

THE USE OF E-GOVERNANCE BY LOCAL AUTHORITIES TO IMPROVE SERVICE DELIVERY: A CASE OF CHITUNGWIZA MUNICIPALITY

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Abstract: This research was based on assessing the use of e-governance by local authorities to improve service delivery: A case of Chitungwiza Municipality. The research objectives were to find out the benefits of e-governance system, to find out the challenges being faced by Chitungwiza Municipality in implementation and use of e-governance system and to proffer possible strategies that can be employed to ameliorate some of the challenges being faced. The research was confined to Chitungwiza respondents only. Literature review then focused on giving description of e-governance, benefits of e-governance, challenges being faced by the local authorities in using e-governance, strategies that can be adopted by local authorities to implement and use e-governance and the use of e-governance system by other local authorities in different countries. Descriptive research design was used. Stratified random sampling technique was used to select the respondents. The sample for the research was 50 respondents which constituted 10 employees, 10 top management and 30 residents. Questionnaires and personal interviews were used as the research instruments. An overall response rate of 84% was obtained from the questionnaires and interviews. Data presentation and analysis was done. Findings obtained from the research study were presented in tables, graphs and pie-charts followed by the analysis. Major findings of the research were that, Chitungwiza Municipality is faced with financial shortages, lack of adequate machinery and minimum support from the government so as to fully implement and use e-governance system to improve service delivery. The council does not have its website where people can access information. Some of the council departments do not have adequate computers and some no longer function well. People have limited knowledge on e-governance and they do not have adequate knowledge on the benefits of using e-governance system. Strategies that can be adopted by Chitungwiza Municipality to implement and use e-governance include engaging public private partnerships, training of personnel, increasing awareness to the public on e-governance, and city twinning. Lastly recommendations were made which include, efforts should be made to ensure that e-governance system is taken aboard by the Municipality in years to come in order to improve service delivery to the public through advanced use of internet and council website, the council need to plan and have a council website so as to make services accessible to the citizens, training of staff should be done so that they can gain deep understanding on the benefits of e-governance and the council should make use of public private partnerships and city twinning so as to acquire financial and other resources in order to implement and use e-governance system to improve service delivery.

Keywords- E-governance, E-readiness, Local Authority, Service Delivery.

BACKGROUND

Chitungwiza municipality is a local authority. The municipality is the third largest urban settlement in Zimbabwe in terms of population (close to two (2) million residents), Chitungwiza is located approximately thirty kilometres south of the capital city and ten kilometres from the Harare International Airport [1]. Chitungwiza was named after “Dungwiza” a mountain were Chaminuka performed his spiritual deeds. Chitungwiza was born during the colonial era as the following African townships were united that is Zengeza, Seke and St Mary’s in 1978.

Chitungwiza is a high dormitory town in Zimbabwe as it is located in the traditionally area of the Hera people and its distinguished figure is Pasipamire, the pre-colonial spirit medium of Chaminuka. Chitungwiza operated as an area board in the colonial era as Seke was administered by the Ministry of Internal Affairs whilst Zengeza and St Mary’s were governed by the City of Harare [2]. Chitungwiza was used as a settlement area for people working in Harare that’s why there are low activities of industries in Chitungwiza as many people work in the capital city. In 1996 the government granted a full municipal

status through realizing its growth and demand for investment.

According to Saugata worldwide trends indicate that the use of e-governance system especially in developing countries is very low. Local authorities in many developing countries have not yet adapted the initiative than those in developed countries. Studies have shown that only 35% of local authorities in developing countries have embarked on the use of e-governance system as a tool to enhance improved service delivery to the citizens. Many local governments in developing countries have been faced with multi-faceted challenges in undertaking the use of e-governance such as shortages of requisite communication technologies, lack of skilled personnel since developing countries are suffering a lot from brain drain ever since the turn of twenty first century to date and another greatest challenge is that of shortage of finances and as a result many local authorities have failed to take aboard the system of e-governance. He further stated that, in recent times, the recent advances in (ICTs), local governments in developing countries have started to appreciate the system of e-governance as an opportunity to provide and transform the relationship between local authorities and citizens as well as contribute to the achievement of good governance goals.

In Chitungwiza Municipality the vigorous drive towards e-governance was triggered by an outcry from the residents,

employees and agencies who wanted the council to appreciate the use of advanced ICTs such as Council website, internet and computerization of all departments to improve service delivery to the public and to ensure that citizens have access to adequate information. The situation that led this research is that, residents are being frustrated with the poor communications methods which are being used by the council. In some cases telephone lines will be down, lack of access to council information, delays in responses from the council and manual systems which the council has used for the past so many years and the residents now want a change so that the council can adapt the use of ICTs to shun delays, lack of access to council information, poor service delivery and lot of paper work is being used leading to loss of information..

In 1998 up to 2008, they were many complaints that were received from the Chitungwiza residents, employees and agencies that the manual system was not effective and efficient since some documents could not be found, lack of access to information from the residents, poor communication lines communication between the council and the residents, stakeholders and other departments of line ministries, time consuming to search some files containing information, some documents were being easily manipulated by employees especially those who wanted to be engaged in fraud and fake services, some records were being manually updated resulting in loss of some information, some files were lost in file rooms, information was not readily available to residents and the employees were not as fast in serving them. But the municipality fathers adopted a do nothing approach to address the concern.

