FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF LOCAL GOVERNANCE STUDIES

Information Communication Technology for Zimbabwean Local Authorities in service delivery. A Case of Mutare City Council

BY

LEONAH MARANGE

R137979F

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APPROVAL FORM

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The undersigned confirms and declares that they have read and made recommendations to the Midlands State University for approval of a research project entitled: **Information Communication Technology for Zimbabwean local authorities in service delivery. Case of Mutare City Council.** The project was submitted in the partial fulfilment of the requirements of the **Bachelor of Science Honours degree in Local Governance Studies.**

Supervisor

Signature ……Date ……..…/…..……/……..……

Chairperson

Signature ……Date ……..…/……..…/……

MIDLANDS STATE UNIVERSITY

P. BAG 9055
260404/260337

Gweru

Zimbabwe

Telephone: (263) 54

Fax: (263) 54260233/260311

FACULTY OF SOCIAL SCIENCE

DEPARTMENT OF LOCAL GOVERNANCE STUDIES

RELEASE FORM

NAME OF AUTHOR	:	LEONAH
SURNAME	:	MARANGE
REGISTRATION NUMBER	:	R137979F
PROGRAMME	:	LOCAL GOVERNANCE STUDIES
TITLE OF THE PROJECT	:	ICTs FOR ZIMBABWEAN LOCAL AUTHORITIES IN SERVICE DELIVERY .A CASE OF MUTARE CITY COUNCIL.
YEAR AWARDED	:	2017
SIGNED	:	……
DATE	:	……
PERMANENT ADDRESS	:	7928/26, Sizinda Bulawayo
CELL NUMBER	:	0771 562 041/ 0778 492 692/ 0773 476 258
EMAIL	:	leonamarange@gmail.com

DEDICATION

This work is dedicated to Doctor Honorable Christopher Mshohwe and Amai for financially supporting my studies, for without their unwavering support, l would not have been this far. Thumps up to my loving grandmother, Sister Marange, whom I will forever cherish her love and respect. My words are insufficient to explain your contribution and commitment to my life. Grandmother, l will simply say your unconditional moral backing and consolation is to a greater extent the reason of my prosperity. May the heavenly father bless you in abundance?

ABSTRACT

The researcher was researching on a topic entitled Information Communication Technology for Zimbabwean Local Authorities in service delivery. The aim of this research was to establish the impact of the ICT system in addressing the challenges facing Zimbabwean local authorities in the delivery of services, with particular reference to City of Mutare. The research was undertaken in wards 5 and 16 respectively of Mutare urban. City of Mutare was perceived as having insurmountable challenges which had greatly compromised its capacity to deliver services to the residents of Mutare. The challenges have led to performance gaps resulting in the City of Mutare providing inadequate services or no services at all. The researcher further highlighted the research objectives which are to determine whether ICT is beneficial or not to the residents, employees and management itself, determining the consequences of ICT system and suggested possible solutions to these prevailing problems .This has resulted in the Mutare city as a council to recognise the significance of ICTs in addressing service delivery .The researcher used both quantitative and qualitative methods in presenting data. The study was informed by both primary and secondary data. Primary data was gathered from a sample size of 20 who were conveniently selected as the author used purposive and systematic sampling from a total of 140 000 population and this was determined after considering the budget and timeframe of the researcher. The data was gathered through documentary analysis derived from the journals, and books as well as reviewing the various data analysis done in relation to the assessment of ICT in enhancing service delivery provision, interviews, questionnaires, observations and council documents were used as well by the researcher. The study confirmed some of the operational challenges to include lack of IT skills, and lack of clear understanding of ICT as well as training. The research established that the challenges facing City of Mutare were related to capacity issues, financial aspects inadequacy of the ICT infrastructure, lack of well-drilled ICT manpower and this has led to performance gaps resulting in the City of Mutare providing inadequate services or no services at all. Findings from previous literature revealed that there are constraints faced in the operations and utilization of ICT.The researcher identified a plethora of challenges being encountered by the C. O.M in the implementation of ICT such as inadequate financial system, lack of well- drilled ICT manpower and the chief problem is that the C.O.M is still lacking in ICT infrastructure for it to provide services effectively and efficiently. Although the city is being affected by these insurmountable challenges, it is striving to implement ICTs earnestly as depicted by its use of ICT tools in service delivery such as the E-payment services, Websites to advertise and attract investors and the use of an SMS hotline based platform. The researcher recognised that the C.O.M unlike other Zimbabwean local authorities is trying its best in moving from a paradigm shift of operating and providing services manually to the new public management of operating electronically in the provision of efficient and effective services by engaging private players and twinning with other donor funding programs to boost its revenue base and for resources mobilisation as these supply both technical and financial assistance to accelerate ICT programs. This study provides an effective solution to identified challenges and impact as well as strategies to be adopted in order to reduce the failure rate of ICT. The implications of the findings are that unless the limitations dubbed above are resolved, ICT in the Zimbabwean local authorities will continue to experience insurmountable service delivery challenges, poor economic growth and development. Therefore, the study recommended on Chapter 5, that City of Mutare should adopt strategies such as including all stakeholders in ICT planning and implementation as it creates a sense of ownership and help in the mobilization of resources,

engaging private players for boosting their revenue base and in order for them to try to reverse and halt the service delivery deterioration.

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DECLARATION

I Leonah Marange, do hereby declare that this research project is my own produce, it is my original work except other literature cited in it and this have been acknowledged. The work has never been submitted to another University in the awarding of a degree. The researcher acknowledged all sources cited using in text and end text Havard referencing style.

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Student Date

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Supervisor Date

LIST OF ABBREVIATIONS

ICTs	Information Communication Technologies
C.O.M	City of Mutare
M.C.C	Mutare City Council
N.G.O	Non-Governmental Organisations
E-government	Electronic government
UCA	Urban Councils Act
RDCs	Rural Districts Councils
UNDP	United Nations Development Programme
SMS	Short Messaging Services
PPPs	Public Private Partnerships
CCTVs	Closed Circuit Television
POTRAZ	Postal and Telecommunications Regulatory Authority of Zimbabwe

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CHAPTER 1

1.0 INTRODUCTION

The study sought to align the impact of Information communication technologies (ICTs) for Zimbabwean local authorities in an attempt to address the challenges of service delivery. It is focusing on improving good governance through the use of ICT in delivering services to the poor. Residents were experiencing critical water shortages; erratic refuse collection, un-trafficable road system coupled with raw sewer effluent from burst pipes, poor housing or informal settlements. There was deterioration in the provision of public street lighting and traffic lights. Most local authorities in Zimbabwe are failing to deliver efficient and effective services to the people under their jurisdiction, therefore the needy of ICTs to try and grapple the challenges encountered. Mutare city council is going to be used as an area of study by the researcher.

1.1 Background to the study

Mutare city council was once a city of Excellency in delivering its services but the situation has changed, it is now one of the local authorities in Zimbabwe well-known of encountering insurmountable challenges in delivering efficient and effective services to its citizens. The council attained its municipal status in 1914 and became a City in 1971.It has a population of 188 243 (ZIMSTAT 2012 National Statistics) and now it is estimated to have risen to around 199 253 which became a challenge to local authorities to provide quality services to the people since there was overpopulation due to the issue of diamond mining in Chiadzwa, Marange Bocha area. This facilitated the growing of informal sector and settlements, and deterioration of services since many people were migrating from different countries and cities chasing diamond leading to a scenario where many people were chasing few resources. Therefore, this was the main reason for why the local authorities were encouraged to

implement ICTs according to Mupingo (2013) as a way of creating an enabling environment for investors to develop the area through the creation of soft infrastructure such as websites for marketing and advertising and biller codes to make the task of money transfers easy and the revenue base of the local authorities will be boosted. Also, this will improve the life standard of people since employment will be created and opening up of local industries. Also ICTs would accommodate and involve all the stakeholders in matters to do with the council and this will facilitate service delivery since everyone will be participating through websites and SMS hotline platforms and they will earnestly pay their rates.

The council in the past years have been awarded for maintaining a reputational celebrity status in service delivery, as reflected by its vision which is to be a centre of excellent service delivery and prime investment destination by 2020 and its mission statement which is to provide quality services to all stakeholders in a transparent manner at competitive cost (City of Mutare Strategic Plan 2015-2018). The history of Mutare dates back to the 19th century thereby making it one of the oldest cities within the environs of the capital city. The C. O. M as a local authority is following the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET) which is an economic blueprint meant to revive the economy through adopting Information Communication Technologies in the provision of services by using an SMS hotline chief among others to its citizens. This is depicted under the section of Information Communication Technology, it focuses on four Key Results Areas that is E-Government, information Communication Technologies Governance, Information Communication Technologies Backbone and Infrastructure and ICT Research and Development according to the ZIMASSET (2013). This reflects that Information Communication Technology is now a crucial issue which is a stepping stone to achieve

organizational goals, improved service delivery but the city is still experiencing insurmountable challenges in the execution of their functions.

The council tried its best to maintain its status but it seems to be failing, due to the fact that they do not have full autonomy and devolution since there is still heavy interference of the central government which in most cases left the council in a heavy bankruptcy by their directives through the Minister according to Chigwenya (2010). Also it failed due to the issues to do with inadequacy in communications and power infrastructure, shortage of ICTs facilities and ICTs skills, inadequate public-private partnerships, limited data management capacity, inadequate financial resources since it was more reliant to the Central government , exclusion of stakeholder participation, poor communication channels among others.

There was inefficiency and ineffectiveness in the council leading to deterioration of services delivery. This was the main reason for why Zimbabwean local authorities were urged to use ICTs in areas of their jurisdiction since it is recognised as an effective tool to address service delivery challenges and as a way of delivering services faster without long queues, easy dissemination of information between the local authorities and its citizens, good performance system and result oriented. Mupingo (2013) stipulated that ICTs is no longer an optional programme anymore, but it is a mandatory paradigm shift, which the Local Authorities should follow to remain relevant and re-active. ICT is a product of e-government, which is a component of the Integrated Result Based Management system and these are entangled as one thing and there are all aiming at producing quality services, faster and easy access of information. The deterioration of services was exacerbated by rampant corruption, political patronage, economic decline, poor local governance and malpractices in the procurement process. Therefore, this shows the significance of ICTs in addressing all these insurmountable

challenges that the local authorities are facing. The failure by City of Mutare to execute its function had greatly affected the citizens who have every right to access quality services and at the right time. This therefore motivated the researcher to undertake a research on the impact of ICTs for Zimbabwean local authorities in addressing the challenges being faced by City of Mutare in the delivery of efficient and effective services to its clients.

1.2 Statement of the problem

Despite, Information Communication technology bringing benefits to the local authorities to be more efficient and effective, the Zimbabwean local authorities are still failing to execute their function in servicing its citizens. Financial constraints is the most challenging factor which is hindering local authorities not to fully and earnestly implement Information communication technologies in Zimbabwe as an instrument in service delivery challenges in areas of their jurisdictions. City of Mutare like other local authorities in Zimbabwe is encountering an insurmountable challenges such as inadequate communication and power infrastructure, shortage of ICT facilities and ICT skills and there are lacking the capacity and competency in the ICT field among others. This led local authorities in continuing to provide ineffective services to their citizens.

1.3 Main objective

- To determine if ICT can be a useful instrument of addressing service delivery challenges in local authorities.

Research Objectives

- To establish on the benefits of using ICT system by the City of Mutare.

- ❖ To find out the challenges being encountered by the City of Mutare in the implementation and use of ICTs to improve service delivery.
- ❖ To explore possible strategies that can be employed to the challenges being faced by the Mutare city council in the implementation of ICTs.
- ❖ To determine whether the current ICT policies formulated in Zimbabwe are effective or not.
- ❖ To determine the connection or relation between ICT and good governance in improving service delivery challenges.

1.4 Research questions

1. Why are local authorities adopting ICTs when addressing service delivery challenges in the organisation?
2. Does participation of residents or citizens through ICTs brings any change to service delivery?
3. What are the effects and benefits of using ICTs in the provision of services in the organisation?
4. Is the ICTs system fully implemented in the organisation as a tool for effective service delivery?
5. Is ICT a solution to the challenges hindering effectiveness in service delivery in the departments?
6. What lessons can be drawn from other Local Authorities concerning the Information Communication Technologies issue?

1.5 Purpose of the study

The main purpose of this study is to assess the impact of Information Communication Technologies for Zimbabwean local authorities in addressing service delivery challenges affecting areas of their jurisdictions. The study will also determine if ICT can be a useful instrument of addressing service delivery challenge. .

1.6 Justification of the study

Several scholars have written about the role and impact of ICT for Zimbabwean local authorities in addressing service delivery challenge. This research is going to be an eye-opener to local authorities and the government on what are the root causes of the failure to deliver efficient and effective services to the people when ICT is in place and what strategies can be employed in addressing these insurmountable service delivery challenges. The study will also serve as a tool to the local authorities on how to use ICT in the provision of services.

The research will establish the challenges faced by citizens and might help to alert the local authorities and other public sector organisations to come up with resolutions over these challenges encountered in using ICT. The study will contribute to the body of knowledge and may serve as a point of reference and it might also become university reference material to be used by other researchers.

1.7 Assumptions of the study

- ICT is applicable and functional in Mutare city council
- ICT can be used as an instrument to address service delivery challenges
- ICT is not earnestly and fully implemented in Mutare city council
- The availability of ICT in Zimbabwean local authorities does not mean there will be good and effective provision of services

- Findings of this study can be used to improve service delivery levels of Zimbabwean local authorities
- All respondents would respond in good faith without trying to please the researcher or withholding vital information that could compromise the research.
- Analysis of the data is going to be solely using the results obtained from the field.

1.8 Delimitation

The study will be confined to the City of Mutare since ICT is applicable in the day –to day running of each and every department and some of its residents. The area is where most people benefited from the status quo of not using ICT tools and infrastructure in enhancing service delivery. There is high corruption rate, a number of cases of unethical activities in the council so significant information might not be given to the researcher .Most parts of Mutare, are characterised by poor housing facilities and poor service delivery, this is where there are a plethora of challenges which can be identified and used as a case study in this research, and the study will be focusing on the residents of ward 5 and 16 only and the employees and top officials referring to (Heads of Departments), ward councillors of the wards under study with an estimated population of about 140 000 people. Mutare city is about 263km east of Harare and 290 km west of Port Beira, Mozambique. The sample of 20 was used in the collection of data.

1.9 Limitations of the Study

Time

- The researcher has limited time for researching because the semester only stretches for only four months and of the four months she will be attending lectures. Therefore, good

time management skills are called for and the researcher should utilize her weekends wisely.

Permission

- Time taken to be permitted by the responsible officials was long, there was too much bureaucracy thereby having a negative implication on the study by increasing the time frame but the researcher had applied for the permission earlier and had to make follow ups to the responsible offices. Therefore, all appointments were made in advance and on time for circulation and to avoid unnecessary inconveniences.

Information

Confidentiality –respondents may not be willing to avail some of the information asked such as the mismanagement of funds might not be revealed due to political connotations and suspicions. The researcher emphasized to them that the organisation's information will be kept private, confidential and used for academic purposes only. The researcher therefore relied on secondary data.

1.10 Definition of terms

Information and Communication Technologies

A term that includes any communication device or application encompassing radio, television, cellular phones, computer network hardware and software and satellite system according to Corney (2005).

Local government

Is the sphere of government that interacts most closely with people and it is the sphere of government where service delivery takes place. It can also capacitate or hinder socio-economic development.

Citizens

-refers to persons who reside in City of Mutare who have the rights to the legal and social benefits provided by the City Council of Mutare and also have legal obligations to the Council.

Efficiency

Performing or functioning in the best possible manner with the least waste of time and effort, doing things right Brewer (2010).

Effectiveness

Jones (19996) defined it as the extent to which an activity fulfils its intended purposed function. It can also be referred as the adequate accomplishment of a purpose; producing the intended or expected, result doing the right things.

1.11 Summary

In this chapter the author introduced the topic under study with regards to the positive and negative impact of ICT for Zimbabwean local authorities in addressing service delivery challenges. The author highlighted the research objectives that this study is seeking to achieve, the research questions that the author is seeking to answer, reasons justifying the research, limitations and lastly delimitations that the research work will be confined to. The researcher highlighted on the benefits and challenges of ICT for Zimbabwean local authorities in trying to ensure that there is good provision of services. The following chapter will emphasize on the literature of various schools of thoughts relating to the impact of ICTs in local authorities, the benefits and challenges in service delivery provision.

CHAPTER II

LITERATURE REVIEW

2.0 Introduction

This study reviews literature related to the topic under study. Literature review is an account of what has been researched and published on the topic by other scholars and publishing houses. This section intends to stipulate and appreciate on the other works which were done by other schools of thought. The purpose of the literature review is to situate the research in the context of what is already known about the Information and communication technologies for Zimbabwean local authorities, its significance and its drawbacks in addressing service delivery challenges. This is the chapter that will depict the premise on which this exploration is constructed, examining work done by different researchers globally.

2.1 Literature review

Tsvere (2008) stipulated that it is a descriptive, critical analysis and evaluation of what other key authors or researchers have written or researched on in the area or research problem. In support of that Nerderir (2010) refers literature review to as the course of interpreting, scrutinizing, and assessing and summarizing theoretical information related to a certain topic. Therefore, this means that it is a straight forward summary of what is ready on the topic as it surveys scholarly articles relevant to the area of study so as to proffer a significant literature published on the topic. Literature review is significant when researching because it stimulates potential insights and provides ideas to the possible approaches for studying the problems as gaps in the current stock of knowledge are identified.

2.2 Information communication technologies

There are a plethora of scholars' ideas which are going to be stipulated and discussed in this study. Information communication technology is not just technology, not just business processes nor just human resources, it affects every aspect of an organisation delivers services to the public .ICT can be defined as the use of electronic tools used to convey, manipulate and store information. Therefore, it refers to the usability of information technologies to enhance "the efficiency and effectiveness of service delivery in the Public sector" (Jeong 2007). Information and communication technologies (ICTs) are broadly defined as technologies used to convey, manipulate and store data by electronic means (OpenUniversity, nd). This can include e-mail, SMS based text messaging, video chat, Skype, and online social media (for example WhatsApp and Facebook). It also includes all the different computing devices (for example, laptop computers and smart phones) that carry out a wide range of communication and information functions. ICTs are pervasive in developed countries and considered integral in the efforts to build social, political and economic participation in developing countries. For example, the United Nations (2006) recognizes that ICTs are necessary for helping the world achieve eight time-specific goals for reducing poverty and other social and economic problems.

