

**AN ANALYSIS OF ELECTRONIC GOVERNMENT IN THE MALAWI LOCAL
GOVERNMENT - CASE OF MWANZA AND ZOMBA DISTRICT COUNCILS**

MASTER OF PUBLIC ADMINISTRATION AND MANAGEMENT THESIS

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UNIVERSITY OF MALAWI

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Submitted to the School of Law, Economics and Governance in partial fulfilment of the
requirement for the degree of Master of Public Administration and Management

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DECLARATION

I, undersigned, hereby declare that this thesis is my original work and it has not been submitted to any other institution for a similar purpose. Acknowledgement has been made where other people's work has been used.

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CERTIFICATE OF APPROVAL

The undersigned certify that this thesis presents the student's own work and effort and has been submitted with our approval.

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DEDICATION

This research work is dedicated to God, for with Him all things are possible.

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ABSTRACT

The research targeted at finding out how the Local Government in Malawi was doing in terms of electronic government implementation. The research's main objective was to assess e-government initiative in selected district councils in Malawi, namely Mwanza and Zomba. The assessment was done through analysis of the policy framework, assessment of the initiatives that have been put in place to help promote e-government implementation, analysis of benefits of implementing e-government and finally a discussion of challenges that were hindering e-government implementation at the local government level in Malawi was made. The research employed a qualitative approach to collect data. The methods that were employed included process document reviews, questionnaires, interviews and focus group discussions. Firstly, it was revealed that there was minimal e-government framework because of lack of relevant and sufficient policies to help in the implementation of the project. Secondly, there was lack of consistency in e-government initiatives such as trainings and awareness and refresher programs due to among other things lack of funding. Thirdly, it was an appreciation of the benefits that the little implemented e-government had brought in the service delivery. Finally, a thorough investigation was made on challenges which included technical (ICT infrastructure, IT standards National Information Infrastructure and collaboration), governing (leadership, top management support and funding, among others) and social factors (training, awareness and social influence statements). The study established that the local government in Malawi was not able to fully provide e-services because of the above articulated factors. It was then revealed that there was minimal e-government implementation at the local government level in Malawi.

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LIST OF ABBREVIATIONS AND ACRONYMS

CG – Central Government

D-E-govt – Department of E-government

DHRMD – Department of Human Resource Management and Development

DPP – Democratic Progressive Party

DRTSS – Directorate of Road Traffic and Safety Services

E-Govt – E-government

EGDI – E-government Development Index

G2B – Government to Business

G2C – Government to Citizens

G2E – Government to Employees

G2G – Government to Government

GWAN – Government Wide Area Network

HDI – Human Development Index

HRIMS - Human Resource Information Management System

ICTs – Information Communication Technologies

IFMIS – Integrated Financial

IMF – International Monetary Fund

IT – Information Technology

ITU – International Trade Union

LASC – Local Authority Service Commission

LDCs – Least Developed Countries

LGAP – Local Government Accountability Program

LGA – Local Government Authority

LG – Local Government

MDC – Mwanza District Council

MDGS – Millennium Development Growth Strategy

MHEN – Malawi Healthy Equity Network

MPSR – Malawi Public Sector Reforms

MRA – Malawi Revenue Authority

NII – National Information Infrastructure

NIP – National Information Policy

PPEAR – Political Economy Analysis of Accountability for Resources and Results

PPDA – Public Procurement and Development of Assets

PPP – Public Private Partnership

SAA – Sub-Saharan African

SMART – Simple Moral Accountable and Transparent

UDF – United Democratic Front

UNDP – United Nations Development Programme

UNO – United Nations Organisation

ZDC – Zomba District Council

CHAPTER ONE

INRODUTION

1.1 Introduction

The present study analyses electronic government (e-government) implementation in the Malawi local government with a focus on two district councils, Mwanza and Zomba. In trying to understand this, the researcher interviewed different individuals and groups of people working at the Ministry of Local Government, the Department of E-government and the selected two district councils and reviewed some documents. The chapter introduces the topic of the thesis, provides background of the topic and of course brings in the problem statement. It also presents the research's main and specific objectives. The chapter has been divided into sub sections which are: 1.1. Introduction 1.2 Background, 1.3 Problem statement and 1.4 Research objectives.

Field et al. (2003) defines e-government as 'the use of Information and Communication Technologies (ICTs) by government agencies for a better government. Similarly, the World Bank (2012) defines e-government as the use by government agencies of information technologies such as Wide Area Networks, the Internet, and mobile computing that have the ability to transform relations with citizens, businesses, and other branches of government. Once put into practice, e-government does not only ease the delivery of services but also promotes transparency and accountability in government ministries, departments and agencies (World Bank 2012).

It is not surprising therefore, that Field et al. (2003) describes e-government as the use of Information and Communication Technologies (ICTs) by government agencies for a better government

It has also been observed that there has been a rapid change in the way government services are provided as a result of technological and scientific innovations and advances (Mtingwi 2014). Mtingwi (2014) describes this as one of the biggest innovations that the world has faced so far is the introduction of the internet, which alongside several Information and Communication Technologies (ICTs) has ushered in radical change in how services are delivered both in the private and public sectors. Information Technology therefore brought in a huge change in as far as service delivery is concerned hence (Castells, 1996) describes this as one of those rare intervals in history that is characterized by the transformation of our material culture by the works of a new technological paradigm that is organized around Information Technology (IT). ICT is therefore used to transform the delivery of public services to citizens and to reconfigure relationships between governments and their constituents, governments and businesses in a process commonly known as e-government or digital government (Kyem, 2016). Devadoss et al. (2003) claims that most organizations have chosen to utilise ICTs in order for them to stand a better chance of responding to the needs of the dynamic and complex world. The modern world needs fast but efficient and effective services. Furthermore, organizations have seen expectations for value and quality of services rise from their various stakeholders (Devadoss et al., 2003). Both the public and private sector are therefore investing in ICT, which is referred to as Electronic Government (E-government) in the public sector, with an aim to meet the demand of the people that they serve.

1.2 Background of the study

Many countries across the globe, developed and developing have embraced the new technology and for those whose countries have adequate resources, they are enjoying the benefits that the e-government has brought. This is evident through Irani, Love, & Jones (2008) who reveals that there have been numerous electronic government projects taking place all over the world in recent years. This means that many countries have seen the need for them to engage themselves in electronic service delivery. This includes the Least Developed Countries (LDCs) such as Malawi who have also introduced electronic service delivery in their governments. According to Twizeyimana (2018) many governments have employed this kind of management strategy in order to improve service delivery to the citizens. E-government would help to improve service delivery as it is fast, timely and at the same time promotes transparency and promotes accountability. However, there is still a slack on the speed as to how e-government is being implemented in developing countries, mainly because of lack of adequate resources. One of the United Nations Organization's (UNO) e-government development surveys reveals that Africa was behind the rest of the world's regions in e-government initiatives (UNO, 2012).

Schuppan (2009) realises that in spite of the despairing effort in e-government initiatives, the digital government project is particularly needed in sub-Saharan African countries where public administration is characterized by inefficiency, limited capacity, and poorly-trained personnel. Kyem (2016) claims that in most of the Sub-Saharan countries, clear legislative and regulatory frameworks that are prerequisites for successful e-government programs are either non-existent or in early stages of development. Kyem further cites such countries as Sierra Leone, Liberia and Somalia that have recently emerged from prolonged armed conflicts as examples of such countries.

Schuppan (2009) also observes that government departments for coordinating and overseeing the implementation of projects are absent in many countries and in cases where the structures exist, they are grossly under-resourced. Similarly, structures that are in place to ensure interoperability and portability of government services and information exchange are either outmoded or inadequate while skilled labour is scarce due to lack of capacity-building programs and brain drain (Misuraca, 2007 cited in (Kyem 2016:2). Furthermore, beside inefficient administrative systems, the lack of e-government initiatives on the continent may be explained by the fact that ownership and subscription to internet and other popular forms of information technology that drive e-government activities in other parts of the world are lacking in many sub-Saharan African countries (Kyem 2016). Despite the fact that Africa contains about 15% of the world's population, there were only 7% of over a billion people who could access internet in 2013, compared to Europe with 12% of the world's lowest- population but internet access reached more than 75% of households on the continent (ITU, 2013).

There are mixed views so far among scholars about the effectiveness of e-government in Africa. On one hand, some scholars such as Kyem (2016) think that Africa is suffering the results of European colonization and restrictions imposed by international donor organizations for example International Monetary Fund (IMF) and the World Bank. On the other hand, other scholars think this is as a result of endogenous factors such as corruption, poverty, frequent violent changes in government and dictatorial powers of political leaders (Kyem 2016). However, there were a handful of countries in the region that have implemented notable e-government programs and these were Seychelles, South Africa, Mauritius, Kenya, Cape Verde, Rwanda, Uganda, Botswana, Tanzania and Namibia and of late Zambia (Munyoka & Manzira, 2014; UNO, 2014).

The study therefore focuses on e-government implementation in selected district councils within the Malawi local government. The local government was selected for several reasons. First, the decentralization reforms that has put local government at a centre stage. Decentralisation of government means that powers have been devolved to local councils, allowing them to perform certain operations that were previously only done at Central Government level. World Bank (2013) describes decentralization as transfer of authority and responsibility of major government functions from central to sub-national governments, including governments, civil society and the private sector. The Local Government Act (1998) in line with the National Decentralization Policy (1998) advocates for devolution of authority, powers, responsibilities, functions and resources from Central Government to local authorities. In the same vein, the Malawi Public Sector Reforms (2018) describes decentralisation as a mechanism for empowering local communities to participate actively in the decisions that affect them for improvement of their welfare. Local government therefore brings government closer to the people for quality service delivery, popular participation in local governance and development (MPSR 2018).

Secondly, e-government could be potentially significant at the local government level in terms of improving public service delivery as it could ensure greater transparency and accountability. Adding to this, Drechsler (2005) argues that e-government can help the government agencies reduce manual transaction and co-ordination cost thereby making them more efficient, transparent and accountable to the public. Many e-government efforts therefore strive to improve efficiency, effectiveness, accountability and transparency of the government (Bhatnagar 2004). The transparency and accountability of the Malawi Local Government had for a long time been questionable.

This was evident from many issues of such type of news that make up headlines in the media. One example comes from the Malawi Health Equity Network (MHEN) research in 2017 which reveals that among other things, there was a problem of funds management in most councils with some of them failing to account for the funds that they received from the Central Government (Malawi Nyasa Times, 2017). Secondly, in a related case, the 2015 Tilitonse Fund Report titled the Political Economy Analysis of Accountability for Resources and Results in Local Government Councils indicates that funding to Local Government Councils progressively increased from K3 billion in 2005/2006 financial year to K34.2 billion in 2015/2016 financial year (Chiweza, 2015). Chiweza describes this as an indication that the councils are faced with numerous queries of fraud and limited accountability of the resources which they obtained from Central Government. Finally, Rahman (2009) explains that despite the popularity, potency and precision of electronic form of government (e-government), it still remains in uncharted territory for many countries in terms of implementing it at the lowest tier of the governance system commonly known as 'Local Government'. This was because in practice the lowest tier of any governance system always lacks proper incentives, adequate resources and satisfactory management, just to mention a few. This reveals that major victims of this situation are countries in the developing and transitional economies (Rahman, 2009). Furthermore, there has been little research on e-government implementation in the Malawi Local Government so the choice was made with an aim to fill that gap. Several comprehensive e-government studies have taken place in Malawi but not at Local Government level.

1.2 Problem Statement

Islam (2013) observes that e-government is becoming of prime importance with the dawn of the technological age due to the wide spread of the Information and Communication Technologies (ICTs). Islam (2013) observes that the situation has prompted many governments including the Sub-Saharan African (SSA) to start thinking of going digital. Islam further explains that e-government has the capability of promoting better governance, transparency, raising service performance and eliminating bottlenecks in the service delivery process and that most developed countries claim that e-government offers a way out of incompetency. Makoza (2014) observes that Malawi like most of the Sub-Saharan African countries have for the past decades, embarked on e-government projects in an effort to deal away with the incompetent service delivery mainly in the public sector.

Malawi as one of the least developed economies in the world has over the years faced socio-economic challenges associated among other things with weak ICT base which has resulted in failure to achieve an ICT-led socio-economic development (MDGS I, 2006). The situation has left the country in a position which is extremely difficult for it to develop a vibrant, globally competitive industrial and services sector in the emerging new economic order, robbing it of competitive urge against other nations within Africa and beyond (Makoza, 2014).

Although the country has been implementing e-government since 2004, this effort has not only generated results that vary between different government agents but also within them with some registering greater success than others. This is evident through among

other things a report that within the Ministry of Local Government in Malawi some councils were doing much better in terms of e-government implementation as compared to others. This was revealed through interviews with officials from the Department of E-government and the Ministry of Local Government. It was also disclosed that despite the councils operating under one umbrella, the ‘Local Government’, they are differing in how e-government is being implemented. This development cannot be taken for granted because all the councils fall under the same ministry, they are funded by the same government and have the same objectives for e-government implementation thus to increase efficiency and effectiveness in public service delivery.

The National ICT Policy (2009) also argues that the current low levels of ICT services in Malawi are leading to administrative inefficiencies in public service delivery, consequently contributing to challenges such as overreliance on the agricultural sector, low growth rate coupled with a balance of payment difficulties, poor physical, communications and social infrastructure development, heavy debt burdens and huge public and social expenditure budgets.

It is against this background that this study seeks to assess the contribution of the available structures to the different levels of success being registered by selected local councils that are doing well and those that are not doing well by means of a Case of the Malawi Local Government through a comparative study between Mwanza and Zomba district councils.

1.3 Research Objectives

1.3.1 Main Objective

The main objective of this study is to assess electronic government initiatives in selected district councils in Malawi.

1.3.2 Specific Objectives

In order to achieve the main objective, the following specific objectives were pursued:

- i. To analyse policy framework on e-government implementation at local government level in Malawi.
- ii. To assess the initiatives on e-government implementation at local government level in Malawi.
- iii. To assess the benefits of e-government implementation at the local government in Malawi.
- iv. To analyse the challenges that hinder e-government implementation at local government level in Malawi.

1.4 Research questions

In order to achieve the objectives above, the study was guided by the following research questions:

- i. What policy framework was there to help in the implementation of e-government at the local government level in Malawi?
- ii. What initiatives have been put in place to help the implementation of e-government at the local government level in Malawi?
- iii. How beneficial was e-government implementation at the local government level in Malawi?

- iv. What challenges were hindering the implementation of e-government at the local government level in Malawi?

1.5 Significance of the study

There is a link between electronic government and public administration. Public administration involves much of service delivery and e-government helps the provision of effective service delivery. Twizeyinama (2018) observes that this is as a result of swift transfer of information from one level of governance to another which reduces paper-work and manual ways of running duties in different government offices that also leads to bureaucracy. E-government is also believed to have promoted transparency and accountability in the way governments operate because there is a sense of tracking what is done and what is not done and makes it easy to hold anyone accountable (Twizeyimana, 2018). E-government has also become a requirement for some aid programs in developing nations to improve transparency and accountability, a condition which rich states and international agencies have put in place for them to supply aid to these economically less developed countries (Ciborra, 2005).

It is also believed that e-government improves citizen participation and democratization. Twizeyimana (2018) elaborates that e-government widens knowledge base of the local citizens which in return leads to proper or improved service delivery, economic growth and empowerment of the local citizens through dissemination of information.

The discussion above demonstrates that e-government is vital for service delivery which is the hub of public administration. It is therefore significant to study e-government concept in the domain of Public Administration and Management.

1.6 Organisation of Thesis

This thesis has five chapters. Chapter one introduced and gives a background of the topic of the study, stated the problem statement that required investigation, objectives and significance of the study. Chapter two presented the literature reviewed, the conceptual and theoretical framework guiding the research. Chapter three described the methodologies, designs and samples that were used. Chapter four presented the findings of the study and their discussion. Finally, chapter five gave a summary of the research, major findings, possible areas of further study and conclusion

1.7 Conclusion

The chapter started with introducing the topic under study, a detailed background of electronic government, the e-government framework and initiatives that have been put in place, benefits that e-government has brought and its implementation challenges. The chapter also discussed the problem statement, the main research objective as well as specific objectives. In addition, the chapter highlighted the significance of the study in academia. Finally, the chapter explained how the thesis was organised.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter reviews and discusses literature in related studies and justifies the study based on the literature reviewed. The main focus is e-government implementation in Least Developed Countries (LDCs), particularly Malawi, with a special attention to the Ministry of Local Government. To review the literature, e-government has been defined and a background on e-government has been presented. E-government blocks and phases have also been discussed but much focus has been put on e-government framework at the local government level in Malawi, initiatives that have been put in place to enhance the implementation of e-government at the local government level in Malawi, the benefits that e-government has brought in the service delivery and the e-government implementation challenges being faced at the local government level in Malawi. Theoretical and conceptual frameworks have been proposed and finally a conclusion of the chapter made.

