenges as county government. Previous studies have not addressed the challenges by highlighting the factors that will enable the county government seamlessly hook up to the IFMIS system without experiencing the outcry as they have voiced in the recent past.

This chapter highlights the theoretical framework of literatures guided by the Technology acceptance model (TAM) and Kurt Lewin change theory also the conceptual framework which was guided by the objectives under different sub-topics which are; human resource capacity, technical challenges, staff willingness.

3. Research Methodology

3.1. Introduction

This chapter discusses the ways through which this research was carried out. It explains the study design used, target population, the sample size, the instrument that was employed to facilitate the collection of data and the methods of data analysis.

3.2. Research Design

To develop an understanding of the factors influencing implementation of IFMIS in the County Government in Kenya, this study adopted both a descriptive and correlational research design. Correlational design entailed reporting on condition of relationships as they exist. The approach explains the uniqueness of a particular individual or group. In this type of research design, the researcher has no control over the variables; they can only report on the occurrence (Kothari, 2004).

Hopkins explicates that correlational research mainly establishes the relationship between an independent variable and a dependent or outcome in a population, ascertaining the correlations and causality between variables (Hopkins 2000). This explains majorly why this design will be employed: the fact that it will facilitate an assessment of how each individual factor of the three considered in this study; Human resource capacity, ICT Infrastructure and staff willingness contributes towards the Implementation of IFMIS Project in the devolved government in Kenya. This research also consists of both qualitative and quantitative approaches. While the qualitative approach involves subjective assessment of attitudes, opinions and behavior, the quantitative technique is used in presenting numerical information.

3.3. Target Population and Sample size

Mugenda and Mugenda define population as a whole group of persons or individuals, events or objects with common observable characteristics (Mugenda & Mugenda 2003). On the other hand, target population implies to the population which a researcher intends to generalize the study findings (Kombo & Tromp, 2006). The population of the study was 47 county governments currently implementing the IFMIS. 5 counties were selected as representatives of the study which is 10% of the entire population (Mugenda & Mugenda, 1999). The sampling frame involved the senior officer involved in implementation of the IFMIS project which were; financial officer, IT Officer, Human Resource officer and Procurement officer from the selected county. The sample size for the study will be 20 officers which will be sufficient for the study.

Level	Frequency
Financial officers	5
Human Resources Officers	5
Procurement Officers	5
IT Officers	5
Total	20

Table 1: Sample size Source: Devolution and Planning Ministry, 2015

3.4. Sampling Frame

A sampling frame is a comprehensive list of all sampling units, which a sample can be selected, (Kombo & Tromp 2006). Sampling frame is the list of the senior officers of the counties which are implementing IFMIS found in the ministry of Devolution and National Planning office, (2015). Through this list the researcher was able to get the senior officers who are involved in implementing IFMIS.

3.5. Sampling Design

This section examined the sampling technique and sample size. The study utilized a sample size of 20 respondents which involved; Financial officer, IT Officer, Human Resource officer and Procurement officer from selected counties. The study adopted the proportionate stratified sampling method. The stratified sampling method measures the overall population parameters with greater precision and ensures an extraction of a representative sample from a relatively homogenous population (Kothari, 2004). The stratified sampling also reduces the standard errors through having a greater control over the variance. On the other hand, the proportionate stratification ensures that the sample size of each stratum is proportionate to the population size of the stratum (Mugenda & Mugenda, 1999). The proportionate stratified sampling was adopted because it provides a better precision than a simple random sampling of the same size.

3.6. Data Collection Instrument.

For primary data, in this study, questionnaires were used to collect data. The questionnaires comprised of both open and closed ended questions. The choice of this method of data collection was based on the fact that questionnaires are low cost even when the population is large; it is free from the bias of the interviewer. (Mugenda & Mugenda, 2003). The use of questionnaires in this case was important so as to be able to obtain personal data from the respondents that would be otherwise impossible to collect by other means.

3.7. Data Collection Procedure

The data was collected using a self-administered questionnaire procedure, where the questionnaires were administered to the selected respondents through drop and pick later technique. This gave the respondents enough time to fill the questionnaire.

3.8 Reliability and Validity of Data

The reliability was ensured by testing the instruments for the reliability of values (Alpha values) as recommended by Cronbach, (1946). Cronbach recommends analysis for Alpha values for each variable under study. According to Sekaran 2001 Alpha values for each variable under study should not be less than 0.6 for the statements in the Instruments to be deemed reliable (Sekaran 2001). Consequently, all the statements under each variable were subjected to this test and proved to be above 0.6. A measure is reliable when it is error free and consistent across time and across various items in the instrument. A test questionnaire was administered to five county staff. According to Mugenda and Mugenda (2003) subjects in the actual sample should not be used in the pilot study. The pilot study was used for checking the validity of the questionnaire. The validity of the data collection instruments was done with the help of an Expert (the Researcher's Supervisor) to edit the questionnaire. The researcher forwarded a closed ended questionnaire to supervisor who is an expert in the area covered by the research for editing and reviewing.