ICT is a field of work and study that "includes technologies such as desktop and laptop computers, software, peripherals, and connections to the Internet that are intended to fulfil information processing and communications functions" (Statistics Canada, 2008). Another definition for ICT comes from UNESCO, which states ICT as "the combination of informatics technology with other, related technologies, specifically communication technology" (UNESCO, 2002). Thus, ICT uses the newest technologies to process and communicate information.

The World Bank defines ICTs as "the set of activities which facilitate by electronic means the processing, transmission and display of information" (Rodriguez and Wilson, 2000). According to ESCAP (2001) ICTs refers to technologies people use to share, distribute, and gather information and to communicate, through computers and computer networks". ICTs are a complex and varied set of goods, applications and services used for producing, distributing, processing, transforming information including telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media (Marcelle, 2000).

The Zimbabwe National ICT Policy (2015) defines ICT as "all electronic movement information, interactions and transactions that facilitate service delivery among Government ministries, institutions, departments and agencies." The policy document summarizes the definition of e-government as solely depends on ICTs to provide services;

- Offering easy access to interactive information and services;
- Provision of services at appropriate time and;
- Cost cutting and desired result methods of conducting business transactions.

The writer takes a holistic approach thereby linking ICT with good governance. In order for the public sector to operate effectively and efficiently in the provision of services, ICTs system should be earnestly implemented thereby enhancing good governance. This definition explores the fact that ICT and good governance are intertwined, which means they cannot be separated. These two aims at solving challenges or complications being encountered by the public sector in the provision of services and ensuring that there is good performance and

they are result oriented. Therefore, the main aim of ICT is to ensure there is an improvement in the overall performance of the public sector organisations such as local authorities as the area of analysis of this research.

The government of Zimbabwe has embarked on the immediate implementation of ICTs in order to bring the government to the grassroots level, to reduce corruption, bureaucratic red tape and business costs associated with traditional public administration and outdated methods of service delivery. Most local authorities have adopted Information Communication Technology (ICTs) shifting from the manual system of operating and providing services to the public. ICT has created electronic neighbourhood thus, boundaries are no longer about geography but by shared interests. Through ICT people in different places can communicate thus there is no barrier.

There are a various types of ICT tools used in most local authorities in Zimbabwe and other developing countries and these are as follows government to users tools, which comprises of the council websites, E-payment systems, electronic billing and electronic accounting packages ,and also government to citizens tools which consists of the SMS platforms, electronic discussions forums and e-democracy tools and lastly the government to government tools which among them is the intranet, electronic case treatment or executive work and electronic internal records. Additionally there are also forms of ICT used by both developing and developed countries that are as follows, telecommunications through mobile phones, computers, the internet to mention but a few. ICT has created opportunities for the effective, efficient and economic service delivery in both developing and developed countries through creating opportunity for easy dissemination of information, reduce loss of information , paper work and information is accessed at low cost.

ICTs have been in use for some time, for example in voice communications technology. However, recent advances such as the Internet are breaking new ground (and introducing new divisions) in the achievements and potential they offer. Cukier (1998a) is of the notion that definition of the Internet is very relevant to the peering debate about the exchange of data traffic and interconnection agreements as well as whether regulators have a role to play in Net matters. Cukier (1998a) further pointed out that the voice telecoms network is founded upon the principle of universal connectivity. The Internet, however, lacks a specific definition and it is tentative whether the telephony model applies to it. According to this view, the spread of the Internet has unique significant features distinguishing it from other outdated technologies, such as telephony. This notion has vital implications for countries' policy approaches and the way in which they seek to inspire, monitor and regulate ICT adoption, interconnection and, ultimately, access. ICTs are not a remedy for development or a replacement for real-world processes, if the latter are defective, lacking or absent, ICTs cannot create well the defects or make up for the insufficiencies. This is for instance a government process is affected by the bureaucratic red-tape, convoluted and subject to delays, moving it on-line may not make it any more efficient; and instantaneous transmission may not necessarily make it any faster. If controls over financial systems are scarce or missing, making systems electronic will not make them effective, and may in fact make it more problematic to trace the audit trail.

2. 3 Global perspective of ICT in service delivery provision

The use of computers in both developed and developing countries today has become significant in the operation of both private and public sector organisations and in societies. Kroeker et al (2010) postulated that today information is carried at phenomenal speeds within

and across various communication networks known as ICT networks. These allow the transfer or dissemination of massive amounts of information in a matter of seconds and it is enabling humankind to advance in a multitude of ways. ICT in today's world permeates many different industries and is responsible for the growth of production and in boosting the revenue base of many public sector (Basu and Ferald 2008).

With the increasing global penetration of computers and networks enabled by the internet, there are a multiplicity studies indicating the adoption of ICT as positively impacting concepts such as creation of significant divergences in the world, economic productivity, poverty alleviation and even enhancing sustainable development (Madon et al, 2000). Specifically, in the issues to do with business ICT is depicted as significant for cost reduction in the international and transnational arena (Rangan and Sengul, 2009).

ICT also fosters or accelerates the transfer of knowledge around the world and the integration of multinational and transnational corporations (Rangan and Sengul , 2009). Aral et al (2006) supports this argument by the notion that these transfers are significant in increasing the Gross Domestic Product (GDP) growth as well as the non –linear work productivity and ability to multi-task and this clearly reflects the added value of ICT. Additionally, ICT has also been portrayed as encompassing potential innovations within and among public sector organisations by enabling a conducive environment for the use and sharing of important information faster without face to face communication or meetings and it has the potential to reshape and reformulate organisations internally and as well as reshaping their interactions with other organisations and individuals within the networks in which they lay (Burt and Taylor, 2000). Globally, the networks also offer to corporations the opportunity to engage in organisational learning and knowledge management.

Avgerou (2000) is of the notion that ICT can be used to directly influence the productivity, cost effectiveness and competitiveness in industries, which is the advantage that developing countries can boost their economies upon. Catching up on developed economies in terms of application of technology and the resultant economic benefits have never been that easier. In business , ICT are categorised into two categories of product namely the traditional computer based technologies and the more recent and fast growing range of digital communication technologies which creates a conducive environment for people and organisations to communicate and store information.

ICT is significant and crucial for fostering sustainable development in developing countries. Thioune (2003) is of the notion that for the past two decades most developed countries have witnessed significant changes that can be traced to ICTs. These multi-dimensional changes have been observed in almost all aspects of life; economics, education, communication and travel. ICT s have accelerated the communication system in the sense that both the sender and the receiver will access the information faster without communication barriers. Many initiatives have been put in place at the international level to support developing nations such as African countries to accelerate the ICT system and find faster ways to achieve durable and sustainable development (Thioune, 2003).

ICT helps in enhancing efficiency gains, information dissemination and creates a vivid line of communication between public sector organisations and its various stakeholders in both developing and developed countries. Krishana (2008) was of the notion that ICTs in local government in Maputo may reshape, reorganise and fundamentally restructure working methods and ultimately the sectors in which they are used. They offer generic advantages of efficiency gains, information sharing, communication and faster knowledge accumulation,

dissemination and application, in support of the specific purposes for which they are used. It also enhances communication and interactions between previously isolated agents pool their individually isolated resources, knowledge and experiences to build a common knowledge base upon which all members can draw.

ICT is significant and vital during disasters in local government across the world (Kabbeer, 2003). Communication technologies can help establish preparedness networks that link emergency operation centres, emergency broadcasting systems and front-line emergency responders or communities through the use of ICT response alarms and other interventions. Such networks can expedite rescue service delivery to the victims of emergencies as well as providing the communities with soft infrastructure by educating the communities about disaster preparedness, tracking approaching hazards, alerting authorities and early warning systems were people who are likely to be affected will be warned of the disaster and this depicts the significance of ICT globally.

Furthermore, ICT helps in reducing the bureaucratic red tape which is the characteristic of many public sector organisations in both developed and developing nations and countries. Bureaucratic lethargy is a hindrance factor when it comes to development and provision of services by most local authorities globally as it lead to growth of unethical acts such as petty corruption in order to receive services in time without queuing and going through offices. Hughes (2003) supports this notion by proposing that the adoption of ICT across the world is significant in the service provision as it facilitated the paradigm shift from the traditional public administration associated with the bureaucratic red tape and administration to the new public management of processing and providing services electronically without long queues and going through tall structures for approval.

2.4 Benefits of using ICTs by Zimbabwean local authorities

Fig 2. 1 Benefits of using ICTs by Zimbabwean local authorities

Source :edited from Ndou (2004)

Information leads to self-actualization, especially when combined with other resources (Castels, 2003). ICT speeds up the flow of information and its use in decision-making (Ahmed et al, 2006). Computers and telephones are the ICTs most frequently accessible in the local government area. This supports the work of Ahiakwo (2002) who described the role of computers in storing administrative, budget, and other information. ICT increases the speed of information services and this is in line with the work of Ahmed, et al. (2006). It was

also observed that the benefits of ICTs towards local government administration are enhancement of communication and increased productivity. This is in line with Bagozzi (2006) who noted that ICT helps to enhances communication among administrators and staff and also increases productivity, accuracy, speed, acquisition of skills and knowledge.

2.3.1 Stakeholder participation

Whilst ICTs has traditionally been understood as being centred on the operations of government, ICT is understood to extend the scope by including citizen engagement and participation in governance. According to Ndou (2004) ICT creates good relationships and vivid communication lines between governments and its citizens or Government-to-Consumer and in this (G2C) model, it applies the strategy of Customer Relationship Management (CRM) with business concept. By managing their customer (citizen) relationship, the business (government) can provide the needed products and services fulfil the needs from customer (citizen).

According to Franda (2001) ICT has paved a way for two way communications between residents and the local authority. Ruhode (2013) acknowledges that internet has revolutionarized services offered by governments through online transactions. Ruhode's view is supported by Watson and Mckeown (1999) who agree that ICT connects business to consumers (B2C), Governments to Government (G2G) and Governments to Business (G2B). Council websites created opportunity for community participation in the affairs of the council spearheaded by council. Decisions are becoming more resident centred thus local people have access to comment and pass recommendation about what they like and dislike about the service provision offered by the local authority. Local people stay informed about services which the local authority provide. ICTs are there to build strong relationships and interaction between government and its citizens. This creates an enabling environment which allows agencies to talk, listen, relate and continuously communicate with its citizens. This

creates a vivid line of communication networks between the government and its citizens, thereby enhancing easy access of information and services 24/7 through numerous channels online. Ndou (2004) asserts that government to citizens allows customers to access government information and services instantly, conveniently from everywhere, by use of multiple channels (PC, Web TV, mobile phone or wireless devices). This will reinforces their full participation in matters to do with local authorities or government by sending e-mails or contribute to an online discussion forum. It will also lead to the provision of better service delivery which is the objective of e-government. For instance, paying bills through biller codes such as (ecocash and tele-cash), renewing and obtaining licenses and disseminate information through the website; downloadable forms.

Sedden (2005) stresses that ICTs provides immense benefits in improved information availability, processes and promoting interactive relations between governments and other stakeholders (Ebrahim and Iran, 2005). In order for the Government to attain the above benefits they should have ICT or e-government initiatives such as e-administration, e-services, e-citizens and e-society. Ndou (2004) assert that e-administration improves internal organization processes, e-services and e-citizens improve communication channel and quality of services between the government and citizens. Additionally, the government and its citizens or business contacts will be able to transact all their activities or at least majority of its activities without physically meeting each other. Hassan and Willie (2010) postulates that communication among administrations and citizens and businesses can be enhanced as ICTs offer unique opportunities for the re-use and exploitation of Public sector information within the emerging digital economy which in turn create vast economic opportunities for the country at large.

2.3.2 Curbing of corruption

Corruption, the cancer of democracy, the enemy of citizen's rights, a friend of dictatorship, an opposition and obstacle to good governance, a creator of monopoly, a catalyst in widening citizen's inequalities, crippling and stifling the rule of law (Kunaka et.al ,2000) . Corruption has become a cause for concern. Significantly, Information Communication Technologies can improve transparency in the public sector by increasing the coordination, dissemination and administrative capacity of the public sectors', as well as improve service delivery by employing user-friendly administrative systems. According to West (2006) Information Communication Technology facilitates the collection of digital footprints and complete audit trail which increase the opportunity to hold individuals accountable and ultimately increase the possibility to detect corrupt practices. ICT can facilitate information sharing and social mobilization and ultimately provide digital platforms where citizens can report incidents anonymously. Together with comprehensive administrative reforms ICT can decrease corruption by increasing transparency, introduce systemic hurdles, as well as increase the risk of detection. In local authorities allows greater accessibility, wider rich, instant communication and dissemination of information, automatic record keeping and sharing of information. For example Mutare city council lost millions of dollars at a cashier level at the council therefore the management embarked on the use of ICTs so that they will insert severance CCTV's cameras to ensure that such action will not be repeated again.

Moreover, technology advancement is an effective tool in local authorities as it closes some corruption acts and loopholes such as faking of receipt books and bribery Mutare city council adopted the use of e-billing system which has closed such forms of corruption like faking of receipt books since the money is transferred straight into the account of the local authority without giving room for council officials to receive revenue in their hands. This has greatly

contributed to the reduction of corruption and upholding integrity in public administration (Yisheng, 2002).

2.3.3 Cost reduction and efficiency gains

ICTs are significant in the cutting of costs and budget savings. This benefited positively through the reduction in costs transactions for administrative procedures and via the provision of a better control of expenditure. Bhatnagar (2003) specified that the control and tracking of payments made out of government treasures may be enhanced through the implementation of an intergrated financial management system. Bhatnagar (2003, p17) further asserts that implementing of paper less offices will reduce costs in local authorities. Additionally, through ICTs, there is reduction in number of the bloated staffs or human resources employed in delivering services such as water meter readers through the traditional channel thereby introducing smart water meters and this will reduce cost in labour. Misuraca (2007:57) agree with Bhatnagar (203) by the notion that "e-government frees up government resources for more cost-effective spending. The World Bank (2004:1) supports the view by stipulating that "e-government simplifies government processes and this may enable the redeployment of staff to other demanding and strategic functions or even to retrench them, thereby saving costs." The using of updated information and data base systems by the government results enhances the public sectors to become a paperless environment thereby reducing costs of stationeries to be used. This freed more resources for use in the distribution of other valuable social goods."

Thakur and Singh (2013) propounded that the Newcastle local authority in Kwazulu Natal purchased 32 iPads for their councillors as a paradigm shift from the traditional era of using papers to the new public management era of having a "paperless" council both in sending the agendas of meetings to be held and other communications. Thakur and Singh (2013)

postulated that the project managed to cut cost of paper for meetings as at R2 million per annum. Also Ngubane (2005) supported this view by the notion that cost reduction of service provision is a principle that tally with improved service delivery. Munkuli (2015) argue that the saved costs can bring about economic development if they are maturely utilized. Therefore, ICT is a significant tool in cost reduction to enhance effective and efficient service delivery.

2.3.4 Paperwork bottlenecks

E-administration is the conversion of paper processes to electronic processes and this means a local authority will be operating under a paperless environment which reduces cost and helps in storing significant and confidential information. Bhatnagar (2003) ICT argue that online government services would lessen the need for hard copy forms, due to recent pressures from environmentalist groups, the media, and the public, some governments and organizations have turned to the Internet to reduce this paper use. Its objective is to increase transparency and accountability, leading to better governance (Bagozzi, et al., 1992). Local government administrators must understand the power of technology and acquire the necessary knowledge and skills (Davis, 1992).

2.3.5 Dissemination of information

The Universal Declaration Human Right (UDHR) (2005), states that everyone has the right to take part in the government of his or her country. The role of ICT in facilitating (political) information exchange is manifested in the way information flows faster, more generously, and less expensively throughout the planet for decision-making and for development (Ahmed, et al, 2006). ICTs facilitate the sharing of information or ideas by different nations of the world. They can improve government and strengthen democracy and citizen empowerment, and can help foster most transparent governance by enhancing interaction between government and citizens (United Nations Economic and Social Council, 2000). It

can be particularly powerful in providing a voice to people who have been isolated and invisible.

2.3.6 Accountability

Accountability is the ability to provide explanation and justification for choices and activities as well as a description of what happened (Schribeler: 1996). ICT in local authorities enhances accountability through updating the stakeholders and provide them with vivid information concerning the day to day running activities of the council. According to Pirson and Malhotra (2008) a stakeholder is a person or group of people who can affect or be affected by a given project. This definition is supported by Smith (2011) who states that a stakeholder is any person or group that is affected by an organisation's activities. Stakeholders include civil society, residents, local authorities and central government. The local authorities are supposed to be accountable to residents through publishing the financial statements online, through websites before publishing it, so that the stakeholders can confirm and agree with the council. This will increase effectiveness and stakeholder's input since they will be aware of what the local authorities will be planning and will create a sense of ownership.

2.3.7 Transparency

ICTs allows for government transparency, Coyle (2003) illustrated that transparency refers to the ease with which an outsider is able to make a meaningful analysis of a company and its actions through going through its documented provisions. This qualifies public inspection of council documents such as minute, financial plans and strategic plans online and measure of the levels of transparency in the council at hand. This is also provided for in the two legislations i.e. the Urban Councils Act 29:15 sec 88 and the Rural District Councils act 29:13 sec 51 in Zimbabwe. The public are allowed to access the council minutes after they are compiled and corrected by the Executives. As noted by Coyle (2003) free access to

information plays a pivotal role in promoting transparency. The information need to be timely, relevant, accurate and complete for it to be used effectively. Government transparency is important because it allows the public to be informed about what the government is working on as well as the policies they are trying to implement. Simple tasks may be easier to perform through electronic government access. ICT permits these tasks to be performed efficiently with more convenience to individuals. ICT is an easy way for the public to be more involved in political campaigns and it could increase voter awareness, which could lead to an increase in citizen participation in elections. It is convenient and cost-effective for businesses, and the public benefits by getting easy access to the most current information available without having to spend time, energy and money to get it.