2.2 The concept of electronic government

Electronic government was established in the United States of America in 1993 (Kamensky, 2012). Electronic government has got different dimensions whereby it is understood and defined differently by different scholars. This is evident through Gichoya (2005) who describes e-government as multifaceted.

Field et al. (2003) defines e-government as ‘the use of Information and Communication Technologies (ICTs) by government agencies for a better government.’ Fang (2002) and Field et al. (2003) concurs that e-government provides increased opportunities for citizens to participate in democratic institutions and processes. However, this study adopted a World Bank (2012) definition that conceptualises e-government as ‘the use by government agencies of information technologies such as Wide Area Networks, the Internet, and mobile computing that have the ability to transform relations with citizens, businesses, and other branches of government.’ This definition was perceived relatively broader and hence regarded suitable for the purpose and objective of the study. From the definitions, the role of e-government is seen as governments’ ability to provide services to citizens, businesses and other governments using ICT for efficiency and effectiveness.

E-government was brought into existence to have governments that are efficient, effective, transparent and accountable. This is evident through Cunningham and Cunningham (2011) who observes that the main objective of e-government is to have SMART government and describes SMART as Simple, Moral, Accountable and Transparent. Services will be simple to deliver because e-government eases work. Once the systems have been put in place it becomes easy to provide services. At the same time, e-government service delivery becomes moral because it is believed that it is rightly done. Finally, e-government would always hold the users accountable and responsible for their actions because of the user identifications (IDs) that are used. This in the end makes e-government service delivery to be transparent

Many governments started providing public services using ICTs due to the introduction of the internet since early 1990s (Mtingwi 2014). Moon and Bletschneider (2002)

explains that this has enhanced the development and use of World Wide Web (WWW) in government institutions to provide public services, policies and citizens' political participation. Banerjee and Chau (2004) observes that this resulted into the creation of e-government through explicit programs to build innovative aspect of social and economic development. Carroll (2005) also observes that this entails computerisation of manually documented processes that result in innovative approaches of management. E-government was therefore created to deliver services to citizenry, business, various government agencies, ministries departments and employees in an efficient, effective, transparent and accountable manner. Alluding to this, Ndou (2004) also observes that there are four main stakeholders of e-government and these are citizens, businesses, governments and employees.

The process of implementing e-government involves a sequence of activities and structures called phases (Gottschalk & Solli-Sarther cited in Makoza 2013, p. 272). There are different models but it is likely that each model may be ideal for understanding the process of e-government in a specific context. On one hand, Gartner (2000) brings about a four-stage model comprising of web-presence, interaction, transaction and transformation. On the other hand, UN (2001) presents a five-stage model comprising of emerging presence, enhanced presence, interactive presence, transactional presence and seamless presence. However, Makoza (2014) uses a four-phase model to illustrate the initiatives of e-government in Malawi as illustrated below:

Presence is the first phase of e-government, which is also called cataloguing. This phase involves establishment of government online presence where information for government is published online and links to other services are provided (Makoza 2014).

Yildiz (2007) describes presence as one way of communication where citizens are on the receiving end. At this phase, government, citizens and businesses cannot conduct any transactions but there are efforts to focus on internal collection of information, for instance, forms can be downloaded and printed (Layne & Lee 2001). As of 2008, at this phase, the e-government in Malawi had several initiatives in some of the ministries and government departments (Makoza 2014). The initiatives included dynamic content website with catalogue and links.

Makoza (2014) states that the second phase of e-government implementation is Interaction and that at this phase government provides services online to support offline activities. Chan et al. (2008) observes that at this phase citizens may download forms or contact government agencies through e-mail before visiting the agency.

Transaction is the third phase of e-government implementation and this enables citizens to use online services without visiting the government agency (Makoza 2014). Layne and Lee (2001) observes that at this phase, there is increased services and access to online services resulting in online engagement between citizens, businesses and government. Transaction may also involve cross government agency sharing of information such as online payments (Al-Nuaim, 2011).

The final phase of e-government implementation is Integration and the phase involves vertical and horizontal integration across government functions (Makoza, 2014). Layne and Lee (2001) explains that vertical integration takes place within each level for example, at local and state level while horizontal integration takes place across different functions and services. Chan et al. (2008) explains that at this phase all services are

presented together in a seamless and customer focused manner, for instance, application or registration services may be done online.

E-government has been categorised into functional categories and according to the European Commission (2007) there are four distinct but unified categories of e-government applications namely e-democracy, e-service, e-administration and e-commerce. This study will concentrate much on electronic administration which is described as the utilisation of ICTs for aiding “back office” organisational processes, for example procurement, budgeting, accounting and human resources (European Commission 2007).

2.3 Electronic government framework

Putting a legal framework in place would help to create a knowledge-based society, empower users and prepare future generations to meet the demands of the globalized world. Legal framework provides an overview of various areas of law affecting e-governance (Metcalf, 2014). Metcalf (2014) also observes that e-governance is often approached as a technical issue, even if it is now mature enough for other aspects to get more attention. It is not unusual that legislators, regulators or others concerned concentrate too much on technological issues and presume that new rules are needed if new technologies are used (Metcalf, 2014).

There is need for a profound analysis of existing legislation to identify whether and in what contexts new or amended rules may be required (Metcalf, 2014). Metcalf (2014) further states that it must not be forgotten that the perception of reliability and security of e-governance is important as people will not use services they see as insecure, which

is why data protection is a priority. Therefore, technology and law should work together and complement one another, although the relationship may be less complex than it may appear to the non-initiated (Metcalf, 2014).

The legal system must be able to include e-governance but does not need to change totally because technologies change. Saarenpaa (2003) observes that transformation of society into a network society is proceeding at a startling pace and that one often hears the term legal framework in this context, but few details of that framework are forthcoming. However, there should not be much separate legislation or regulation for e-governance, as these risks creating parallel systems rather than benefiting from efficiency gains (Metcalf 2014). Metcalf (2014) further claims that a profound analysis of existing legislation is required to identify the contexts of new or amended rules.

2.4 E-government initiatives

Many governments have put in place initiatives to enhance the implementation of electronic government at all levels in their respective countries (Makoza, 2014). Makoza (2014) further observes that the Least Developed Countries (LDCs) have not been spared on this as they are among those countries that are working really hard to make sure that e-government is being implemented. On one hand, the establishment of the department of e-government has been identified as one of the e-government initiatives (E-government MW Facebook Page). On the other hand, Khan (2014) brings about trainings and awareness programs on e-government as some of the e-government implementation initiatives.

2.4.1 Establishment of E-government Department

One of the biggest initiatives that most governments have implemented is the establishment of the E-government Department (E-government MW Facebook Page). This concludes the restructuring process that has been going on for some time to ensure that government departments and ministries are properly structured and aligned to implement the electronic service delivery. The page further observes that the department creates a connected government and acts as a catalyst for electronic service delivery that the government provides to its citizens through the creation of one stop centres.

‘One Stop Centres’ are places where one can access different government services under one roof and the government offices in these centres are connected. The Department of E-government MW – Facebook page presents the ‘Mangochi Mlambe One Stop Public Service Centre’ that was launched by the then state president, Professor Arthur Peter Mutharika on 29th March 2018. It is observed that some of the services being offered at the service centre are passport acquisition (immigration), driver’s license (Road Traffic), domestic taxes (MRA), business registrations (Registrar General) and Postal and Courier Services (Malawi Posts Corporation). The e-government department provides the connectivity for all of the services’ systems that were being provided and integrated them to one payment gateway (Department of E-government MW – Facebook Page).

2.4.2 Training

Khan (2014) explains that trainings are important and claims that if people have not been trained it is difficult for them to take responsibility of the new technology. Keep (1989) observes that although trainings are costly, they should also be regarded as an investment. Training helps people to understand new concepts and for electronic government to be a

success, trainings should include those in leadership positions so that they understand the concept and appreciate its existence. In the case of e-government, trainings would help to deepen the knowledge, awareness and skills of specialists, the e-government analysts thereby broadening the ICT-related possibilities (Khan 2014).

2.4.3 Awareness

Awareness is critical in the introduction of a new concept. In electronic government implementation, awareness will help to improve knowledge of those working in government offices and citizens. This in the long run will help in the adoption of electronic service delivery. Dourish and Bellotti (1992), defines awareness as "an understanding of the activities of others, which provides a context for your own activity". Dourish and Bellotti (1992) further explain that e-government awareness includes using the mass media to introduce the concept of e-government system for people in the public sectors, conducting seminars or workshops to encourage the public sectors' work force to apply the concepts in their daily operations. Similarly, Heeks (2001b) observes that a package of activities could be delivered that includes seminars and training workshops, web-based documentation, individual meetings, and support for monitoring and project evaluation. Heeks (2001b) indicates that this can be done using various channels such as radio, television, advertisements, mobile application and social media.

2.5 Benefits of e-government

Scholars have revealed that countries that are implementing electronic government efficiently are enjoying a wide range of benefits. Discussed below are some of e-government benefits as presented by different scholars.

2.5.1 Speed

Electronic technologies make communication better and faster (Kumar 2020). Kumar (2020) observes that it will take very less time for any policy, or scheme to reach to the people as you yourself can see that internet, cell phones and mobile communications have these capabilities and also access does not require parties to travel thereby saving time.

2.5.2 Building partnerships and strengthening institutional relationships

Heeks (2001) observes that electronic government helps to strengthen relations between government and other institutions such as Non-Governmental Organizations (NGOs) or international organisations. E-government also helps to build civil society partnerships, strengthening relations between the institutions of civil society such as between NGOs. Reddick (2010) observes that success of an e-government project is heavily dependent on strategic partnerships and that the most important partnering sectors include other departments in the government, the private organizations, and Non-Governmental Organizations (NGOs) that can impact grassroots delivery. This uses all the potentials of ICTs to strengthen current information connections and to build new information connections between institutions whose rationale is to create a strong economic, social and political 'fabric' within society (Heeks, 2001).

2.5.3 Working better with businesses

E-government helps to improve the interaction between government and business (Heeks:2001). Heeks (2001) further explains that this includes digitising procurement from and services to business to improve their quality, convenience and cost. This uses

all the potentials of ICTs to deliver the informational components of public services to business in digital form. It also includes digital support for opening up government to business through outsourcing and other public-private partnerships. The direct rationale is to drive costs down and quality up within government, but there is also an indirect rationale of improving the efficiency and responsiveness of local business (Heeks 2001).

2.5.4 *Developing communities*

E-government helps to improve the interaction between government and business (Heeks 2001). Heeks explains that this includes digitising procurement from and services to business to improve their quality, convenience and cost. This uses all the potentials of ICTs to deliver the informational components of public services to business in digital form. It also includes digital support for opening up government to business through outsourcing and other public-private partnerships. The direct rationale is to drive costs down and quality up within government, but there is also an indirect rationale of improving the efficiency and responsiveness of local business (Heeks 2001).

2.5.5 *Curbing corruption*

E-government helps in curbing corruption because it makes people accountable of their operations. This is evident through (Parajuli 2007) who observes that e-government aims to improve administrative efficiency in delivery of services, promoting public participation in decisions and actions for government, encourage political accountability and policy effectiveness. Similarly, Bass and Multon (2010) also observe that the use of ICT in government, have been said to increase transparency and accountability.

2.5.6 Cost Effective

According to Makoza (2013) e-government helps to save money, as it doesn't require the concerned parties to travel long distances to deliver and access information and this may result in cost effectiveness. Kumar (2020) concurs with Makoza (2013) and explains that implementation of the various policies and schemes of the government, a lot of money is spent in purchasing of stationery like for buying pens, papers, and printers. Makoza (2013) further observes that through the use of e-government, government will be able save these expenditures, which can be used for other developments.

2.5.7 Promotes access to information

E-government may also facilitate better access to government information on issues of health, agriculture, job opportunities, credit sources, just to mention a few. Janssen et al. (2012) believes that the use of e-government advances the relationship between governments and the population

2.5.8 Enhances Interaction

Electronic government enables front offices communication with citizens, which is called government to citizens (G2C). Ndou (2004) observes that (G2C) facilitates communication between government and its citizens and initiates government interaction with its citizens in an accountable, democratic and transparent manner. This results in provision of quality services and gives citizens permission to access government information and other services using personal computers, Web-TVs, cell phones and wireless laptops among other things (Ndou 2004). This also helps to initiate interaction between governments and business partners to do business electronically (Ndou 2004).

Electronic government also helps back offices in processes such as internal interactions and it enables government's interaction with employees, which is called government to employees (G2E). Ndou (2004) describes (G2E) as a relationship between governments and their workforce. G2E brings employees together with the aim of sharing ideas to enhance e-learning among them and allows workers to access information such as civil rights laws, policies, and training among other things (Ndou 2004). G2E is beneficial because it provides strategic and tactic means for employees to implement goals and programs. Electronic government also makes it easy for government agencies to communicate, this is known as government to government (G2G) (Ndou 2004). Ndou (2004) explains that G2G integrates central government, ministries, departments with local government and state-owned companies. Ndou further explains that such integrations are also between judiciary, parliament and central government departments or external agencies.

2.5.9 Helps to reduce poverty

Mutula (2002) observes that e-government helps to reduce poverty in communities. Thus, the use of e-government may help governments to address some of the challenges they encounter in delivery of services to citizens such as shortage of personnel and inadequate facilities (Kumar, Mukerji, Butt & Persaud, 2007).

2.6 E-government implementation challenges

Sanabria et al (2014) claims that there is less evidence as to how e-government is occurring in developing countries or whether the claimed positive effects identified in other cases are also taking place here. Dada (2006) and Heeks, (2003) reveal that e-

government faces different challenges in different contexts, mainly in developing countries. Some of the challenges have been discussed below.

2.6.1 Lack of adequate ICT infrastructure

Lack or weakness of ICT infrastructure is one of the major challenges for e-government implementation. Alshehri et al. (2010) observes that internetworking is required to enable appropriate sharing of information and open up new channels for communication and delivery of new services. Alshehri et al. (2010) further explains that for a better transition to electronic government, an architecture, which is a guiding set of principles, models and standards, is needed. Many developing countries suffer from the digital divide which is referred to as a gap in opportunity between those who have access to the Internet and those who do not, and they are not able to deploy the appropriate ICT infrastructure for e-government deployment. Governments should therefore work closely with the private sector to establish a modern infrastructure that will provide access opportunities to disconnected groups and individuals (Alshehri et, al 2010). Alshehri describes lack of ICT infrastructure as one of the primary barriers to e-government implementation because most e-government applications require considerable investment in national IT infrastructure.

2.6.2 Digital Divide

The digital divide refers to the gap in opportunity between those who have access to the Internet and those who do not (Alshehri et al., 2010). Those who do not have access to the Internet will be unable to benefit from e- government services, therefore leaving a gap between the two parties which is called a digital divide. Alshehri et al. (2010)

observes that not all people have the suitable access to computers and Internet, whether due to a lack of income, necessary skills, or internet access. To bridge up the gap, Alshehri recommends that governments should make computers available in public locations, such as libraries, post offices and shopping centres among others. Therefore, digital divide, which is as a result of limited ICT infrastructure is considered the most important barrier to e-government as it leads to unequal access to ICT (Alshehri et al 2010).

2.6.3 Social Economic Conditions

Developing countries are perceived as relatively poor hence the challenge because e-government implementation requires adequate resources. Alshehri et al. (2010) declares that the lack of financial support is considered as significant obstacle to the implementation of e-government in many countries. It is necessary for governments to ensure the availability of the existing and expected budgetary resources in order to achieve the goals (Alshehri et al 2010). Alshehri et al. (2010) observes that because of the high cost of implementation and maintenance the computer systems, many countries become in dilemma of funding e-government programs, even when a government entity has a plan for effective and accessible e-government. Lack of finance for capital investment in new technology is a major obstacle to e-government. Alshehri also observes that the abilities of government offices to place services online and to use technology for democratic outreach are hampered by budget considerations. Alshehri finally explains that the total cost, including the high cost of systems hardware and maintenance, software, training and education, are always seen as major barriers inhibiting agencies and governments from using the technologies.

The most serious and significant barrier to the implementation of e-government is a lack of money because e-government implementation is expensive. Budget makers should consider fitting e-government into their budget for its successful implementation.

2.6.4 Collaboration

Collaboration and cooperation between partners are critical factor in the e-government implementation process in order to gain a successful e-government system (Alshehri et al 2010). Similarly, Ndou (2004) emphasizes that cooperation between public and private sectors is necessary to provide resources, plans, skills and experiences that the government may not otherwise have. Government should encourage all sectors to participate in e-government implementation and development.

2.6.5 Literacy Levels and Language Barriers

Netchaeva (2002) explains that literacy levels and language barriers are some of the factors that are hindering the implementation of e-government. Makoza (2014) observes that most developing countries have very few literate people leading to most citizens not having access to information. Alshehri et al. (2010) also observes that e-readiness and ICT literacy are also necessary in order for people to be able to use and benefit from e-government applications. Alshehri et al (2010) further describes ICT literacy as the use of digital technology, communications tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society.