It is within this background there was an outcry by residents that, Chitungwiza Municipality is taking too long to upgrade their systems to the advanced use of (ICTs) so that there can be improved delivery of services to the public. The greatest challenge is that citizens do not have access to adequate information on the council operations and poor service delivery is being witnessed from the council. The residents, employees and agencies want the system of e-governance to be implemented at the municipality as it can be the one, which is expected to result in improved service delivery at the council.

It is the local authority's mandatory duty to provide improved service delivery to its local populace and this can be achieved through effective implementation of e-governance system. It is therefore necessary for all local authorities to implement e-governance system so that there can be an improved service delivery to the citizens. Currently at the Chitungwiza Municipality there is no council website, some telephone lines are not connected and some are down since the past 10 years resulting in poor communications, some departments have old computers and in some case the Information Technology Department is still struggling and is faced with many challenges to the use of internet.

According to Morris the use of e-governance system especially in local authorities both rural and urban, will serve a number of reasons such as to improve the efficiency and effectiveness in interaction between local authority and its residents and other stakeholders, bring about transparency and accountability in both rural and urban body operations, help improve reach of

the delivery of services to the citizens, provision of integrated and simplified services to citizens on anytime, anywhere basis, decentralize service delivery and improve accessibility of information to citizens, provide single window system for delivery of improved services and information to citizens, integrate data and services of various departments and enhance efficient inter-departmental coordination [3].

He also further argued that, the recent advances of e-governance system if implemented will help citizens in better delivery of services and information, improved communications, quick redressed of residents grievances, transparency and accountability in local authorities functioning, improved interactions with councils at different levels and opportunity for greater participation in decision making. In addition, e-governance system will benefit the local authorities in improved communications, improvement in revenue collection, efficient citizen grievance redressal, better coordination between departments, stakeholders and residents, creation of effective management information system, better mobilization and utilization of resources and overall improvement in governance, delivery of improved services and citizen interface.

STATEMENT OF THE PROBLEM

There has been growing concern over the capacity of Chitungwiza Municipality not using e-governance system in ensuring better access and delivery of improved services to benefit citizens, employees and various stakeholders. The problem under investigation is that Chitungwiza Municipality is faced with poor service delivery; lack of access of information from the public, the council does not have its own website where one can obtain council information anywhere and some telephones lines are not well functioning. This has led to poor service delivery, poor communications between the council and residents, lack of participation for all citizens since they do not have access to relevant information, lot of paper work, delays and too much bureaucracy. It is the general perception of the Chitungwiza community and the public that the resultant increase in such manner of such activities has to do with the competence or lack of Chitungwiza Municipality's management to take advantage use of e-governance system to better service delivery.

RESEARCH OBJECTIVE

- To analyse the benefits of using e-governance system by Chitungwiza Municipality.
- To find out challenges being faced by Chitungwiza Municipality in implementation and use of e-governance to improve service delivery.
- To find out possible strategies that can be employed to the challenges being faced by Chitungwiza Municipality in implementation of e-governance

LITERATURE REVIEW

According to Roberts literature review is the extraction of accumulated knowledges that is learnt from what others have already published that appears relevant to the research topic. This chapter is aimed at reviewing related literature to the research topic [4]. It analyses what other researches think about the topic. This chapter will first give description of e-governance

as presented by various scholars, explain the present state of ICT in Zimbabwe local authorities, highlights benefits of e-governance, illustrate examples of local authorities in various countries that have implemented and used e-governance as a way to improve service delivery, clarify the challenges faced by local authorities in undertaking e-governance as described by various articles and list and explain strategies that local authorities can employ to implement the use of e-governance to improve service delivery.

Description of E-Governance

According to Karim e-governance is the public sector's use of ICTs with the aim of improving information and service delivery, encouraging citizen participation in the decision making process and making government or municipalities more accountable, transparent and effective [5]. In addition e-governance involves delivering services to the public via internet, telephone, public access centres, wireless devices or other communication and information systems. According to Alexander e-governance is simply the use of modern machinery such as internet, local area networks, mobiles etc [6]. by the government or municipals to improve the effectiveness, efficiency service delivery and to promote democracy. Recently the use of e-governance system has brought the concept of wider participation for all citizens having access to relevant information which may be posted on websites by government or municipals. Saugata augments this notion by the assertion that e-governance is the application of ICTs for delivery government or municipalities services to the general populace, exchange of information communication transactions, integration of various standalone systems and services between municipalities or government to citizens. The key benefits of using e-governance system are to provide single window system for delivery of services and information to the citizens, provide integrated and simplified services to citizens on anytime, anywhere basis and decentralize service delivery and improve accessibility of information to citizens. James and Khairuddin argue that the use of e-governance system by many municipalities in developing world has signalled a new relationship between the municipalities and the citizens at large [7]. E-governance system has distinguished itself from the old way relationship of delivering improved services to the citizens, whereby the old way relationship was characterised by rigidity, long delays, unnecessary complexity and public sufferings to access current information. According to Leitner e-governance is a form of public administration use of ICTs to enhance the access delivery of municipalities' services to benefit citizens, employees and management of urban local bodies [8]. It aims to help strengthen local authorities' drive toward effective governance and increase transparency to better manage social and economic resources for development. Yong states that the broad aim for implementing and using e-governance system in many local authorities is to focus on clearly improving efficiency and effectiveness in service delivery, interaction between municipalities and its citizens and other various stakeholders, improvement in governance, delivery of services and citizen inter face, improved communications between municipalities and citizens and overall efficient citizen grievance redressal. It will be within the confines of this research to seek and assess the use of e-governance by local authorities to