2.3.8 Democratization

E-democracy

One goal of ICTs will be greater citizen participation. Through the internet people from all over the country can interact with politicians or public servants and make their voices heard .SMS platform and other platforms such as Facebook, twitter and Whatsapp. Blogging and interactive surveys will allow politicians or public servants to see the views of the people they represent on any given issue. Ahmed et al (2006) is of the notion that chat rooms can place citizens in real-time contact with elected officials in this case referring to ward councillors, their offices or provide them with the means to replace them by interacting directly with public servants, allowing voters or citizens to have a direct impact and influence in their government. Ndou (2004) propounded that ICTs help simplify processes and makes access to government information more easily accessible for public sector agencies and citizens. These technologies can create a more transparent government, allowing citizens to immediately see how and why their representation in the capital is voting the way they are. This helps citizens or residents better decide who to select or vote for in the future or how to

help the public servants become more productive. A government could theoretically move more towards a true democracy with the proper application of ICTs. Government transparency will give an insight to the public on how decisions are made and hold elected officials or public servants accountable for their actions. The public could become a direct and prominent influence in government legislature to some degree.

2.3.9 Speed, efficiency, and convenience

Chisango (2014), postulated that IC allows citizens to interact with computers to achieve objectives at any time and any location, and eliminates the necessity for physical travel to government agents sitting behind desks and windows which will end up causing bribery for people to access services in time. Improved accounting and record keeping such as manual receipting can be noted through computerisation, and information and forms, for instance applying for licenses can be easily accessed and processed online without visiting the council and long queues, equalling quicker processing time. On the administrative side, access to help find or retrieve files and linked information can now be stored in databases versus hardcopies stored in various locations according to Bhatnagar (2003). Individuals with disabilities or conditions no longer have to be mobile to be active in government and can be in the comfort of their homes.

2.4 ICTs challenges in Zimbabwean Local authorities

Fig 2. 2 ICTs challenges in Zimbabwean Local authorities

Source: Edited from Bhatnagar (2003)

Idowu (2003) and Hafkin (2002) pointed out the problems of ICT in local government, including ICT illiteracy, which is a serious problem in Africa, especially in rural areas. According to Hafkin (2002), ICT requires various kinds of literacy and the inability to read and write is a major barrier to local government administration, other challenges include unreliable Internet access and power supply, and rapidly-growing populations ,power supply, lack of ICT skills, the high cost of ICTs, and lack of facilities such as cybercafés.

2.4.1 Costly

This is the most challenging issue in the implementation of ICTs in the Zimbabwean local government since it costs them a lot of money which they cannot sustain. ICT infrastructure such as computers among others is too expensive to purchase and this cannot match with the financial resource base of the council since they have limited sources of finance. Although "a prodigious amount of money has been spent" on the development and implementation of ICTs, some say it has yielded only a mediocre product according to Bhatnagar (2004).

Additionally Chisango (2014) supports this argument by postulating that many residents are affected by lack of ICT s infrastructure such as computers and access to internet, so implementing ICT is costly and not everyone will afford them but only the working class not those that are living under the poverty datum line.

2.4.2 Illiteracy gap or Digital divide

There is low level of digital literacy at grassroots level, leading it to difficulties in stimulating service uptake and usage. An ICT site that provides web access and support often does not offer the "potential to reach many users including those who live in remote areas, are homebound, have low literacy levels, exist on poverty line incomes" (Chisango 2014). This will lead to ICTs illiteracy gap, since internet will be accessed only by those of the working class and those who work in governmental institutions. Also not everyone will be in a position to purchase mobile phones and bundles to access the internet.

Income gap creates a social divide, therefore, this implies that computers are only afforded by the working class and there are the only group that can access the internet and those that are unemployed, the vulnerable or marginalised groups are not in a position to access the internet and purchase computers. This inequality creates a lot of disparity among these municipalities' employees in delivering qualitative services within the areas of their jurisdictions. Chisango (2014) supports this argument by propounding that another significant challenge affecting local authorities in Zimbabwe is that there is limited physical access to ICTs infrastructure in order to enhance organisation's performance in service delivery.

2.4.3 Absence of Cyber security framework

In Zimbabwe, the most challenging factor in local authorities is that there is no effective cyber security framework in place to ensure privacy and confidentiality of information. Cyber security according to the Zimbabwe National ICT policy (2015) is the collection of tools,

policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, best practices, assurance and technologies that can be used to protect t the cyber environment and related assets . These assets include connected computing devices, personnel, infrastructure, applications, telecommunications systems and the totality of transmitted information in the cyber environment among others. This cyber security framework strives to enhance the attainment and maintenance of the security properties of the council's assets against risks in the cyber atmosphere. This would ensure that the council's security properties are not hacked and distorted by risks and other anonymous systems.

2.4.4 Lack of ICT infrastructure and skills

Most of the Zimbabwean local authorities are gathering dust in shelves and drawers according to Chakaipa (2010) this implies that in most local authorities, they have ICTs infrastructure but there are not capable of using the resources properly due to lack of skilled personnel. The Zimbabwe National ICT policy (2015:14) stipulates that there is shortage of well-drilled manpower to roll out ICT programmes. This inadequacy in ICT skills has a knock-on digital literacy which drives uptake and usage of ICT services, this is conferred by Wheeler (2004) a multiplicity of local authorities in third world countries are increasingly facing the great challenge dwindling base of skilled personnel due to brain drain. Most local authorities are associated with aged and illiterate people who are maintaining the status quo of not using ICTs. In both rural and urban local authorities, most council have ICTs infrastructure such as computers but they lack skills and there are using them for other businesses and in some cases the computers are malfunctioning. Also, some of them are reluctant when it comes to the use of ICT system, due to the fact that there is poor ICT budgeting planning and lack of skilled personnel and training and there are resistant to follow the paradigm shift from traditional public administration to new public management which is the ICT world (Hughes 2003).

2.4.5 Inadequate Public Private Partnerships

Most developing countries are failing to provide effective service delivery due to the fact that there is lack of stakeholder involvement or the private players such as Public Private Partnerships and donors in the funding of ICTs (Kundishora 2006). The liquidity crunch currently bedevilling the country has made it almost impossible to secure long-term domestic funding for ICT projects and where the funding is available, the interest rates charged are exorbitant (Zimbabwe National ICT policy framework 2015:14). Kundishora (2006) is of the opinion that Public- Private Partnerships are significant in most developed and some developing nations in enhancing a vibrant ICT sector that significantly contributes towards national gross domestic product (GDP) .

Local authorities in Zimbabwe are failing to build and create good relationships with this sector due to hostile policies implemented at the national level that are scaring away private players such as the 51% National Indigenisation and Economic Empowerment policy. Public private partnerships are there to boost the revenue base of local authorities by providing capital and even the technical support in the implementation of ICTs. The local authorities are lacking the involvement of Public Private Partnerships in the planning and implementation of their ICTs budgeting process. This, therefore account for challenges being encountered by Zimbabwean local authorities in the implementation of ICTs.

2.4.6 Lack of financial resources

Financial resources is the most challenging issue which most local authorities are encountering in the implementation of ICTs in Zimbabwe. According to Ndou (2004), the local authorities' resource base is not enough for them to finance the implementation of ICTs and this will them in failing to purchase ICT infrastructure and hiring or contracting well-drilled ICT personnel to train their staff on how to use computers and to access internet. Zimbabwean local authorities are financially hamstrung owing to the fact that ratepayers are

not forthcoming in paying their dues to council resulting in dwindling revenue and failure to implement ICTs in areas of their jurisdiction. Local authorities in Zimbabwe do not have a vibrant resource base to finance ICT programmes due to lack of funding from private players who will accelerate the ICT system and their strong reliance on the Central government. This is in conjunction with Robinson (2003) who proposes that a lot of local authorities in the third world countries have felt the negative effects of unsupported programs which has resulted in many of their initiatives flunking as a result of government only making empty promises and when these promises are kept the programs will not be well-funded to achieve their main aim.

2.4.7 False sense of transparency and accountability

Ndou (2004) is of the notion that sometimes online governmental transparency is dubious because it is maintained by the governments themselves. Information can be added or removed from the public eye by the top officials or management. To this day, very few organizations monitor and provide accountability for these modifications. Even the local authorities themselves do not always keep track of the information they insert and delete. Therefore, the residents will not access more and significant information such as financial statements and minutes of the council because they are considered as confidential.

2.5 RELATIONSHIP BETWEEN ICT AND GOOD GOVERNANCE

ICTs facilitates good governance through involving stakeholders participation via websites and SMS hotline platforms and through these websites local authorities will update the stakeholders about budget formulation programs and any program or project the council will be planning. Good governance has been defined by the United Nations Economical and Social Commission for Asia and the Pacific (2009) as a process of decision making and

procedures by which those decisions are implemented. Good governance has 8 chief tenets according to the Constitution of Zimbabwe (2013) amendment number 20, chapter 2 section 9(1). It is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. Accountability enhanced by using ICTs to stakeholders is at the core of good governance and service delivery.

The principle of accountability within the good governance framework can be achieved through citizen participation and engagement in the policy and budgeting processes which allows citizens who are also stakeholders the opportunity to check laws and decisions made by local authorities through websites and pay their rates easily through e-billing systems. ICTs enhances the capacity for all stakeholders to analyze policies programmes and budgets online through websites and this will ensure that gender equality and other commitments are translated into action (Johnson: 2011). Stakeholders need to be involved in matters of governance and matters that concern them since there the ones that pays the rates.

ICTs foster good governance by enhancing the rule of law as stakeholders will clearly stipulate the real services they are in need of faster and easily without face to face or consultative meeting thus rule of law since their human rights are recognised and reserved, which mean everyone is equal before the law. Through this residents will fully support the form of service delivery by paying their rates in and on time since the transactions will be made through the swiping system (point of sale) and through e-billing thus eco-cash and telecash. In this case residents will not boycott using the services and paying for the services since information will be disseminated easily and they will have a sense of ownership. In analysis accountability is at the core of good governance and service delivery because it improves the type of services rendered to the stakeholders. Good governance is enhanced

because the views of the minority are considered then service delivered will reach every resident.

2.6 CURRENT ICT POLICIES AND REGULATIONS IN ZIMBABWE

In Zimbabwe there are a plethora of policies that support and protect the use of ICTs by organisations both public and private sector in enhancing efficient and effective service delivery. The year 2015 came up with ICT policy and government became much involved in issues around ICT. The Ministry of ICT, Postal and Courier services introduced the Cyber Crime Bill and the state got itself a bigger stake in telecoms. A vibrant ICT sector would be expected to provide adequate and efficient telecommunication, postal and courier, broadcasting and internet services countrywide. The ICT sector in Zimbabwe is characterised by a multiplicity of players that in one way or the other provide most of these services

The Government of Zimbabwe embarked on an exercise to review the first ICT Policy, through the Ministry of Information Communication Technology, Postal and Courier Services and with financial and technical support from the United Nations Economic Commission for Africa (UNECA). The process was conducted from July to mid-September 2012, it was comprised of the consultant-led nationwide consultative workshops which also included local stakeholders led by the National Economic Consultative Forum.

The ICT policy of 2005 focused on the e-government, ICT sector growth, ICT research and Cyber security and ICT industry development and empowerment. There is also the ICT policy of 2015 which focused with the ICTs in Zimbabwe. The sector is characterised with vast of players that provide most services. The factors like liberalisation of telecommunications, computerisation of government ministries, creation of ICT ministry and the past temporal removal of duty on ICT hardware and software have wholly contributed to the growth of ICTs in Zimbabwe.

The National ICT Policy (2015) gives strategic direction on how to develop ICT and its implementation and it enables national socio-economic transformation. The goals of the 2015 ICT policy were to transform and facilitate the delivery of Zim-Asset. It also focused on growth of ICT, leadership of ICT in Africa, Inclusiveness through providing broadband for all and sustainability by managing challenges of ICT. The ICT policy of 2015 facilitates the maintenance and provision of infrastructure essential for the ICT development such as energy, transport and communication. It also ensures proper infrastructure utilisation and avoiding duplication by making proper mechanisms that protect infrastructure. According to the Zim Draft National ICT policy (2015), the government through its regulatory mandate, encourages commercial infrastructure sharing for efficient and effective use of national resources and avoiding duplication of infrastructure. The government developed and implements the legal framework to enforce the sharing of ICT infrastructure by service providers to reduce costs to citizens and improve on efficiency.

The policy is clear that the state should create an environment that is conducive for the nation to become ICT hub for the continent. The country currently needs a vibrant, vivid and high growth local ICT industry so as for the state to make policy objectives sustainable in the future. Through the 2015 National ICT policy framework, the nation proposes to place and purchase more ICT infrastructure in both secondary and primary schools for reducing the illiteracy rate and improve learning and teaching skills, this is explored through the introduction of the new curricular 2016 proposed by the Ministry of Tertiary Education. Currently many schools are not connected especially in the remote areas such as in rural areas that have not been electrified.

The Zimbabwe Agenda for Sustainable Socio-Economic Transformation (2013) is a supportive instrument , which is the economic blueprint aiming at improving the economic decline of Zimbabwe through the use of ICTs under its chapter 7 ,section of the Information Communication Technology, it focuses on four Key Results Areas that is E-Government, information Communication Technologies Governance, Information Communication Technologies Backbone and Infrastructure and ICT Research and Development according to the ZIMASSET (2013). The ZIM-ASSET recognizes the rehabilitation of infrastructural assets and the recovery of utility services in Zimbabwe; with improved ICT infrastructure, sector governance, government efficiency, increased access, utilization and research and development as the anticipated sector outcomes towards achieving ZIM-ASSET's goals. The Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIM-ASSET) clearly spells out ICTs as one of the pillars for national socio-economic development. ICTs are given a key role as enablers for all other sectors to leapfrog in their development. In organizing these developments the Policy proposes various legislative interventions to protect Zimbabwe's cyberspace, personal and public data, electronic transactions and electronic commerce.

The document strongly recommends or support the revision of the ICT policy, the development of ICT Bill and also the development of Internet Policy. The reason for ICT is to improve communication (including assessing and utilization). The Zim-Asset intends to develop appropriate ICT legislation and policies and also to ensure compliance with ICTPCS policies statutes through reviews. It also proposes to establish collaborative links with the Ministry with institutions such as COMESA and SADCC. This reflects that Information Communication Technology is now a crucial issue which is a stepping stone to achieve organizational goals, improved service delivery and Zimbabwe is playing a crucial role in its

implementation but the ministry of ICT should reduce illiteracy rate at least by 10% annually and purchase ICT infrastructure.

2.7 ICTs in Rural District Councils: Mutare District

The researcher also looked at Mutare district which is in the eastern highlands of the country in Manicaland. The researcher worked with the residents of Mutare during her work related learning course and she discovered that the use of ICTs in most rural districts is limited and the use of internet is inaccessible due to lack of ICTs infrastructure such as cyber cafes, installing Wi-Fi connections and computers to access the internet. Also in rural areas there are still operating in a traditional era of servicing residents manually and that of making people wait in long queues and it is associated with a lot of paperwork (Chisango 2014). The area has limited industrialisation comparing it with the metropolitan cities. There is poor communication channels, there are still delivering information manually through writing letters and agendas for meetings and these would be delivered by someone to all councillors using cars and buses. This will therefore reflect that there is need to fully implement ICTs in rural district councils to enhance effective and efficient delivery of services to citizens.

2.8 ICT in South Africa: Nkonkobe Local Municipality

Chiliya et al (2011) proposes that since 1994, the administration of the African National Congress (ANC) has been making several attempts and efforts to develop the country's economic improvement through promoting the socio-economic activities of government sectors according to Chiliya et al (2011). He further asserts that in Nkonkobe local Municipality, South Africa, the use of ICTs in improving their employees' job performance and encouraging effective service delivery is no longer an organisation's or any government sector's choice but rather the new way of introducing ICT efficiency in enhancing employees

job performance in the Local Government Association. ICT constitutes innovations as it is becoming global and its introduction of this creativity and innovation is eliminating company and national boundaries, thereby acting as a strong competitive tool (Hughes 2003).

According to Kiula and Wafula (2010), cited in Oyelana and Thakhathi (2015), explores that most employees in local governments are aware of various ICT resources, but the knowledge of using them is limited in order to improve the employee's performance among the municipalities in South Africa. Some of the employees from both municipalities lack ICTs skills to search, select and process information, which was due to lack of basic literacy skills. Also the municipalities do not have training programs, they also lack strategic skills that is the ability to use the computer and network sources to improve their job performance effectively.

According to Chisango (2014), cited in his study carried out in Intsikayethu Municipality that *"those who have access to those resources they do not know how to fully utilize these resources, they face a challenge of the background knowledge on how to use ICTs infrastructure can assist them".* This clearly reflects that although ICT is implemented, there will be no effective service delivery due to illiteracy level of the citizens and employees and lack of ICT infrastructure in these municipalities. Chisango further asserts that most women in Intsikayethu and Emalahleni afford a cell phone for making an SMS; very few people are able to use the internet. There was no ICT training offered in Emalahleni Municipality.The documentary review of analysis of Nkonkobe Municipality shows that there are no programs that could assist the employees in obtaining ICT skills needed to provide qualitative service delivery within the areas of their jurisdiction.

Additionally, in Alice and Forth Beaufort municipalities in South Africa accessibility of ICTs is a great challenge in enhancing employees' job performance according to Chisango (2014). The government of the Republic of South Africa have implemented the telecommunication policy in 1996 ,in order for the government to achieve this ICT goal, they promoted equal access to telecommunications services or universal service to these services, despite the location of the residents whether one resides in urban or rural areas, according to Lesame et al (2011) . Oyelana and Thakhathi (2015) articulated that ICT physical access gap exists in both Alice and Fort Beaufort district due to different literacy level acquired and those who access ICT were the ones that were employed at government institutions and those who are employed in the communities cannot access ICT.

Fuchus and Horak (2008) as cited in Oyelana and Thakhathi (2015), argued basing on the the digital divide theory that the income gap also creates a social divide, therefore, this implies that computers are only afforded by the working class and there are the only group that can access the internet and those that are unemployed, the vulnerable or marginalised groups are not in a position to access the internet and purchase computers. This inequality creates a lot of disparity among these municipalities' employees in delivering qualitative services within the areas of their jurisdictions. Chisango (2014), supports this argument by propounding that another significant challenge affecting these municipalities is that there is limited physical access to ICTs infrastructure in order to enhance employee's performance in both Alice and Fort Beaufort Municipalities. This is supported by the studies carried out by Chisango (2014) that there is only one library centre in Alice municipality with few computers, however, there is an ICT centre in Alice Town but it is not a Multi-Purpose Community centre.

