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Diploma Thesis

Enhancing citizen participation through eDemocracy in Zambia

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DIPLOMA THESIS ASSIGNMENT

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Informatics

Thesis title

Enhancing citizen participation through eDemocracy in Zambia

Objectives of thesis

The aim of this thesis is to analyse the challenges of implementing eDemocracy in Zambia. The main purpose is to look at the available tools and provide a solution for the implementation of an eDemocracy strategy for Zambia.

The other specific goals of the thesis are:

- To analyse the current state of eDemocracy in Zambia;
- To identify the challenges of implementing eDemocracy in Zambia;
- To design possible solutions to enhance citizen participation through eDemocracy in Zambia.

Methodology

The methodology for this research is based mainly on secondary material. The discussion brings together the theory of eDemocracy and the social, political and technological environment in Zambia. A practical solution will be designed to enhance citizen participation in decision making processes. Conclusions of the thesis will be formulated based on the results of author's primary and secondary research.

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COLEMAN, S. and BLUMLER, J.G. The Internet and Democratic Citizenship: Theory, Practice and Policy Cambridge: Cambridge University Press, 2009, 220p.

HILBERT, Martin. Digital Processes and Democratic Theory: Dynamics, Risks and Opportunities That Arise When Democratic Institutions Meet Digital Information and Communication Technologies [online]. 2007. Dostupné z: <http://www.martinhilbert.net/democracy.html>

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Organisation for Economic Co-operation and Development. OECD. [on-line]. Available at WWW: <<http://www.oecd.org>>.

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Prague January 15. 2013

Declaration

I do hereby declare that this thesis titled “Enhancing citizen participation through e-Democracy in Zambia” is entirely my own work and I have used only the sources referenced at the end of the thesis.

In Prague, 23.3.2013

.....

Fred Nyambe

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DEDICATION

I wish to dedicate this thesis to my late father who has been my mentor and role model.

Enhancing citizen participation through eDemocracy in Zambia

Posílení účasti občanů prostřednictvím e-demokracie v Zambii

Summary

One of the most important aspects of democracy is communication and free flow of information among stakeholders. Information and Communications Technologies (ICTs) are being used to enhance democracy in various countries. This study was aimed at exploring how ready Zambia as a country is for e-Democracy. The potential for successful implementation of e-democracy was assessed in this study. The challenges and impediments to usage of ICTs in the democratic process were discussed and analysed. Despite the various challenges, there exist a number of opportunities which create an enabling environment for e-democracy. Due to existence of certain favourable conditions, a model for the solution to the challenges was designed based on the information collected from the field survey and review of literature. Furthermore, in order to ensure successful implementation, recommendations based on the findings from the study were also suggested.

Key words

e-Democracy, e-Participation, e-Voting, Zambia, developing country, Government, ICT.

Shrnutí

Jedním z nejdůležitějších aspektů demokracie je komunikace a volný tok informací mezi zainteresovanými subjekty. Informační a komunikační technologie (IKT) jsou využívány pro posílení demokracie v řadě zemí. Tato studie byla zaměřena na zjišťování, do jaké míry je Zambie jako stát připravena pro e-demokracii. Rovněž byl v této studii zhodnocen potenciál pro úspěšné zavedení e-demokracie. Dále byly probrány a zanalyzovány výzvy a překážky pro užití IKT v demokratickém procesu. Navzdory rozličným složitostem, existuje i množství příležitostí, které vytvářejí vhodné prostředí pro e-demokracii. Vzhledem k jistým příznivým podmínkám byl model pro řešení těchto výzev navržen na základě informací nasbíraných při průzkumu v terénu a na přehledu literatury. Mimoto byla navržena i doporučení založená na zjištěních z této studie, která by měla zajistit úspěšné zavedení e-demokracie.

Klíčová slova

e-demokracie, e-účasť, e-hlasování, Zambie, rozvojová země, vláda, IKT

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1. INTRODUCTION

Information and Communications Technologies (ICTs) have become a part of our day to day life. ICTs are viewed as a major factor of development and are being applied in different industries both public and private sectors. The boundaries of geography have been broken allowing people to communicate in the most efficient manner and there still seems to be more possibilities beyond what is currently prevailing.

One area where ICTs are being employed currently is in the governance and democratic processes. As people get more enlightened, they seek to question the representatives and hold them accountable for the policies and decisions they make. According to (Brown, 2007), the public will not support decisions unless they have been consulted and been involved in the process. In order to fulfil this, government and politicians are compelled to communicate effectively with the people who put them in office. For them to be able to achieve this, one available tool at the disposal is ICT hence the terminologies e-democracy and e-participation.