improve service delivery. From the above it has been realized that e-governance can bring about efficiency and effective service delivery to the citizens and quick service delivery at a decentralized level. Alexander (2004) concurs with Yong when he said,.....the recent advances in using e-governance system by municipalities in developing world provide opportunity to transform the relationship between municipalities and citizens as well as contribute to the achievement of good governance goals. E-governance system will ensure that the interface between citizens and municipalities is made smooth and improved of service delivery, decentralization, better information management and transparency, citizen involvement in municipalities and overall improvement in urban governance across departments , citizens at all levels and quick redressed of citizens grievances. E-Governance issues cover a wide range of topics from government or municipalities trying to raise awareness about the democratic process and the system of municipalities or government to enhancing public participation. According to Gilbert (2004) e-governance system has a pivotal role to play in improved service delivery. Access to information through systems such as internet and municipalities websites has a very important role to play in ensuring the health of good governance. He also postulated that, the use of e-governance system by various local authorities ensures that citizens make responsible informed choices rather than acting out of ignorances or misinformation, enhances local authorities to provide services to its citizens and stakeholders in an efficient and effective way. He further postulated that through the use of the e-governance system, local authorities will be able to provide online services conveniently through the use of modern ICTs, bring services closer to the people, improve communications between the local authorities and citizens, reduces local authority operating expenses and be more transparent and accountable in the manner which it provide services to the public. According to Bryman the onus of the e-governance system is on the local authorities to use the system as a stepping stone to increase communication between themselves and the public in order to increase accountability and their operations [9].

Present state of ICTs in Zimbabwe local authorities

According to Zimbabwe E-Readiness Survey Report present state of ICT in both urban and rural councils can be estimated up to 65% because these local authorities in Zimbabwe have internet and email facilities. E-readiness is a term used to assess the preparedness of a community to participate in the global information society and digital economy. The level is gauged by assessing a community's maturity across a series of ICT. However the use of websites for disseminating information to the public is at its inception in Zimbabwean local authorities. In Zimbabwe, there are only 3 Local Authorities which are Bulawayo City Council, Mutare City Council and Harare City Council that have a website facility. Local authorities are as yet not networked to an extent that links could be established for the whole service of e-governance system. Most Municipalities in Zimbabwe have substantial ICTs in place although there are multifaceted challenges like lack of computers, shortage of finance to purchase machinery and lack of skilled personnel. These include computer based payroll system, document management, council property, and business licences. However,

ICTs have not been employed to improve interactions with the public, for eg providing business licences, application forms over the web. On the other hand many rural councils do not have adequate ICTs in place and are facing financial constraints to purchase the required equipment. The report stipulated that the present state of ICTs in Zimbabwe in general is very low as compared to other countries like China, Japan and Britain. This is because internet usage is growing reasonably at a slow rate, the level of penetration in rural areas is still well below international standards. The cost of internet access in Zimbabwe is very high and not many residents and companies can easily afford access to internet especially in rural areas. Use of advanced ICTs in Zimbabwe is still very low and internet access being extremely high.

DISCUSSION OF RESULTS / ANALYSIS

The results of our testing can pretty much be summarized with the following three points:

1. Modern Intel CPUs run at full speed (including the full Turbo Boost allowed based on the number of cores and workload) all the way up to 100°C
2. Even after the CPU hits 100°C, the performance is not greatly affected until the CPU spends about 20% of the time > 99°C
3. While stock cooling only causes around a 2.5% drop in performance, even a budget after-market cooler will dramatically improve CPU temperatures

Truly, it is a bit surprised at how well modern Intel CPUs dealt with really high temperatures. They manage to run at full speed all the way up to 100°C, and even then the performance is not greatly affected unless they spend a significant amount of time at that temperature. Certainly no one is advocating letting CPU run at those kinds of temperatures, however.

Therefore considering the writers concern, the results of the experiment carried out has allayed the fears of using computers in rural schools where the average temperature is high. The fears of thinking whether investing on computer systems will be a waste should not be taken serious any more. Majorly caution must be taken in considering the type of systems to acquire. Experiment showed that Turbo booster processors like Intel are of high reliability therefore in terms of purchase this must be taken into consideration.

Despite the outcome of this experiment by Bach, the article still caution computer users as this article is about performance there are plenty of non-performance based reasons to keep CPU temperature at a more reasonable level. This is because sensitive electronics like CPUs have a finite lifespan and running them at higher temperatures shortens it.

BENEFITS OF E-GOVERNANCE

Improved and enhanced delivery of service

According to Alexander (2003) e-governance provides improved and enhanced delivery of service [10]. E-governance system provides electronic delivery of information and services by the local authority. It also facilitates the equitable access of information to the public across the country through internet and websites. Bryman stipulated that the use of e-governance

system provides improved service delivery. Using e-governance system it becomes very fast and convenient for people in parts of the country to avail the council services anywhere and at anytime.