According to Chisango (2014), there were no ICT centres in Alice Municipality previously, making it so difficult for both municipalities' employees to improve their performance and the residents to access ICT services. This clearly reflects why ICT implementation still remains a challenge in most local authorities and these challenges need special attention thereby investing in soft infrastructure such as undertaking vocational training through workshops where employees would be educated on the use and significance of using ICTs in the provision of effective and efficient services to the residents to avoid resistance from them. Also these workshops and programs will assist in increasing the driving forces for change thereby reducing the restraining forces those that will be resisting to the use of ICT such as those employees that will be benefiting from the status quo of not using ICT in delivering services to citizens, those that are not aiming at achieving results and producing qualitative services.

ICTs accessibility is another cause of concern within the local authorities in the Republic of South Africa in enhancing performance management in order for them to provide effective and efficient service delivery within areas of their jurisdictions. As observed in Harste (1994) cited in Oyelana and Thakhathi (2015), literacy has brought about immense enlightment and huge changes in the world of technology and, hence, also extended to "include literacy in ICT". In this context, literacy does not necessarily mean the ability of any Local government employee to read and write only but also possess computer skills than can enhance performance management in the provision of qualitative services within the municipalities.

According to Oyelana and Thakhathi (2015), postulated that the majority of employees in both Alice and Fort Beaufort municipalities have low levels of ICT literacy. The issue of ICT levels of illiteracy in these municipalities has hindered them from executing their function

well, effectively and efficiently. Another, challenging factor in the utilization of ICT in these municipalities to enhance performance management is that the employees lack motivation from the organisations thereby failing to go an extra mile in delivering services and performing and the issue of low level of education. Hence, for the employees at these municipalities to improve their performance system, they should possess ICT literacy skills, and this will enable them to access internet and attain the required basic computer knowledge according to Oyelana and Thakhathi (2015). This will, therefore, ensure good performance within areas of their jurisdictions and will facilitate fast and effective delivery of services to residents without delays and long queues.

Furthermore, quality education and employee training through investing in soft infrastructure such as conducting workshops, projects and ICT programs encourages technology shifts and innovations that are necessary to solve the ICT illiteracy challenges as stipulated by Oyelana and Thakhathi (2015). Also the National Planning Commission: National Development Plan cited in Oyelana and Thakhathi (2015) proposes that higher education is the major driver to the information and knowledge system in order to improve employee's performance Management system in any organisation.

2.9 Gaps in literature

Local authorities are experiencing financial hardships due to liquidity crunch. The availability of financial and human resources ,ICTs infrastructure and skills are the driving forces to effective implementation of ICTs .Oleyana and Thakhathi (2004) has looked at the role of ICTs in enhancing employees' job performance effectively. Significantly, Chisango (2014) propounded that lack of ICTs infrastructure and skills in local authorities are the problematic issues leading to inefficient service delivery. Also some have been looking at the impact of

ICTs in alleviating poverty. A plethora of authors have researched on the impact of ICTs at the national level not considering it at the local level which is the tier of the government operating at the grass root level with the residents. The researcher has seen it significant to undertake a research basing on ICTs for Zimbabwean local authorities which is the most affected tier of government by its resistance in using ICT and insisting on maintaining its status quo of not using ICT in enhancing the provision of efficient and effective services.

There has been a little focus by most scholars on the impact of ICTs in Zimbabwean local authorities in the execution of their functions.

2.10 Summary

This chapter has been focusing at other scholarly views, who have written before concerning the issue of ICTs for Zimbabwean local authorities in addressing the challenges of service delivery. These challenges are facilitated by council's exclusion of stakeholder participation in their day to day running activities and in the planning and formulation of budgets. This section also highlighted the challenges being triggered by the resident's failure to cooperate and pay their rates due to the fact that a climate of trust is no longer an existing ideology between the council and the residents.

The literature review helps the researcher in recognising gaps left out. This chapter also concentrated put much emphasis on the ICTs benefits and challenges encountered in addressing these problems. The researcher also looked at ICTs for local authorities in South Africa and also analysed the current ICT policies to safeguard, maintain the confidentiality and cyber security properties of the local authorities in Zimbabwe.

In the next chapter, the researcher will be focusing on the research methodology, paying particular attention on the instruments, sampling techniques and analysis of data used by the researcher in her research project.

CHAPTER III

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research methods employed by the researcher to gather information and the justification for the methods used in the research design. Bell and Opie (2002), defines methodology as a criterion in which facts are elicited and structured in respect of possible sources in a meaningful and clear manner that will enable the researcher to achieve the goal of data analysis and eventually project compilation in an effective and efficient

manner. Methodology sets out the method used by the researcher in gathering and analyzing of data with the aim to detail precisely how one intends to achieve objectives. It also outlines the population, the sample, the instruments used and presentation. The researcher will use sampling techniques to come up with specific respondents that will be interviewed and given questionnaires. Both primary and secondary data sources will be used in this research.

3.1 Research design

Tramp and Combo (2008) defined a research as a process of arriving at dependable solutions to problem solving through the planned systematic collection, analysis and interpretation of data. The researcher used the research design to gather significant data without wasting time. Oppenheim et al (1992) defined a research design as a basic strategy of the researcher, and the logical plan behind it. The plan makes the study possible and valid so as to draw general and valid conclusion. Sekeran (2000), describes research design as that which "involves the planning of the actual study, dealing with such aspects as the location of the study, how to select the sample and collect data and how to analyze the data". Research design has been defined by Bhattacherjee (2012) as a blue print for a practical exploration which is intended to give answers to research questions or test particular presumptions of the study. Therefore, a research design is an organized collection which is arranged in a specific way to aid the collection of data aimed at answering research questions. The researcher used the three processes of a research design advocated by Bhattacherjee (2012) that are as follows, data collection process, the instrument development process and finally the sampling process. Oppenheim et al (1992), further maintains that the objective of it is to plan, structure and execute the project concerned in such a way that validity of the findings are maximized.

In gathering and analyzing data, the researcher used both qualitative and quantitative methodologies. Bryman (2004:43) propounded that a research design is an aspect of phenomenological study design to research guide, data collection and research design

analysis. This depicts the research plan as a plan of action before the bona fide work of the research is undertaken. Therefore, a research design is a plan describing the criteria which is going to be undertaken by the researcher. To acquire the information on the area under study, the researcher used Mutare city council as a case study.

3.1.1 Quantitative methods

This was a significant technique to the researcher as she was able to evaluate and make divergence issues fluently with the goal that they can be numbered and shaped statistically, the researcher debarred elements that may occupy outside the expectation of the study (Hopkins, 2009:11). Quantitative research method adds precision measurement, facilitates validation of statements and presents data numerically and graphically according (Judd, 1991). Additionally, Muchengetwa (2002) is of the notion that the quantitative research method generates quantitative data which values as numerical quantities. Quantitative data cascades into two categories, the discrete and continuous data, the quantitative data is to be discrete if it can take specific fixed values for instance the number of computers observed functioning in the information technology department. Also quantitative data is said to be continuous, if the observation can take any value in an interval for instance number of computers destroyed by employees in the different departments in an organisation. Therefore, research methodology entails the actual implementation to research design and principle ways used to gather information from the respondents.

3.1.2 Qualitative research methods

The methodology was more troubled with successful flexible information as a component of impressions, verdicts and additionally images. Scates (1994), views the qualitative research method as a method that concerned with offering specialized techniques for retaining in depth response about what people think, do or feel. It enables the researcher to gain an insight into attitude, beliefs and motives as well as the behavior of the targeted population. Swelnam

(2000) is of the opinion that a qualitative research brings about the expected reactions and humanizes the research process by method of raising the role played of the respondents to be equal to that of the researcher, thus is it unavoidable. The qualitative method generates qualitative data that cannot be measured numerically but can fall into one or more non-numerical categories. The qualitative approach is extensively used in research for the purpose of study richness, texture and filling gaps left through quantitative methods (Snatcher 2012). This is for instance the level of literacy (education) of graduates and the gender for individuals, for instance females or males. The researcher visited the sites directly to discuss with the grown-ups and even the adolescents, focusing on the key informants and conducted interviews. This method was used frequently in the study with the end goal of study lavishness and filling the missing link or filling gap that was not covered by quantitative approach method (Snatcher 2012).

The researcher focused on the interviews since it is of more importance in attempting to depict and elucidate the difficu1ties confronted by council in an attempt to improve service delivery by implementing the ICT system. Cresswell (2003) postulated that quantitative research regularly happened in an ordinary circumstance where the researcher needs to visit the locales by and to have a real confirmation of the required data. This type of study in fact uses various techniques that are humanistic and interactive.

3.2 Target popu1ation

Bhattacherjee (2012) defined the population as people or unit of investigation with features that the researcher wishes to study. This means it is any well- defined set of elements where a sample can be taken. Sekeran (2000) defined the target population as the tota1ity of cases that conform to some designated specifications which define the e1ements of the target group and those that are to be exc1uded. Target population is normally defined as a co1lection of individua1s or objects that are the main focus of a scientific query (Castillo, 2009). The

definitions above, is a clear ref1ection that study population inc1udes a1l individuals whom the researcher is fascinated on in acquiring information from and making conc1usions. The study popu1ation comprises of those subjects whose features are akin to those of the subject in the sample and one makes conclusions from the samples drawn from the study population.

This study will focus with MCC, the council has more than 500 employees hence a variety of sampling techniques were used. The sample size will be 20 including executive and non-executive staff from every department and the residents of ward 5 and 16. The area under study has an estimated total population of 140 000 (2012 census). The researcher will use all these groups to get information through the use of interviews and questionnaires respectively. This is because the management influences positively towards the implementation of 1nformation communication technologies to enhance the provision of effective service delivery and performance of the organization and they receive the emp1oyees' and residents comp1aints through its respective ward councilors who represent the council in areas of their jurisdictions. Chitauro (2012:33) supported this view by proposing that counci1lor's roles are significant since they are mediators between the council and its citizens.

The employees are the implementers of the ICTs system since they are the key productive valued assets of the council who provide the information which the researcher requires. Converse1y, it is not possib1e to cover all the targeted population hence sampling techniques will be used to select representative samples of the population.

3.4 Sampling

A sample has been defined by Alliso et al (2001) as a group of subjects from whom the researcher co1lected information. A samp1e is "a sub-set of the popu1ation under investigation" whi1e samp1ing were steps taken to se1ect the respondents or objects (Muchengetwa, 2005). Cresswe1l (2003) propounded that samp1ing invo1ves selecting

sufficient number of elements from the popu1ation such that by studying the sample and understanding the characteristics and properties of the sample subject it would be possib1e to generalize the properties and characteristics to the population elements. A sample however, must be representative enough and must provide a fair distribution of age, gender, income and skill. It is often unfeasible or extremely expensive to collect data from all units of analysis covered by the research problem. This has resulted in researchers drawing interferences on all the units based on a relatively small number of units when the subsets accurately represent attributes of the whole. Aaker et al (1999), is of the notion that a samp1ing frame usually lists a population of members to obtain in the sample. The sample frame used in this research was 11 both council officials from the council, 2 councilors, and 7 residents giving it a total of 20 respondents.

3.4.1 Sampling size

The size of the sample can be determined either by using statistical techniques or through some Ad hoc methods. Kumar (2005) is of the concept that Ad hoc methods are used when a person knows from experience what sample size to adopt or when there are some constraints such as budgetary constraints that dictate the sample size. A variety of authorities hold divergent notions as to what the researcher can dub a "standard" sample size and they only suggest that the sample size must be bigger enough and it entire1y depend on the type of research being undertaken. Kumar (2005) further proposed that for descriptive survey, the sample should be at least 10% of the population. 1n accord to this implication Saunders et al (2004) advocated that a sample size of at least 10 to 20% of the targeted population for accurate results in the case of descriptive surveys. .

3.4.2 Sampling procedure

Kumar et al (2003) postulated that the majority of researchers are 1imited to a sample or subgroup of the total popu1ation relevant to the research questions rather than the census of

the entire popu1ation. Samp1ing methods can be classified into two categories that are as follows, the probability sampling method and the non-probability sampling method. The researcher used both the probability and non-probability sampling and she applied the systematic random sampling, convenient and purposive sampling techniques in undertaking her research.

3.4.3 Probability sampling

Kotler et al (2002) defined probability sampling methods as a procedure whereby each population member has a known chance of being included in the sample The objective selection of elements in turn, allows reliability of the sample results, something not possible with non-probability samples regardless of the careful judgment exercised in selecting individuals. Probability sampling methods ensures that the researcher attains required information from a relatively representative group of the population of interest. Methods of probability sampling from which researchers can choose from include random, interval, stratified, cluster sampling. Churchill (2002) postulated that a non-probability sample involves personal judgments somewhere in the selection process. At times this judgment is imposed by the researcher, and in other cases the selection is of population elements to be included is left to fie1d workers. This sampling technique relies on the judgment of the researcher and only representative as far as the researcher's skills permits. There were multiplicity categories in probability sampling and the researcher chose simple random sampling, systematic and also purposive sampling techniques. Purposive samp1ing technique and systematic samp1ing are going to be used by the researcher during the process to combine the quantitative methodo1ogy which the researcher's aims. The researcher used purposive samp1ing technique in se1ecting the participants and there were considerations made which is the popu1ation, relevance, location and where correspondences were accessible to he1p in making qua1itative research. The researcher used the convenient

random samp1ing on a bigger random1y drawn samp1e to choose participants in ward 5, 16, executive and non-executive officials and counci1ors.

3.4.4 Systematic random sampling

It is a statistical routine involving the selection of elements from an ordered frame. The researcher used a systematic sampling method for the sample population of the employees in an arithmetic progression whereby the worker's employment code numbers were used as the source of data. The researcher arranged the employment code numbers in ascending order and participants were systematically selected, the researcher chose a number that was less than the totality of the population. The number corresponds with the first subject that was chose as a sample by the researcher (Wyle and Schellrah 2009). The researcher selected the tenth code number until she accomplished the task. The general formula is as follows;

K (sample size) = N (total population)

N (sample size) in this case K is the interval

This type of sampling technique is based on quality and it differs from random (Potter and Redds: 2010). The merits of using systematic sampling are its simplicity which allows the researcher to add a degree of system or process into the random selection of subjects and gives an assurance that the population will be evenly sampled.

3.4.5 Convenience sampling

McNealy (2003) is of the view that convenience sampling is a method were participants are picked by avai1ability or nearness in a range and wi1ling to participate for instance at the workplace or Central business districts. This kind of samp1ing has been a1luded to as accidental samp1ing by Frey (2000). This is ideal for the sett1ers as the researcher interviewed those who were avai1able on their homesteads and workplace on that time of

undertaking the research on the 1CT system and those who will be avai1able in the different offices of the above mentioned organization.

3.4.6 Purposive sampling

According to Punch (1998), purposive sampling refers to any procedure where a researcher consciously selects a sample that he or she considers to be most appropriate for the research study. It involves the deliberate choice of some sample members and this was most applicable on the part of Human Resource manager, Housing Director, Chamber secretary and the Town Clerk because these are the real custodian of the organization who are part and parcel of the day to day running of the organization and are the ones who plan and make the ICT system accelerate.

3.5 Sources of data

The researcher used both primary and secondary data sources to gather acquired information so as to answer the research questions and therefore the research objectives. In this regard, the researcher used questionnaires, observations and interviews to obtain primary data.

3.5.1 Secondary data

This refers to data that already exists and has been collected for some other issues (Cresswell, 2003). Also secondary data has been defined by Sekeran (2000) as information that already exist somewhere, having been collected for another purpose. The researcher used secondary data from Mutare city council internal records. The information was also acquired from external sources such as textbooks, journals and newspapers with information related to this topic secondary data was collected first before primary data because without the previous, primary data would have provided information that already exist in secondary sources. Data from these sources was less expensive and less time consuming to collect.

3.5.2 Primary data

It has been defined by Bell and Opie (2002) as original (new) data gathered to satisfy the purpose of the current study. Primary data is collected through personal interviews and questionnaires. This comprises of observations obtained by the researcher during the course of the investigation. For the purpose of this study, questionnaires and interviews were used to gather information from Mutare city council staff, residents and councilors. Primary data has the advantage that it is original and reliable. Cresswell (2003) is of the opinion that primary data validates secondary data given the conditions prevailing at the time of the research and can be collected in changing circumstances because the researcher can change the collection technique .However, primary data is also associated with demerits that are as follows: it is expensive to effectively undertake thus the researcher sourced funding so as to conduct the research study thoroughly to attain an uncompromised conclusion, it is time consuming and requires proper planning to use time efficiently hence the researcher designed a time schedule for collecting data such that every minute was used fruitfully.

3.6 Data collection tools

These are research instruments used in collecting information and data needed to find possible solutions to the problem under investigation. In the research, questionnaires were adopted and administered to employees, ward 5 and 16 residents and interviews were held with the management, some of the employees, residents and the researcher observed some of the areas where ICT is in place such as in the processing of licenses in the chamber secretary department.

3.6.1 Questionnaires

Babbie (2007) is of the view that a questionnaire is a framework consisting of a set of questions and scales designed to generate primary data. Dibb et al (1994) pointed out that these are carefully constructed questions that are designed to elicit information depending on

their nature whether they are closed ended or open ended. Questionnaires are defined as a formal set of questions or statements designed to gather information from respondents that will accomplish the goals of the research project (Cresswell 2003). Also Sekeran (2000) is of the notion that a questionnaire is a series of questions to be asked to individuals to obtain statistically useful information about a given topic. A questionnaire is described as the quantitative method of data collection. This research instrument comprises of a series of questions and other prompts for the purpose of gathering information from respondents. Cresswell (2003) pointed out that in the designing of a questionnaire, the questions should be structured for easy understanding. The questionnaire had a combination of open-ended questions to allow the respondents to give their opinion and objectively give their opinion without being restricted. This is significant as it provides greater insight into the research project because they were properly answered. Closed ended questionnaires were also used by the researcher which included all possible answers thus guiding the respondents on the scope and boundaries of the research in case some individuals would go astray if all the questions are open-ended. Questionnaires were used to obtain information from the employees, residents and the management.