2.6.6 Human Resource and Skills

Ndou 2004 observes that lack of ICT skills is a major challenge to e-government implementation, especially in developing countries. The e-government system can be implemented successfully if qualified personnel are available to take the role of starting and developing the e-government system (Sharma and Gupta 2003). Similarly, Alshehri et al 2010 explains that it is vital to focus on training and education programmes to enhance the progress of e-government projects. Training is a fundamental prerequisite as the rate of change increases and new technologies, practices and competitive models appear. OECD (2003) observes that the full economic benefits of ICT depend on a process of training and learning skills, which is still at an important stage for all governments.

2.7 E-government research gap in other Least Developed Countries and Malawi

The implementation of electronic government in Malawi started in government ministries, departments and government owned companies in the late 1990s (Mtingwi (2012). Mtingwi (2012) observes that since then, the leadership of the country decided that the Malawi government should start utilizing ICTs to sustain democratic management through e-government. The momentum for ICTs to enhance e-government at national level started in 2004 with the need of ICTs with a priority in social and economic development areas of health, agriculture, transport and communication, infrastructure, tourism, postal services, education, banking and e-commerce (ICT Policy 2013).

The Millennium Development Goals (MDGs) Report for Malawi (2011) indicates that on one hand, the use of internet by the population in Malawi improved from as low as

0.07 percent in 2005 to 17 percent in 2011 while on the other hand, the use of mobile and fixed telephones (tele-density) had improved from 2.63 percent to 27 percent in the same period (ICT Policy 2013). This is an indication that there has been some progress in as far as the of ICTs and the internet is concerned. This has been initiated by the Ministry of Information who is in-charge for the laying out of ICT infrastructure in the telecommunications sector for successful exploitation of ICTs in all sectors of economic growth to obtain better results (Mtingwi 2012). Studies on e-government are taking place almost everywhere in the Least Developed Countries (LDCs) including Malawi and among them are the following:

Bwalya (2013) did a study on E-government Implementation in Zambia. The study reveals that a lot needs to be done if e-government were to succeed in Zambia. Bwalya observes that majority of the research respondents were not aware of e-government implementation in Zambia and it is therefore desirable that the concept should be implemented with due reference to local contextual characteristics. If the factors that are negatively influencing e-government growth in Zambia are addressed, the prospects for its contribution to revitalizing the public service are high (Bwalya 2013).

Another study was by Adeyemo (2011) on E-government in Nigeria. Adeyemo observes that Nigeria has the fastest growing and most lucrative Telecommunications, Information and Communications Technology (ICT) market in Africa but it was still ranked low in e-government provision despite that significant progress in ICT. Adeyemo (2011) realises that digital divide, low ICT literacy level, management challenges and reluctance to share information were some of the factors negatively affecting the implementation of e-

government in Nigeria. If those factors were worked on, the situation would be improved (Adeyemo 2011).

The findings of both studies revealed that Zambia and Nigeria were still behind in terms of e-government implementation. On one hand, Zambia registered lack of awareness, digital divide, low literacy levels and management challenges as the major issues affecting e-government implementation. On the other hand, Adeyemo highlights that although Nigeria had the fastest growing Telecommunication Information and Communication Technology (ICT), it still registered the same issues as Zambia with digital divide as a major issue.

There have been a few significant studies done on e-government so far in Malawi as stated below. Bichler (2008) conducted a study on digital divide and internet usage in two major cities of Malawi namely Blantyre and Lilongwe. The study concluded that the country was in the early stages of e-government and that poor infrastructure was the main cause of limited implementation of online public services (Bichler 2008).

A study by Mtingwi (2012) on the State of E-Government and M-Government Readiness in Malawi revealed that important factors are available that would enable LDCs to implement m-government. For instance, Malawi is, to a large extent, ready to embrace mobile government. Nevertheless, other LDCs can also take advantage of the factors and themes which were discovered and determine mobile readiness.

Another study was 'E-government implementation in the context of a developing country', Makoza (2014). In addition, the results showed slow growth in e-government implementation in Malawi because of limited integration of public services. The study

provides insights that may be useful in improving the implementation of e-government in Malawi.

Thangalimodzi (2016), E-government Adoption in Malawi also revealed a number of factors impeding adoption of the concept. Critical among them are poor funding for activities that can facilitate e-government adoption, weak leadership focus on issues of e-government, poor ICT-Infrastructure and poor National Information Infrastructure.

Malanga (2017) 'The State of E-Government Initiatives in Malawi: A Public Sector Reform Initiative'. Like the rest of the studies, this one too revealed that Malawi has very low internet levels.

All these studies are witnessing that the LDCs are facing different problems in e-government implementation. However there haven't been studies on e-government implementation at Local Government level in Malawi. Local government is the branch that has direct interaction with the local citizens hence filling in that gap is regarded important in as far as Public Administration is concerned. This study therefore intends to fill in such gaps in literature by contributing to knowledge that is critical in the understanding of e-government implementation efforts in Malawi.

2.8 Theoretical framework

Considering that the study focuses on the service delivery in the public service, it will be grounded on one of the Public Administration theories, New Public Management (NPM) which was originated by Christopher Hood in 1991 in an effort to replace the Traditional Public Administration theory. Hood (1991) observes that NPM came into existence

because of the ongoing global financial and economic crisis in governments across the European Union (EU) that are engaged in deep public spending cuts as part of broader austerity drive with an aim to reduce the deficit and public debt Hood (1991). Alonso et al (2013) traces back ‘Drives to slim down the public sector’ to the 1980s, when it was done through both outright sales and through the application of management techniques borrowed from the private sector. Such policies came to be labelled New Public Management (NPM).

NPM aimed at correcting some of the perceived pathologies associated with the public sector, including the view that it was inefficient and too large (Alonso et al 2013). As the NPM doctrine emerged, its proponents emphasized strategies to minimize and downsize the government (Pollitt and Bouckaert 2003; Van de Walle and Hammerschmid 2011) cited in Alonso et al. (2013:2). NPM has become an umbrella term covering a set of public sector reforms carried out from the 1980s across most countries under the Organisation for Economic Cooperation and Development (OECD 2003). Most scholars agree that NPM began as a phenomenon in Anglo-Saxon countries, and was then picked up, adapted, and promoted globally by international organizations, most prominently the OECD (Clifton and Díaz-Fuentes 2011).

Scholars broadly agree that NPM involves an ‘attempt to implement management ideas from business and private sector into the public services’ (Haynes 2003: 9). There are different conceptualizations about what the core elements of the NPM reforms are but this study will use elements by Pollitt and Bouckaert (2003) which are, to reduce public spending, to improve population’s perception about public sector performance (transparency), and to seek for accountability mechanisms. This would in turn bring

about effectiveness, efficiency, responsiveness and equity which are some of the issues that e-government also tries to address. In practice, this means that e-government can enhance public administration reforms by achieving some of the core values of the NPM agenda (Bellamy and Taylor 1998; Heeks 2006). From a practical and policy-oriented perspective, the OECD provides an illustration to this point. The Organisation defines e-government as “the use of Information and Communication Technologies, and particularly the Internet, as a tool to achieve better government” (OECD 2003). OECD refers ‘better government’ to meeting the challenge of enabling a more responsive, efficient, effective and participatory government.

Different scholars have brought about both positive and negative reactions on NPM. On a positive note, Hughes (2003) observes that NPM provides managerial alternatives to the traditional model of management. Similarly, Osborne & Gaebler (1992) cited in Alonso et al. (2013) explains that convergence on a new way of organising public tasks is happening because of the traditional model that lacks efficiency under contemporary conditions. This therefore means that governments all over the world are moving towards the New Public Management style.

On shortcomings, firstly, Wagana et al. (2016:463) citing Kaboolian (1998), Khademian (1998) & Maor (1999) argues that giving public managers more authority to manage programs may result in concentrating decision making thereby centralising rather than decentralising decision making as the NPM theory claims. Secondly, Armstrong (1998) & Flynn (2002) also observes that the nature of the public sector will make it difficult to be privatised because of its distinct, political, ethical, constitutional and social dimensions that make the public sector totally different from the private sector. Thirdly,

Monique (2001a) cited in Alonso et al. (2013) argues that NPM is a reform model that was originated in a small group of rich countries and therefore it would not be directly transferred to poorer Non-Western Countries because of contrasting features such as political, culture and practice.

Although NPM seems to be contradicting itself in the way its operations are run, it is still effective because governments can adopt not everything but only those elements that would suit their context from the long menu list that NPM is made up of. The fact that NPM is a Western approach should not be a great concern for Non-Western Countries because almost all the management styles that these governments use was adopted from those Western nations where they look up to. This is why the study will use the NPM as it fits the Malawi context.

2.9 Conceptual framework

A conceptual framework by Khan (2014) has been adopted to be used in this study. The model highlights governing, technical and social factors that have a positive impact on e-government implementation in every context. These include vision, top management, support, leadership and funding as governing factors. IT-infrastructure, IT-standards, National Information Infrastructure, and collaboration as technical factors and social factors include social influence statements, awareness and training. The factors illustrated in the research model will be used as hypotheses of the study to test the interviewees to see whether they agree with the factors or not. The figure below illustrates the three categories of factors.

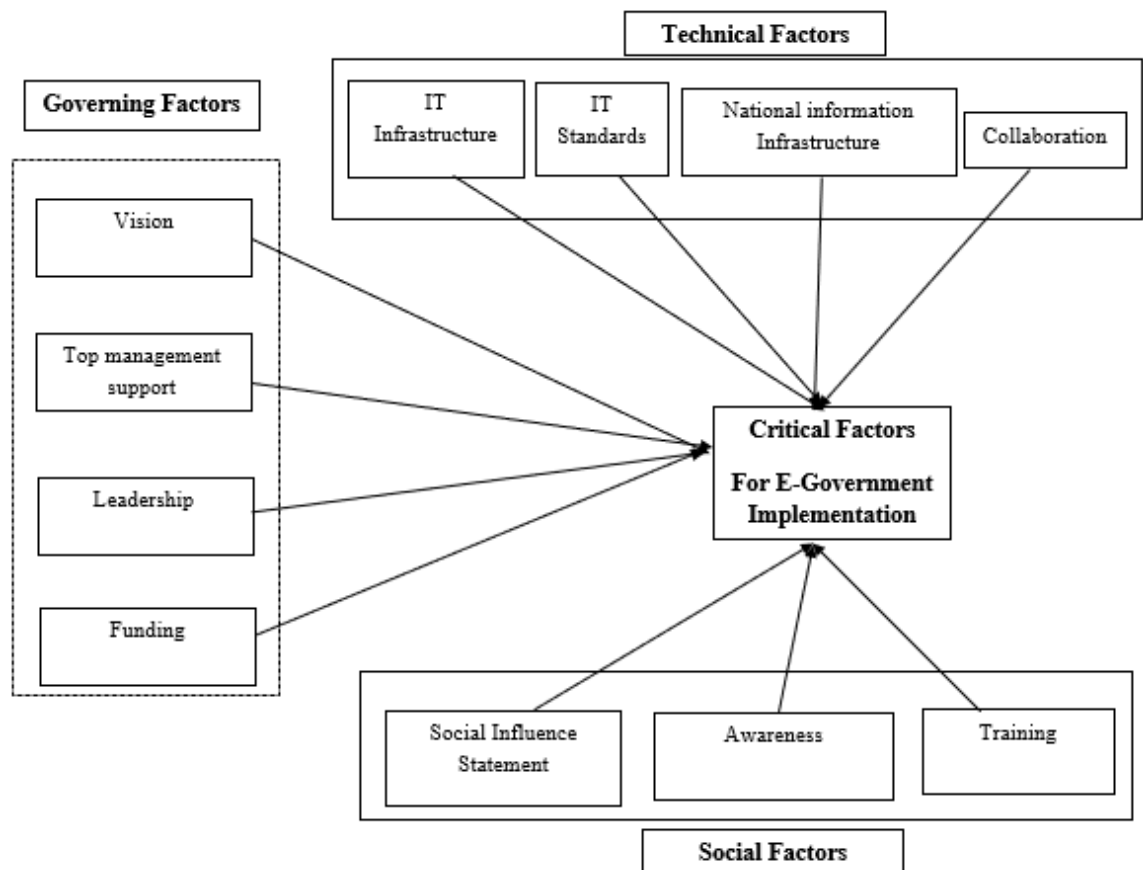


Figure 1:Research Model Khan (2014): Factors affecting electronic government implementation

Below is how each of the hypothesis has been illustrated to show how they impact the implementation of e-government.

2.9.1 Governing Factors

The first category of factors that affect electronic government implementation is governing factors. The governing factors are those things that enable authorities to exercise their powers. In the case of e-government implementation, the governing factors would guide on the best way the concept could be implemented using the factors that are made available to them. The governing factors include vision, top management support, leadership and funding. Below is a description of how each factor affects the implementation of e-government.

The first factor that will be discussed is vision. Vision must be coherent to creation of the future and must be powerful to generate commitment to performance and emphasize realistically what can or should be done (Allen 1995). This means that vision has a positive impact on critical factors affecting e-government implementation because one of e-government's main challenges is the establishment of inappropriate strategy which leads to inappropriate vision (Khan 2014)

The second governing factor is top management support. Managers have authority to establish and enforce policies and guidelines so that their support is essential in the implementation of programs and projects including e-government (Khan 2014) citing (Cavaness & Manoochelin 1993). Complementing to this, Khan (2014) explains that top management support is important for accomplishing project goals and objectives and aligning them with the strategic vision. Khan (2014) further explains that top

management support also helps in fulfilling important tasks and responsibilities which among other things include playing ownership role, project policies implementation management, controlling project planning and progress, enabling fast decisions and motivating management. Therefore, top management has a positive effect to critical factors affecting e-government implementation.

Khan (2014) brings about leadership as a third governing factor affecting electronic government implementation. Heeks (2002) describes strong leadership is a precondition in e-government adoption and implementation. Ke & Wei (2004) complements to this by indicating that strong leadership with a vision is crucial for e-government success and therefore leadership has to be considered the most important factor for the successful e-government implementation project.

Funding is the fourth governing factor affecting the implementation of electronic government (Khan 2014). This is the glue that holds the building, collections and staff together and allows attainment of goals and promotes the success of e-government (Khan 2014). E-government funding becomes crucial as it finances ICT infrastructure. Khan (2014) also observes that lack of funding is a disincentive and greatest barrier to e-government adoption and implementation and it blocks necessary investment for implementation. Funding affects e-government implementation hence it is considered crucial for e-government implementation.

2.9.2 *Technical Factor*

The second category of factors that affect electronic government implementation is technical factors. Technical factors refer to existing facilities that would help in the

implementation of a policy or project. Technical factors that would help in the implementation of e-government range from IT Infrastructure, IT Standards, National Information Infrastructure and Collaboration (Khan 2014). These factors will be discussed below.

Khan (2014) presents IT infrastructure as the first technical factor affecting e-government implementation. Khan narrates that infrastructure is important not only in IT but in any other field because most vision signifies that development of some kind is taking place (Khan 2014). Khan (2014) further observes that IT infrastructure leads to increased productivity and allows internet to access multiple services as a foundation to support digital broadcast systems to apply a global digital network. Therefore, IT infrastructure affects e-government implementation.

The second technical factor according to Khan 2014 is Information Technology Standards. On one hand, Khan (2014) citing Freeman (2001) describes Information Technology Standards as specifications for hardware and software that are either widely used and accepted or sanctioned by a standard organisation. On the other hand, Information Technology Standards refers to the technical rules and foundation for interconnected systems that work across organizations and geographic locations (Wakid & Radack 1997). IT standards define some component of an IT system leading to many users being able to use offerings from multiple sources and multiple vendors (Libicki 1995) cited in (Khan 2014). IT Standards therefore help people to manage and use technology and they help to reduce costs for IT organisations while promoting greater levels of IT responsiveness (Khan 2014). The standards can influence in connecting organisational processes and systems and allows flexible approach in organisational

operation hence perceived to have a positive effect to critical factors for e-government adoption and implementation (Khan 2014).

National Information Infrastructure is the third technical factor according to (Khan 2014) who describes NII as computerized networks, intelligence terminals accompanying application and services that people use to access, create, disseminate and utilize digital information. The NII consists of physical technologies for example Global Network, landlines and telecommunication systems (Wilson 1997) cited in (Khan 2014). (Khan 2014) citing (Nambisan & Agarwal 1998) further explains that advancements in telecommunications have created opportunities for organizations and users to communicate and share information. Therefore, NII has a positive effect to critical factors for e-government adoption and implementation.