3.8. Data Processing and Analysis

Data analysis involved data coding and analysis (Gatara, 2010). Data analysis was done using quantitative approaches. Descriptive statistics such as mean and percentages were applied in the data analysis. The results were presented using tables with explanations on all parameters used. Descriptive statistics method was applied to analyze quantitative data where data was scored by calculating the percentages, means and standard deviation. This was done using Statistical Package for Social Sciences (SPSS) computer software.

4. Data Analysis, Results and Discussion

4.1. Introduction

This chapter presents the findings and analysis of the data obtained from the questionnaires administered to finance department, information communication and Technology department, Administration, and procurement department. The information given by respondents was analyzed and the researcher extracted important variables from them. The data has been presented in tables, figures frequencies and percentages with summaries being given for each table and figure. The aim of this chapter is to explain the data in order to draw conclusion and interpretations. The data analyzed and presented is based on the responses from the questionnaire. The sections were divided into five parts: General information, human resource capacity, ICT infrastructure, IFMIS implementation and relationship between variables. The questionnaires were 20, administered to the respondents. All of them completed and returned the questionnaires. This gave a response rate of 100%.

4.2. General Information

4.1.1. Gender of the Respondents

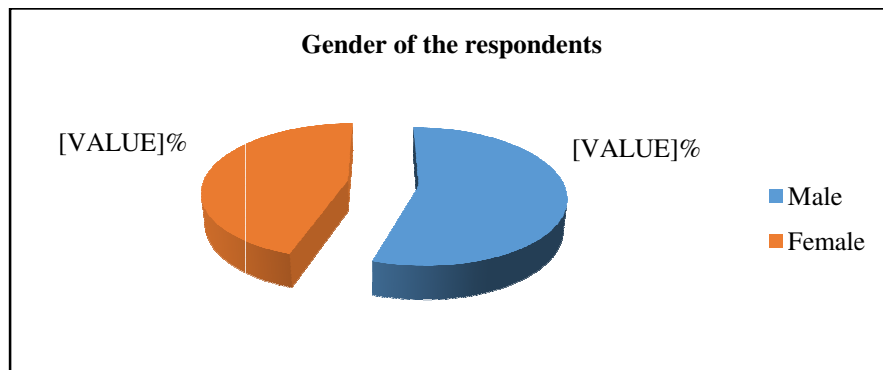


Figure 4: Gender of the respondents

The Figure 4, above shows that majority of the respondents in this study are men, with 55% and women with 45%. The findings show that men and women are working together, in the implementation of IFMIS in devolved Government.

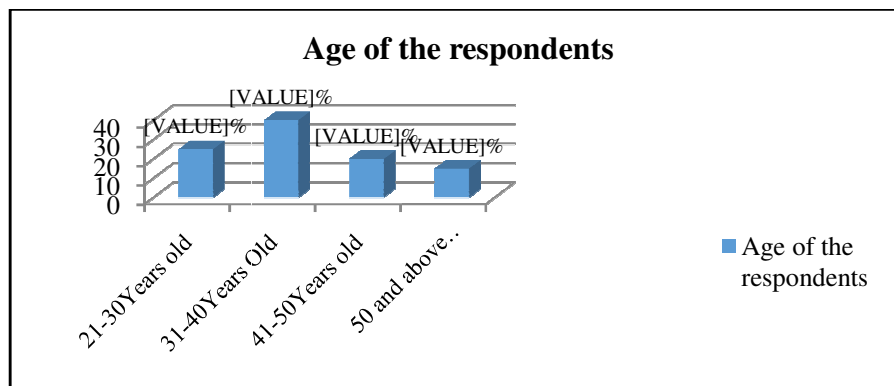


Figure 5: Age of respondents

The Figure 5 shows that 40% of the respondents are between 31-40years old, while 25% of the respondents are between 21-30years old. This means that the participants in IFMIS implementation are young; therefore, there will not be any problem of computer illiteracy. Young people also bring out an aspect of flexibility in using IFMIS in counties. On the other hand, 20%of the respondents are between 41-50years old, whereas, 15% are 50 and above. The implementation of IFMIS in the counties needs the experienced people. This study has had the people who have been using the IFMIS program time to time in their everyday work.

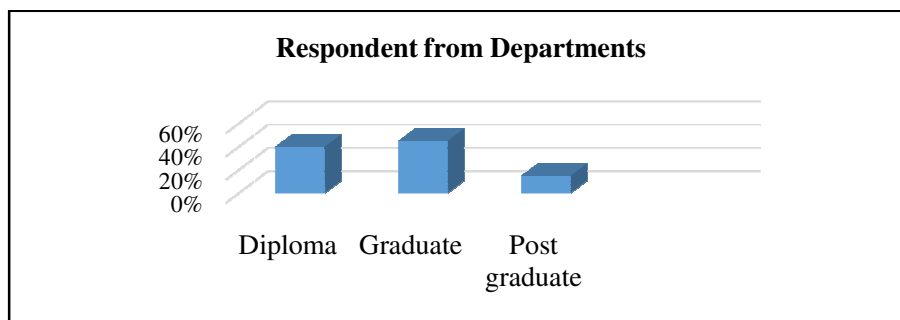


Figure 6: Department of respondents.