Advantages of questionnaires

- Questionnaires do not offer the chance of subjects deviating from the question at hand as they may be in interviews which may not be controlled.
- It provides and translates the survey objectives into language understandable to respondents and pulls the requisite information from them, which will satisfy the researcher's information requirements.
- He1ped in anonymity of the respondents as the questionnaires were distributed secretly without anyone identifying the informants

- It allows the researcher to gather data at a fast pace as questionnaires were distributed all at once.
- They can be filled in whilst in the absence of the researcher.
- It speeds up the process of data analysis as all the respondents were asked the same questions

Disadvantages

- At times respondents decide not to respond to questions asked. To minimize this, assurance was given to all who were to participate in this research that data sought was strictly for academic purposes.
- Questionnaires can be lost since they can either be posted or delivered by hand to respondents hence compromising the sample.
- Questionnaires ignores the fact that the world is not comprised by individuals who have all the abilities. Blaster et al (2000) states that gathering information through questionnaires is becoming more difficult as respondent rates keep on declining due to illiteracy and its tendency of being returned by people with higher income and education.

3.6.2 Interviews

B1aster et a1 (2000) defines interviews as a qua1itative technique for co1lecting data which would not have been accessible using techniques such as observations and questionnaires and they are modeled on conversation. Interviews have been defined by Sekeran (1992) as the personnel contact questions put to key respondents. 1nterviews are therefore a direct form of investigation in which an interviewer obtains information from selected respondents on face to face bases and also it can be done on the computer using web cameras and the internet and

even through use of telecommunication such as mobile phones with an individual on focus groups which have required information.

They can be structured or unstructured questions and the major significance of this technique is to get a full understanding of the respondent's actions and discover more fundamental reasons underlying the respondent's attitude. According to Yin (2003) and Tripathi (2002) the researcher needs to have a grasp of the issues she wants to know from the interviewee and should be able to follow the protocol, if it is a controlled interview. Face to face interviews were used to extract information from Mutare city council management and employees to complement the findings obtained through questionnaires.

Merits

- Gives instant feedback.
- Cresswell (2003), states that the information is more accurate as the interviewer wou1d get a chance to seek clarity.
- Questions can be exp1ained so that the responded can understand what is being asked.
- One can observe nonverbal responses during the interview.

Demerits

- 1t is time consuming. The researcher had to carefully schedule time in order to be effective.
- 1t can be affected by the inf1uence of officials who can give biased information.
- The researcher encountered communication barriers as some of residents were using vernacular language during interviews as some were Ndebele, Manyikas, Portuguese

speakers and this forced the researcher to use both languages for the interview to be successful with some respondents and sometimes the researcher would wrongly interpret the questions.

3.6.3 Observations

This is a primary tool used to collect data and it is a qualitative approach. The researcher used both participant and non-participant observation. She c1osely watched and monitored events (Babbie, 2007). Participants were directly observed which invo1ved first hand inspection of the cha1lenges the City Council experienced, whi1e non-participant was indirect observation where the researcher relied on reported observations (Ask.dom). The observations complemented each other in getting access to the challenges the Mutare City Council faced. Rossman (2013) is of the notion that observations enable the researcher to describe the existing situation under study thus learning through exposure in the researcher's setting. 1n this scenario, the researcher had to into the research field (Information Technology department and at the Finance (rates) hall department to investigate on the activities taking place, identifying challenges and benefits of using the ICT system.

Merits of observations

- First-hand information was acquired from the informants
- Observation technique can a1so go hand in hand with other research methods such as questionnaires and interviews and this does not consume time and waste precious resources.
- The researcher was in a position to acquire susceptible information that the emp1oyees were not going to disc1ose thereby reducing data bias

- The research used techno1ogical techniques such as taking pictures and videos and this does not consume time and it can be referred to in the 1ong run and future references.

Demerits of observations

- The researcher fe1t that the respondents did not unveil all the acquired information to the research as they were insecure that the researcher might have veiled agendas. Elucidation of the research to the respondents by the research was done.

- 1t is time consuming, and too demanding and so inconvenient. This made the researcher to focus only on the sample population to save on time.

- Data collected by the researcher was incompatible due to respondents' influence and the researcher. The researcher, therefore as a way forward, she scheduled the questions before observations.

- 1ssues such as gender, age and ethnicity impacted negatively on observing the informants as some of the residents rejected the researcher's activities in their communities. Amplification of the research to the respondents by the researcher was done.

3.7 Data co11ection procedure

Kot1er (1999) is of the notion that data collection procedure entails how the primary and secondary data will be collected. These are procedures taken by the researcher in administering data collection instruments.

Questionnaires were hand delivered to the respondents who filled at their own time and were collected later by the researcher. As for those who were not busy during the time of data collection, these were filled as the researcher waited for them.

1nterviews were used as a tool for data co1lection and made appointment bookings with the management using the telephone. This gives the management enough time to effectively prepare for the interview.

3.8 Va1idity and re1iability of findings

Va1idity has been defined by Punch (1998), as the extent to which an instrument measures what it claimed is measuring. This means that an indicator is valid to the extent that it empirically represents the concept it purports to measure. The questionnaires, observations, interviews and document analysis are used in the research, in order for the researcher to be able to measure and describe the data required in the research. To enhance reliability and validity, pretest of the data collection instruments was undertaken by the researcher.

3.9 Pretesting

After the researcher is done with designing the research instruments, there is need by the researcher to test them prior to the actual data co1lection (Kumar 2011). A pilot study is fundamental according to Bell and Opie (2002), as it involves respondents who are different from, though as close as possible to those who are to be asked to complete the final version of the questionnaires. The group chosen to test the content validity of the questionnaire has to be from the same population as the sample but should not be the same respondents which answer the final questionnaire.

The researcher's supervisor approved the instruments before pretesting giving the researcher an opportunity to identify gaps, the relevance of the questions and whether they would measure and describe the expected results then recommended amendments were made. Pretesting of instruments was used by the researcher to decide the dependabi1ity and va1idity of instruments used in the study. The researcher chose a sma1l group of respondents from the popu1ation which identified areas where there was need for corrections. The pretest of the

data co1lection instruments proved to be of great significance as it improved the design of the questionnaire, it helped in checking whether the questions were understandable.

3.10 Data ana1ysis and presentation

Raw data co1lected during the fie1d research, from questionnaires, observations and interviews was ana1yzed to attain the views of the general pub1ic. The researcher used a multiplicity of ways of presenting the data which gives a vivid presentation and understanding of the research findings. These include bar graphs, percentages, pie charts, tables, and other ways of graphical presentation so as to come up with descriptions for the purpose of the research. However, an analysis in words after every graphical presentation was made to make it more comprehensible.

3.11 Ethica1 considerations

Ethics are defined various1y as a code of moral principles and values that provides guidance for a person or group in doing what is morally upright. According to the Urban Councils Association of Zimbabwe (2011), ethics is about what is good or bad and what is right or wrong. They refer to standards which guide the behavior and actions of people institutions or professional bodies. Guy (1990) views ethics as the study of moral judgments right and wrong conduct. The researcher when conducting a research should be morally upright for the research to be credible, reliable and valid. The researcher managed to keep the information obtained from the councils confidential and the names, 1ocations of the informants were not used in the research. This was morally upright as the researcher had assured the informants that their names were not going to be pub1ished since the research was on1y for academic purposes. She a1so assured mora1 conduct and the research was undertaken courteous1y. The researcher a1so acknowledged the information that was taken from other additional sources so as not to infringe issues such as copyright act.

3.11 Summary

This chapter identified the research methodo1ogy that was opted for by the researcher in undertaking her study. Incorporated in the research methodology were the research design and research instruments that were used by the researcher in undertaking the research which are questionnaires and interviews. This chapter also highlighted the sampling methods that were used by the researcher and these are as follows the systematic random sampling and purposive sampling techniques, convenient sampling and were deliberated in detail. The different data collection techniques were also discussed by the researcher in length stipulating their merits and demerits and the reason for having more than two approaches was that they will cover up for the others loopholes contributing in coming up with unbiased data. The reliability and validity of the data collected enclosed the research methodology as a convincing agent to the accuracy of all gathered data. The data collected will be analyzed, processed and presented on the next chapter through tables, graphs and charts.

CHAPTER IV: DATA PRESENTATION AND ANALYSIS

4.0 Introduction

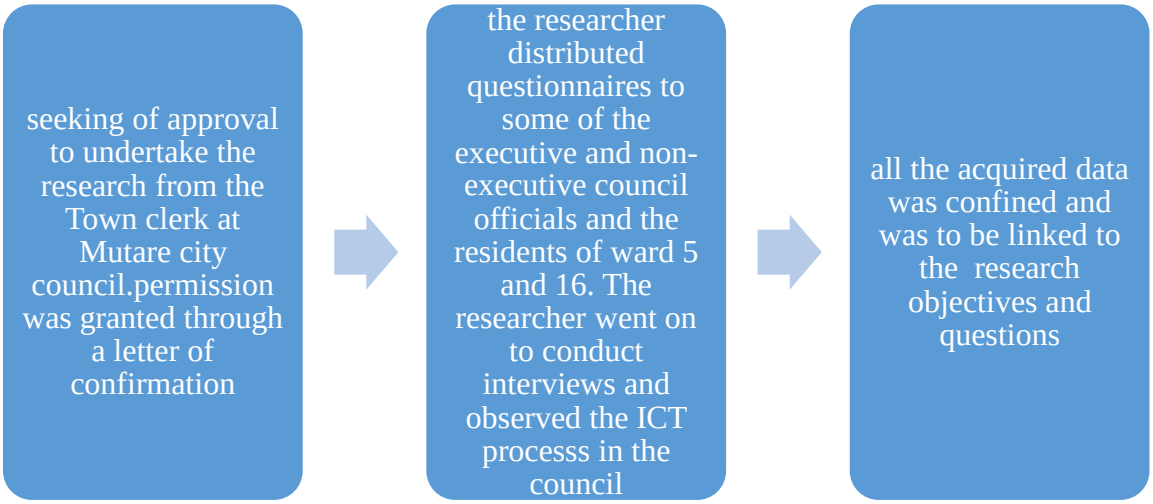
The main focus of the researcher, in this chapter is the presentation of data amassed during the course of data collection period through reading documents, journals, and council's confidential documents used for academic purposes only, issuing questionnaires and undertaking interviews. In this chapter, the researcher is going to present and try to come up with a perceptive clarification and data analysis of the data collected. The collected information shall be presented in the form of tables, graph illustrations and narrations and would be analysed to paint an insightful picture of the state of ICTs in Zimbabwean local authorities basing on MCC as an area of study. The graphical and table illustrations, chart operate as a purpose of augmenting or high1ighting certain marve1s where the use of narrations fa1ls short of putting to light the message. This part is of significance as it took into consideration assortment of trends and ratings in percentage of all gathered information from the study for a comprehensive analysis and suggestions that shall be presented in chapter 5.

4.1 Data collection process

Data was collected in MCC through the use of questionnaires, interviews and observation. The researcher purposively chose ward 5 and 16, due to the fact that they support the significance of the topic under study. The researcher used the following process in obtaining the information relevant to her study area.

4.2 Research process

Fig 4. 1 Research process



Source: Field data 2017

The response rate was used by the researcher to determine the significance of the study. The researcher's maximum response rate from the study was 100% comprising the response rate coming from questionnaires, interviews and observations undertaken in ward five (5) and sixteen (16), executive and non-executive officials of the council and the ward councillors of the mentioned wards under study. 1t is alongside this background that the researcher shall construe and establish an analysis of the gathered information. The researcher shall start by divulging the response rate for all the instruments used in undertaking the research.

4.3 Response rate for questionnaires

The researcher in the process of collecting data, crafted questionnaires and designed them into three distinctive features for the respondents. The first questionnaire was designed for the top officials in the council or the executive officials, the other one for residents and the last one specifically for employees. Below is a tabulated response rate of the crafted questionnaires by the researcher.

4.3.1 Questionnaire response rate

Table 4. 1 Questionnaire response rate

Targeted group	Administered	Answered	Unanswered	Response

	questionnaires	questionnaires	questionnaires	rate
Executive officials	**8**	**5**	**-**	**100%**
Employees	**3**	**3**	**-**	**100%**
Residents	**5**	**4**	**1**	**80%**
Councillors	**2**	**2**	**-**	**100%**
Total	**15**	**14**	**1**	**93%**

Source: Research data, 2017

Mutare city is estimated to have a population of 140, 000, and this led the researcher to use a sample size of 20 and distributed 15 questionnaires and 1 questionnaire was returned unanswered from the residents thereby coming up with the total response rate of 93%. Of the 20, 3 were interviews and the researcher managed to interview 3 members from both the executive and employees of MCC in undertaking her study. Also in undertaking the research, the researcher had the opportunity to observe some of the area under study and she made 2 observations from the Chamber secretary department in co-operation with the Health department when there were preparing and updating the businesses database of the C.O.M and the other one she observed was from the Finance Department, at the Rates hall section, where residents were paying their rates through the use of swiping machines or point of sale.

As diagrammatically represented, the response rate of MCC management residents, ward councillors and employees and the response rate was quiet pleasing as it was above 50%. The C.O.M management, employees, residents and ward councillors were extremely co-operative as their response rate is at 93 %, the resident who failed to answer was due to illiteracy, she was not in a position to write and even read the questionnaire. Of all the administered questionnaires only 1 was returned or not answered.

4.4 Response rate for interviews

The researcher interviewed the council officials of the Mutare city council both top and lower ranked officials. She managed to interview 2 top officials from the management and 1 from the employees and she obtained satisfactory responses which were of significance in her research. The interviews were chiefly centred on the challenges and benefits of the ICT system in service delivery provision and the tools utilised in the organisation. Significantly, the response rate is diagrammatically illustrated below;

Response rate for interviews.

Table 4. 2 Response rate for interviews.

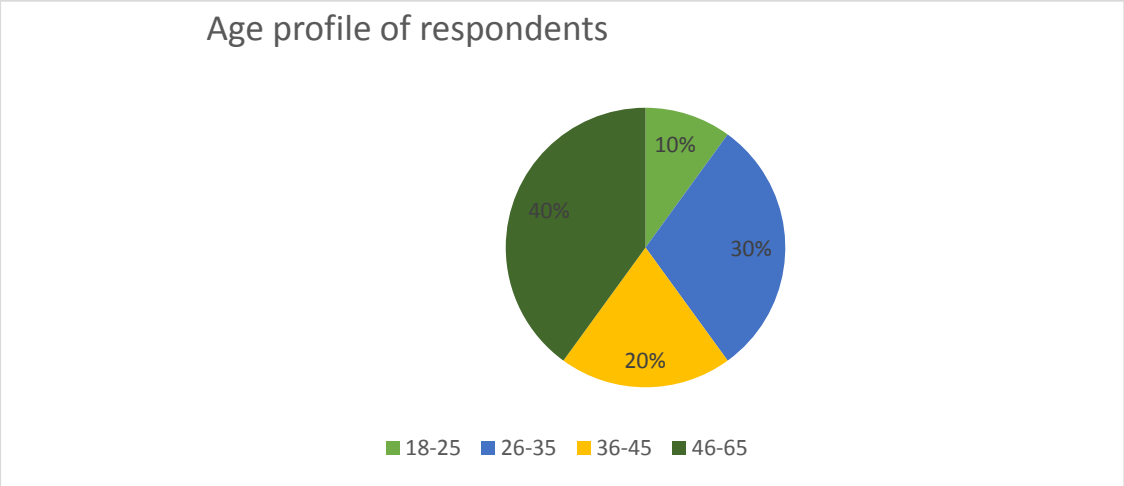
Targeted group	**targeted**	**Individuals who responded**	**Individuals who did not respond**	**Response rate**
Management	2	2	-	100%
Employees	1	1	-	100%
total	3	3	-	100%

Interviewee participation and cooperation was extremely excellent and was high as it constituted a 100% response rate with the council top officials. The management analytically tackled questions from the researcher thereby reaching a 100% response rate. The researcher conducted interviews for both the management and the employees and these were interviewed using purposive technique which emphasizes on targeting the exact population that better offers accurate and reliable information. The researcher obtained a 100% response rate from the employee's side which was the targeted population All things considered, Backer (2012) is in conjunction with this as it is propounded that the response rate below half demonstrates just a couple of respondents from the populace, demonstrating the altogether

incorrect misrepresentation of the populace that can be gotten. Therefore, it is on this foundation that the researcher of this study deduces that the 100% she obtained above is more productive and important as it will assist the researcher to draw conclusions and significant answers for the highlighted issues towards ICTs in service delivery. Ballack (2007) was of the notion that a response rate above 50% speaks to the greater part- the 100% response rate above is totally pleasing and reasonable on the premise of making conclusions and recommendations on this study.

4.5 Age profile of respondents

Fig 4. 2 Age profile of respondents



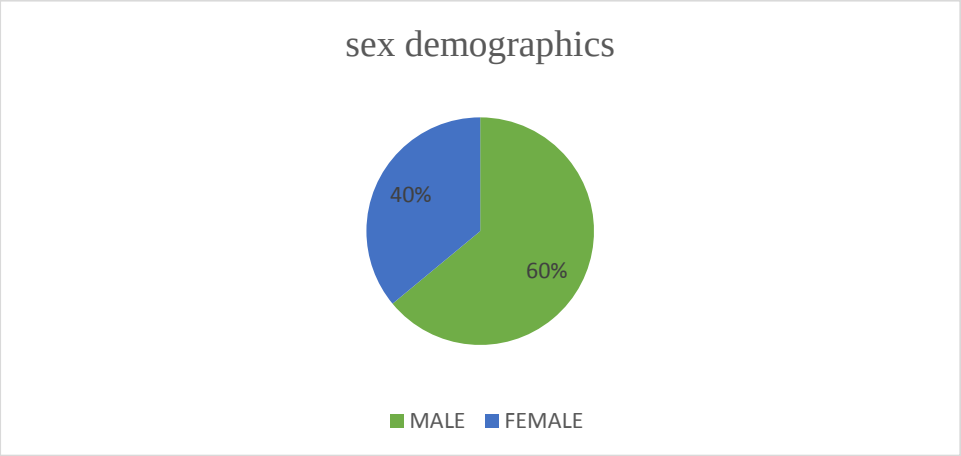
Source: field data (2017)

The above pie chart, shows that only 10% constituted the youths, that is, those between 18 and 25. These were the youths and some of them do not have the knowledge about ICT system but some responded well as they were highlighting the strategies to be employed to ensure effective implementation of the ICT system at Mutare city council, the literacy level of this group is bulky due to the fact that they lack support from the government and there are the most vulnerable and disadvantaged when it comes to planning and decision making. 30% of the respondents fall under the age range of 26- 35 and these also fall under the youth group. This group is comprised of working class and also the unemployed, the researcher

noticed that those who could access the internet and afford to purchase ICT infrastructure are the working class and those that are unemployed are computer illiterate thereby creating a digital divide or computer literacy gap. Those who ranges from 36-45 constitute 20% in this group most of the respondents were the top-officials and they reflected a better understanding of the ICT system but some clearly shows that the ICT system was a challenge to them .the final group which constitutes a percentage of 40 is the age group ranging from 46-65 and it is in this group where there are restraining forces for change, they want to maintain the status quo of filling documents manually not storing information electronically due to lack of ICT skills and computer illiteracy rate. It is this group that need to be well-trained so that there can adopt to new technological advancement.