Khan 2014 brings about collaboration as a fourth technical factor. Social collaboration plays a big role in e-government implementation. Collaboration increases interest, knowledge, sharing and transferring of information in organisations and this has impacted implementation of groupware technologies (Khan 2014). Information sharing removes barriers between parties, for instance, between government and citizens, government and businesses and between government departments. Although governments are individualised and make decisions on their own, collaboration brings in effective communication (Stamoulis & Geogiadis 2000) cited in (Khan 2014). Therefore, e-government must be developed and utilised for internal applications by employees to share information and communication between departments and the public sector. E-mail is the most success story for improved communication, however, bureaucracy and delays are some of the consequences for e-government (Beaker, George, Goolsby & Grisson

1998) cited in (Khan 2014). Therefore, collaboration has an indirect impact on e-government implementation hence it is said to have a positive effect on critical factors affecting e-government adoption and implementation.

2.9.3 Social Factors

The last but not least category of factors affecting the implementation of electronic government is social factors. Social factors are things that affect lifestyle and these include religion, culture and tradition among other things. It is important to know these factors because some have negative impacts on the implementation of projects. According to Khan (2014) the social factors that are deemed important in the implementation of e-government are Social Influence Statements, awareness and training and they have been discussed below.

Khan (2014) citing Barley (1986) and Davidson & Chismar (2007) describes Social Influence Statements as patterned actions, interaction, behaviours and awareness social structures that often become a token for granted aspect of life. External pressures can control the input processes of an organization resulting in actions that would ultimately increase the quality of services and improve customer satisfaction. This in the long run leads into reduction of negative external pressure of social behaviour within an e-government context (Khan 2014). This procedure will also help to transform public organizations from traditional services to online services. Several scholars have identified social dimensions of e-government (Yildiz 2007). Heeks (2005) also argues that e-government is connected to the social context in which it is deployed. Khan (2014) points out that Public Administration involves planning and implementing various policies in order to solve various complex problems posed by the social, political and

economic environment. Therefore, Social Influence Statements is hypothesized to have an indirect impact on e-government implementation resulting in it having a negative effect to critical factors for e-government implementation.

The second social factor is awareness. Dourish and Bellotti (1992) cited in Khan (2014) describes awareness as an understanding of the activities of others which provides a context for your own activity. E-government awareness includes using mass media, seminars and workshops, trainings, individual meetings and web-documentation among other things. There is tremendous need for technology awareness creation in organizations due to the rapid growth of e-government technologies and practices (Papazafeiropoulou, Pouloudi & Doukidis 2002) cited in (Khan 2014). Awareness would bring about benefits that among others things include, reduced time and cost of providing services, reduced bureaucracy and increased efficiency (Khan 2014). Awareness therefore has a positive effect to the critical factors for E-government implementation.

Training is the third social factor that will be discussed. Training is essential for people to use new technologies and without which they cannot take responsibility for their own quality (Khan 2014). Despite that training is costly, it is important and necessary as it helps to satisfy customer requirements that are more and more stringent (Kleiner 1926) cited in (Khan 2014). Training will therefore help to meet and maintain e-government skills (Alonso 2001). Khan (2014) further explains that training has an indirect impact on e-government implementation and has a positive effect to crucial factors for e-government implementation.

2.10 Conclusion

The reviewed literature has highlighted the link between e-government and public administration in the sense that it justifies the appropriateness of the concept in the realms of public administration. Knowledge of e-government will help public administrators to understand it better and enjoy its benefits. The literature review has also helped to identify the existing gap in as far as e-government implementation in LDCs is concerned and Malawi in particular. This observation therefore justifies the focus of the study in an effort to fill in the existing gap.

Finally, although there are similarities identified in terms of factors influencing the implementation of e-government concept in most Least Developed Countries, there are also differences in one way or another. This helps researchers not to generalize the results and therefore gives more room for further research, a justification that leads to the need for further research to the Malawi context with a special focus on the Local Government.

CHAPTER THREE

METHODOLOGY OF THE STUDY

3.1 Introduction

The chapter discusses the methodology that was employed in conducting the study. It also describes the research design that was used, the research methods and the targeted population. The chapter further outlines the sample and sampling method, tools that were used to collect data, data collection techniques, data analysis and the limitations that were encountered during the study period.

3.2 Research Design

Cresswell (2007) refers research design to the entire process of research from conceptualising a problem to narrative writing, not just the methods used in data collection and analysis. Similarly, Parahoo (1997) describes research design as a plan that describes how, when and where data will be collected and analysed. Creswell (2009) highlights two main research approaches as qualitative and quantitative. On one hand, Myers (2009) describes quantitative approach as the one used to investigate natural phenomena for example experiments in laboratories and on the other hand, (Neuman 2006 & Myers 2009) describes qualitative approach as the utilisation of qualitative data from interviews, organisations, documents and participant observation with an aim to gain an understanding and describe social phenomena.

A researcher therefore needs to choose an approach that is suitable for the research problem and objective and type of data collection and analysis to get answers (Neuman 2006).

To achieve the main objective which is to assess electronic government initiatives in selected district councils in Malawi, the research employed a qualitative approach. Denzin and Lincoln (2005) refer qualitative research to a situated activity that involves an interpretive and naturalistic approach that entails studying issues in their natural setting and attempting to make sense of or interpret. Strauss (1998) defines qualitative research as the type of research that produces findings not arrived at by statistical procedures or other means of quantification. Qualitative approach is considered ideal to provide a detailed description of the functions and characteristics of the interface between government and citizens (Johnson & Onwuegbuzi 2004) cited in (Makoza 2013:274. Patton (2002) observes that qualitative data will also help to improve the robustness of the results (Patton 2002). Qualitative research is different from the other forms of research in the sense that it is textual in its orientation, interpretative in its analysis and done in a natural setting of respondents (Cresswell 2014). Qualitative research in terms of meanings that people bring to them, is deemed suitable for the assessment of the implementation of e-government in LDC's with a special focus on the Malawi Local Government. UNDESA (2011) report reveals that Malawi is one of the LDCs hence the focus.

The main research question is: 'To what extent are governments of the LDCs utilising e-government?' Literature revealed that approaches in research may vary due to the difference in contexts. It is therefore important for researchers to make wise choices in order for them to provide a better understanding of the phenomenon. Creswell (2009)

explains that appropriate approach offers a better investigative lens to acquire data that can be viewed and analysed.

This research will employ the following investigative lens. The first lens is qualitative research which (Myers 2009) deems ideal for data collection and analysis. The second lens is post-positivist epistemology which assumes that reality requires the capacity to assess the wider picture to take a distanced view (Creswell 2009; Ryan 2006). The third lens, descriptive and explanatory approaches, will be utilised for in-depth explanation of the results. Last but not least, the deductive approach. This will be used and guided by the research objective (Creswell 2003; Creswell 2009). This research will therefore adopt the qualitative approach during data collection and analysis. The research will also involve a comparative study whereby two district councils, Mwanza and Zomba will be used with an aim to find out if the councils are going at an equal pace in as far as the implementation of e-government is concerned.

3.3 Study population

Selection of respondents in a qualitative study depends on the purpose of the study (Bryman, 2008). This leads to, choice of persons, environments or objects that meet specific descriptions (Miles & Huberman, 1994). The total population was therefore made up of four members of managerial and technical team from the Office of the President and Cabinet (OPC), four members of managerial and technical team from the Department of e-government, four members of managerial and technical team from the Ministry of Local Government and eight members managerial and technical teams from the two selected district councils, four members of managerial and technical from the Local Authority Service Commission (LASC), four members of managerial and technical from the Local Government Accountability Programme (LGAP), team There were also

two focus groups from the Mwanza and Zomba District Councils which combined of mostly low grade members of staff such as guards, cleaners and messengers. This was deliberate because the researcher wanted to appreciate that electronic government was not only for officers but for support staff as well. Each focus group had a population of twelve members. The study finally had a total population of fifty-two and the focus of the study was to understand e-government implementation at local government level in Malawi.

3.4 Sample Selection

Johnston and Christesen (2014) describes sampling as the process of drawing a sample from a population. Sampling therefore targets at studying characteristics of a subset selected from a larger group to understand the characteristics of that larger group. Purposive sampling was deemed fit for the study because of its nature. Deacon et al (1999) observes that in purposive sampling, the researcher implies a conscious and deliberate intention of the research in identifying participants based on a selected criterion. Purposive sampling which is also referred to as judgement sampling is considered weak because of its high level of researcher bias but it also provides room for a researcher to engage only the key players in a selected study. Tracy (2013) observes that purposive sampling is essential when conducting research with those that have first-hand information of the research topic, key informants. In this study, purposive sampling was used to identify key players in e-government implementation.

3.5 Data collection

3.5.1 In-depth interviews with key informants

Johnson and Christensen (2014) describe interview as a data-collection method in which an interviewer (researcher or anyone working on behalf of the researcher) asks question of an interviewee (research participant). This means that the interviewee provides the interviewer with data either in a face-to-face or over the telephone which Teddie and Tahsakkori (2009) refers to as telephone interview. Johnson and Christensen (2014) argue that although interviews can lead to biasness depending on the responses that interviewees give, they can also help build a relationship between the interviewer and interviewee leading into them gathering and giving more or additional information.

In the present study, data was collected in several ways and that is through the use of mobile phones and taking notes as a back-up. Some interviewees refused to be recorded so for those, only note taking was used to capture the findings. The interviewer also took into consideration several issues during the interviews and these were; change of tone in trying to emphasise a point and facial expression among other things. All participants were asked the same questions but in the course of the interviews, additional questions to the semi-structured questions were asked in an attempt to gain more insights of the topic. This is because the prepared questions served as a guiding tool and were determined by the situation to additional questions or replacing the existing questions.

Key informants were the people who have been involved in the design and implementation of e-government, that is managerial and technical teams from OPC, LGAP, LASC, Department of E-Government, Ministry of Local Government and from the two selected district councils.

The interviews aimed at obtaining an in-depth data related to the interests, motivations, ideological positions of the actors involved in the process as well as their views and experiences on how different actors used or were constrained in utilising their power in influencing the implementation of reforms. The interviews were electronically recorded and later on transcribed. Thirdly, the questionnaires were administered to managerial and ICT technical teams from Zomba and Mwanza district councils to find out how e-government is being implemented and finally these findings will help to come up with a comparative study. Finally, two focus groups from the two district councils, Mwanza and Zomba. To get the right information, the researcher had to administer the questionnaires to the two focus groups. This was the case because members of the focus groups had different literacy levels.

3.5.2 Review of documents

Desk research which includes review of the documents was done. The major documents that were reviewed were ICT Policy, MDGS I and II and the Communications Act. The purpose of reviewing the documents was to critically analyse the content of the documents and compare with what the interviewees contributed to the study. Apart from the mentioned documents, the researcher also reviewed reports and some e-government related official documents from the OPC, Department of E-Government, LGAP, LASC, Ministry of Local Government and Zomba District Council and Mwanza District Councils.

3.5.3 Semi-structured interviews

These were open-ended questions. On one hand, Marshal et al. (2006) observe that semi-structured interviews are good because they create conducive atmosphere for participants to come up with issues concerning the topic under study. On the other hand, Kumar (1996) explains that the semi-structured interviews are also helpful for comparison and they involve less.

3.5.4 Questionnaire

A questionnaire was structured to help collect data and mainly address the first objective of the study. The questionnaire was self-administered to various groups of people as follows. The first group was managerial and technical teams from Department of E-Government, with the aim to collect data on the extent to which e-government initiatives that have been put in place to enhance e-government implementation at all levels and in particular the Local Government. Second was managerial and technical teams from the Ministry of Local Government, to collect data on the initiatives that have been put in place to help e-government implementation, effects of e-government on service delivery and challenges being faced at Local Government level.

The study collected two types of data. On one hand, primary data which came from the respondent's views on how e-government project is faring at the local government level in Malawi. On the other hand, secondary data which was obtained from the reviewed documents with the ICT policy as the main source and additional secondary sources were MDGS I, Communications Act and all e-government related reports.

3.6 Data Analysis

Ordinal data was collected from respondents in form of attitude to a particular question or statement coded as 'strongly disagree', 'disagree', 'neutral', 'agree' and 'strongly agree'. Boone et al (2013) refers this type of data to Likert Data. Further, (Boone et al 2013) observes that descriptive statistics are used to analyse the ordinal Likert data. The overall response of the hypothetical statements under test was determined by the mode response which was done by checking the frequency score for each particular hypothesis statement tested.

Since the study was qualitative, analysis was done with the use of tools such as word processing. The research employed the Malawi local government as a case with Mwanza and Zomba District Councils representing it. Mwanza and Zomba District Councils were sampled because of their difference in geographical positions. Mwanza is a district in the rural part of the southern region of Malawi and Zomba is a city in the same region. The research targeted at finding out if the two districts would be at the same level in the implementation of e-government. Taking into consideration that the topic was about information, a number of modes in the discipline were used to make a qualitative analysis and the modes include the following. These modes are according to Brun & Clarke (2006). First, was narrative analysis which is a method of understanding people's actions, organisational events turning into a significant whole and consequences of activities. The second mode that was used was semiotics, this is concerned with analysing symbols and signs and their respective meaning in culture, art, ritual image and languages. Finally, thematic analysis was also used. Braun & Clarke: 2006 describes this as a method that involves identifying, analysing and reporting themes within data. The analysis involves

data formulation, formulation of codes, searching process, review process, naming and defining themes and reporting production.

Apart from the identified hypotheses, the study was more comprehensive by identifying more factors which may not be part of the hypotheses presented in the research model. This was done through asking additional open-ended questions to gather more information from the respondents. All the collected data was analysed using grounded theory. Grounded theory refers to a systematic methodology in the social sciences involving the construction of theory through the analysis of data (Jones et al., 2007). This involves coding raw data, developing themes, categorising themes and deriving them to explain the situation. Grounded theory encourages objectivity and helps to prevent preconceived notions from interfering with the process of data collection and analysis (Jones et al 2007). The theory therefore was deemed fit for the study.

For objective number two, preference ranking was used to explore the governing, technical and social factors affecting e-government implementation in the Malawi Local Government. The e-government analysts were purposefully selected as they are believed to have more knowledge on the governing, technical and social factors affecting e-government implementation. The governing, technical and social issues were ranked separately basing on their level of importance, starting with the most important to the least important factors. Matrix ranking was used and it was presented in a form of a table to present the overall rankings of governing, technical and social factors. Grounded theory was also used for the third objective. Qualitative data was collected from respondents on factors affecting e-government implementation at local government level in Malawi.

The grounded theory was mainly used on the coded data. The collected data was interpreted, categorised and reduced so that it makes sense. To achieve this, content analysis was used in the study. Babbie, (2007) refers content analysis to the study of all forms of recorded human communication by among other things focusing on who said what, to whom, how and why.

3.7 Ethical Considerations

The study had put in place the following mechanisms to ensure everyone involved in the research is respected. First, the study made sure to sought consent and people had the right to participate or not therefore no one was forced to participate in the research. Secondly, all information collected as a result of the research was held confidentially.

3.8 Limitations of the proposed study

The researcher envisaged several limitations in conducting the proposed study. The first limitation was that the concept, e-government sounded very Western so some people would not take this seriously as they think that they could still perform even without applying it in their daily operations. Secondly, Malawian culture where people feel it is not proper to disclose information for fear of putting someone in trouble. Finally, the study required travelling therefore there was need for financial resources which were in limited supply to the researcher.

3.9 Conclusion

The chapter has described the methodology that was used to conduct the study. It has also highlighted the research design, research setup, study population, sample size and procedure. The chapter has further highlighted data collection techniques, data

processing and method of analysis and data validity and reliability. Ethical considerations and study limitations were also given. The next chapter presents results and findings of the study.

CHAPTER FOUR

FINDINGS AND ANALYSIS

4.1 Introduction

The chapter presents and discusses findings of the study. The study used mixed methods to collect data and the methods were questionnaire, documents analysis, face to face interviews and telephone interviews. The main objective of the study was to assess electronic government initiatives in selected district councils in Malawi. The chapter analyses the study findings for the four specific objectives which are analysis of policy framework on e-government implementation at local government level in Malawi, assessment of the initiatives on e-government implementation at local government level in Malawi, assessment of the benefits of e-government implementation at the local government in Malawi and analysis of the challenges that hinder e-government implementation at local government level in Malawi. Qualitative data was analysed using content analysis.

4.2 Findings

4.2.1 Analysis of electronic government Policy Framework

The research's first objective was to analyse policy framework on e-government implementation at local government level in Malawi.

It was realised that there are policies and/or acts that have been put in place to provide guidance on e-government implementation. Respondents from Ministry of Local Government, Department of E-government, Mwanza and Zomba district councils were asked if they were aware of any policies that would help in the understanding of e-government. There were mixed reactions on this as some respondents said there were enough policies to guide them while others said the policies were inadequate and not all policies were relevant. Partially, the inadequacy came in because sometimes there are bills that take too long to be enacted in parliament and so the longer it takes to pass the bills, the longer these other concepts take to be implemented and this affects the country's development in one way or another.

It was also observed that some bills that were entrusted in the implementation of e-government were not relevant as they provided much of some things other than the ICT and e-government. Another respondent said it is surprising how the Communications Act of 1998 is entrusted to provide information about ICT and electronic government.

'Go read this act, it has nothing to do with the concept at hand but rather postal, broadcasting and tele-communication issues.'