Empowerment of citizens through greater access to local authority information and ability to interact and participate

According to Saugata e-governance has a benefit of empowering citizens through greater access to municipality information and ability to interact and participate. Effective use of e-governance system in local authorities and sharing of information with various stakeholders' results in the empowerment of citizens through easy and enhanced access to local authority information and the ability to easily interact and participate in the process of governance.

Enhanced transparency and increased accountability of the local authority

According to Yong (2005) e-governance have a benefit of enhancing transparency and increasing accountability of the local authority. Application of e-governance system in the process of local authority also helps in enhancing transparency and increased accountability in the local authority functioning, interaction with the citizens and stakeholders. Sharing of information such as council audited financial reports to the public online for scrutiny, available of council minutes to the public online and as well as procurement procedures and process being open to the public introduces a lot of transparency in a local authority functioning to the public.

Improved relationship between the local authority and citizens

According to Leitner (2004) e-governance system provides a benefit of improving the relationship between a local authority and its citizens. Interactions between the local authorities can be stimulated and made more effective by the use of e-governance system. This can raise the trust of the citizens and improved relations are created since the council will be in a position of responding in time to the needs of its citizens, also saves a lot of time by providing services on a 24/7 basis which would have otherwise been done over the conventional 'counters' only during the working hours of the council.

CHALLENGES BEING FACED BY THE LOCAL AUTHORITIES OF ZIMBABWE IN IMPLEMENTATION AND THE USE OF E-GOVERNANCE TO IMPROVE SERVICE DELIVERY

Shortages of requisite machinery

According to Barry, one of the major challenges being faced by many municipalities is shortage of requisite machinery [11]. Many local authorities in Zimbabwe both rural district councils and urban councils do not have enough financial muscle to purchase sophisticated machinery. Because of inadequate machinery internet facility is not accessible for example those from other remote areas and especially in geographically isolated areas.

Lack of skilled personnel

According to Wheeler (2004) many municipalities in developing world are facing a challenge of lack of skilled personnel. This lack of skilled personnel has posed a serious challenge to the

use and implementation of e-governance system in Zimbabwe an local authorities to improve service delivery [12]. Zimbabwe lost half of its qualified staff in 2008 where the country was faced with economic melt downs to greener pastures, mostly neighbouring countries.

Shortage of finance

As stated by Hamilton (2000) local authorities' greatest challenge is that of shortage of finance. As a result local authorities have been failing to implement e-governance system effectively to improve service delivery [13]. Local authorities have experienced acute shortages of finance that have crippled their ability to provide improved services consistently. Lack of strong financial base from the councils has led to lack of using e-governance since some councils do not have enough money to purchase the advanced machinery.

Lack of support from the central government to assist the local authorities in implementing E-Governance system

Local Authorities have been faced with a challenge of lacking the consistent support from the central government to fully implement the system of e-governance as a way to improve service delivery. According to Robinson (2003) many municipalities in developing countries have suffered from unsupported programs and these have led to program failure since the government only makes unfulfilled promises and in some cases the programs are not well funded to achieve their main aim [14].

STRATEGIES THOSE LOCAL AUTHORITIES CAN EMPLOY IN IMPLEMENTING THE USE OF E-GOVERNANCE TO IMPROVE SERVICE DELIVERY

Engagement and collaboration with public-private partnerships

According to Colson municipalities need to engage and collaborate with other private partners such as civil society, private sector and public sector if they want to fully implement and use e-governance system to deliver improved services to their local populace [15]. This engagement with public-private partnerships provides a stepping stone in sourcing funds and equipment which in turn will help the municipalities to use and implement the system.

Training of personnel

The pervasive nature of e-governance it requires a lot of skills and use of websites and internet. Wheeler states that training of personnel in e-technology is necessary so that they can make use of such modern ICTs. This therefore requires the council staff to be equipped with the advanced knowledge on the use of advanced ICTs as way to deliver services effectively and efficiently. Training institutions like Universities, private colleges and training institutions can be a means to council staff to sustain employees with relevant knowledge, skills and vast experience

Increasing awareness to the public on the use and benefits of E-Governance system

According to Saugata lack of awareness from the public have crippled the functionality and usage of e-governance system. He further postulated that in some cases especially those resides

in rural communities or geographically isolated regions are not aware or fortunate to access to the use of advanced technologies equipment. Residents in rural areas and other disadvantaged communities need to be exposed to the digital economy so that they are not isolated or marginalised.

City twinning

According to Romney city twinning is also a vital strategy that can be used by local authorities to use e-governance system. This is whereby two local authorities collaborate to share and exchange ideas or information. Zimbabwean local authorities need to try and engage in such visits to other outside councils that have implemented or used e-governance system and share some experiences and borrow a leaf on what they have done to implement e-governance system [16]. City twinning is an important tool for municipalities learning process which can result in improved ideas and skill sharing.