4.6 Gender

Fig 4. 3 Sex demographics



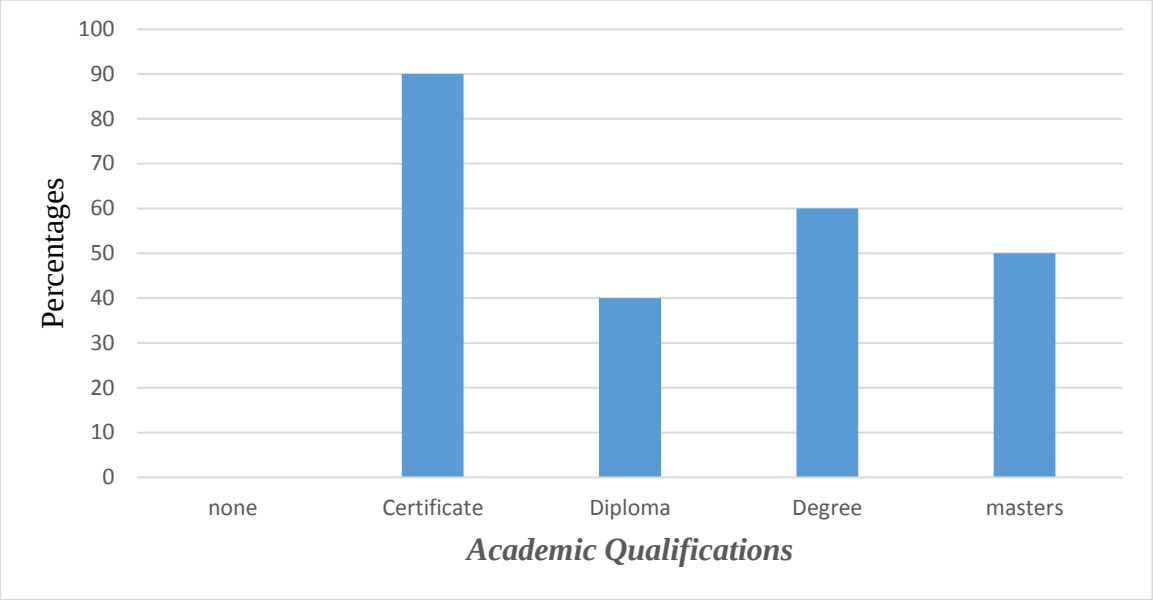
Source: Field Data (2017)

The researcher when undertaking the research noticed that in most Zimbabwean public offices males are still dominant and they are the ones operating high ranking posts as evidenced by the above illustrated diagram males ranges 60% at Mutare city council, the Town clerk, Chamber Secretary, Human resource manager, Housing Officer and even the City Engineer are all males. Most females are secretaries and others operate in low ranking

positions which means the issue of gender is not yet mainstreamed and decisions are made by the top officials in the public sector organisation which mean women are not included in the planning of the ICT system as illustrated above and their percentage ranges at 40%. Most female employees who answered the questionnaires were experiencing ICT challenges such as accessing the internet, processing documents and even could not afford to purchase ICT infrastructures.

4.7 Education level for Mutare city council officials.

Fig 4. 4 Academic qualifications for Mutare City council officials



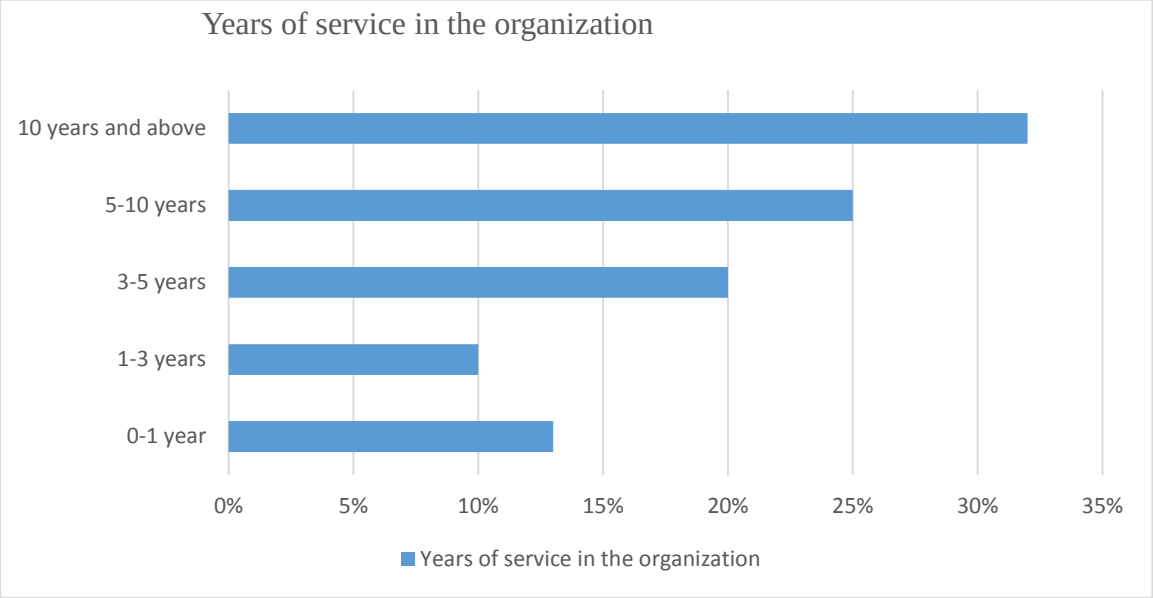
Source: Primary Data (2017)

The above illustrated diagram clearly reflects that at Mutare city council a bulky of employees' educational level ranges at 90% being certificate holders which, means they have reached their secondary level and 40% are those respondents that have completed their diplomas. The top officials holds degrees and masters certificates as illustrated that those who have their degrees reaches 60%, masters reaches 50% since those at top management are

forced to attain high qualifications that suits their positions and increase performance management in the organisation. This reflects that the council officials are well-equipped to identify and address the insurmountable challenges encountered in the implementation and utilization of the ICT system. Also it can be noted that Mutare city council as a local authority have human resources who have skills to identify and solve the challenges encountered in the utilisation of ICT in the organisation as a tool to provide effective services.

4.8 Years of service in the organization

Fig 4. 5 Years of service in the organization



Source: Research data (2017)

The diagram above reflects the years that the respondents have served in the C.O.M. It is presented that 13% of the respondents have served for less than a year in the organization since the management of the C.O.M was restructured as those who were in offices were dismissed due to gross incompetence and there were replaced so the council is full of new officials among them are the Town clerk and the Chamber secretary. This demonstrates that

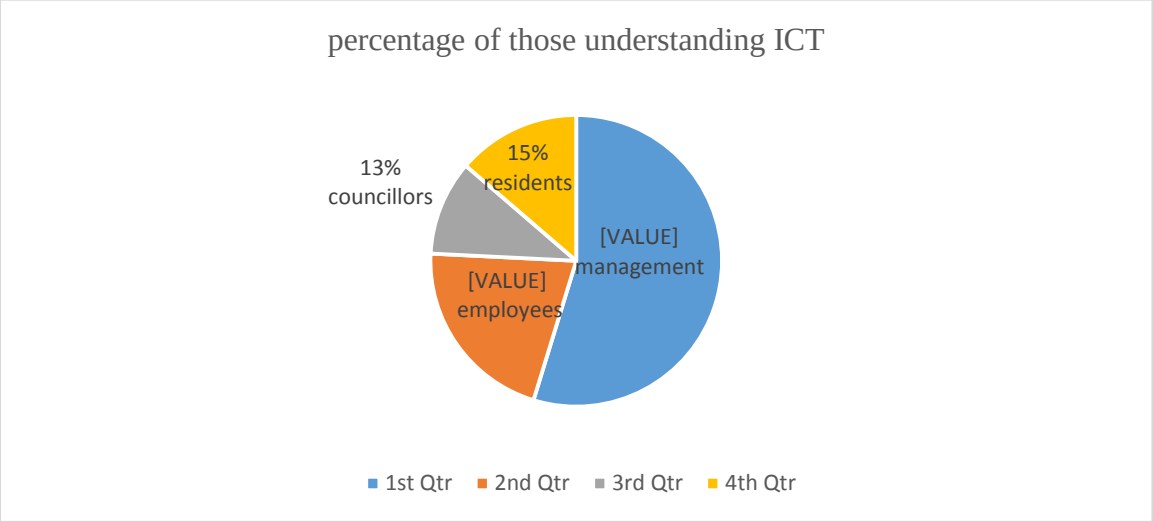
there has been a high turnover of the manpower thus there is job dissatisfaction. 10% of the respondents has served from 1-3 years in the organization and 20% have served between 3-5 years in the organization. The period of service in the organization which is between 5 to 10 years constitute 25% of the whole population whilst the period of 10 years and above has the highest percentage of 32%. This shows that those employees that are satisfied by the organization's status quo will not leave the organization and some of them are the restrictive forces towards the use and earnestly implementation of the ICT system because they want to maintain the status quo of the bureaucratic red tape associated with long queues, filling documents and doing work manually. This shows that these employees have the full knowledge concerning the ICT system and are the ones that can be driving or restraining forces towards ICT implementation and use of computers in the C.O.M and are satisfied by other conditions in the organization such as interpersonal relations, job security and the job significance.

4.9 Understanding of what ICT entails?

The Mutare city council management understood the ICT system as a fast, reliable, efficient and easy way of communication and disseminating information. Also the employees were of the notion that ICT is the use of electronic tools used to convey, manipulate and store information but some of them lack an understanding of the ICT system. The residents some of them understood ICT as a term that includes any communication device or applications encompassing radio, television, computer networks but some of them were not in a position to define it, because they lack the understanding of what ICT is all about.

Percentage of those understanding ICT

Fig 4. 6 Percentage of those understanding ICT



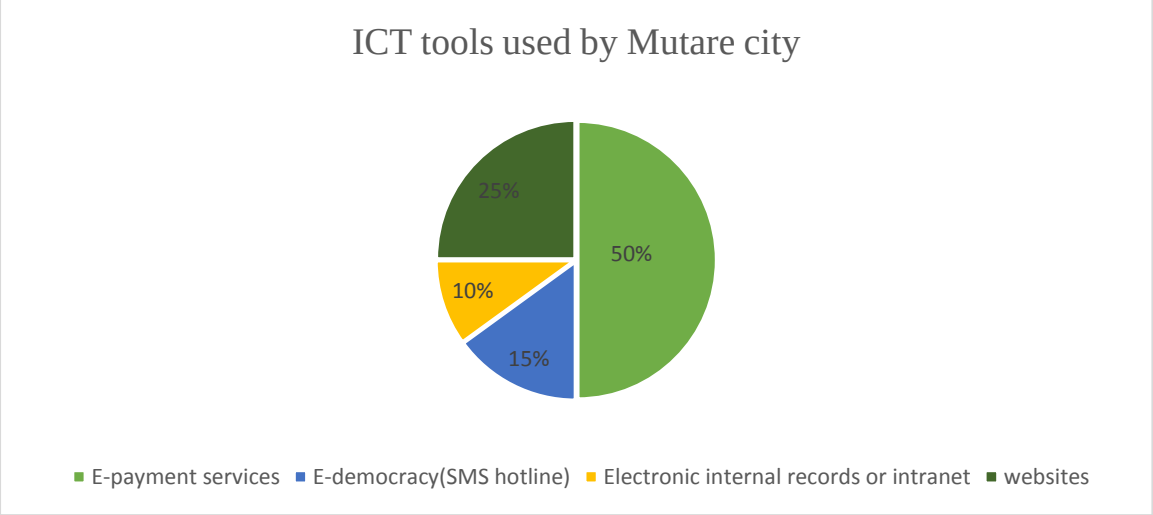
Source : FIELD DATA (2017)

The above pie chart clearly reflects that the City of Mutare management understood what ICTs entails as it has a percentage of 52 % and it shows that they have a better understanding of the system since there are the one who plan and implement the ICTs system. The town clerk and the Chamber secretary highlighted the significance of ICT in their organisation. Also from the respondents, the employees themselves showed that they have the knowledge of what ICT is all about and how it operates in service delivery and in the execution of their duties as it have a percentage of 20% but it also reflected that there is high rate of resistance from employees as they suggested that ICT is making people insecure of their jobs since it is reducing staff as a way of cutting costs because most of the work is now done electronically and others are computer illiteracy so there are resisting change as a way of maintaining the status quo . The residents ranges a percentage of 15% , which is below 50% and it clearly reflects that there are a few residents who understood what ICT entails due to lack of ICT understanding and council's failure to involve them in planning and ICT training. Finally, the

councillors themselves have 13% which clearly shows that they is need for ICT training through workshops and full participation of all stakeholders in the ICT system

4.10 ICT tools that are well-known and used by the respondents.

Fig 4. 7 ICT tools that are well-known and used by the respondents.



Source: field data 2017

The above pie chart shows the percentages of the ICT tools which residents and council employees are accustomed with. ICT tools are classified into three categories that are as follows the government –to government tool (G2G), government-to-users (businesses) (G2B) and finally the government-to-citizens tools (G2C) Ndou (2004).The C.O.M as a council uses these tools according to the respondents both the council officials and the residents .

4.10.1 Government-to-users tools,

The C.O.M under this tool uses the **website** which has 25% which clearly reflects that a majority of residents and the council employees are familiar with the ICT system but the percentage is not quite pleasing since it is below 50% and this is due to the fact that they cannot access the internet and due to lack of ICT infrastructure and ICT skills. This is a tool that facilitates and create a vivid line of communication between government bodies and the users of public services. The City of Mutare as proposed by the Town Clerk and other

respondents over questionnaires and interviews, has a functional website which enables citizens to access significant information such as financial statements, minutes of the council and other updates of the council (Public Finance Management Act 22:19). Also the stakeholders will be in a position to propose recommendations and new innovative ideas to the council. The Town clerk also proposed that the use of websites is attracting investors and some are even transacting funds online easily to support the council. The website is available at ***mutare.intersol.co.zw*** which is used by the organisation and residents to access, discuss and disseminate information 24/7 without undertaking meetings. The council should take advantage of this by utilizing the ICT tools which the residents are familiar with and the ones they can access easily so that they make use of the benefits of the ICT tools and participate fully in matters of the council. Therefore, this is line with the literature from other scholars who postulated that most developing countries are using ICT tools in delivering services but it is still a challenging factor due to lack of ICT infrastructure and due to financial hamstrung of most local authorities.

The C.O.M under the government to user's tool comprises of the, uses **the E-payment services or Digital payment services**.

Plate 4. 8 E-payment services or Digital payment services.

The questionnaires which were administered reflects that 50% of the respondents are making use of the e-payment or digital payment services that are Eco-cash as evidenced with the

biller code 54065, swiping machines, this addressed the challenge of long queues that was affecting the residents when processing payments and it also reduced corruption since transactions will made online not manually. The Town Clerk of the C.O.M proposed that real time gross settlement (RTGS) is also used by the organisation were money is transferred from one bank to another , this saves time and will facilitate service delivery as transactions will made online faster. Zeleti (2010:11) is of notion that " e-service focuses on citizens and businesses and its aim is to make interaction with citizen, businesses, government agencies, offices, employees, and other governments more effective, convenient, user friendly, fast, reliable, inexpensive, and transparent. The residents are enjoying making payments online as it saves time, it is not time consuming as there is no need for queuing and the residents also proposed that ICT is helping in curbing corruption, no more manual payments and there are now enjoying the value of their money through provision of services.

4.10.2 Government to citizens tool (S M S hotline platform and electronic discussion forum)

Plate 2 S M S hotline platform and electronic discussion forum

Source :Field Data 2017

SMS hotline platform at Mutare city council

The C.O.M also uses the which are Electronic discussion forum and e-democracy tools through the Citizens Short Messaging Services (SMS) hotline platform , being monitored by the Residents Association group who were trained to monitor messages and related action taken by the C.O.M. The SMS hotline platform was a project launched by the C.O.M in partnership with the International Rescue Committee (IRC) and Peace Building and Capacity Development Fund in September (PACDEF) 2015. This was done as a way of innovating the service delivery provision through an SMS platform or the Mutare City Dialogue and Technology for Accountability (M-DATA) in creating a vivid line of communication between the council and its residents and building the capacity of the council.

This tool enables residents to easily and anonymously address their service delivery complaints and suggestions to the MCC. These are managed through a cloud database that allows Local government officials to escalate concerns to the respective departments. Additionally, under receipt of an SMS, the platform immediately sends an acknowledgement to the with a reference number for tracking purposes and once the problem is solved the residents will receive a follow-up SMS message before the case is dismissed. This tool allows residents to voice their concerns concerning service delivery and they would also submit complaints about the lack of transparency in the management of local government budget, abuse of power and even concerning the cases of gender based violence. Additionally, the C.O.M employees also used the SMS platform to complain about their remuneration.

The SMS platform was also used to make suggestions for how the C.O.M can improve its relationship with residents. In ward 5 and 16, the residents are now communicating with the city council through the Whatsapp since the system has been upgraded. This enables residents to send images, videos and audio clips related to the issue complained or reported. It is also aimed at consulting the public about meetings such as budget consultative meetings as well as

encouraging citizens, interest groups and other stakeholders to participate more in the decision-making process (Pollitt 2003). The use of government to citizens' tools constitutes of 15% which reflects that the SMS platform is known by the residents but there are few due to lack of ICT infrastructure such as cell-phones (iphones) that connects to social media(WhatsApp and Mutare city face book page) , computers to connect with others and access information. It is helping them in saving time as there is no need for people to gather for meetings and everyone is participating no segregation on basis of gender since there is no face to face communication. Also it increased transparency and increased citizens' participation and increased trust between the local authorities and its citizens. Susanto and Godwin (2010:55) support this argument by proposing that providing public services through the SMS channel has significantly reduced time and cost; introduced a cheaper, easier and faster information-accessing channel; improved transparency, accountability, communication, and relationship between government and citizens; made the services and procedures easier for the citizens; improved the district political image; engaged more people and increased citizens participation; and promoted e-democracy.