Four departments participated in this study. They were finance department with 25%, ICT Department with 25%, Administration with 25% and Procurement Department with 25%. The researcher chose these four departments because they are directly involved in IFMIS implementation in the counties.

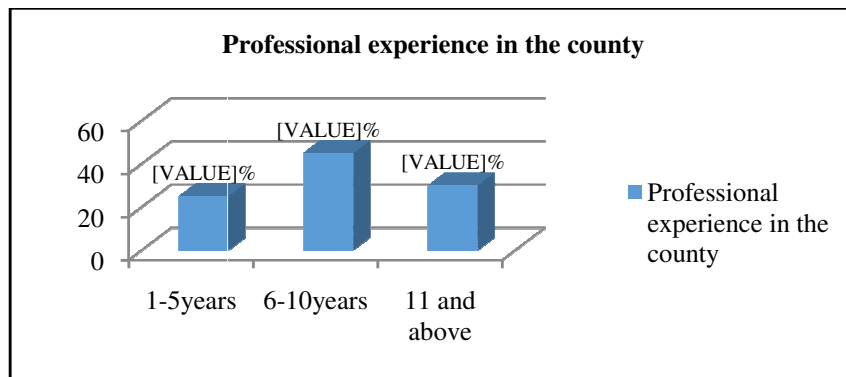


Figure 7: Professional experience in the county Government

The researcher found that 45% of the respondents had a professional experience of 6-10 years, while 30% had professional experience of 11 years and above. This shows that the respondents have enough knowledge on the factors affecting IFMIS in the counties. However, 25% of respondents still young to understand these factors of IFMIS, because they are between 1-5 years.

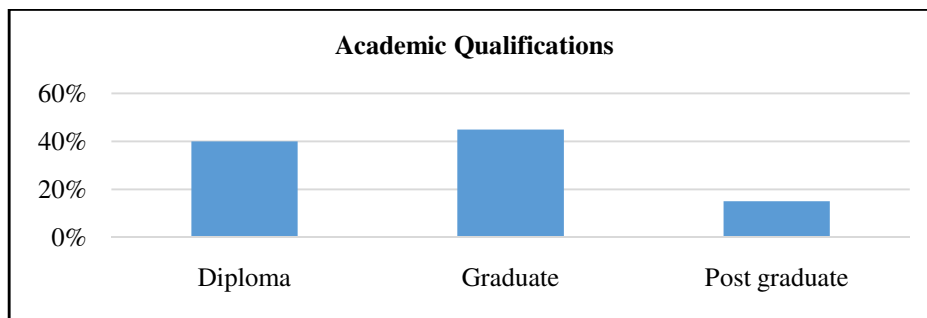


Figure 8: Academic Qualification

The study further sought to establish the level of education held by the respondents. This was to ascertain if they were equipped with relevant knowledge and skills to understand the factors influencing the IFMIS in devolved Government in Kenya. The Figure 8 shows that 45% are graduates, 40% the Diploma and 15% are postgraduate. It implies that the respondents were having the sufficient knowledge on the factors influencing IFMIS implementation in the devolved Government, whereby 60% were learned up to postgraduate degree. The respondents were also well qualified to understand the questions asked in this study.

4.3. Human Resource Capacity

The implementation of IFMIS in devolved government requires staff with the necessary knowledge and skills (Diamond & Khemani, 2008). This study shown that 65% of the respondents agree that they know about IFMIS and its key components. This shows that the system is not a new idea that will require more energy to sensitize to the users. However, 35% do not know about IFMIS. It is a new idea to them, therefore the National treasury need to organize the workshops about how to use this system in county government. The study shows that county workers are not able to navigate through all modules of IFMIS. It is very important for the initiator of this system to invest more in training in order to allow users to navigate through all modules of IFMIS.

The implementation of IFMIS faces different challenges, as far as human resource is concerned. Among them, the users of the system are not well trained before the implementation of the system in the county. The staffs lack the qualification to oversee the effectiveness of the system. This study shows that 65% say that they did not receive enough training before the implementation of the system in the county and staff isn't qualified to oversee the system; although members of the departments manifest the effort of implementing the system at 65%, much should be done to make everybody concerned in the implementation of IFMIS in the devolved government to participate actively.

The findings of this study show that another challenge of implementing IFMIS, in the counties resides on capacity. The majority of the respondents 100% say that the counties do not have enough capacity to implement IFMIS. The county relies to the experts to run the system at 100%. This concurs with Brand (2010), say that low capacity for system implementation at the county level is one of the challenge of IFMIS in developing counties. The National treasury should increase the capacity in the counties to implement the system.