E-democracy is a fairly new concept that integrates Information and Communications Technologies into the democratic process. The boundaries of space and time have been removed although there are some scholars who are sceptical about their application in the democratic process. (Glogoff, 2001) cautions that online communication is not as rich as face to face communication, since the 'personal' touch is not there. He however agrees that it is a very efficient tool. In as much as it is efficient, traditional methods of communication must also be supplemented.

Zambia is a country located in the Southern part of Africa. It became a multi party democratic nation in 1991. Elections are held regularly every five years and they have been generally classified as free and fair with relatively few disputes here and there. Its democratic standing has improved from being classified as a hybrid democracy to being a flawed democracy (CIU, 2012).

This research reviews the literature on democracy as a concept together with e-democracy and e-participation. The current initiatives and tools that support these concepts will be

explored. The research shall discuss whether Zambia is ready for e-democracy and propose a technological framework that fits into the Zambian context considering access and availability of ICTs. The various challenges and solutions shall be assessed and discussed.

ICTs have the potential to increase development and democracy through enhancing the freedom of speech, free flow of information and promotion of human rights (SIDA, 2009). This power needs to be harnessed in a coherent manner and supported by the right policies and partnerships thereby enhancing service delivery and citizens' satisfaction.

2. OBJECTIVES AND METHODOLOGY

2.1 OBJECTIVES

The main objective of this work is to explore and analyse the challenges and potential of implementing e-democracy in Zambia. The purpose is to look in depth into the systems and tools available and provide a solution that is applicable and achievable in Zambia.

Other specific goals of the thesis are to:

- Analyse the current state of democracy in Zambia;
- Identify the challenges of implementing e-democracy in Zambia;
- Design possible solutions to e-democracy.

Hypothesis

- The proportion of people who think when citizens participate in decision making processes they are more likely to be satisfied with the decisions being made by their political leaders is higher than 0.7.
- There is no relationship between having access to internet and the thinking that internet can be used as a tool for enhancing citizen participation in the democratic process in Zambia.
- The proportion of people who think Mobile technology e.g the use of cell phones for citizen participation is the most efficient and cost effective way for the masses is higher than 0.7.

2.2 METHODOLOGY

The methodology combines desk research and field survey on the e-democracy. The country of focus is Zambia located in the Southern part of Africa. Literature on democracy, e-democracy shall be discussed bringing together the political, social and technological contexts.



Figure 1: Map of Zambia

Source: www.zambiatourism.com

2.3 POPULATION

The population targeted in this study are Zambians aged above eighteen years of age both living in Zambia and abroad. This group was targeted because these are the people that have the right to engage in the democratic decision making process.

2.4 SAMPLE

(Best and Kahn, 1993) defines a sample as a small group of a population selected for a survey and analysis. In this study, the sample chosen is made up of two hundred and thirty eight people that were randomly chosen and responded to the questionnaire. (Latif and Maunganidze, 2003) state that the random sampling method gives each person in the population an equal chance to be chosen.

2.5 RESEARCH INSTRUMENTS

Questionnaire

(Best and Kahn, 1993) say that a questionnaire is a data gathering tool through which respondents answer questions or respond to statements in writing. The advantage of this instrument is that it facilitates the acquisition for any qualitative information, which can be objectively quantified. The research instrument was used in a manner that is consistent with the principles of questionnaire creation. All the questions were framed in a manner that the respondents would understand. Biased questions that might encourage the respondents to give an answer that the researcher expected them to give were avoided. Open-ended questions were used to allow the respondents to provide answers in their own words. Restricted questions or closed questions were used to ask the subjects to respond by choosing an answer from a set of alternatives. This provided a control over the respondents' range of responses by providing specific response alternatives.

Data Presentation and Analysis Procedures

The primary data from the questionnaire, was sorted, analyzed, interpreted and presented in tables, graphs and charts. Statistical formulas using SAS statistical package for each specific calculation were also used to prove the hypotheses.

Limitations of the study

A number of obstacles were experienced in this study. One of the first limitations was data collection which was costly and time consuming. Although the respondents were assured of anonymity and confidentiality, a number of them could not respond for various reasons.

Ethical Considerations

The researcher explained to the target population on the nature of the study and also the benefits that can be obtained after completion of this study. An informed consent was obtained from the sample population and no names were recorded on the questionnaire. The participants were assured that they would not be prejudiced or victimized whether they agree to participate or not. All the participants were assured of anonymity and confidentiality.