Implementation and use of e-governance system by other municipalities such as municipality of Zanzibar, Lusaka and Maputo

The implementation and use of e-governance system have been appreciated by various municipalities both in developing and developed countries as a tool to enhance improved service delivery. According to Richardson the Municipality of Zanzibar, Lusaka and Maputo have implemented the system of e-governance [17]. These municipalities were assisted in developing the use of e-governance system by UNESCO, as part of these municipalities effort to deliver improved services to their citizens. Zanzibar, Maputo and Lusaka Municipalities since the era of 1992 up to 2000, the use of e-governance system in the above municipalities was far less developed. A survey which was conducted by UNESCO highlighted that many of even the most basic functions were being carried out manually and the level of ICTs in those municipalities was extremely low. There were poor service delivery to the people and in some cases the public demonstrated against that. It was within that context which vigorously perpetuated UNESCO to source some funds and try to implement e-governance system in those municipalities so as to improvise and do away with poor service delivery to better improved delivery of services to all citizens at all levels.

Richardson further postulated that, the above municipalities were stricken with a plethora of challenges such as lack of support from the central government, computers were scarce, and most the work was being done manually. This led to slow use of e-governance system in many municipalities. Lack of any IT infrastructure at these municipalities and also lack of strong financial base to purchase the required IT equipment led to poor service delivery. In the case of Lusaka Municipality computers were scarce in such a case that during 1992 up to 1996 heads of departments did not even have their own PCs and all documents were being manually filed by secretaries. According to Richardson (2005) in the case of Zanzibar and Maputo Municipalities the interaction and delivering of services to the public was poor since most of the work being done was paper based and responses would often take a month or more to return. Poor communications were being experienced since some lines of telephones were not connected, and no internet connections were there at these municipalities. Interactions

of these municipalities with the citizens were very poor and citizens complained about the issue since they were having poor service delivery.

A survey which was conducted by UNESCO showed that Zanzibar, Maputo and Lusaka Municipalities were delivering poor services due to absence and lack of appreciating the use of e-governance system. In their survey they found that these municipalities had no overall ICTs policies within the municipality and that only the Department of Finance and Information technology (IT) were only the once with functioning computers and computer operators in those departments had a very low level of knowledge regarding e-governance. Through the use of e-governance system, information is now available on the web and can be easily accessible anywhere and now citizens are now able to interact with the municipality via internet and a wide variety of services are now available on online. The concept has brought about delivering improved services to the citizens, people are now also able to search for the specialised databases and download forms and apply for services like applications forms for licence renewal online, improvement in revenue collection, efficient public grievance redressal, better co-ordination between various departments, agencies and stakeholders and this has paved an opportunity for greater participation of all citizens in decision making processes. Long queues at municipalities of Zanzibar, Maputo and Lusaka have now become a matter of the past.

RESEARCH METHODOLOGY

Research design

According to Mason a research design refers to a plan to be followed to answer the research objectives or framework to solve the specific problem. In this research, the researcher selected the most suitable research design, which enables to come up with valuable, credible and reliable research findings [18]. The design allows for the collection of data that answers the research problem and questions. Since the situation on the ground can be best described qualitatively, a descriptive research design will be used as the ideal one.

Descriptive research design

Ryman (2001) defines descriptive research design as a form of plan or structure of investigation that is intended to generate conclusive data [19]. The descriptive research design is chosen ahead of other research designs primarily because the problem under investigation can be best described qualitatively. In this design respondent answered pre set questions in both structured and unstructured questionnaires. In this research interviews and questionnaires were used to gather data on the existing situation.

Target population

According to Dey a target population is a group from which a research is being chosen. Chitungwiza has a population of about closely to 2 million people. In carrying out the study, the target population for this research was composed of top management, employees of Chitungwiza Municipality and strictly residents of the Chitungwiza only [20]. The target population included council employees in management posts it was a mixture of top managers, middle level managers, low level employees and strictly residents of Chitungwiza.

Sample size

According to Crame a sample size can be defined as a subset of the entire population under study whose characteristics are synonymous to the sample population [21]. The researcher limited the sampling frame to the management, residents and employees of Chitungwiza Municipality. The researcher randomly selected the respondents from the sampling frame. Questionnaires and interviews questions were distributed to the residents, employees and top management. The researcher selected 50 respondents as a sample size of which 30 were residents of Chitungwiza, 10 were employees and 10 were top management of Chitungwiza Municipality.

Random sampling

According brymanto Adams and Schvaneldit random sampling this is where each member of the population should have an equal chance of being selected [22]. This can be achieved by numbering the individuals in the sampling frame, and then selecting from these using some random procedure produced manually or on a computer. In addition, the technique saves time as the researcher can be able to select a respondent who falls within the desired group. The researcher collected data randomly from respondents he came into contact with such as women, landlords and school children. The researcher ensured that the respondents were from different wards and locations of Chitungwiza.

Secondary data

In pursuant of this research to be a successful, the researcher used secondary sources of information such as textbooks, internet, journals, articles and some newspapers. This was done as a prelude to the actual research in the field. According to Creswell secondary data refers to data obtained from already published sources such as textbooks or journals [23].

Primary data

According to Mason primary data refers to data that the researcher collects in the field specifically for the project at hand. Primary data have some advantages which include; data is gathered specifically for the purpose for the research at hand. This provides more reliable information as it is first hand information collected from the target respondents Disadvantages include, difficult to collect, requires too much attention and time to gather data. In addition respondents might deliberately lie or give biased information or unwillingness to respond especially in regarding to confidential information and some people are not usually willing to disclose some information under the research study. Field research information was obtained through questionnaires and interviews. The purpose of carrying out the field research was to get first hand information, analyze, interpret it and draw conclusion and make recommendations.

Research instruments

The researcher used interviews and questionnaires only to collect data specifically for the research project under study.