The respondent observed the need to have policies or acts that would be purely e-government related and that would help in the understanding and in the long run, the implementation of the concept.

Still in trying to find out about policies that help in the implementation of e-government programs, respondents were asked if they have heard, known or seen any policy. A respondent from Zomba District Council observed that he had known about e-government way back and was aware that there are some policies that the government

has put in place in an effort to promote its implementation within the government offices including the local government.

‘ICT policy gives guidelines on how best electronic transactions can be made but what is missing is that most people have never been oriented on the ICT Policy because such trainings mainly target the ICT personnel that are called the Systems Analysts in our councils. I wish the leadership would appreciate that for e-government to work it does not only take the ICT departments but everyone who is in service delivery business.’

ICT policy only would not make e-government happen, there are also other regulations and some respondents observed that there are other rules and regulations that are of much help if e-government was to be a success. She cited an example of the Public Finance Management Act of 1999 which promotes the use of electronic transactions of government resources for efficient and effective management. The act is very important for finance and accounting personnel who are practicing electronic service delivery and she urged for the enforcement of this act.

Another respondent also observed that since the introduction of e-government in their district council, a lot of efficiency has been noticed mainly through the use of the policies such as the Integrated Financial Management Information System (IFMIS). He explained that the act helps to control public finances because it makes people accountable of their transactions. The respondent further observed that IFMIS has proved to be more efficient and if implemented fully the government would not go into problems like cash gate that was discovered in 2012.

The research revealed that there were more policies on finance and accounting that would help in electronic transactions, another respondent observed that there is also the Public Procurement and Disposal of Public Assets Act. The Act puts in place some controls on how public officers can procure and dispose public assets. He said if taken seriously and implemented well, the Act would help to maximise government's economy and efficiency.

It was then noted that most of the available policies and acts that promote the implementation of e-government in the district councils were to do with finance and accounting. There is need for policies for other professions so that e-government should not be seen as targeting finance and accounts personnel only. Another respondent observed that:

‘Talking of rules and regulations governing e-government implementation, I feel every field should have their policies that should be used together with the ICT policy. The ICT policy alone can be seen as relevant only for ICT personnel so as is the case with finance and accounting that they have several other policies and acts to help them in the implementation of e-government. Some disciplines like administration, human resource management and some others should be treated the same way. This means that responsible departments like the DHRMD should be approached and see what they can bring in to help in the implementation of e-government in the councils.’

The above findings revealed that there were not enough policies to provide framework in the implementation of the electronic government. This is in agreement with Metcalf (2014) who observes that electronic governance is often approached as a technical issue hence the lack of proper framework. Metcalf further observes that there is need for

profound existing legislation for the implementation of electronic government. As it has been observed by some of the respondents, the implementation of electronic government is going at a slow pace in the two districts councils due to among other things, lack of proper framework. This concurs with Saarenpaa (2003) who explains that the transformation of society into a network society is going at a slow pace because of lack of proper legal framework.

4.2.2 Assessment of E-government Initiatives

The second research objective was to assess the electronic government initiatives. Initiatives are the things that would help people to be aware of the concept and have a better knowledge of what it means. The initiatives would also help people to be aware of the benefits that they would enjoy if they put e-government into practice. The initiatives would equally help to let people know about who is supposed to take part in the implementation of the e-government project. As a way of finding out what e-government initiatives have taken place so far, respondents were asked to explain and the responses have been presented below.

It was observed that trainings and awareness meetings about e-government have been taking place and some respondents have really been helped through such initiatives. Trainings, awareness programs and workshops among other things are more important in as far as learning a new concept is concerned. On one hand, trainings will help to equip people with new knowledge and skills that they need for a successful implementation of e-government.

On the other hand, awareness will help people especially those in decision making positions to appreciate what the project is all about and in return boost its implementation.

One respondent from Zomba District Council observed that e-government awareness programs and trainings that he attended were an eye-opener and it was very capacitating that he got the skills in other operations of the system and made some advancement in operations of the council. He further said in his department they completely changed the way they deliver services but urged leadership to make sure that they arrange follow up programs. Follow up programs would help to rectify problems at an early stage.

For effective e-government implementation, trainings should engage every department that is in the line of service delivery, be it finance, administration, human resource, monitoring and evaluation, social work and the registration bureau among other things. When all these have been trained and are able to use the knowledge in their operations, e-government will turn out to be a success in the councils. Another respondent said that one good thing is that in their council trainings did not only target the ICT personnel or systems analysts but even those that are lay persons in ICT have undergone such trainings. He further said this has been really helpful because by using the knowledge that they gained from the trainings they are able to deliver services electronically. He also called for the leadership to come up with follow up programs so that the problems, especially governing problems that they face in the process of the implementation are tackled at an early stage even before the morale for electronic service delivery goes down.

Still on the on trainings and other e-government initiatives, some respondent had this to say:

“I remember to have attended several e-government programs, they really have been of much help and if implemented, e-government can ease the service delivery. The big problem that I have noticed is that we only get excited during the very first days of implementation, after the training programs and that is when we try to deliver electronic services but after some time, we go back to our traditional way of service delivery which we say is easy. I feel that there is a big issue to do with mind-set change, if we have regular follow up programs, the implementation of e-government would be maximised”

Another initiative that the government has put in place so far is the introduction of the e-government department. The department works as a central point for the electronic connections hence it connects all the government department, agencies and ministries. A respondent from the department of e-government observed that a good example of this is the ‘One stop Centres’ that have been put in place in different places in this country. Mlambe One Stop Centre which is in Mangochi is one of these centres. At the centre people are able to access services from the Immigration Department, the Directorate of Road Traffic and Safety Services (DRTSS), Malawi Postal Services (MPS) and the Malawi Revenue Authority (MRA) just to mention a few. He said this is more convenient and makes life easy because one gets services from different departments under one roof. The Department of E-government provides network that is being used at the centres and makes sure that the services are indeed possible. The respondent finally observed the introduction of the e-government department is the greatest initiative that the government has done so far.

The respondents' views on initiatives, so far were in agreement with the reviewed literature. Literature revealed that trainings help people to understand the concept as they deepen knowledge, awareness and skills (Khan: 2014). Awareness programs help in the adoption of the concept after different programs such as workshops and seminars. Finally, the introduction of the department of e-government would help to get government agencies, departments and ministries connected thereby making it easy for those in service delivery to start providing electronic services.

4.2.3 Benefits of E-government

The third research objective was to identify benefits of e-government implementation at local government level in Malawi. Benefits are the things that people enjoy after a successful implementation of a project. If implemented well, e-government promises a lot of benefits that would in return ease service delivery. Respondents were given a table of the e-government benefits and were asked to respond using: strongly agree, agree, neutral, disagree and strongly disagree. The results have been presented in the figure below. In addition to that, the respondents were also asked to explain their responses and the results have as well been presented below.

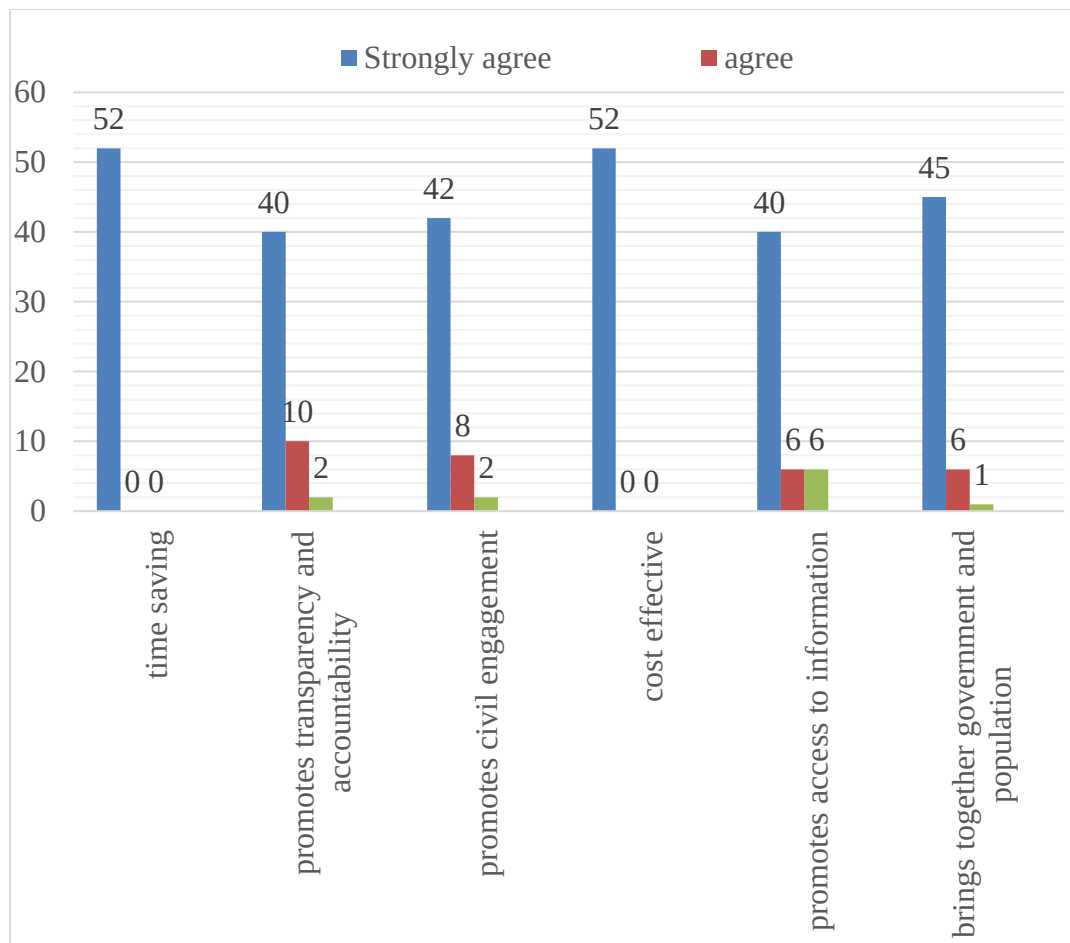


Figure 2: Benefits of E-government

4.2.3.1 Time Saving

Literature revealed that electronic service delivery helps to save time as it does not require too much of travelling (Kumar, 2020). This is the case because people are able to use their gadgets such as phones to check whatever they want to check at their comfort zones. Concurring with this, one respondent said if councils were really serious about implementation of e-government, people would not be spending much time travelling to the Capitol Hill to get their things done because e-government makes life so easy. He further said at Zomba District Council they stopped travelling to Lilongwe or to neighbouring district councils for salaries, they were able to prepare salaries just within their comfort zone and they were also able to help other councils, whom, because of

network problems were not always able to process their salaries. During the time of the interview, Phalombe District Council accounts personnel who travelled from their place were at Zomba District Council to get helped in processing salaries. The respondent also said Machinga and Chiradzulu District Councils also go to Zomba District Council to get helped on the same issue of salary processing. He said that in the near future when network issues are fixed every council will be processing salaries right at their own places.

“Here at Zomba District Council, we call e-government a ‘game changer’ because it has really helped to change for the better in the way we do our business and it has made life easy”

4.2.3.2 Cost Effective

Literature revealed that electronic government helps to save costs (Makoza, 2014). The study has also proved that e-government can be cost effective when well implemented. This is because people will no longer need to buy fuel, pay bus fares or get travel allowances as they are able to do everything whilst in their offices. On this a respondent from Mwanza District Council observed that E-government has not only proved to be time saving but also cost effective to those that are fully capacitated to use it. The respondent said they were yet to enjoy this because since the promotion of decentralisation, some things are never done at the central government any more. She said a good example on this is salaries, whereby every council is processing their own salaries and in their case as Mwanza District Council they were not fully able to enjoy this due to network problems. They always travel to the nearest district council which is Blantyre and do their work. She also said they do spend on travel expenses but when the network is stable and everything is in place, they will be doing these things at their place and will be saving time and money in return.

Another respondent from the department of e-government also observed that implementation of e-government is really cost effective. In the past when civil servants were being paid their salaries in cash, most of them from hard-to-reach areas had to travel to convenient places to wait for officers from the Capitol Hill to pay them. They would travel several times as they could not know the exact date they would get their salaries. He said when e-government was introduced, the civil servants started getting their salaries through the banks but they would still travel to town to check their bank accounts if they had been paid. This would also make them to end up in making several trips of going to their nearest bank branches to check this. The respondent observed that currently, there is a big progress that the banks are able to send notifications, so one knows their salary is in when they are watching a television in their home. The respondent further said: *“Bravo to e-government, it has eased life and finally this saves both time and money.”*

Electronic government has not only helped those people in high positions, even the support staff have benefited from it. Some other respondents from a focus group said since the council started electronic transactions, life has really changed. He explained that before the e-government, they would spend time, waiting for officials from the Ministry of Local government to bring them salaries. Sometimes the officials would not even show up on the agreed day due to some problems but at the same time were not able to communicate. This would make them gather for long at the offices even on weekends, delaying everything they had planned to do for their families and communities. He further said the coming of e-government project has eased their lives because they don't need to travel and meet at the offices for them to receive their salaries. Salaries are sent direct to their bank accounts therefore saving time.

4.2.3.3 Promotion of Saving Culture

Although literature is silent on the fact that the electronic service delivery also promotes saving culture among those using it, the study revealed this through what some focus group members said. It was realised that the electronic transfer of money has not only proved to be time saving but it has also brought in a saving culture among members of the communities including civil servants. Another respondent from the focus group from Mwanza District Council observed that in the past when they received money, they could spend it all because they were getting it in hard cash form and the only thing they knew was to spend. When they were advised to have bank accounts so the money should be sent direct into individual accounts, they started to save. She said what happens is that everyone knows their salary is in their bank accounts through the alerts that they get. In her case, she is always not in a hurry to spend all the money at once and keeps some so the moment the next salary gets in it is a top up of what she already had. The respondent further said this has in the long run helped her to have a plan of what she wants to buy, she then saves and buys the intended thing when the money is enough. She further said: *“I have managed to buy iron sheets for my house through my savings. I salute the introduction of this project which has helped us to save from the little money that we get.”*

4.2.3.4 Promotion of Efficiency and Effectiveness

Electronic government is also known for its efficiency and effectiveness. Makoza (2014) reveals that e-government promotes efficiency and effectiveness. When you engage electronic service delivery into your work chances are high that the work will be done perfectly, with minimal wastage and on time. E-government has also made the National Registration Bureau programs to be a success because in the councils where e-

government is being implemented well, the whole process of producing national IDs is taking place right there. A respondent from Zomba District Council said electronic service delivery has really made their work easier because at their office they are collecting, compiling and entering in the system all data collected from those who want to have their National IDs made and they only send these to Lilongwe for printing of the final product. She further explained that this has finally resulted into their office to be efficient than it was before. For other things like birth and death certificates, they are able to print right at their council and this has eased the workload that they used to send to Lilongwe for data entry and printing.

The study also revealed that if used properly, e-government would help in record keeping in several departments like administration, finance and human resource just to mention a few. A chat with a Human Resource Management Officer from Zomba District Council revealed that managing of Human Resource information has been simplified through the introduction of the Human Resource Information Management System (HRIMS). The respondent said that HRIMS makes management of information easy and finding information is no longer a problem. He further said that electronic government connects departments so much so that even when one reaches retirement age, there is no negotiation about it as his/her salary will stop to go into their account after the retirement birthday. This in the long run would also help to get rid of ghost workers in government ministries, departments and agencies therefore making the system efficient and effective.

4.2.3.5 Promotion of Transparency and Accountability

From the literature review, Makoza (2014) citing (Parajuli, 2007; Schuppan, 2009) brings in transparency and accountability as some of the benefits of using electronic

government. E-government is known to promote transparency and accountability because when using the system, every user signs up and creates their own account. When it comes to service delivery everyone uses their account which makes it possible to trace who offered a particular service. If the service that was offered is questionable then the service provider will be accountable and can be taken to task just to clear whatever issues there could be. A respondent from the Ministry of Local Government observed that:

“E-government has eased our work because it is no longer difficult to find out who did what and this has indeed made people to be accountable of their deeds. Even if it means one needs to be disciplined, it is easy because you know whom to discipline unlike in the past when a whole department would be disciplined for an act done by an individual who could not be traced”

4.2.3.6 Promotion of Civil Engagement

Silcock, (2001) reveals that electronic government promotes civil engagement. E-government is also trusted to give chance to population to participate in issues of public concern. This is possible because if the capacity is there and implemented well, e-government provides a platform for masses to be aware of issues that concern them through access to information. This in return gives people chance to take part in the issues. A respondent from the Department of E-Government pointed out that in countries where e-government is a success, the masses are able to practice even their democratic rights through the platforms that are set for such specific things. He cited an example of some western countries where people can vote online, giving citizens chance to vote from wherever they may be regardless of distance. This in the end promotes civil engagement as it does not only require someone to be in their home country for them to be able to participate in certain developments.”