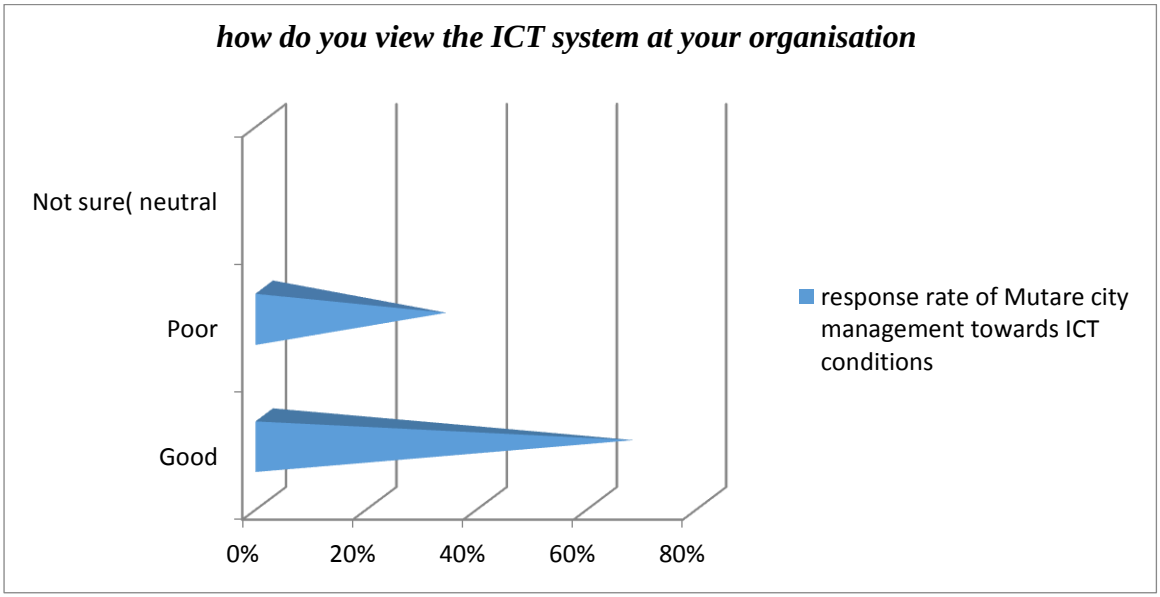
4.10.3 Government to Government

This constitute of 10%, which shows that not all employees are able to access the internet and there is lack of ICT infrastructure such as computers in the council. The City of Mutare also uses the government to government tool, which is the electronic exchange of information within ministries and central agencies as well as between government organizations vertically and horizontally. These tools include intranet, electronic case treatment or executive work and the electronic internal records. They communicate through functional emails and there are also processing licenses through computers and updating the database of all Mutare city council businesses**.** The Chamber secretary was of the notion that the department is now responding to internal memorandums through emails and respond to external correspondents

business mails through emails which is faster and creates a good co-operate reputation to the organisation , type and store confidential documents of the council in computers, process licenses and disseminating information easily through ICT. The licensing process as proposed by the Chamber secretary was a challenging factor as the citizens have to go through offices for processing and approval and also it was consuming time to check for their documents since there were filled in files but now some of the files are stored in computers . This therefore postulates that the City of Mutare is moving away from the bureaucratic red tape to the new public management of computerising significant information according to Hughes (2003).this was done as a way of creating a vivid line of communication between them and its stakeholders.

4.11 ICTs conditions management response rate

Fig 4. 9 ICTs conditions management response rate



Source: Research Data (2017)

The responses given and presented above reports a 67% good condition of the ICT system at the C.O.M by the council officials. This purports that although the council has been

encountering challenges in effectively implementing the ICT system, it is trying its best to shift from the traditional public administration to the new public management era of using ICTs in the provision of services, as this in conjunction with Hughes (2003) who postulates that for the public sector to perform better and compete with the Private sector it should follow a paradigm shift from the traditional era to the world of new Information Communication Technologies systems. This is deduced from the top officials' response rate towards ICT condition. The city is trying its best to ensure they implement the ICT system at the area of their jurisdictions.

Also the ICT system has been presented as being poor, which mean it is not in its good condition by some of the respondents from the same group as reflected by its percentage which is constituting at 33%. There is still too much paperwork in the council, for instance in the Chamber secretary department there are still filling licenses due to inadequacy of the computers and computer illiteracy some of the employees cannot be in a position to update businesses databases because there not computer literate. This characterises the organisation as still operating manually not fully electronically due to too much paperwork which consumes time and led to distortion of confidential information.

Paper work at Mutare city council

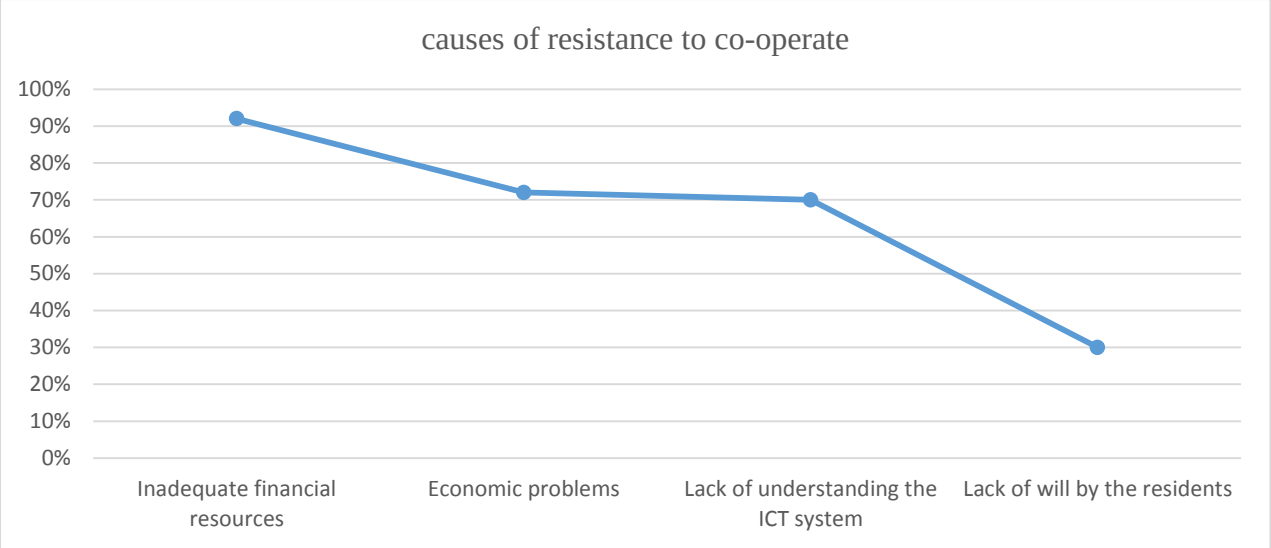
Plate 3 Paper work at Mutare city council

Figure 1 Mutare city council Chamber secretary department

The researcher observed the issue of paperwork as a challenging factor still existing at Mutare city during her work related learning as the filling of licenses was a tiresome process since some of the information was no longer available. Although the ICT system is viewed as being poor by other respondents basing on the fact that the City does not have well-drilled ICT workforce to train others in order to reduce illiteracy gap between the employees and improving their job performance, the response rate clearly shows that it is trying its best to recover from the challenges encountered. Also they are of the notion that Mutare city is still lacking on the issue of financial resource base to purchase more ICT infrastructure and financing the ICT system due to the fact that it still owes their employees more than 18million salary arrears as from 2013 to 2016 (Zhakata 2016).

4.12 Causes of residents' failure to cooperate in the implementation of the ICT system

Fig 4. 10 Causes of residents' failure to cooperate in the implementation of the ICT system

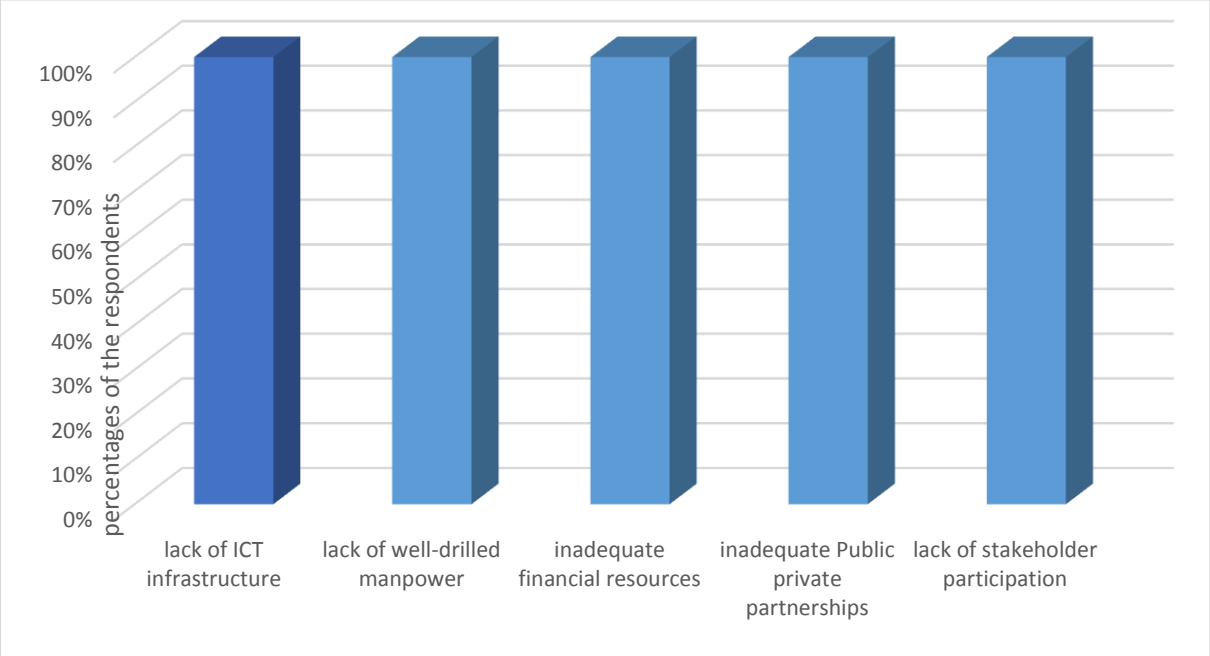


Source: Research data (2017)

Basing on the administered questionnaires to the residents, the massive of the population did not take their education further they completed their secondary levels and some does not even have the certificates. This therefore, becomes a challenge as many of them are illiterate they are not in a position to use ICT tools and they do not have the knowledge of what ICT entails and its significance in their livelihoods. The C.O.M are sometimes excluding the residents on their planning and are not training and educating them on how ICT operates and this will therefore lead to their resistance in paying rates and co-operating as supported by Chisango (2010) who propounded that local authorities are only consulting the public to fulfil and follow the procedural rules of legislations not to take into cognisance their contributions and concerns. Also the residents as reflected by a percentage of 90% shows that they do not have adequate finances to purchase ICT infrastructure due to the liquidity crunch and economic hardships. Also residents are not conforming to the council's initiatives due to the fact that there is no longer a climate of trust between the residents and the council due to service delivery deterioration.

4.13 Challenges encountered by the organisation in effectively utilizing and implementing ICT

Fig 4. 11 Challenges encountered by the organisation in effectively utilizing and implementing ICT



Source : Research data 2017

The above diagram is a vivid reflection that the ICT system in C.O.M is encountering an insurmountable challenges in its implementation. The researcher through interviews and questionnaires, she investigated the problems that are affecting the performance management of the C.O.M in service delivery provision. The Town clerk was of the notion that the main cause of underperformance of the organisation was shortage of well drilled ICT personnel and ICT infrastructure. The Housing Officer also supported this view as they propounded that the department has shortage of well-drilled ICT manpower which has a bearing on the performance of the department and there is lack of ICT infrastructure such as computers as some of the confidential documents are still stored in files not in computers.

4.13.1 Lack of ICT infrastructure

The Finance Director pointed out that that there is lack of ICT resources both human and financial. This is also a problem as he uses his own personal laptop to do council business and in addition to that the Health Officer also proposes that she was using her personal computer (laptop) to update the business database of the C.O.M since there were no enough computers at the council. The employees at M.C.C also asserts that lack of ICT infrastructure such as computers and poor access to internet is affecting the performance in their respective departments for instance those at the City Engineering Department will have to go to the Chamber secretary typing pool or Human resources department to process their documents and print their documents, this therefore will lead to distortion of significant confidential information. Those who are at the Housing Department will have to travel from Moffatt hall where the department is located to the main offices at Civic centre to process their documents and this is time consuming , since most of the times the computers will be fully occupied with the Committee officers busy preparing agendas and processing minutes. This therefore will delay the provision of services and the work will end up being processed manually by filling the documents which mean the council is still operating under the traditional era of using paperwork according to Hughes (2003) who proposed that most public sector organisations are still following the traditional public administration . Due to poor access to internet some of the services which are offered at the housing department like change of ownership cannot be provided in time.

4.13.2 Lack of well-drilled ICT manpower

The researcher recognised that there is lack of ICT manpower at Mutare City Council through the respondents such as the Housing Officer who proposed that there is lack of well drilled ICT manpower at the Housing Department, he further postulated that in the whole

department, only one person is well-versed on the billing system (promun) and he is also the only one used for creating accounts for new residents. The lack of well-drilled ICT personnel is a challenging factor in most public sector organisation as this is in conjunction with Wheeler (2004) who is of the notion that a great number of local authorities in the third world countries are increasingly facing the great challenge dwindling base of skilled personnel due to brain drain. This therefore, is making it difficult for the C.O.M to fully and earnestly implement the ICT system at their organisation

4.13.3 Lack of stakeholder participation

The C.O.M is not following the legislative procedures of allowing the full consultation, participation and involvement of various stakeholders in its planning and implementation of the ICT system leading to stakeholders' resistance to cooperate and adopt to new technological advancement. There is low stakeholder participation and training in the implementation of the ICT system leading to lack of finances to finance the ICT projects. The involvement of stakeholders will help in the mobilisation of resources and will create a sense of ownership thereby coming up with fruitful decisions and products.

Information Communication Technologies status at Mutare city council

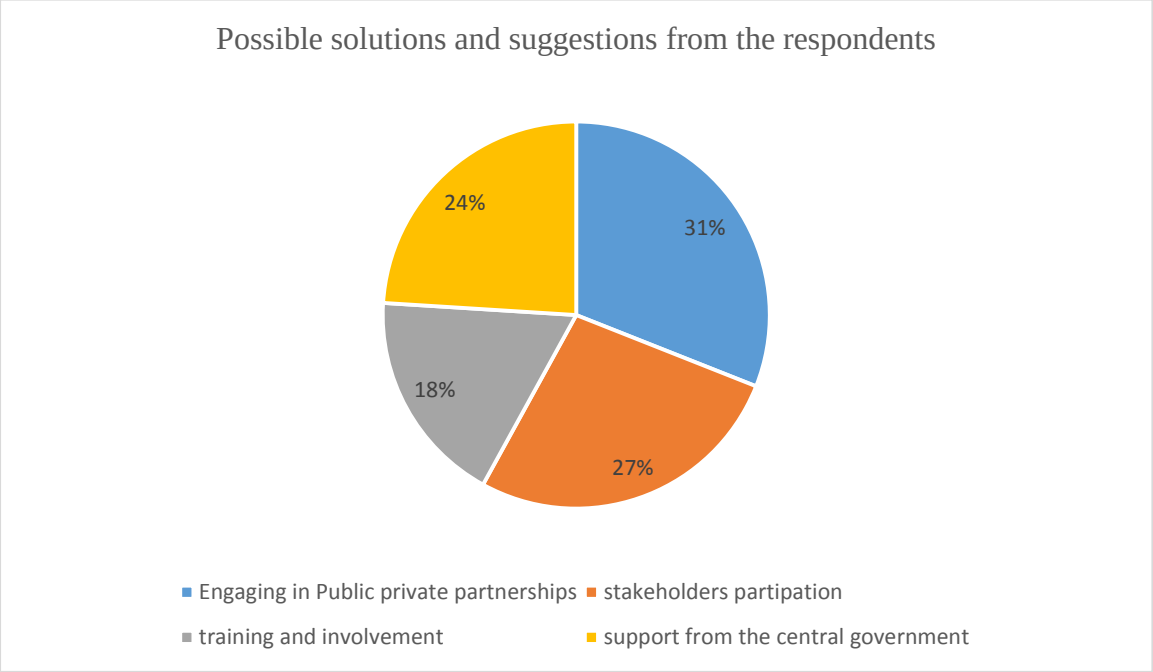
Plate 4. 1 Mutare city council typing pool

Plate 4. 2 City of Mutare Information Technology Department

The City of Mutare is utilising the ICT system well in the provision of services as depicted by the use of computers starting from the cashier levels where there are CCTV's and in almost each and every department in disseminating information, curbing corruption ,storing data and even in the provision of services such as licensing processes and other application form . This reflects that E- records readiness is in use by the organisation. The only challenge is that the computers are few and some of them are malfunctioning, there is need to purchase more ICT infrastructure and this is in conjunction with the challenges highlighted by the researcher in her literature review that most local authorities are encountering lack of ICT infrastructure in areas of their jurisdiction in order for them to provide effective services to the citizens.

4.14 Possible solutions from the respondents on the strategies to be employed to solve ICT challenges.

Fig 4. 12 Possible solutions and suggestions from the respondents



4.14.1 Engaging in public private partnerships

The response rate of the residents and other employees constituted 31%, were of the notion that the council should engage the private players such as donors, non- governmental organisations to finance the ICT system and assist with purchasing ICT infrastructure. Also the private players will provide the council with technical assistance thus well drilled ICT manpower to train those who are computer illiteracy. As stipulated by Chisango (2014) that the local authorities should train its manpower as a way of improving its performance in the organisation by hiring well-drilled manpower. The local authorities should twin and involve donors such as the UNDP in funding of programs and in ICT planning, financing and development. For instance when implementing the ICT system the C.O.M launched an SMS hotline platform in partnership with the International Rescue Committee (IRC) and Peace Building and Capacity Development Fund in September (PACDEF) 2015 Nyoni (2015). This

was done as a way of innovating the service delivery provision through an SMS platform or the Mutare City Dialogue and Technology for Accountability (M-DATA) in creating a vivid line of communication between the council and its residents and building the capacity of the council. This helps in building a vivid relationship between the local authorities and its stakeholders, and in the mobilisation of resources.