INTERVIEWS: FACE TO FACE INTERVIEWS

Personal unstructured interviews were used by the researcher to get information for the research project at hand. These were face to face interviews where the researcher asked questions

to employees of Chitungwiza Municipality so as to get in-depth understanding of the operations and challenges being encountered.

QUESTIONNAIRES

In this research, questionnaires were used to gather data from the respondents. According to Jankowicz a questionnaire is a set of questions designed to generate the data necessary for accomplishing the objectives of the research project [24]. According to Sekaran questionnaires can be open-ended meaning that they are not restrictive, the respondent is in position to write his or responses without restrictions [25]. Questionnaires can be closed-ended meaning that it can be structured in a way that the respondents give responses that seek specific facts, opinions, attitude and beliefs.

MAJOR FINDINGS

People’s knowledge on e-governance and its use to improve service delivery.

Source: Research data 2013

Figure 1 above shows people’s levels of knowledge on e-governance and its benefits. However during the field research, researcher noted that 20% of the respondents to questionnaires and interviews knew about e-governance and its associated benefits, 30% have limited knowledge about e-governance and 50% of the respondents do not have adequate knowledge about e-governance. During the field research it was noted that 20% of the residents do not have adequate information on what is e-governance and its functions. Also 20% of the employees also did not have information and knowledge on what is e-governance. 50% of St Marys, Makoni, Zengeza and Chikwanha respondents showed that they had no knowledge on e-governance system. It is only not the residents lacked knowledge on e-governance as some of the Chitungwiza employees and management expressed ignorance and lack of adequate knowledge on the issue. The researcher also noted that the residents lacked awareness and deep understanding on e-governance system and its use by local authorities to improve service delivery as evidenced by 50% on the pie chart.

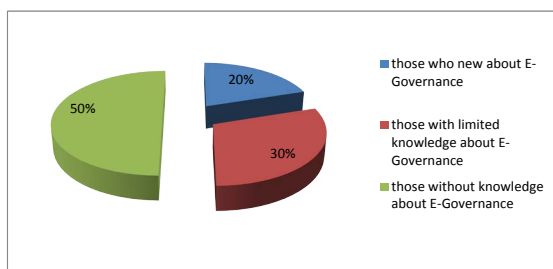


Figure 1: Pie-chart showing people’s levels of knowledge on e-governance system.

Source: Research data 2013

Figure 2 above show some of the benefits of using e-governance system. During the research, the researcher noted that most of the respondents advocated for the use of e-governance system by local authorities to improve service delivery. From the research findings 70 % respondents advocated for the use of e-governance system by local authorities because of the benefit of having improved and enhanced delivery of services.

According to Alexander (2003) e-governance system provides a benefit of improved and enhanced service delivery to the public in a fast, effective and efficient manner, better delivery of services and information through various channels such as internet and websites and it gives opportunity for greater participation of all people in decision making. Improved service delivery will lead to high levels of trust by the citizens and will able to pay their rates in time. The findings of the research revealed that 10% of the respondents advocated the use of e-governance system because it provides a benefit of improved relationship between the local authority and citizens. According to Leitner e-governance system provides a benefit of improved relations between the citizens and municipalities. There will be a two-way communication channel which in turn will foster mutual relationship fulfilling gone of the major objectives of good governance. The study also revealed that 10% of the respondents advocated for the use of e-governance system at Chitungwiza Municipality because it provides a benefit of enhanced transparency and increased accountability of the council. Yong postulated that e-governance system if used by municipalities will provide enhanced transparency and increased accountability in the municipality functioning [26]. Also the findings of the research revealed that 10 % of the respondents advocated for the use of e-governance system since it provides empowerment of citizens through greater access to local authority information and ability to interact and participate.

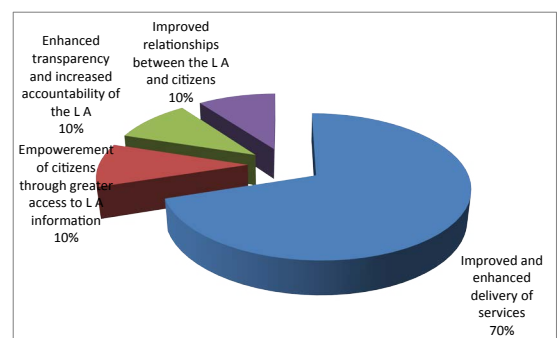


Figure 2: Pie chart showing some of the benefits of using e-governance system.

Source: Research data 2013

The Figure 3 above shows the range of challenges that Chitungwiza Municipality is facing in implementing and use of e-governance system so as to improve service delivery. The graph shows challenges that have made it difficult for the Municipality to implement and use e-governance system. The challenges of shortage of finance, lack of skilled personnel, resistance to change, lack of support from the central government and lack of adequate machinery were mentioned by respondents as the major challenges that has the greatest impact on implementing and use of e-governance system by local authorities to improve service delivery. The challenges that Chitungwiza Municipality as a local authority is facing include the shortages of requisite machinery which consist of advanced computers, fax machines and equipment of internet installations so that the municipality can have a council website. 80% of the respondents from the management and employees cited that the lack of adequate machinery is a challenge faced by the council. use of e-governance system in municipalities. The findings from