4.2.3.7 Promotion of Access to Information

E-government also allows people to access the information that concerns them, be it about health, education and agriculture among other things. People would really know the information that is meant for them through the use of phones and other platforms if electronic government is well implemented (Makoza 2014). Concurring with this a respondent from the Department of E-Government said that this could only be possible in a country where majority of its citizens are literate, they are able to read and write. The literates easily grab ideas and they would always want to try new things. The respondent said, this in return, would make it easier for government to convey information to the masses and for the masses to access information. He further said the other thing that would make access to information possible is the NII and ICT infrastructure. If the country has enough, proper and modern infrastructure, this would create a technical base that makes it possible to convey and access information either way. The respondent finally said that most developing countries have problems with access to information because they do not have the capacity to enable them do that.

4.2.3.8 Brings closer the government and population

E-government is also trusted in bridging communications gap. This is the gap of knowledge that is there when e-government is not well implemented. Where electronic government is taking place, there is togetherness between the government and the population because it would be easy for them to do things together. A respondent from the department of e-government said full implementation of e-government makes it easier for government to communicate to the communities. Most things that the government plans to do to communities, for example, development ideas, would be made

known to communities faster and easier using the message conveying platforms that are put in place by the government. This would make it possible for citizens to know of developments that affect their communities and finally bring them closer to their government.

4.2.3.9 Promotes Job Satisfaction

Another benefit of e-government is that if well implemented, it promotes job satisfaction. Although this does not have a back-up from the reviewed literature, a respondent from Zomba District Council said that because of its nature, e-government promotes effectiveness and efficiency which is as a result of the accuracy that it involves. He also said e-government promotes transparency and accountability because every user signs up when using an application thereby making people accountable of the transactions that they made. This in return brings ownership to service providers and if they have done well, they are appraised thereby promoting job satisfaction.

4.2.3.10 Curbs Corruption

Electronic government is also believed to help prevent corrupt acts. Literature has it that the use of electronic government helps to curb corruption (Parajuli, 2007; Schuppan, 2009) cited in (Makoza 2014). One of the respondents observes that using e-government platforms provides an opportunity for users to sign up in the course of using the platforms. This means that the service providers have usernames that they use when delivering services electronically. He further said if an individual does something inappropriate or there was corruption involved, it would be easy for the individual to be traced. This will in return prevent acts of corruption in the running of government business because officers are aware that if they engage any corrupt acts, chances are there

for them to be known. This will in the long run prevent corruption because people will be afraid of suffering its consequences.

4.2.3.11 Easing Office Procedures

Makoza (2013) explains that the use of electronic government promotes effectiveness. One respondent explained that it is also believed that the use of e-government has eased daily office running procedures such as meetings, which in the past they had to physically meet even for announcements. He said currently, meetings can be done virtually, giving people a chance to do other things.

4.2.4 Electronic government Implementation Challenges

The fourth objective of the research was to find out the challenges that are hindering the implementation of electronic government at the local government level in Malawi. E-government would have been a great success if it were not for the issues that are posing a challenge in its implementation mainly in the LDCs. The challenges have been categorised into three namely, technical, governing and social factors. This is in line with Khan (2014) conceptual framework that presents factors affecting the implementation of electronic government. The factors that were presented in the model were used as hypotheses in this research. The results from the interviews are presented in three different figures that were used to find out more from respondents

4.2.4.1 Technical Factors

Technical factors are the factors or ingredients that come into play in helping to create a sense of presence. The technical factors provide an opportunity for something to happen and when they are not available, they can hinder the presence of some development.

Khan (2014) conceptual framework brought about some technical factors that hinder e-government adoption and these are National Information Infrastructure, ICT infrastructure, IT standards and collaboration.

The figure below shows results of the technical factors that were listed down and interviewees were asked to express their opinion by ticking strongly agree, agree, neutral, disagree or strongly disagree. The exercise engaged all the participants.

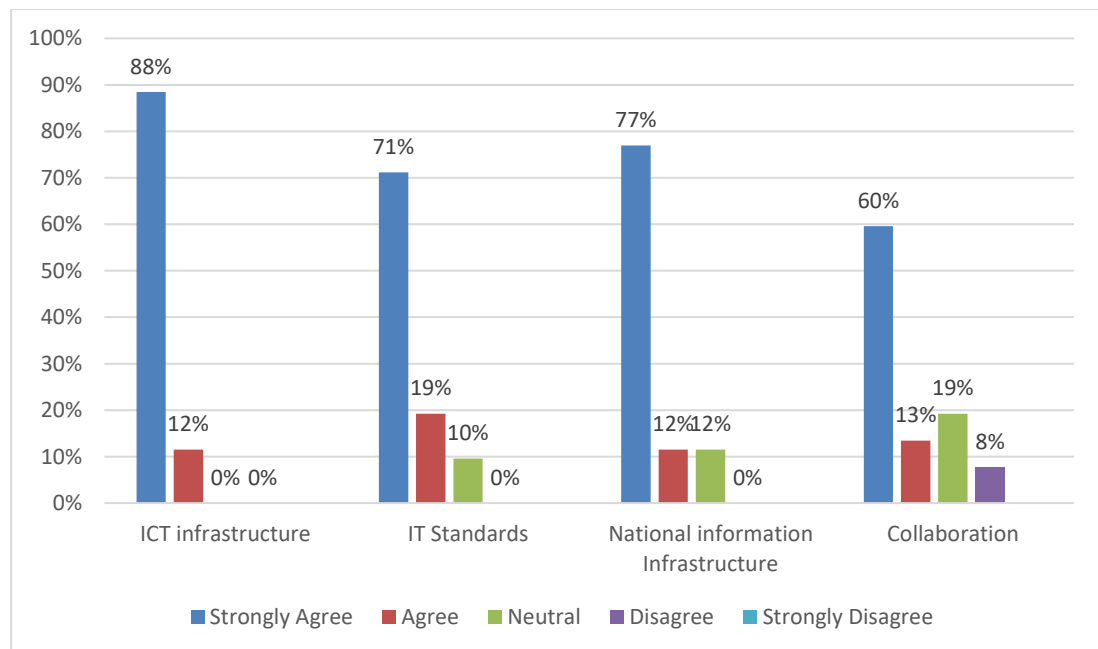


Figure 3: Technical factors affecting e-government implementation

The figure above presents the findings in regard to the technical factors affecting e-government implementation at the local government level in Malawi. The mode response for ICT infrastructure was ‘strongly agree’ and scored 46 which is 88%. This was seconded by National ICT Infrastructure, whose mode response was also ‘strongly agree’ with a score of 40, representing 77%. The third was IT Standards, with a mode response

of ‘strongly agree’, which scored 37, representing 71% and finally collaboration with the mode response ‘strongly agree’ whose score was 31, representing 60%.

Presented below are the respondent’s views on how they feel the technical factors are affecting the implementation of e-government at local government level in Malawi.

The first technical factor was ICT infrastructure. In every development, infrastructure is key and this applies even to ICT. Infrastructure in ICT means the network and gadgets like computers, servers and printers. For a successful electronic government implementation, government should make sure that everything that would help is available but this has not been the case in the local government offices in Malawi hence the observation by one of the interviewees who said that there was a problem to do with the ICT infrastructure that they use in their offices. He claimed that if they were to fully implement e-government it means they should have enough gadgets like computers, printers and servers. He further said in most government offices, the local government inclusive you will only find one computer in an office of may be four people, which means when one is using it, the rest of the people are waiting or it is only the supervisor from that office using it. This finally demotivates those officers who do not have access to the gadgets and chances are there for them to go back to their traditional way of service delivery.

Another respondent also observed that at the local government offices, one would hardly find a laptop being used by officers but desk tops, which are also inadequate. She claimed that if they had laptops, they would be able to work from anywhere at any time. This would in the long run promote rapid implementation of e-government.

The second technical factor was National Information Infrastructure (NII). When a country has a good information infrastructure, it would be in a better position to implement electronic government project. National Information Infrastructure refers to applications and systems that have been put together by the government to enable people to create, access and disseminate digital information. This infrastructure can either be visible like landlines or abstract like phone networks. Poor information infrastructure will always challenge the implementation of e-government. One respondent observed that:

“The National Information Infrastructure is very poor in the sense that even if one is serious to use digital platform they might switch to the traditional method. The biggest problem is network that even the connections among the government ministries and departments are not stable. This is a clear indication that if connection is a problem at the top, there is going to be definitely more problems in the councils that would finally make the e-government implementation a big problem.”

The respondent claimed that for those councils that are not doing well in e-government than others, their major challenges is network hence the need to look into this as it has been noticed as one of the major factors in as far as e-government implementation is concerned. It was also observed that network problems that are faced in the day-to-day operations, in government offices bring down the morale for implementing e-government project thereby making people turn back to their traditional methods of service delivery. Collaboration was the third technical factor. There can always be a big problem when there is no collaboration between government and other stake holders. Collaboration is the partnership and cooperation between government and private partners, civil society, and Non-Governmental Organizations (NGOs).

The ICT4D Policy (2006) states that collaboration is critical if the government of Malawi is to make progress in electronic government project implementation.

It was observed that there has been Public Private Partnerships (PPP) that are put in place by government but they are not working well for e-government because there is lack of coordination due to among other things, absence of the project's strategy. There is therefore need for the government to look into this and strategize the e-government project so that even the implementers know what to do.

IT Standards was the fourth technical factor that was discussed. This is one of the most important things to think about when talking about electronic government implementation. IT standards are normally hardware or software that are used to manage and use technology. A good example is one stop centres that are put in place to facilitate the use of digital transacting. It has been observed that Malawi is one of the countries in the LDCs with the poorest IT standards (Makoza 2014). The other contributing factor to this may be that most times IT, ICT or e-government projects are not included in the national budget as observed by one the respondents who said that:

“Most times our budget does not have allocation for IT related projects and the government solely relies on donor funding. The donors would fund the projects like e-government, mostly when it is at a pilot phase and when this is done, the project fails due to lack of funding. I think it is important that the government takes this into consideration and start funding such projects fully for better results.”

The study has also revealed that electricity black-outs was another technical factor that would have a negative effect on electronic government implementation at local

government level in Malawi. This is because all the gadgets that are used in the implementation of e-government depend on electricity to function. In Malawi, for some time blackouts have been the order of the day and the impact that this has on e-government implementation is so huge. One respondent observed that it is always frustrating to have your whole work gone when power goes off unexpectedly. To make things worse generators in most councils are not functional all the time because of issues like shortage of fuel or that they are broken and need maintenance. The respondent further explained there are times that they have had no power for the whole day and officers only doing the work that can be done manually. It was also observed that there is need for the councils to make sure that they have working generators that will be used as back up. If this problem is not rectified, e-government implementation will remain to be a problem.

Therefore, the findings above get us to the conclusion that on one hand, ICT infrastructure, National Information Infrastructure, IT Standards, Collaboration are the technical factors that would have a positive effect on e-government implementation at local government level in Malawi. On the other hand, electricity black-outs would have a negative effect on e-government implementation at local government level in Malawi.

4.2.4.2 Governing Factors

The governing factors are those things that involve day to day running of business. In this case the governing factors would help in planning, organizing, monitoring and budgeting among other things. The figure below gives results of how governing factors have applied the most challenges to e-government implementation at local government level in Malawi.

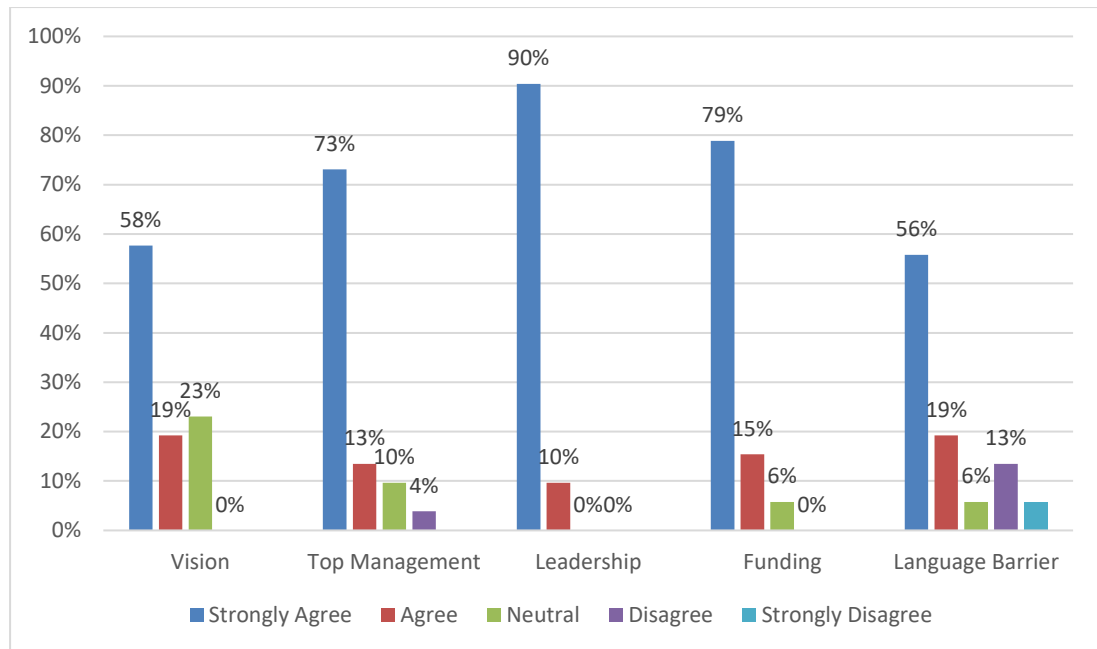


Figure 4: Governing factors affecting e-government implementation

First was leadership, whose mode response was ‘strongly agree’, it had 47 scores representing 90.4 percent. The second factor was funding with mode response ‘strongly agree’ and it had 41 scores representing 78.8 percent. Top management came third, its mode response was ‘strongly agree’ and scored 38 which is 73.7%. Vision came fourth with a mode response ‘strongly agree’ and scored 30, representing 57.7 percent and finally was language barrier whose mode response was ‘strongly agree’ with 29 scores representing 55.8 percent.

Leadership is another important aspect to think about when talking about electronic government implementation. To lead means to direct or guide a group of people or organization. In this case the leadership would refer to both political and bureaucratic. Political leaders are crucial as Cummingham and Cummingham (2011) puts it that ‘several factors must exist such as financial resources, computer literate human capital, power and telecommunication infrastructure and above all political will and strong

commitment of national leadership to maximize e-government's effectiveness and to realize its vast potential.' A respondent observed that projects like electronic government need to be championed by a political icon for them to be successful. He further explained that political leaders play a vital role in some projects and so if e-government was championed just as the government has done with the reforms, whose champion was the state vice president, there could be notable progress on its implementation. The respondent said:

"We hear of how some countries have prospered in the implementation of e-government, Rwanda for example, it is the president himself championing the e-government project. We have also heard of Mauritius, where the vice president is the champion of e-government. These are good examples to emulate as a country. If Malawi had a champion for e-government, it would have been spread in all areas and it would be a success".

Funding came out as the second governing factor and it scored 79%. Funding is when money has been set aside to pay for or finance a project. Electronic government, like any other project will need to have funds allocated for its implementation. It is therefore the government's responsibility to allocate funds for e-government implementation at all levels. Another respondent observed that most e-government projects are donor-funded and that this causes problems on the continuation of the project because once the donors stop giving aid the projects are at a stand-still. He further said that the e-government donor funding mostly comes when the projects are a pilot, when the pilot phase is done, funding stops and the project cannot be continued. *"I would like it if this project is locally funded through our national budget so it can be a success."*

The third governing factor was top management support which scored 73%. Top or senior management is another crucial part if projects are to be a success. Top management holds authority, it provides control and direction over resources and it is responsible for decision making. It is therefore imperative to have top management involved in electronic government implementation. A respondent said top managers or bosses have a very important role to play in the implementation of electronic government at the local government level in Malawi. As people who are very much into decision making, every project would succeed or fail depending on their attitude towards that particular project. He further said that in most cases they have a problem whereby top managers become reluctant to support e-government because, firstly, they see the project as a western thing that institutions can do without whilst using the traditional way of service delivery. Secondly, most bosses regard e-government as something that would expose their secrets because of its transparency and accountability element. This poses a threat in their daily operations hence the reluctance in enforcing its implementation.

Vision is the fourth governing factor which scored 58%. Vision simply means a plan for the future. Government in this case needs to have a plan of what level it would want e-government to be in a specified period of time. The plan should be shared to implementers as well so that they are all on the same page. When the vision has been put in place, there is also need to have follow ups on how the councils are faring. One respondent had this to say that vision is another important aspect in the implementation of electronic government because it gives direction. She further said for the vision to work, there is need to monitor the progress with responsible people from the councils, making sure they have it and going by it. Most times projects fail because the implementers are not following the initial plan of the project so it would be important if every phase of the plan is fully monitored for better results. The gap for follow ups is

identified through the discrepancies in the level through which the councils are implementing e-government.