Human resources are the most important assets that contribute to organizational success. With the introduction of complex and rapidly evolving technology, organizations oftentimes are limited by the scarcity of skilled employees and experienced managers needed to operate the newly introduced ICTs. It is recommended that IT managers and their top management have a plan to cope with skill shortages because organizations that fail to manage their present staff stand little chance of obtaining and retaining outstanding individuals. Human resources that are reliable and full of capabilities will also increase the efficiency and effectiveness of the ICT. Therefore, organizations need to ensure they can recruit, train, and retain talented IT experts. This issue is directly related to

organizational performance as well as individual performance; significant contributions that materially improve an organization's performance have oftentimes been made by a small number of individuals, (Zakareya & Zahir, 2005)

The National treasury needs to have proper training of the users of the system and motivate them appropriately. Chene, (2009) say that the salary structure and terms of employment in public sector are not attractive. Therefore, the county government has to review the motivational system of employees who are direct users of IFMIS, in order to implement the system effectively in the county.

There is also a need to empower the users of the system by sending them to further studies. This study shows that 40% of the county personnel have a diploma degree and 100% of the users of the system have technical background to use the system. Thus, these employees need more training to be familiar with the system, because academically they need to improve their skills and knowledge in using the system.

The study shows that 100% don't agree with the phased roll out which has led to fragmented training in which has to improve the use of IFMIS, in devolved Government. This concurs with Farelo and Morris, (2009), say that the human resource in the county needs prioritization, education system, and aligned with ICT demands. It is very important to train the users of IFMIS adequately in order to implement this system effectively in the counties. Up to date the study shows that users are trained at 65%. However, there is a need for more training to tackle fear among 35% users who are not well trained to handle the system.

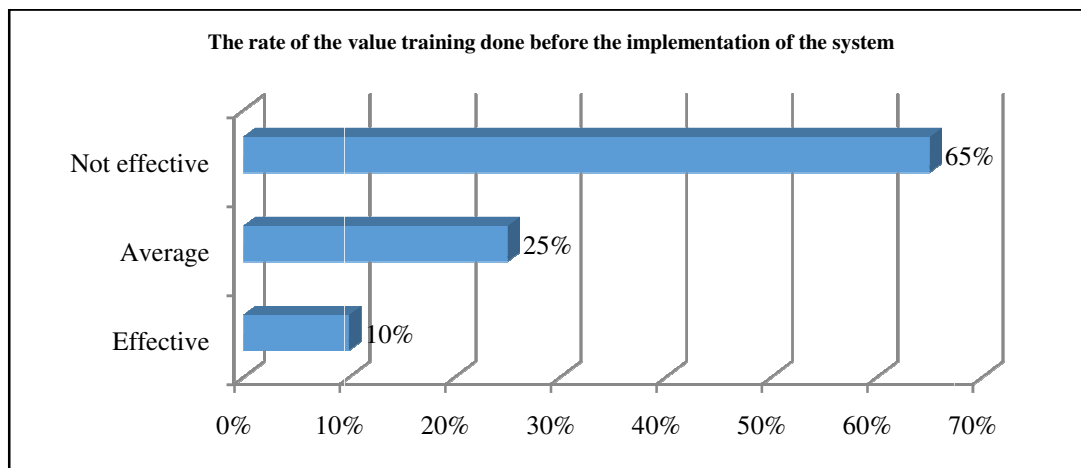


Figure 9: The rate of the value training is done to the staff before implementation of the system

The Figure 9 shows that there is a poor training of the staff before the implementation of IFMIS system, whereby 65% of the respondents say that the training is not effective, while, 25% agree that the training is average and 10% find that it is effective. The findings of this study show that national treasury has to put more effort in training of the users of the system before implementation.

4.4. ICT Infrastructure

Modern ICT is a significant strategic tool for lifting public sector performance, offering benefits of greater efficiencies and effectiveness in government's services and operations (Ameen & Ahmed, 2011). This study shows that 100% agree that there are computers and other ICT equipment dedicated on IFMIS system in the counties. Procurement department has received ICT equipment's specifically for implementation of IFMIS in the counties. This shows that it is very possible to implement the IFMIS system in the counties because there are enough materials to improve the services and operations. There is hope that the system will be implemented effectively, since 100% of the respondents say that the counties use private ISP to connect to IFMIS using VPN. The VPN will help the counties to interact with IFMIS system easily in the counties.

According to Rose and Grant (2009), e-Government is no longer viewed only as provision of information or services via the internet. The findings show that 100% of the respondents say that county LAN infrastructure is not stable and reliable. Therefore, there is a challenge in the implementation of IFMIS system, because infrastructure is the backbone of the system from the servers, network and work station issue the security and data integrity. On the other hand, 35% strongly agree that there is local area Network/WLAN within the county which enables sharing of the resources. This study shows that 100% don't agree county Network infrastructure connected to the national government Network infrastructure. This will create a challenge in the implementation of IFMIS in the counties. Therefore, the National treasury has to improve on county network infrastructure to achieve an effective implementation of IFMIS.