3. LITERATURE REVIEW

3.1 Introduction

Over the decades there has been vast technological advancement that has seen the proliferation of Information and Communications Technology (ICT). Defined as electronic networks that embody complex hardware and software linked by vast array of protocols (Marshall, R and Silverstone, 1996), Information and communications Technologies (ICTs) are seen as a tool for collaboration, engaging and advancement in various fields and societies. Democracy is one such area where these tools are increasingly being employed. ICTs allow innovative sharing of information and much broader collaboration among government departments. Furthermore, there is increased collaboration between different branches of government and citizens (O'Reilly, 2010).

Social media technologies such as Facebook, Twitter, crowdsourcing and cloud computing to name a few are being used to solve collective problems at city, state, national or international level (O'Reilly, 2010). Political parties, citizen's representatives at various levels and indeed the citizens themselves are engaging in such media to participate in one form or another. As technology continues to evolve, this potential seems to be growing from strength to strength.

The potential for citizens' engagement using ICT has been witnessed in the uprisings in North Africa and the Middle East. However, a lot of questions are raised as with how this relates to the democratic process itself. This demonstrates how much power social media has in mobilising the citizenship. Results are unprecedented. The question is "are we making a better world with Information technology?"(Walsham, 2001), followed up by how can we make a better world with Information and Communication Technology (MISQ, 2004) must be addressed if ICTs are to truly benefit humanity at large.

Research evidence shows a strong link between access to information and communications technology (Bhatnagar, 2003). However, what is important also is not just the infrastructure itself but the content of the information must appropriate to the particular situation (Heeks, 2002). Social structures are necessary to exploit technological potential

(Avegerou, 1998) and thereby become a crucial aspect in the determination of societies ability fully utilise ICTs (Cornford, 2003).

There are different perspectives on the real value of e-democracy. It would not make sense if digital democracy created virtual parallels of political processes and structures (Coleman, 2007). Only when harmony created between ICT and democracy generate value for society would citizen participation make sense. A framework looking at public value set up by (Moore 1995) conceptualises the context of strategic management in government. (Kelly, 2002) and other scholars built on the concept and applied it for broader improvement. They believe only the public can approve what is of value to them. Therefore, focus on public value is an important aspect in so far as citizen engagement in democracy is concerned.

It is without doubt that e-democracy and e-participation have there own challenges when it comes to implementation. When it comes to developing countries, these challenges range from policy to ICT infrastructure, accessibility and skills. This raises the issue whether online engagement of citizens is really a representative of the masses of people. However, (Coleman 2001) argues that one key objective of online engagement is to inform elected representatives than be concerned with the participants. There is need to blend online engagement with other initiatives if a wider citizenship is to be targeted.

3.2 Democracy

3.2.1 Definition of democracy

There is significantly wide literature on democracy. There are various definitions given by different writers and scholars. Democracy, the word itself comes from two greek words “demos” meaning people and “kratos” meaning power (John Dunn, 1993). From the word itself, it can be seen that democracy is about the people. The aim of democracy is to ensure that the people are empowered rather than some other group in society (Donnelly, 2003).

Therefore, a democracy is a form of government that is in line with the principle of the ruled and the ruler, i.e the popular will and the law. The popular will is from the people, where the power belongs. The ruler therefore acts as an agent of execution of the will of the ones who hold the power. The ruler therefore conforms to ends determined by the

general will (Donnelly, 2003). Even though there seems to be general agreement of power belonging to the majority, some democracies seemed to be biased in their implementation. Some small elite groups exercised the right to choose leadership on behalf of the wider majority. Women and some men were excluded from participation based on ethnicity and racial background (Sorensen, 1993). For example in South Africa democratic rule was in the hands of the minority and mainly determined by race (Sorensen, 1993).

Elections justify the representative or ruler and grant him or her authority to execute their will not his or her own will (Benoist, 2008). Elections are an integral part in any democratic dispensation. (Carothers, 1992) considers elections as a synonym for democracy. (Joseph Schumpeter, 1942) argued that elections were the only part important in the democratic process. He further stated that the time period between elections the governed are reduced to the status of observer whose task is to choose whether to re-elect or replace them in the next election. This statement has been criticised by some scholars. It offers a narrow perspective of the whole democratic process. (Coleman, Blumer 2009) identify five key areas as necessary for any democratic system:

- Free and regular elections
- Rule of law
- Freedom of speech
- Government accountability and responsive to citizens concerns
- Exercise of civil society sector free of state control

3.2.2 Democracy- Ideals and values

Democracy in itself as a system of governance must have features that make it different from other public decision making concepts (Mayo, 1960). It is important in this work to highlight these values to ensure consistency when discussing the aspect of e-democracy.