Language is the fifth governing factor and it scored 56%. Language is a structured system of communication used by people and it comes in two ways that's either spoken or written (Oxford Dictionary). A language is used by either a country or a community and it connects people. It is important that people use a language that is familiar to majority of them so they understand each other. When a language is not able to send message to a certain group it becomes a barrier. Another respondent had this to say:

“Most of the official communication in Malawi is in English, the language that we use when communicating official things. E-government communication is also done in English the thing that would make information not to reach to a certain group of people. Councils are there to send and get information to and from the masses. It would be wise for the government to think about using local language so that access to information is possible.”

Literacy levels is the sixth governing factor. Most developing countries have low literacy levels, which means that the number of people who can read and write is low. Malawi as one of such countries, its literacy levels are low and this means that some people are left behind when it comes to written information. A respondent from Mwanza District Council focus group explained that for the illiterates like herself, it is difficult to know whether the message that they got was on their phone is just another message from the bank, their relatives or an alert that her salary is in. She said that sometimes they could think they got the money whilst the network providers are informing them that there will be network problems. She further said it is also dangerous because they always trust other people to let them know what the message is about and this may sometimes lead into

them stealing from the illiterates. Illiteracy is indeed a draw-back in as far as the implementation of the e-government project is concerned. It is important that government should think of providing communities with adult literacy education just for them to learn the basics that would help in reading phone messages and transact on our own from their phones.

Finally, the findings revealed that leadership, funding, top management, vision, language barrier and literacy levels are the governing factors that would have a positive effect on the implementation of e-government at the local government level in Malawi.

4.2.4.3 Social factors

The social factors are another important set of influences to think about when introducing a new project to people. Social factors are mainly the effects of people and groups influencing one another through culture, social class and family. Social factors affect one's thoughts and behaviour in social situations hence their importance in the implementation of electronic government. Khan (2014) in his conceptual theory brings about social influence statements, training and awareness as the social factors that would affect e-government implementation. The figure below gives results of how the said social factors have applied the most challenges to e-government implementation at local government level in Malawi.

Training was first, its mode response was 'strongly agree', and had 40 scores representing 90.4 percent. The second factor was awareness with mode response 'strongly agree' and it had 36 scores representing 69.2 percent while social influence statements came third whose mode response was 'strongly agree' and scored 26 which is 50 percent.

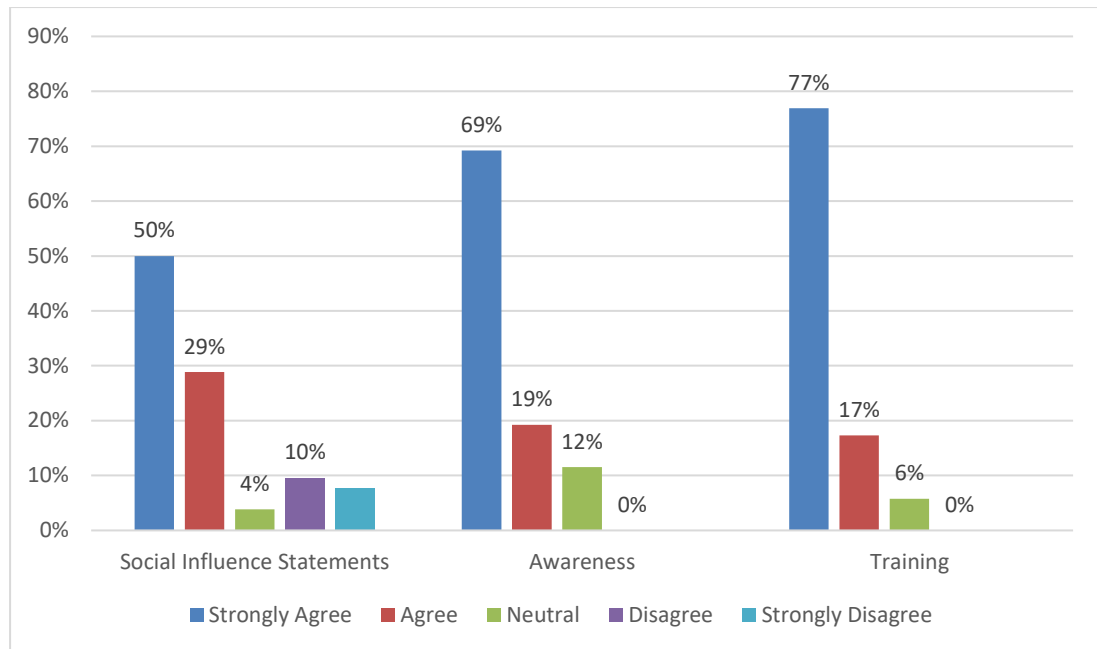


Figure 5: Social factors affecting e-government implementation

Training came out as the most important aspect in the implementation of e-government at the local government level in Malawi with a score of 77%. Training will equip people with the knowledge they don't have and this will in return help them in the implementation of e-government. One respondent said that a few e-government trainings that he has attended have been of much help as he got the information that he did not know and it was helpful. He further said he thought that government should make effort to see to it that people have access to information through e-government project by making them literate – having the knowledge.

Awareness scored 69% and came out as the second important social factor in the implementation of electronic government. Awareness programs help to sensitize people on new things that concern them. Providing awareness on e-government would equally help officers understand the concept and motivate them to start delivering electronic services. A respondent observed that if the government will not be careful on making

people aware of e-government, problems of it not being implemented will not change. There is a huge need for sensitisation so that those in the implementation position become aware of its benefits and stop looking at it as a western thing. The respondent also observed that most people in the councils are not implementing the project because they are not fully equipped with the knowledge.

Third was social influence statements with a score of 50%. Social influence statements are sayings that people would say to one another regarding a development. Such sayings may finally discourage them from engaging in a new development for the fear of being laughed at. Another respondent observed that when there is no proper awareness and training on these new projects, one may be discouraged by their peers. Electronic government is a western thing that is being adopted into our context and chances are high that people would discourage their colleagues because they think the project is too English and they cannot afford to embrace it.

The research also revealed additional social factors that are hindering the implementation of electronic government at the local government level in Malawi. These factors are gender and age and positions.

Gender is regarded as one of the social factors that is affecting the implementation of e-government implementation at the local government level in Malawi. Most people would say issues of technology are for men. A female Systems Analyst observed that several times she been discouraged that technology issues are for men not women. People would also say that women who like technology do not have time for their families unlike men who they think have all the time because in most Malawian households, men do not do chores. This at the same time brings in gender issues because to them women are for secretarial jobs while men are for any other developments that may come their way

including new technology. This shows that there is lack of awareness among the people who would be in the forefront in implementing e-government. There is therefore that need to let people know that modern things are not only for one gender but for everyone else.

Finally, the last issue that the research revealed to be one of the social factors influencing e-government implementation is age and positions as one of the interviewees put it. In most government institutions including the local government you will find out that most people who hold higher positions are aged and this is mostly because of long service. In most cases people regard issues to do with technology as for the youthful and this poses difficulties for these aged people to adjust and accept to be using gadgets whilst they were comfortable with a piece of paper and a pen, the traditional way of service delivery. Another respondent observed that sometimes they are challenged because among the decision makers are the aged who have a negative attitude towards technology, they feel technology is childish and it is for the young generation. That being the case, it is difficult for such type of people to prioritise electronic government when it is decision making time because of their attitude. Awareness would really help people of different age ranges to appreciate and understand the e-government project.

On one hand, training and awareness are the social factors that have been revealed that they have a positive effect while on the other hand, social statements, gender, age and positions have a negative effect on e-government implementation at the local government level in Malawi. The discussed factors have been presented according to their categories in the figure below.

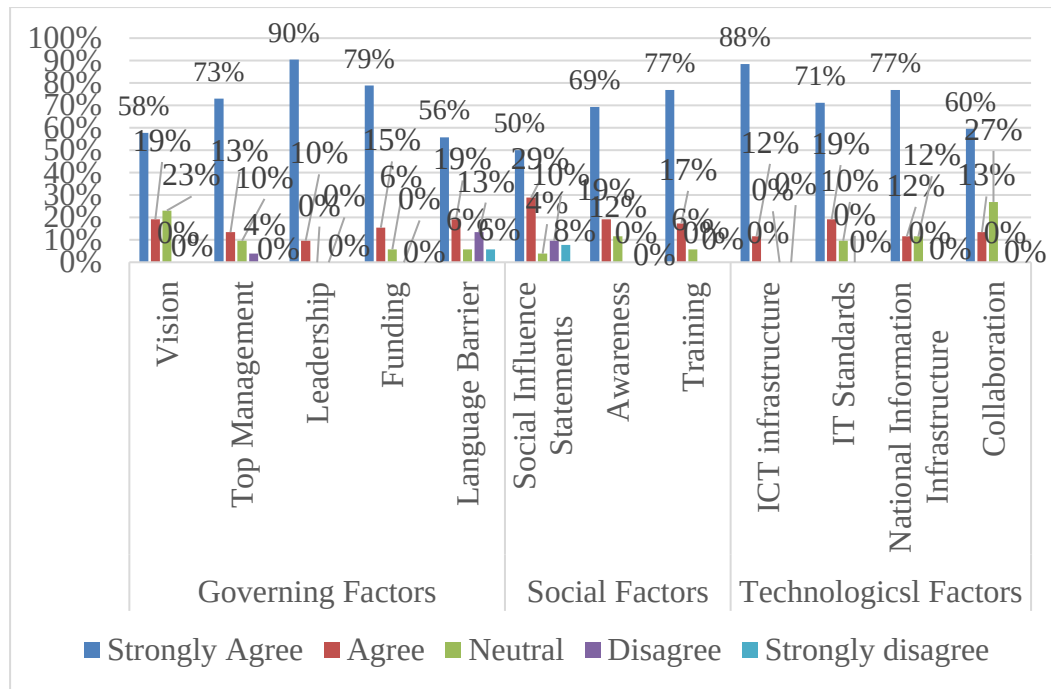


Figure 6: Factors affecting e-government implementation

4.3 Conclusion

In this chapter the research findings were presented and discussed basing on the four research objectives. The first objective was about the assessment of electronic government framework whereby respondents were asked if they were aware of any rules relating to the e-government implementation at the local government level in Malawi. The general response for this was that they had known the e-government for some time, for instance since the 1990s. Most of the interviewees also had knowledge of the different policies that have been put in place to help in the enforcement of e-government implementation and these included the ICT Policy, Public Finance Management Act and the IFMIS among other things.

The second objective was aimed at finding out the e-government initiatives that they know so far. It was revealed that there has been some awareness meetings and trainings

that most of the respondents said were of much help, as one of them put it ‘the trainings were an eye opener and I wish we had many of those.’

The third objective was to find out if the interview participants had ever used the e-government in service provision and what they would envisage as the benefits of implementing e-government. On the same, the responses were used to compare between Mwanza and Zomba District Councils, which one is implementing e-government more and what benefits they were enjoying. From the results the following were revealed to be e-government benefits, it is time saving, cost effective, promotes transparency and accountability and promotes efficiency, where it was called game changer by a respondent from Zomba District Council. It is from the benefits that it was discovered that Zomba District Council was enjoying more benefits as compared to Mwanza District Council, which was a sign that Mwanza was behind in e-government implementation.

The fourth and last objective was about finding out the factors that affect e-government implementation at the local government level in Malawi. To come up with this, a conceptual theory by Khan (2014) was used. Khan categorised the factors into three namely; technical, governing and social factors. The social factors according to Khan (2014) included ICT infrastructure, IT standards, National Information Infrastructure and Collaboration. These factors were all valid in the research and the only factor that came in as an additional is power outages. Under governing factors, Khan (2014) in his conceptual framework included leadership, funding, top management support and vision. Additional factors from the findings were language barriers and literacy levels. Finally, was the social factors category that comprised training, awareness and social influence statements. Gender, age and positions came out as additional factors from the research.

In all the categories the research brought the most critical factor from each category and ICT infrastructure emerged most critical in the technical factors, leadership and training were revealed the most critical from the governing and social factors respectively. This does not mean that only those factors that were voted the most critical are important. All factors are equally important and they collectively enhance the smooth implementation of e-government.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter provides conclusion of the study. The conclusions are aligned to the specific objectives and are in line with the findings presented in chapter 4. Recommendations have also been made on e-government framework, initiatives, benefits and the implementation challenges. Finally, the chapter also presents recommendations and area for further research.

5.2 Major Conclusions

5.2.1 Electronic government Policy Framework

The findings so far, have revealed that there has not been much put in place to work as regulations for the e-government implementation in the Malawi Local Government. Most respondents were aware of the ICT policy as one of the policies but at the same time, a few had knowledge of what the policy provides that would guide in the implementation of e-government at the local government level in Malawi. It was also observed that other policies and acts were not relevant for the implementation of e-government for example, Communications Act that provides much of postal and telecommunications issues and that it was not purely ICT related.

Such policies would therefore not help in the implementation of the e-government project. It was then realised that there was need to have clear e-government policies that would help in its implementation.

5.2.2 Electronic government Initiatives

The findings revealed that there have been several initiatives that were put in place to help the implementation of e-government at the local government level in Malawi. These range from the establishment of the e-government department, trainings and awareness programs. The main aim of the department of e-government was to work as a central point for all the government ministries, agencies and departments. The department connects the ministries, agencies and departments electronically for their service delivery. The study then revealed that the connections were not always perfect because of poor ICT infrastructure that the country had. The study also revealed that trainings proved to be important because it was the only way through which people could learn and understand new concepts. E-government trainings had been taking place at different levels with an aim to make sure the concept was known and from there, implementation would be possible. However, it was also revealed that most of the trainings targeted those in ICT department and that slowed down the e-government implementation because those that were not in ICT related jobs were not motivated and still ignorant of the concept. The research finally revealed that awareness programs on e-government were minimal and this also contributed to the slow pace of its implementation.

5.2.3 Electronic government Benefits

The researcher also had to find out the benefits that those that were implementing e-government to a certain level were enjoying. The benefits among other things included the following:

It has been realised that using e-government could be time saving because it allows people a chance to work within their comfort zone thereby saving the time they would use to travel for the same services. It was also revealed that using e-government was cost effective because it did not require one to travel to get and provide some services and thereby saving the travelling costs. Electronic government therefore provided some comfortability in the course of delivering and accessing services. It was also realised from the research that e-government promotes transparency and accountability. The transparency and accountability came in because in the course of delivering services electronically, every user would sign up to their own account. This then makes it easy to know who provided a particular service and if there were issues, the service provider would be answerable. This means that if e-government was fully implemented in the local government, it would help to curb corruption because everyone would be made accountable of their transactions. It was also observed that e-government could help to promote a saving culture among communities. Some respondents said they started saving money after they started receiving the salaries electronically. This is a very good development that would help communities in the long run. E-government was also trusted to have helped bring together government and citizens because people would access information that concerned them through their personal computers or mobile phones. This in the long run also helps to promote civil engagement because from the knowledge they had, people were able to take part in decision making. All in all,

electronic government implementation makes life easy in as far as service delivery was concerned at the local government level in Malawi.

5.2.4 Factors influencing e-government implementation

Finally, the last but not least objective of the research was to find out factors that were hindering the implementation of e-government at the local government level in Malawi. This proved to be very important in the whole research because it helped to reveal the bottlenecks that were making e-government implementation difficult. These factors were categorised into three namely, technical, governing and social factors. The technical factors included National Information Infrastructure, ICT infrastructure, collaboration and power outages among other things. It was realised that lack of ICT infrastructure was the biggest technical challenge that was making the electronic service delivery not fully possible. This was the case because all other connections would be possible where there was enough ICT infrastructure, which was not the case in Malawi as one of the Least Developed Countries.

Among the governing factors that affect the implementation of e-government at the local government level in Malawi were leadership, top management support, funding and language barrier. Leadership came out to be the most important governing factor affecting e-government implementation. Leadership was looked at from two angles, first was the political side where it was observed that political leaders were not good at implementing projects that were started by their predecessors. Especially in a multi-party system of government where a ruling party had a term to serve and if the next term goes to a different party, chances were there that some of the projects that the predecessor started would not continue because the other party would have their own agenda,

different from that of the predecessors. The second angle of leadership was bureaucrats where it was observed that sometimes projects would fail because those in authority were not interested. E-government was a good example of such projects that would not please most aged leaders, who are mostly in leadership positions because they regarded it as some innovation for the young generation.

The social factors included training, awareness and social influence statements. Training came out the most important social factor in as far as e-government implementation at the local government level was concerned. Training would help people know new concepts and if this was not prioritised, chances are there for e-government to still be at infant stage because the entrusted people to help in its implementation do not have the capacity. The findings revealed additional social factors as gender and age.

5.3 Recommendations

The researcher suggested what could be the best course of action on electronic government policy framework, e-government initiatives and factors affecting the implementation of e-government.

5.3.1 Policy framework

There was still not enough framework put in place, the researcher recommended for more electronic government implementation policies because the existing ones were not clear and not all were relevant.