4.14.2 Stakeholder participation in ICT planning and development

The other respondents proposed that Mutare city council as a local authority should undertake ICT consultative meetings that involves all key stakeholders of Mutare city and this constituted 27%. The consultative process, should be undertaken in all areas so that everyone will have a better understanding of what ICT entails. There should invest in soft infrastructure such as vocational training, where they will hire private ICT experts' players to train people on how to use computers and swiping machines through workshops. Information should be conveyed to other stakeholders through the council's website in a bid to adhere to the consultative nature of the process. This approach will help in not only enhancing the quality of the final product, but also in ensuring that the same product will be a citizens driven output with which stakeholders would have a sense of ownership and there will cooperate (Ndou 2004). As most local authorities are characterised by not involving the stakeholders in their planning system and this has been a challenging factor to the effective implementation of the ICT system in Zimbabwe.

4.14.3 Support from the Central government

The other respondents who constituted 24% were of the notion that the government should intervene on the issue of internet tariffs, they are still high for people. The tariffs should be reduced so as to create a pro-poor strategy thereby accommodating all the stakeholders, the

vulnerable groups especially the unemployed group and the youths so that they can access the internet as well as many are failing to be computer literate due to lack of support as they are experiencing financial hamstrung as supported by Chisango (2010) who proposed that illiterate gap is facilitated by lack of support from the centre. The government should intervene through the Postal and Telecommunications Regulatory Authority Of Zimbabwe (POTRAZ) to reduce internet costs as the tariffs have been increasing and unaffordable especially by the vulnerable groups and those who are in remote areas and rural areas (Chisango , 2010). If these challenges are rectified then every stakeholder will manage to access the internet and it will reduce illiteracy gap.

4.15 Summary

The researcher in this chapter was mainly focusing on the presentation and analysis of data collected during the field research. The data was presented in a multiplicity of ways thus through pie charts, tables, graphical illustrations and field pictures. Finding obtained were clearly presented through the qualitative and quantitative data analysis on the impact of ICTs in service delivery in both the ward 5 and 16 residents, councillors and council officials both high and lower ranked officials. The researcher recognised that although the city of Mutare is shifting from the traditional public administration associated with bureaucratic red tape, long queues and servicing people manually to the new public management of operating and providing services electronically, faster and cheaper, it is still facing an insurmountable ICT challenges such as lack of ICT infrastructures such as computers, lack of ICT well-drilled workforce and it is still associated with a lot of paperwork. The following chapter will be focusing on the research conclusion and presentation of recommendations.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The chapter captures the major highlights of all the aforementioned chapters and it is focusing on summarising the whole research and giving a recap of the research findings and the recommendations made. It further went on to give conclusion basing on the major findings in Chapter 1V. Lastly recommendations based on conclusion and major findings will be given that can be adopted by the local authority to effectively utilise and implement the ICT system.

5.1 Summary

The major thrust of the research was to determine whether ICT is an effective tool for addressing the insurmountable service delivery challenges that the City of Mutare was incurring. The researcher on her first chapter, she introduced the significance of the study noted that inadequate financial resources was the most challenging factor hindering local authorities not to fully and earnestly implement Information Communication Technologies in Zimbabwe as an instrument in service delivery challenges in areas of their jurisdictions. A summary of the City of Mutare, justification of the study, limitations and delimitations were fully elucidated in chapter 1.

Significantly, on chapter 2, the researcher highlighted ICT aspects and a multiplicity of concepts concerning the ICTs system that have been published by other scholars and have been accredited by researchers alike. The significant issues that were discussed in this chapter comprises of what ICT entails, benefits and challenges of using ICT s by Zimbabwean local

authorities, current ICT policies and regulations in Zimbabwe , ICTs in other countries , the Case of South Africa.

Chapter two focused on the benefits of using ICTs in service delivery that are as follows, it increased efficiency gains, transparency and accountability, it builds the capacity of the local authorities, reduces costs and it is even faster thereby reducing the bureaucratic red tape. The literature also highlighted that although Local authorities are benefiting from the ICT system, most of them are still having challenges in fully implementing it basing on the issues like inadequate financial resources, lack of ICT infrastructure, and lack of well-drilled ICT manpower among others. This reflects that they are still not delivering effective services to its citizens.

The current policies in Zimbabwe are not conducive and favourable for the implementation of the ICT system as it lacks security, the legislations and policies are poor and are hindering the Local authorities from being creative and innovative through their failure to create supportive tools for ICT system but rather they consider innovative and creativity as acting ultra-vires. The central government is not fully supporting the programs of the local authorities, thereby making the local authorities inefficient and ineffective and also through their directives there are ruining service delivery and leaving council's in bankruptcy.

The third chapter is where the researcher highlighted the research methodology used in the study. The researcher used both the quantitative and qualitative data to attain a multidimensional picture of the problem. This was to help the researcher to draw more conclusions as the researcher would have detailed information. The researcher used both interviews, questionnaires and observations in gathering data needed. The research instruments were discussed and their pros and cons were also indicated and these comprised of the primary data. The researcher obtained secondary data from the scholarly views and

field under this study. On undertaking the research, a sample size of 20 was used by the researcher and the researcher used the purposive and systematic sampling techniques. Finally the pilot projects were undertaken before the actual research was done to ensure there is success in the research and the writer will not discuss wrong questions to the respondents. Ethical considerations were also significant as it helped the researcher to earn respect and win respondents' hearts due to being honest.

In the fourth chapter, the researcher was mainly focusing on the presentation and analysis of data collected during the field research. The data was presented in various ways through pie charts, tables, graphical illustrations and field pictures with the aim of achieving the objectives of the research. The overall response rate obtained from both the interviews and questionnaires constituted 93 % which was quite pleasing, as the response rate is valuable and justifiable because it is above 50% as postulated by Ballack (2007). The chapter provided the researcher with a more vivid picture of the ICT System in Mutare city council and also shaded light on the insurmountable challenges encountered by the council such as lack of ICT infrastructures such as computers, lack of ICT well-drilled workforce and it is still associated with a lot of paperwork. The possible solutions and strategies were highlighted by the respondents as they proposed the C.O.M to engage various stakeholders in ICTs planning and development, twinning with other private players for resource mobilisation among others.

The researcher aimed at determining whether Zimbabwean local authorities are effectively utilising and implementing ICTs as a tool in addressing service delivery challenges and this has been reflected through chapter 4 of the research which highlighted an insurmountable challenges which the Mutare city council is encountering in utilising and effectively implementing the ICT system and this led the researcher to dub ICTs as an ineffective tool in addressing service delivery challenges highlighted.

High computer illiterate

There is still high computer illiteracy rate and digital divide gap in Mutare city council due to lack of well-drilled ICT personnel and this is affecting the performance of the organisation since most of its workforce are having challenges in the provision of services using ICT infrastructure for instance computers. Furthermore, there is still high ICT infrastructure tariffs and internet tariffs in Mutare which is increasing the digital divide in the society since ICT s is utilised by the working class only, thereby disadvantaging the vulnerable groups such as the youths and those that are unemployed or who live below the poverty datum line. Addition to this, ICT infrastructure is still a chief factor to be dealt with in most local authorities including Mutare city council which is the study area of the researcher and this is leading to an increase in the digital divide or illiterate gap as most of the residents and even the workforce are not in a position to access the internet due to financial hamstrung and inaccessibility.

Lack of Stakeholder participation

This is challenging factor in most Zimbabwean local authorities and other developing countries as stakeholders are not involved in the planning and development of the ICT system and this is leading to local authorities failing to yield fruitful decisions and coming up with fruitful projects. Also this is triggering to lack of will by the stakeholders because there are feeling neglected in matters that concern them and they is no training as evidenced by the failure of some of the residents and employees of the council to entail what ICT tools are and its benefits to them.

5.2 Conclusions

In retrospective of the above analogy, the researcher made the following conclusions:

1. The most challenging factor hindering the effective implementation of the ICTs system is lack of stakeholder participation by the local authorities in Zimbabwe. This is due to the fact that the stakeholders are not in a position to entail what ICT is all about and also that there is lack of resources which mean to say local authorities are not involving the stakeholders who assists in the mobilisation of resources and coming up with new innovative ideas.
2. The major causes for shortfalls in both human and financial resources to accelerate the ICT s system is chiefly as a result of lacking technical and financial support from the central government due to centre-local relationship which is associated with hostile directive and policies.
3. The issue of inadequate public private partnerships encountered by local authorities in Zimbabwe in financing their ICT planning and development is due to hostile policies crafted at the centre that are scaring away investors and also it is due to the liquidity crunch in Zimbabwe and the rate of corruption by Zimbabwean local authorities who are diverting public funds from investors to private gains.

5.3 Recommendations

- There is need to facilitate the provision and maintenance of infrastructural facilities necessary for ICT development and these should not be too costly so that everyone can access the internet and reduce the digital divide gap

- The government should financially and technically assist the local authorities in ICT programs not dismissing their programs as being ultra-vires and they should support with concerted efforts of other players.
- There is need for full participation and involvement of all stakeholders in ICT planning and developing since stakeholders are the ones that mobilise resources both financially and technically. Participation by players from all sectors of the economy is encouraged in the implementation of the ICT policies such as the Zimbabwe National ICT policy framework for it to be fruitful.
- There is the need for the central government to craft and create attractive and conducive investment policies that will enable and accelerate the growth rate in ICTs not crafting hostile policies which scares away investors, hostile policies are a hindrance to development.
- There is need for the refurbishment of the political, institutional, and economic and security frameworks to facilitate development and use of ICTs.
- There is need for local authorities to invest in soft infrastructure thereby embarking on extensive capacity building and training programmes through undertaking workshops to provide adequate supply of qualified, well drilled ICT personnel and knowledge workers in areas of their jurisdiction
- Establish the necessary governance and regulatory structures that facilitate ICT development and adaptation across all sectors of society;
- There is need for gender mainstreaming in most Zimbabwean local authorities as it is associated with males being the dominant group as a strategy to ensure that the concerns and experiences of both men and women are integrated into the design and implementation of ICT programmes so that there will be equity and equality for all.

- The youths and children constitute a high proportion of ICT users and opportunities should therefore be established to ensure their full participation and also ICTs should also respond to the needs of the vulnerable and, marginalised groups such as the Orphans and the disabled to ensure their inclusion and participation in matters affecting them or concerns them.

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APPENDICES

APPENDIX A

QUESTIONNAIRRES FOR WARD 5 AND 16 MUTARE CITY RESINDENTS ON THE USE OF ICTs IN MUTARE CITY COUNCIL

Instructions

i. ***Tick the suitable answer in the boxes provided***

ii. ***Write your answers on the space provided below***.

NB. Do not write your name on the questionnaire for confidentiality

i. What is your gender?

Male ☐ Female ☐

ii. In which age group do you belong to?

18 - 25 years ☐ 26 - 30 years ☐

31 - 40 years ☐ 41 – 45 years ☐

46 – 55 years ☐ 56 – 59 years ☐

60 Years and above ☐

iii. What is your level of education**: *please tick where applicable***

Primary level ☐ Secondary level ☐

Certificate ☐ Diploma ☐

Degree ☐ Others ☐

None of the above ☐

Instructions: Answer all questions.

1. Which services have you been provided with at the council?

……

……

2. How do you see the quality of services offered to you by the council?

……

……

3. What do you understand by the term Information Communication Technologies?

……

……

4. Which Information Communication Technologies tools do you know?

…….....

.....

5. What are the benefits of using Information Communication Technologies in accessing services?

……

……

…….

6. Are you encountering any challenges in accessing services using the Information Communication Technology system? If yes, state the challenges.

.....

.....

.....

7. What are the possible solutions you may think the council should employ in addressing ICT challenges?

.....

.....

APPENDIX B

QUESTIONNAIRE FOR CITY OF MUTARE COUNCILORS ON THE USE OF ICTs IN MUTARE CITY COUNCIL

Tick the suitable answer in the boxes provided

iii. ***Write your answers on the space provided below***.

NB. Do not write your name on the questionnaire

i. What is your gender?

Male ☐ Female ☐

ii. In which age group do you belong to?

18 - 25 years ☐ 26 - 35 years ☐

36 - 45 years ☐ 46 – 55 years ☐

56 – 60 years ☐ 60 Years and above ☐

iii. What is your level of education**:** ***please tick where applicable***

Primary level ☐ Secondary level ☐

Certificate ☐ Diploma ☐

Degree ☐ Others ☐

None of the above ☐

Instructions: Answer all questions.

1. Which services have you been providing as a council to the citizens?

……

…….

2. As a councillor, how do you see the quality of services offered to the residents by the council?

……

……

3. What do you understand by the term Information Communication Technologies?

……

……

4. Which Information Communication Technologies tools do you know?

…….....**.....**

.....

5. Can you say Information Communication Technologies is benefitting the citizens in accessing services? IF yes what are the benefits

……

……

…….

6. Are you encountering any challenges as a councillor in accessing services using the Information Communication Technology system? If yes, state the challenges.

.....

.....

.....

7. What are the possible solutions you may think the council should employ in addressing ICT challenges mentioned above?

.....

.....

QUESTIONNAIRE FOR MUTARE CITY COUNCIL MANAGEMENT

Instructions

i. ***Write your answers on the space provided below.***

ii. ***Do not write your name on the questionnaire***.

Instructions: ***tick where applicable*** and answer all questions.

i. What is your gender?

Male ☐ Female ☐

ii. In which age group do you belong to?

18-25 years ☐ 26-35years ☐

36-45years ☐ 46-55years ☐

56 years and above ☐

iii. What is your level of education?

Primary level ☐ secondary level ☐

Certificate level ☐ Diploma level ☐

Degree level ☐ masters level ☐

☐

None of the above

iii Years of service in the organization

0-1 year ☐ 1-3 years ☐

3-5years ☐ 5-10 years ☐ 10years and above ☐

iv Department worked for ……

vi Position held ……

SECTION B

1. What are the challenges that you are encountering as a local authority in implementing the ICT system.

……
……
……
……
…….

2. From your own opinion and understanding how do you view the ICT system?

Poor ☐ good ☐ not sure ☐

3. Why is the council failing to recover from the insurmountable service delivery challenges after implementing the ICT system?

……
……
……

……

……

4. In your own view why are residents failing to cooperate in the implementation of the ICT system?

……

……

……

……

……..

5. How far have you gone as a council of Mutare towards the achievement of the vision of Mutare City Council?

Already there ☐ Already reaching ☐ about to reach ☐ still far ☐

6. As a council , are you engaging or do you have any hopes of involving private players or public private partnerships who are in a better position to accelerate the ICT system.

Yes ☐ No ☐ Not sure ☐ ***please tick where appropriate***

APPENDIX C

INTERVIEW GUIDE QUESTIONS FOR CITY OF MUTARE EMPLOYEES ON THE USE OF ICTs IN MUTARE CITY COUNCIL

1) What do you understand by the term ICTs?
2) To what extent has ICTs been used in the council?
3) Which ICT tools are used in the council?
4) How can ICT enhance the performance of the council?
5) What challenges are faced by the council as a whole in utilizing ICT?
6) What problems are contributing to the underperformance of the council?
7) If ICT is fully utilized will council be result oriented and will there be an improvement in the delivery of services?
8) How can customer satisfaction be achieved through the use of ICTs?
9) Do you have the requisite ICT skills and infrastructure to fully utilize the ICT system? Explain your answer.

THANK YOU FOR YOUR CO-OPERATION

APPENDIX D

INTERVIEW GUIDE QUESTIONS FOR CITY OF MUTARE MANAGEMENT ON THE USE OF ICTs IN MUATRE CITY

1. Do you understand what ICTs entails?

2. What problems are affecting performance of the council in service delivery provision?

3. When did you start implementing ICTs?

4. What initiatives were put in place?

5. Which ICT tools are used in the council?

6. How effective are the ICT tools which are being used in improving performance of the council?

7. What challenges are being faced in the utilization of ICTs?

8. Do the employees have the requisite ICT skills and infrastructure to utilize ICTs?

9. What progress has been made in utilizing ICTs?

10. What strategies do you think the council should employ to address ICT implementation challenges**?**

THANK YOU FOR YOUR CO-OPERATION

APPENDIX E

OBSERVATIONS ON THE USE OF ICTs IN WARD 5 and 16 OF MUTARE CITY

Situation under observation	Observed things, Ward areas and Date
ICT tools used at Mutare city council	**Area:** **Date:**
How often is ICT used in the council	**Area:** **Date:**
ICT infrastructures used in each and every office	**Area:** **Date:**
Has ICT improved Service delivery in Mutare city council	**Area:** **Date:**
How ICT tools are used in payment in every department	**Area:** **Date:**

APPENDIX F

CITY OF MUTARE
TOWN CLERK'S DEPARTMENT

IF CALLING OR TELEPHONING
PLEASE REFER THE MATTER TO:
Mr. M. Machaka Ext. 219

Civic Centre
P.O. Box 910, Mutare, Zimbabwe

Phone: 64412 Fax: 61002
E-mail: townclerk@mutare.intersol.co.zw

Your Ref:

Our Ref: TM/cs

19 May 2017

Leona Marange
Midlands State University
P.Bag 9055
Gweru, Zimbabwe

Dear Madam

APPLICATION TO CONDUCT A RESEARCH ON INFORMATION COMMUNICATION TECHNOLOGIES FOR ZIMBABWEAN LOCAL AUTHORITIES IN SERVICE DELIVERY

Your letter dated 19 April 2017 on the above matter refers.

I wish to advise that you have been granted permission to carry out a research entitled "**Information communication technologies for Zimbabwean local authorities in service delivery, a case of Mutare City Council".**

I wish to further advise you that permission is being granted on condition that the research outcome will remain confidential and you will avail a copy to City of Mutare.

Could you please therefore liaise with the Acting Finance Director on the above matter.

Yours faithfully

J. MALIGWA
TOWN CLERK
cc. Acting Finance Director