the research indicate that the council do not have its own council website due to lack of adequate ICTs infrastructure. Main channels of communication between the general public and the municipality is still largely over the counter-meaning face to face, some departments have obsolete machinery e.g. computers, some departments have few computers which are functional and some of the operations are still being done manually [27]. In some cases long queues in payment of rates which is frustrating the citizens since they want online services which is fast and there are complaints from the residents that there are delays in response from the municipality since some responses are taking too long some even a month. Chitungwiza Municipality is also facing the challenge of lack of skilled personnel and knowledge in the emerging nature of ICTs and E-Governance system. 60% of the respondents cited this challenge which is being faced by Chitungwiza Municipality. The study revealed that the lack of skilled personnel is also a major blow being faced in implementation and use of e-governance system by local authorities. Due to the economic instability during 2008 the local authority lost many of its qualified and experienced employees who had vast skills and knowledge on ICTs to neighbouring countries or greener pastures. According to the management of Chitungwiza Municipality, only a few qualified personnel were left behind. Shortage of Finance is one of the major challenges being faced by Chitungwiza Municipality in implementing and use of e-governance system to improve service delivery. 100% of the respondents cited this challenge as the major one which is being faced by the council. The study also revealed that resistance to change is also another challenge that Chitungwiza Municipality is facing from the staff and residents in order to implement and use of E-Governance system to improve service delivery. 20% of the respondents cited this challenge. Chitungwiza Municipality is facing the lack of adequate support from the central government so as to fully take aboard the initiative of e-governance system to improve service delivery to the public and match the globalisation trend.

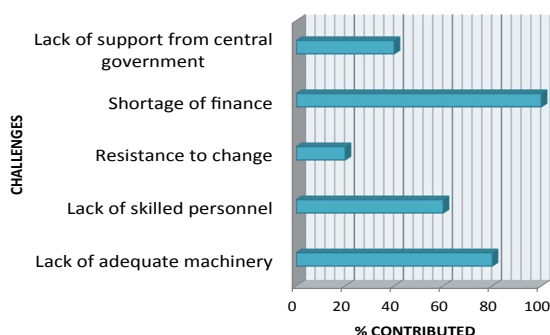


Figure 3: Challenges faced by Chitungwiza Municipality in implementation and use of e-governance to improve service delivery.

Source: Research data 2013

The Figure 4 shows some of the strategies that can be adopted by Chitungwiza Municipality to implement and use of e-governance system to improve service delivery. The pie chart shows some of the strategies that were mostly suggested by the respondents in order to try and survive some of the challenges being faced by the local authority to implement and use e-governance system to improve service delivery. These strategies can be a solution to the challenges which the local authority is currently facing in implementation and use of e-governance system.

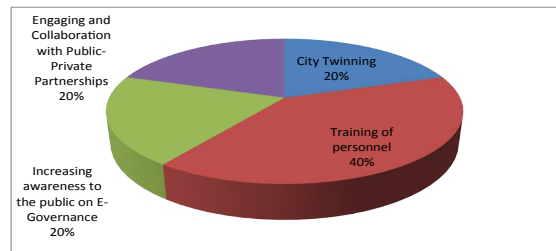


Figure 4: Strategies that can be adopted by Chitungwiza Municipality to implement and use E-Governance system to improve service delivery.

Engaging and collaboration with public-private partnerships

A public-private partnership is the collaboration between local authorities and the private sector in order to improve service delivery. According to Municipality officials, the local authority need to engage in public-private partnerships in order to fully implement the system of e-governance since they have the ability to mobilise resources and they have the capacity to provide the service more efficient and effective because they have the skilled personnel.

Training of personnel

The findings of the research revealed that the Municipality suffered from brain drain and most of its qualified employees left the organisation to greener pastures. Only a few qualified and experienced personnel were left behind. According to Daniels postulated that there is need for training of personnel in the use of advanced ITs so as to equip them with vast skills. This therefore requires the council employees to be equipped with skills in the use of advanced ICTs

City twinning

According to the Municipality, city twinning can also be a vital strategy which can be used by the council in order to implement and use e-governance system. This city twinning will give a platform for the council to visit and learn from other municipalities that have adopted and used the system.

Increasing awareness to the public on the use and benefits of E-Governance system

The findings of the research revealed that 50% of the respondents do not have any knowledge, awareness and understanding of the use and benefits of e-governance system. According to 50% of the respondents, they revealed that there is no any form of awareness or education that takes place at the community level regarding to the use of and benefits of e-governance system. According to Saugata there is need for increased awareness to the public on e-governance system since the public are the end users of the benefits. This awareness can be done through meetings, workshops, trade fairs and awareness campaigns [28].

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CONCLUSION

In conclusion, the research identified a number of areas requiring further analysis with regard to the use of e-governance by local authorities to improve service delivery. The objectives therefore set in an endeavour to objectively assess the use of e-governance by local authorities to improve service delivery were, to analyze the benefits of e-governance system, to find out challenges being faced by Chitungwiza Municipality in implementation and use of e-governance system and to diagnose possible solutions. An explorative case study design with all its sub tenets facilitated the establishing of various research findings and from these several conclusions was arrived at. From the findings, people's levels of knowledge on E-Governance, 20% of the respondents only knew about e-governance, 30% had limited knowledge about e-governance and 50% of the respondents do not have knowledge about e-governance. The research concluded that Chitungwiza Municipality is faced with such challenges such as shortage of finance, shortage of adequate machinery and lack of skilled personnel to fully implement and use e-governance system to improve service delivery Chitungwiza. From the data collected Chitungwiza Municipality can adopt various strategies which can help to combat the challenges being faced such as City twinning, public-private partnerships and training of personnel, the research established that more could be done.