5.3.2 Initiatives

E-government initiatives, trainings and awareness programs are relevant but the programs needed to be all inclusive whereby engaging everyone across the departments and not only those in ICT department. There was also need for follow up programs just to make sure that the imparted knowledge was being put into practice.

5.3.3 Factors affecting e-government implementation

From the technical factors, it was evident that the ICT penetration rate in Malawi was the lowest on the African Continent due to the country's weak economy (Makoza 2014). A recommendation was made that there was need to strengthen the ICT infrastructure as that was the back bone of all ICT related developments and projects. This could be possible through collaboration with the private sector. On governing factors, leadership came out the most important factor in as far as e-government implementation was concerned. There was need to make sure that leadership from both angles, bureaucratic and political were in support of the e-government project for it to be a success. Finally, on social factors, trainings and awareness programs were seen to be minimal and it was recommended that the programs increase so that the implementers of e-government understood the concept.

5.4 Areas of further research

The present study found out that among other things, one of the social factors that affect the implementation of e-government is age. This age is of those in service delivery and those that need to access the services. This is mainly because most aged people have an attitude that ICTs are for the youthful people and a result of this would be that the aging

population will be left out in development. The study therefore recommends that a study, the aging population and e-government, should be conducted to determine the difference in interest of different age groups in using the ICTs that would eventually promote the implementation. Such a study would help to bring about ways through which the aging population should embrace the e-government and finally this would lead to them not being left out in development.

5.5 Conclusion

All in all, the study ‘An Analysis of Electronic Government in the Malawi Local Government - Case of Mwanza and Zomba District Councils’ was successfully conducted. The findings on e-government policy framework, e-government initiatives, benefits of e-government and factors affecting e-government implementation were successful.

The information that was gathered helped to shed more light on why e-government implementation is still at an infant stage in Malawi. The researcher also came up with recommendations at the end of the study and suggested an area for further research. The findings of the study would on one hand, help policy makers and decision makers on what to put in place in order to make e-government a success. On the other hand, they will help to identity existing gaps in literature thereby enriching the existing body of academic e-government literature in Malawi.

REFERENCES

- Allen, B. A., Juillet, L., Pacquet, G., & Roy, J. (2001). E-governance and government on-line in Canada: partnerships, people and prospects. *Government Information Quarterly*, 18(2), 93-104.
- Alonso, J. M., Clifton, J., & Díaz-Fuentes, D. (2013). Did New Public Management Matter? An empirical analysis of the outsourcing and decentralization effects on public sector size. *Public Management Review*, 17(5), 643–660. <https://doi.org/10.1080/14719037.2013.822532>.
- Alshehri, M., & Drew, S. J. (2011). E-government principles: Implementation, advantages and challenges. *International Journal of Electronic Business*, 9(3), 255. <https://doi.org/10.1504/IJEB.2011.042545>
- Armstrong, M. (1998). *Performance, Employees – Rating of Personalentwicklung*, Institute of Personnel and Development, London
- Banerjee & Chan (2004). An Evaluative Framework for Analysing E-government Convergence Capability in Developing Countries
- Bichler, R. (2008). Southern Africa and Digital Divide: A Malawian Case study. *The International Journal of Technology, Knowledge and Society*, 4(6), 41-50.
- Bichler, R. (2008b). Information and Communication Technologies in the Republic of Malawi: An Assessment of Progress and Challenges Ahead. In: Bada, Abiodun O./Musa, Philip (Eds.): *Proceedings of the IFIP WG 9.4-University of Pretoria Joint Workshop. Towards an ICT research Agenda for African Development*. International Federation for Information Processing, Pretoria, South Africa. pp. 189-202.
- Bonina, C. & Cordella, A. (2008). *The New Public Management, E-Government and the Notion of Public Value: Lessons from Mexico*. Proceedings of the SIG GlobDev's First Annual Workshop, Paris, 13 December 2008.
- Boone, E. (2013). *A Critical Insight into the Evaluation of E-government Policies: Reflection on the Concept of Public Interest*. Sage.
- Bwalya, K., Du Plessis, T. & Reinseigh, C. (2011). Multi-Dimensional Factors Impacting on E-Government Adoption in Botswana, Mozambique and Malawi. *International Journal of E-Adoption*, 3(3), 1

- Chiweza, A.L. (2015). *Political Economy Analysis of Accountability for Resources and Results in Local Government Councils* (1). Department of Political and Administrative Studies, Chancellor College, Zomba, Malawi.
- Chirwa, J. (2016). *Councils fail to account for K34.2bn*. Retrieved 30th December, 2018. <https://mwnation.com>.
- Ciborra, C. (2005). *Interpreting e-government and development: Efficiency, transparency or government at a distance?* London School of Economics and Political Science, London, UK.
- Clifton, J. & Diaz-Fuentes, D. (2010). *Evaluating EU Policies on Public Services: A Citizens' Perspective*. Annals of Public and Cooperative Economics.
- Cunningham, P., & Cunningham, M. (2011). *E-government Interoperability: Interaction of Policy, Management, Technology and Dimensions*. Sage
- Cresswell, J. (2014). *Research Design: Qualitative, Quantitative and Mixed Approaches*. London: Sage.
- Deacon, D., Michael, P. Peter, G., & Graham, M. (1999). *Researching Communications: A Practical Guide Methods in Media and Cultural Analysis*. Arnold.
- Devadoss E. (2003). *E-Government: Assessment of Current Research and some Proposals for Future Directions*. Department of Information Technology and Media. Mid Sweden University. SE-831 25 Ostersund, Sweden
- Dourish, P. & Belloti. V. (1992). *Awareness and Coordination in Shared Workspaces*. DOI:10.1145/143457.143468 Conference: The 1992 ACM Conference.
- Drechsler, W. (2005). *Post-autistic Economics Review: The Rise and Demise of the New Public Management*. University of Tartu and Talinn University of Technology, Estonia.
- European Commission, (2007). *Taking Stock of Good Practice and Progress Towards Implementation of the i2010 eGovernment Action Plan*.
- Fang, Z (2002). E-government in Digital Era: Concept, Practice and Development. *In the International Journal the computer, the Internet and Management*, 10(2).
- Flynn, N. (2002). *New Public Management: Current Trends and Future Prospects*. London, Routledge.
- Gichoya, D. (2005). *Factors affecting the Successful Implementation of ICT Projects in Government*. Research School of Informatics, Loughborough University, UK.
- Haynes, P. (2003). *Managing Complexity in the Public Services*. Open University Press.

- Heeks, R. (2006). *Understanding and Measuring e-Government: International Benchmarking Studies*. Paper prepared for UNDESA workshop, E-Participation and E-government: Understanding the Present and Creating the Future. Budapest, Hungary, 27-28.
- Hood, C. (1991). A Public Management for all Seasons? *Public Administration*. 69(1):3-19. Doi.10.1111/j.1467-9299.1991.
- Hughes, O. E. (2003). *Public Management and Administration: An Introduction*. New York U.S.A.
- Irani, Z., Love, P.E.D, & Jones, S. (2008). Learning Lessons from Evaluating. E-government: Reflective Case Experiences that Support Transformational Government. *The Journal of Strategic Informational Government, Israel* (1992), 1-15.
- Islam, M. S. (2013). *Implementation of e-Government Initiatives in Sub-Saharan Africa: A Literature Review*. Orebro University, School of business Studies (Informatics), Sweden.
- ITU Statistics (2011). *International Telecommunications Union Statistics Database* Accessed on 3 March, 2021 from: <http://www.itu.int/ITU-D/ict/statistics/index.html>.
- Johnson R.B. & Christensesn, L. (2014). *Education research: Quantitative and Qualitative and mixed approaches (5th ed.)*. SAGE Publications.
- Jones, S. Hackney, R. & Iran, Z. (2007). Towards E-government Transformation: Conceptualising 'Citizen Engagement'. *Transforming Government: People, Process and Policy*, 1(2), 145-152.
- Kamensky, J. (2012). *Social Media in the Public Sector*. Annual NASPAA Conference, Austin, TX, USA.
- Ke, W. & Wei, K. K. (2004). *Successful E-government in Singapore: Communications of the ACM* 47(6): 95-99.
- Khan, G. F. (2014). Factors Affecting Electronic Government implementation: Research Model.
- Kihoro, J. M. (2020). *The Cooperative University College of Kenya, Kenya* Advantages of E-government. Patna, Bihar, India
- Kumar T. & Misra H. (2020). *Decentralization and E-Government Services: Framework of e Governance at the Local Government Level Case Based Study in Gujarat*. India.

- Kyem, P.A.K. (2016). *Mobile Phone Expansion and Opportunities for E-governance in Sub-Saharan Africa*. Central Connecticut State University, USA.
- Layne K. & Lee, J. (2001). Developing Fully Function E-government: A Four-stage Model. *Government Information Quarterly* 18(2) 122-132.
- Makoza, F. (2014). The Level of E-government Implementation: Case of Malawi. Department of Information Systems, University of Cape Town, South Africa. *Electronic journal of E-government*.11 (2), 268-279.
- Malawi Growth and Development Strategy Report (2006). *Malawi Growth and Development Strategy Report: From poverty to prosperity 2006-2011*. Ministry of Finance, Malawi.
- Malawi Local Government Act (1998) Lilongwe, Malawi.
- Malawi National Public Sector Reforms Policy (2018). *Office of the President and Cabinet*, Lilongwe, Malawi.
- Malanga, D. F. (2017). *The State of E-Government in Malawi. A public Sector Reforms Initiative. Malawi Conference Paper March 2017 with 575 Reads Conference: The 2017 DLIS Conference*. At University of Botswana Auditorium, Gaborone: Botswana.
- Metcalf, K. N. (2014). e-Government in Law and by Law: The Legal Framework of e-Governance. *Regulating e-Technologies in the European Union* (33-52).
- Miles, M. & Huberman, A. (1994). *Qualitative Data Analysis*, Thousand Oaks, CA: Sage.
- Mtingwi, J. & Jean-paul, V. (2012). The State of E-government and M-Government Readiness in Malawi. *International Journal of Information Technology & Computer Science*, 6, 2091-1610.
- Munyoka, W. & Manzira, M.F. (2014). *Assessing the Impact of e-Government Projects*. The Case of Limpopo Province in South Africa.
- Nambisan, S. & Agarwal, R. (1998). *The Adoption and Use of National Information Infrastructure: A Social Network and Stakeholders Systems, Perspective*. Proceedings of the International Conference on Information Finland, Helsinki.
- National ICT Policy for Development (2009). *Malawi National Policy final draft*. Ministry of Information and Civic Education.
- Ndou, D. (2004). *E – Government for Developing Countries: Opportunities and Challenges*. The Electronic Journal of Information Systems in Developing

- Countries 18(1), 1-24.
- OECD, (2003). *The E-government Imperative*. OECD Publications, France.
- Pollitt, C. & Bouckaert, G. (2003). *Evaluation in Public Sector Reform: Concepts and Practise in an International Perspective*, Edard Edgar, chapter Evaluating Public Management Reforms: An International Perspective.
- Sanabria, P., Pliscoff, C.& Gomes, R. (2014). E-Government in South American Countries: Echoing a Global Trend or Really Improving Governance? The Experiences of Colombia, Chile, and Brazil.
- Shackleton, P., Fisher, J. & Dawson L. (2004). *E-Government Services: One Local Government's Approach*, In Linger, H. et al. (Eds.): *Constructing the Infrastructure for the Knowledge Economy: Methods and Tools, Theory and Practice*. Springer, 2004.
- Sharma, G. (2003). Building Blocks of an E-Government: A Framework. *Journal Of Electronic Commerce in Organosations*, 1,(4),1-15.
- Tracy, S.J. Qualitative research methods: Collecting Evidence, crafting, analysis Communicating impact. Wiley-Blackwell.
- Twizeyimana, J.D., Larsson, H. & Gronlound, A. (2018). E-government in Rwanda: Implementation, Challenges Reflections. *Electronic Journal of e-Government*, 16(1): 19-31
- United Nations (2012). *E -Government Survey 2012: E-Government for the people*. Department of Economic and Social Affairs, New York.
- United Nations (2016). E-Government Survey 2016: E-Government in Support of Sustainable Development. doi: 10.1016/S1369-7021(02)00629-6.
- UNDESA (2012). *United Nations E-Government Survey 2012: E-Government for The People*. New York, USA.
- Wagana, D.M., Iravo, M.A. & Nzulwa J. D. (2016). *The Moderating Effects of E-Government on The Relationship Between Administrative Decentralization and Service Delivery in County Governments in Kenya*. Jomo Kenyatta University of Agriculture and Technology,
- The World Bank Group (2012). *E-government: Definition of e-government*. Retrieved on 23 July, 2018. <http://go.worldbank.org/M1JHE0Z280>.
- The World Bank Group (2013). Decentralization. Retrieved on 23 July, 2018. <http://go.worldbank.org/M1JHE0Z280>.
- World Economic Forum Global ICT Report (2012). *Living in a Hyperconnected World*:

World Economic Forum. Accessed on 28 July, 2018 from:
http://www3.weforum.org/docs/Global_IT_Report_2012.pdf.

Yildiz, M. (2007). E-government research: Reviewing the literature, limitations and ways forward. *Government Information Quarterly*, 24, 646-665.

APPENDICES

Appendix 1: Interview Guide for Controlling Officers, Systems Analysts and Managerial Staff

Date:

i. Council / Department:

iii. Interviewee's position:

iv. Gender

v. Age range:

a. 18 – 25

b. 26 – 30

c. 31 – 40

d. 41 – 50

e. 51 – above

Preamble

1. What do you understand by the word e-government?
2. When did e-government implementation start at the Local Government level in Malawi and in your council or department?
3. What is your opinion about the implementation speed of e-government in the Local Government and in your council?

4. Which services from your department are provided through e-government? (Please explain in detail)

Framework

1. Have you ever heard about any policies and/or acts governing the implementation of e-government?
2. Did you at some point had chance to see or read any policy/act relating to e-government?
3. Do you see the existing policies and/or acts relating to e-government working in your context?

Initiatives

1. What initiatives have been put in place to enforce e-government implementation at Local Government level in Malawi?
2. Have you ever attended any e-government awareness programs taking place in your council? If yes, how useful were they?
3. Have you ever attended trainings on e-government? If yes, how helpful were they?
4. Mention any other e-government programs that have taken place at your work place?
5. Are many people in your department able to use e-government in their day-to- day work?
If not why?

Benefits

1. For the time that you have known and implemented e-government, what would you say are the benefits of this project?

Challenges

1. Are there any problems that you think are hindering the implementation of e-government at your work place?
2. Is there anything that you think could be done to get rid of these problems?

Closing

1. Do you have additional comments in general about e-government?

Appendix 2: Questionnaire for Controlling Officers, Systems Analysts and Managerial Staff

Date:

i. Council / Department:

iii. Interviewee's position:

iv. Gender

v. Age range:

a. 18 – 25

b. 26 – 30

c. 31 – 40

d. 41 – 50

e. 51 – above

Note: Your answers will be treated confidentially

Benefits

1. (a)The following are benefits of e-government implementation at Local Government level in Malawi:

No	Benefits of e-government	Agree	Strongly Disagree	Neutral	Disagree	Strongly Disagree
01	It is time saving					
02	It promotes transparency and accountability					
03	It promotes civil engagement					
04	It is cost effective					
05	It promotes access to information					
06	It brings together government and population					

1. (b) Would you please explain your answers in (1a) above.
2. Are there any negative effects affecting e-government implementation in the Local Government and in your council? If yes, please explain.

Challenges

Technical challenges

1. (a) The following technical factors apply the most challenges to e-government implementation

No	Technical Factors	Agree	Strongly Agree	Neutral	Disagree	Strongly Disagree
01	IT/ICT Infrastructure					
02	IT Standards					
04	National Information Infrastructure					
04	Collaboration					

- (b) Would you please explain your answers in (1a) above
- (c) Are there any other technical factors affecting e-government implementation in the Local Government and in your council? If yes, explain.

Governing Factors

1. What is your opinion about the governing factors which affect the implementation of e-government project in the Malawi Local Government?

2. (a) The following are governing / managing factors have applied the most challenges to e-government implementation

No	Governing Factors	Agree	Disagree	Neutral	Disagree	Strongly Disagree
01	Vision					
02	Top Management Support					
03	Leadership					
04	Funding					
05	Language Barrier					

2. (b) Explain your answers in (1a) above

Social Factors

1. What is your opinion about the social factors which affect the implementation of e-government project in the Malawi Local Government?

2. (a) The following social factors have applied the most challenges to the implementation of e-government at Local Government level in Malawi

N o	Social Factors	Agree	Strongly Agree	Neutral	Disagree	Strongly Disagree
01	Social Influence Statements					
02	Awareness					
03	Trainings					

(b) Explain your answers in (2a) above

- Are there any other factors that you would want to add to the ones explained in the above categories? If yes, explain in the space provided below

Closing questions:

- Would you like to add anything more?
- Could I contact you for follow-up questions in case I need some clarification?

Appendix 3: Introductory letter