Other challenges in as far as ICT is concerned in the implementation of IFMIS in the counties are: system breakdown. In this study, 100% of the respondents strongly don't agree that IFMIS system is always available for use while, 100% don't agree that ICT phobia still an issue if IFMIS is to be effective. There is a need to allow the users of the system to have a full access on it. The number of staff working on IFMIS implementation should be increased, because it still low according to the findings of this study. The number of computers allocated specifically on the staff working on the IFMIS is enough to implement the system.

Defined organizational and technological requirements that will be necessary for the adoption of e-government in public sector organizations through construct an integrated architecture framework for e-government. The difficulties and barriers that have been

experienced in public sector organizations which complicate the implementation process of e-government have been analyzed and then identified and presented in a taxonomy (Zakareya & Zahir, 2005).

In general, the ICT infrastructure preparedness to handle the implementation of IFMIS system, is taken care of few things should be improved on to allow the quick implementation of the system in the counties. These are internet connectivity and connecting county Network infrastructure to the National Government Network.

4.5. The Staff Willingness to Change

The findings of this study show that 65% of the respondents agree that there is a tendency of unwillingness of staff to use IFMIS system, while, 35% say that staff will to use that system. The behavior of the staff towards the usage of this system is divided because of different reasons. From the survey done, it shows that the management is not fully in support of the use of the system at where 85% of the respondents feels that they management is not fully committed and 15% feels that the management completely don't support the implementation of IFMIS. Management laxity in supporting the IFMIS system had largely affects the effective use of the system by employees. Factors cited as lacking in the top management was the drive to inspire, understanding of the system and how it worked and general lack of support as expected from the top management. (Kimwele, 2011).

There isn't adequate training of the county staff on the use of the system at 80% of the respondents confirm that there was no sufficient training and 20% of the respondent felt that there was some level of training on IFMIS which plays part in the proper use of the system. Changes in technology bring changes in policy, culture, mindset, organizational structure, and the process (Kifle & Low Kim Cheng, 2009). This claim is consistent with the socio-technical view on organization that regards an organization as a socio-technical system built from two correlated systems – social and technical. The technical system is composed of the processes, tasks, and technologies needed to transform input into output, whereas the social system is composed of people, their beliefs, skills, values, knowledge, needs, the relationships between them, remuneration systems and authority structures (Bostrom & Heinen, 2007).

The users of the system do not fully see the importance of it, whereby, 30% have strongly not seen any benefit of the system while the rest 70% don't agree that the system is useful in performance of county duties. This study shows that the 65% agree that the county staff is unwilling to use the IFMIS system. There is, 45% that don't agree and 10% that disagree strongly that the system is not easy to use even after training this can be attributed to the level of training they have undergone as if the training is not sufficient it will have negative impact on the implementation. 70% say that they don't see the benefits system in improving the services and operations in the county. The opposition to the system linked to the issue that 65% say that county staff were not sensitized on the benefit of IFMIS project. Beside all the above, challenges of implementation of IFMIS, 55% agree that the county staff do not have any problem in using IFMIS system.

4.6. IFMIS Implementation

ICT systems have resulted in a variety of significant benefits for organizations. It has improved quality of tasks, time parsimony, improved job performance, staff productivity, operation efficiency, improvement in decision-making, and enhanced competitiveness are examples of IT benefits for organizations (Benitez-Amado 2010). IFMIS implementation, is a continuous process that all departments involved should plan together, in order to achieve the goals and objectives of the counties. The table above shows that implementation of IFMIS in the counties faces many challenges, among them are that the system will not be adequately used to run the county's activities. Here 65% agree that the system is not being used in day to day ruining of the county this can be explained by the frequent breakdown of the system or lack of training reduces the use of the system. 65% say that the system is not effectively being used to perform county functions they feel that the system can be used fully used to perform their monitoring task.

The users of the system are not satisfied by the implementation of the system. The study shows that 80% agree that the county staff is not satisfied by the use of IFMIS. This is a result of 75% of respondents who agree that the county staff do not have adequate knowledge to operate the system. This agrees with the lack adequate training of the system before and after installation of the system which could have helped in overall usage of the system. A successful implementation of IT needs sharing of knowledge, training, and higher levels of skills by the employees who are also the users of IT (Egbu, 2005).

Skilled, knowledgeable employees tend to reinforce their self-efficacy and self-esteem through the use of a new IT since being good with the IT will provide them with a preponderant position, recognition and status in the company which at the end might increase their level satisfaction with IT. The findings of this researcher agree with Sabherwal (2006) who says that IT usage and user satisfaction are closely interrelated so that increased user satisfaction will lead to increased intention to use and thus IT usage, which would generate IT-based business value. The users are not satisfied as shown in 50% strongly unsatisfied and 25 not satisfied, as the same time 70% of the respondents strongly don't agree that the county staff are using the IFMIS system fully. This shows that there is a need to improve on capacity allocated to IFMIS implementation and train the personnel before the implementation of the system. The majority 80% of the respondents strongly agree that extensive training before implementation could have assisted in implementation of the process.