RECOMMENDATIONS

- The public private partnerships and City twinning initiatives to be extended to the IT sections so as to ensure that Chitungwiza Municipality can acquire financial and other resources from the partnerships and exchange visits that would have been forged to enhance their use of E-Governance capabilities.
- Chitungwiza Municipality should build on their human resource development initiatives so as to ensure continuity of ICT by retaining the skills and knowledge that the local authority has in its IT department. This ensures that skilled labour is not gradually lost through greener pastures and various labour turnovers.
- The researcher suggests that Chitungwiza Municipality should create a framework that promotes the availability of ICTs in all its departments through appropriate policy interventions.
- Chitungwiza Municipality should rigorously develop and implement awareness campaigns and training programmes in ICT skill for its residents so as to equip them with vast knowledge and understanding on E-Governance.
- The Municipality should develop policies to encourage the use of ICTs in improving service delivery to the public.
- The central government should develop smart partnerships with relevant stakeholders in the ICT industry to improve and expand E-Governance system to connect even the remotest local authority to improve service delivery.

- Chitungwiza Municipality need to plan and have a council website so to make services accessible to the citizens in a fast, efficient and effective manner.
- The central government in collaboration with the Ministry of Information and Communication and Technology should formulate and implement a policy framework for the use of e-governance by all local authorities so as to improve service delivery to the people.
- An e-governance plan should be crafted in conjunction with the major stakeholders. It should be well laid out and elaborate on the benefits of using e-governance system to improve service delivery and shared by the residents and stakeholders.
- Efforts should be made to ensure that e-governance system is taken aboard by the Municipality in years to come in order to improve service delivery to the public through advanced use of internet and websites.
- Need for the Municipality and central government to provide or facilitate ICT oriented e-governance workshops and training so that the public and council may fully realise the benefits of e-governance system.
- The central government should made significant strides towards e-governance by setting up a wide area network that links all local authorities throughout the country so that e-governance system can be a viable initiative in improving service delivery.
- ICTs should be employed by the Municipality to improve interactions with the public for example e-billing and providing of services over the website in a fast and convenient manner.
- Training for staff and public on the use of ICTs should be done through workshops so that they can gain deep understanding on the use of e-governance.

REFERENCES

- [1] Mandirahwe Z, Chitungwiza Telegraph Convex, Harare, 2010.
- [2] Urban Councils Act Chapter 29:15, Harare.
- [3] Morris DI, Research for Management 4th Edition, Prentice Hall, London, 2005.
- [4] Roberts E, E-Data and Communications: From Revision to Fulfillment, Sage Publications, London, 2002.
- [5] Karim MR, Electronic Commerce 3rd Edition, Sage Publications, London, 2002.
- [6] Alexander D, Communications in Governance, Sage Publications, London, 2003.
- [7] James B and Khairudddin C, E-Business: Strategic thinking and Practice, Pelandik Publishing, London, 2004.
- [8] Leitner B, E-Business and Communication Management, 4th Edition, Prentice Hall, London 2004.
- [9] Bryman C, International Corporate Governance, Juta, New Delhi, 2001.

- [10] Alexander D, Communications in Governance, Sage Publications, London, 2003.
- [11] Barry J, E-Commerce and Management 1st Edition, Weaver, Ontario, 2004.
- [12] Wheeler S, Improving Public Service delivery through E-Governance, Longman, London, 2005
- [13] Hamilton M, E-Marketing in Business, Prentice Hall, London, 2000.
- [14] Robinson OW, E-Business in American Business, Cambridge University Press, London, 2003.
- [15] Colson C, E-Commerce and Management 3rd Edition, Longman, London, 2004.
- [16] Zimbabwe E-Readiness Survey Report May, 2005.
- [17] Richardson D, E-governance and improved service delivery: An Indian Perspective, 2nd Edition, Mac-GrawHill Publications, London, 2005.
- [18] Mason J, Qualitative Research, Sage Publishers, London, 1996.
- [19] Strauss A, Research Methods, St Martins New York, 1999.
- [20] Dey I, Qualitative Data Analysis user friendly guide for social scientists, Routledge, London, 1993.
- [21] Crame D, Understanding Research Methods, 2nd Edition, Longman, New York, 1999.
- [22] Adams G and Schvaneldt J, Understanding Research Methods, Prentice Hall, London, 1991.
- [23] Creswell JW, Research Design: Quantitative and Qualitative Approaches, Sage Publications, California, 1994.
- [24] Jankowicz M, Research Methods, Pearson, New Jersey, 1995.
- [25] Williams G, An introduction to E-Communications, Sage Publications, London, 2000.
- [26] Sekaran, Research Methods 3rd Edition, Rout Ledge, London, 1992.
- [27] Yong A, Towards excellence in E-Governance, Times Media Publications, Singapore, 2005.
- [28] Saugata B, Conceptualizing E-Governance. A conceptual Introduction, Oxford University Press, 2007.