4.7. Relationship between the Variables

Correlations		RBV4	RBV1	RBV2	RBV3
RBV4	Pearson Correlation	1	.733*	.562	.712
	Sig. (2-tailed)		.016	.496	.097
	N	20	20	20	20
RBV1	Pearson Correlation	.733*	1	.163	.066
	Sig. (2-tailed)	.016		.493	.783
	N	20	20	20	20
RBV2	Pearson Correlation	.562	.163	1	.225
	Sig. (2-tailed)	.496	.493		.341
	N	20	20	20	20
RBV3	Pearson Correlation	.712	.066	.225	1
	Sig. (2-tailed)	.097	.783	.341	
	N	20	20	20	20

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

Table 2: Relationship between the variables

- RBV1: Human Resource capacity
- RBV2: ICT Infrastructure
- RBV3: Staff willing to change
- RBV4: Implementation of IFMIS

The correlation coefficient is used to determine if two or more variables are related. Correlation does not provide information about the cause, however, strong the relationship may be. The table 2 above shows that there is positive relationship between the variables. Positive correlation occurs if variables are positively related then the values of these variables tend to increase or decrease together. In this study independent variables are in significant relationship with dependent variable, that is Human resource capacity; ICT Infrastructure and staff willingness to change are in significant relationship with IFMIS implementation in the counties.

Independent Variables	Dependent variable		Significance
	Mean	r	
Human Resource Capacity	4.4	.733	strong positive correlation
ICT Infrastructure	4.5	.562	moderate positive correlation
Staff willingness to change	4.55	.712	strong positive correlation

Table 3: Mean and correlation of independent variables

The table above, shows that there is a strong positive relationship between Human Resource capacity and IFMIS implementation of $r=.733$. This means that the implementation of IFMIS can be effective once the human resource capacity is improved on. Staff willingness is another variable which is in a strong positive correlation of $r=.712$ with IFMIS implementation. The effective implementation of IFMIS in this study depends on the rate of staff willingness to change. Lastly ICT Infrastructure is in a moderate positive correlation with IFMIS implementation of $r=.562$. This means that ICT infrastructure is also important in implementation of IFMIS in the devolved government but not on the high level like staff willingness and Human resource capacity.

5. Summary, Conclusion and Recommendation

5.1. Introduction

This chapter presents the summary and conclusions derived from the findings in the previous chapter. The aim of these conclusions is to answer the research questions, and recommendations are for improvement, then suggestions for the future study are presented. The main purpose of the study is to establish the factors influencing IFMIS implementation in devolved Government in Kenya.

5.2. Summary of Findings

5.2.1. Human Resource Capacity

The study sought to find out the effect of human resource capacity in counties on implementation of IFMIS projects. The findings of this study show that human resource capacity is key in implementation of any Information System in an organization. In the devolved government, one of the key hindrance in IFMIS implementation is lack of proper training during pre and post implementation of the project. A percentage of the county staff started working on the system without proper training and without knowhow of all component of the system they were to work with, in return it limits the output of the staff and the system. The researcher found out that effective implementation of the IFMIS in the counties depends on adequate training of the personnel. The national government also needs to put in place mechanism that will assist the counties in effective training of the system, create minimum requirement for

the staff involved in using the system and address fragmented or phased rollout of the system which has made the staff to have disjointed understanding of the system hence reducing the implementation of the system.

5.2.2. ICT Infrastructure

The study sought to determine the ICT infrastructure-related factors that influence implementation of IFMIS project. ICT Infrastructure is the backbone of any information system the requires to implemented by any organization. From the study it was worth noting that the county governments have improved the number and quality of equipment being used in the county. The survey established that there was enough computers and accessories required to implement the IFMIS project. And they were procured as per the specification given to march the system requirement. There are enough computers and other ICT equipment dedicated to the IFMIS system. The counties use private ISP to connect to IFMIS using VPN this shows that the national government has not interconnected all the counties to its fiber optic network so that the county are in the same network. Lack of reliable network infrastructure was also highlighted which make the system not to be available in some of the occasion the ICT. The staff ICT phobia is no longer a problem among the users of IFMIS in their daily operations. National government needs to put in place a unit to improve the system. This will help to make the system available as it was noted that the system was not available for use when needed due to infrastructure breakdown.

5.2.3. Staff Willingness

Lastly the study sought to find out how staff willingness influences implementation of IFMIS project. The study shows that there is a strong resistance to the implementation of IFMIS system in the counties. The users do not see any benefit from the implementation of the system in the counties. The system is not easy to use even after having training and the management does not in support of IFMIS implementation. However, the county staff have no problem in using the IFMIS system and they believe that the system improves the county activities in achieving its targets. The implementation of IFMIS requires a sort of accountability and commitment, probably users of the system resist because of extra effort requires the system to be implemented. The government needs to do more sensitization and improve the system in order to make it easier to use.

5.3. Conclusions

The study concludes that there is a significant relationship between variables. Correlation ranges between -1 and 1.the independent variables: human resource capacity and ICT Infrastructure have positive correlation. This means that their values increase when the values of dependent variable Implementation of IFMIS system increases. There is strong positive correlation between Human resource capacity and IFMIS implementation and moderate positive correlation between ICT Infrastructure and IFMIS implementation and Strong positive correlation between staff willingness to change and IFMIS implementation. The study shows that staff willingness to change is a strong independent variable to the IFMIS implementation. Therefore, the National government needs to work more on staff willingness to change in order to implement this system in the counties.

ICT Infrastructure should also be improved by connecting internet throughout to the IFMIS system in the county. The human resource needs training before implementation of the system and their salary structure has to be reviewed, so that it motivates the employees towards the good productivity.

5.4. Recommendations

The purpose of this study was to determine the factors influencing successful implementation of IFMIS in counties and through the study, it has made various recommendation:

5.4.1. Human Resource Capacity

This study recommends to different stakeholders such as the devolved government who are implementing the IFMIS project, to put more emphasis in human resource capacity in the devolved government to achieve the expected implementation. More focus should be in training of staff who are involved in day to day running of the system. In return the user will understand the capabilities of the system and utilize the it fully.

The national government which is in charge of IFMIS implementation should have training programs running in the counties for ease of access and reference. Having one in Nairobi can be prohibitive for the counties who have scarce resources.

5.4.2. ICT Infrastructure

The ICT systems implementers should improve the county ICT infrastructure, availability of the required equipment and stable and reliable network will make the system be available for use. The county internet should be very reliable and connecting to IFMIS system. Connection to the National Government VPN to access IFMIS servers should not be a deterrent to implementation of the system. The system developers should also review the whole IFMIS system to reduce frequent systems breakdown and inaccessibility. County should be improving their connectivity by linking up with the current national fiber optic grid which will eliminate the issue the accessibility and improve the internet capacity in all county governments.

5.4.3. Staff Willingness to Change

The management should be in support of the use of IFMIS system through the sensitization on the benefit of IFMIS system. This will help the staff to change the negative attitude towards the implementation of the system, and use it day to day in running the county's

tasks. Adequate training of the system before and after installation of the system could help in overall usage of the system. A successful implementation of IT needs sharing of knowledge, training, and higher levels of skills by the employees who are also the users of the system. Skilled, knowledgeable employees tend to reinforce their self-efficacy and self-esteem through the use of a new system since being good with the system will provide them with a preponderant position, recognition and status in the county which at the end might increase their level satisfaction, acceptance and willingness to use the system.

5.5. Areas for Further Studies

This study is focusing on factors influencing implementation of integrated financial management information system (IFMIS) in devolved government. Where the study focus on interaction between the devolved and the national government in financial transaction. The are other studies that are needed to be done touching of the implementation of the IFMIS in devolved. The effects of implementing IFMIS on the private sector focusing on the vendors who trade with the devolved government.

6. References

- i. Chene, M., & Hodess, R. (2009). The Implementation of Integrated Financial Information Management Systems (IFMIS), *Transparency International Journal*, 2(1), 23-79.
- ii. Diamond, J. & Khemani, P. (2005). Introducing financial management information systems in developing countries. IMF Working Paper, 5(196), 1-33 (IFMIS). Available at <http://www.u4.no/publications/the-implementation-of-integrated-financial-management-systems-ifmis> 12/2/2016
- iii. Gibson H.M., Nolan Z M, (2003) E-government and Public Sector Process Rebuilding, *E-government International Journal*, 2(1), 23-79.
- iv. Hendriks, C.J. (2012). Integrated financial management information systems: Guidelines for effective implementation by the public sector of South Africa. *SA Journal of Information Management*, 14(1), 1-9
- v. Indeje, W.G. & Zheng, Q. (2010). Organizational culture and information systems implementation: A structuration theory perspective. *Sprouts: Working Papers on Information Systems*, 10(27), 1-15
- vi. Kathuri, N. J., Pals, E. (1993). Introduction to education research. Egerton University.
- vii. Kimwele, J M (2011) Factors affecting effective implementation of integrated financial management information systems (IFMIS) in government ministries in Kenya, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13330>
- viii. Medlin, B.D. (2001). The factors that may influence a faculty member's decision to adopt electronic technologies in instruction. Doctoral dissertation, Virginia Polytechnic Institute and State
- ix. Mugenda , O., &Mugenda , A. (1999). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: ACT's Press.
- x. Holt, Daniel T; Armenakis, (2008); Readiness for Organizational Change the Systematic Development of a Scale, *The Journal of applied behavioural science*, 43(2), 232-255
- xi. National Treasury, (2015). Brief on Integrated Financial Management Information System (IFMIS) Implementation in National and County Governments, National Treasury.
- xii. Ngibuini, E. (2010). Impact of Integrated Financial Management Information Systems, University of Nairobi.
- xiii. Peterson, S.B. (1998). Saints, demons, wizards and systems; Why information technology reforms fail or under perform in public bureaucracies in Africa. *Public Administration and Development Journal*. 18, 37-60.
- xiv. Rodin-Brown, E. (2008). *Integrated Financial Management Information Systems*. New York: The Louis Berger Group, Inc.
- xv. Dzidonu, C. K. (2011). United Nations Department of Economic and Social Affairs (UNDESA), eGov Branch, New York, USA
- xvi. Wafula, J. M., & Wanjohi, N. (2009). ICT Policy and ICT Initiatives: What Linkages
- xvii. Rozner, S. (2008). Best practices in fiscal reform and economic governance: Introducing integrated financial management information systems.
- xviii. Sahin, I. (2006). Detailed review of Rodgers' diffusion of innovations theory and educational technology –related studies based on Rodgers' theory. *The Turkish Online Journal of Educational Technology*, 5(2),
- xix. Yogesh K.D. (2013) Grand Successes and Failures in IT: Public and Private Sectors, International Working Conference on Transfer and Diffusion of IT, TDIT 2013.
- xx. Ajayi, C.M. &Omirin, S. P. (2007). Key Issues in Information Systems Management.
- xxi. Archer, S.H. (2006). A model for the determination of firm cash balances. *Journal of Financial and Quantitative Analysis*. 1:1, 1-11.
- xxii. Asselin, L. and Srivastava, (2009), "Integrated Financial Management Systems: Experiences in Latin America", World Bank (mimeo), Washington DC.
- xxiii. Bartel, M., (2009). *Integrated Financial Management Systems: A Guide to Implementation Based on The Experience*. Washington, DC: Institute for Democratic Strategies, LATPS Occasional Paper Series.
- xxiv. Casals A., (2009). *Integrated Financial Management Systems Best Practices: Bolivia and Chile,* funded under USAID Contract AEP-I-00-00-00010-00, Task Order No. 01 Transparency and Accountability, 2009.
- xxv. Cooper, D.R and Schindler P.S (2000). *Business Research Methods*.10th edition, McGraw Hill, International Edition.
- xxvi. Davis, N., Preston, C., & Sahin, I. (2009). ICT teacher training: Evidence for multilevel evaluation from a national initiative. *British Journal of Educational Technology*, 40(1), 135-148.
- xxvii. Diamond, Jack and Pokar Khemani (2005), *Introducing Financial Management Information Systems in Developing Countries*, International Monetary Fund.

- xxviii. Embretson, S. E & Hershberger, S.L. (2009). IT Alternatives to Social Control in Organizations. London
- xxix. GOK (2011). Integrated Financial Management Information System (IFMIS) IFMIS Re-Engineering, From Modular, to Full Cycle End-To-End Processes, Strategic Plan 2011-2013
- xxx. Miranda, R. and T. Keefe (2008). "Integrated Financial Management Systems: Assessing the State of the Art", Government Finance Review, pp. 9-13.
- xxxi. Zakareya Ebrahim, Zahir Irani, (2005) "E-government adoption: architecture and barriers", Business Process Management Journal, Vol. 11 Iss: 5, pp.589 – 611
- xxxii. Prakash, A. & De, R. (2007) Importance of Development Context in ICT4D Projects: A Study of Computerization of Land Records in India. Information Technology and People, 20, 3, 262-281
- xxxiii. Walsham, G. (2013) Development Informatics in a Changing World: Reflections from ICTD2010/2012. Information Technologies & International Development, 9, 1, 49-54
- xxxiv. Vachara Peansupap, Derek Walker, (2005) "Factors affecting ICT diffusion: A case study of three large Australian construction contractors", Engineering, Construction and Architectural Management, Vol. 12 Iss: 1, pp.21 – 37
- xxxv. Gichoya D (2005) "Factors Affecting the Successful Implementation of ICT Projects in Government" The Electronic Journal of e-Government Volume 3 Issue 4, pp 175-184,
- xxxvi. Bostrom, R., & Heinen, J. (2007). MIS Problems and Failures: A Socio-Technical Perspective. MIS Quarterly Journal, 1(3) , 17-32.
- xxxvii. Kifle, H., & Low Kim Cheng, P. (2009). e-Government Implementation and Leadership. Electronic Journal of e-Government Volume, 7(3) , 271-282.
- xxxviii. Kim, H. J., Pan, G., & Pan, S. L. (2007). Managing IT-enabled transformation in the public sector: A case study on e-government in South Korea. Government Information Quarterly Journal, 338-352
- xxxix. Rajiv Sabherwal, 2006; Information System Success: Individual and Organizational Determinants. Management Science, Vol 12; Iss: 1 pg. 1849