3.2.2.1 Equality

This is one major ideal of the concept of democracy (Sartori, 1962). The work further argued that popular sovereignty and self-governance are key features that make a system democratic. The fundamental theory of democracy is based on human equality. All human beings are equal with respect to their rights within the society they live in (Jahabaksh,

2001). However, there is a difference in how people are treated in different democracies and in different countries. Some issues under constant debate with respect to equality are women's rights, people with different disabilities and various minorities. (Bryce, 1931) classifies equality in five different categories namely:

- Civil equality, which involves an individual's right to be protected under the law;
- Political equality, where each individual has an equal share in governance issues and is equally eligible to hold any post in public service;
- Social equality, no distinctions drawn between classes and ranks in society;
- Economic equality, an attempt to share wealth equally among people thereby creating equal opportunity for all.
- Natural equality, similarity among all human beings with respect to their birth e.g possession of five senses and similar mental capacities.

How equality is classified is subject to debate. The major focus here is political equality. Equality must equip one with enough rights to participate in political affairs without intimidation or fear. The equal right for every individual to speak was a major factor of democracy in Athenian democracy (Sealey 1976). Every single citizen must have the same power of exercising political participation (Ross, 1952). According to (Dahl, 1989) people that have less wealth and status are likely to be unequal when it comes to political participation. (Lively, 1977 agrees with this notion stating that there are insufficient structures to reach political equality. Furthermore, (Schlozman, 2006) states that political equality is at the heart of democracy however, it is threatened by economic inequality. There are various views from different scholars on the subject of equality but one thing they agree is that equality is essential to any democratic dispensation.

3.2.2.2 Liberty

The word liberty according to The Encyclopaedia Britannica means state of freedom. Liberty can be categorised as Political freedom and freedom of expression. Political freedom is the aspect that allows an individual the right to free political participation without fear. This idea according to (Jahanbaksh, 2001) includes voting, campaigning and standing for public office. This means candidates can run for public office without being hindered by legal barriers. It includes the freedom of citizens to air their views publicly and

criticise present decision makers (Mayo, 1960). The freedom of expression includes the freedom of speech and communication through various media. This entails citizens are free to assemble and seek to realise their political aims without the fear of being reprimanded (Jahanbaksh, 2001). (Cohen, 1972) categorises this freedom into two i.e. the freedom to oppose and the freedom to provide alternative courses of action.

3.2.2.3 The Majority principle

This is one value that has attracted different views among writers and scholars. From one point of view it seems difficult for the majority to make decisions but on the other hand if the few are allowed the power to make the decisions then the rule would apply to the few (Jahanbaksh, 2001). The ambiguity of the majority principle is further discussed by (Cohen, 1972) with respect to the proportion of the majority. He questions what proportion is legitimate, is it two-thirds or three quarters? It is confusing as to where the majority is drawn from, is it the majority of the people who actually vote or is it the majority of the entitled (Cohen, 1972)? Majority rule is upheld if representatives have been voted by majority of the voters (Mayo, 1960). If majority of the voters have chosen representatives, the decisions the latter make are deemed legitimate (Mayo, 1960). One other important aspect of the majority rule is that the minority must accept as legitimate the decision of the majority. The majority rule is the best judgement of a given society (Hallowell, 1965). He argues that widest popular participation and discussion yields wiser and legitimate decision than discussion and participation limited to a few. ICT development opens up new possibilities in this regard. What was a very huge challenge can be done in a more quicker and cost effective way with innovation as technology changes. The majority principle is implemented by way of choosing decision makers through elections held at regular intervals (Mayo, 1960). (Haskell, 2000) points out that elections can only be seen as democratic if voters have alternatives, they can participate fully without fear and all votes have equal weight. (May, 1952) describes the majority rule as the only decision making rule that is fair. He further states no vote has more privilege than others, all are the same. In what is known as May's theorem, he points out the following as properties of the majority rule:

- Fairness: this is broken down further into two other properties

- Anonymity: each voter is treated identically and it does not matter who casts the vote, the voter's identity remains unknown.
- Neutrality: each alternative is treated equally
- Decisiveness: a unique winner is selected
- Monotonicity: the decision making rule always selects the alternative that the voter prefers if he or she (voter) were to change his or her preference.

3.3 Types of Democracy

This section looks at two distinctive types of democracy being direct and representative democracy. Electronic democracy will be discussed in a later section.

3.3.1 Direct Democracy

In about 5th century BC, a foundation that changed the political sphere was laid in Greece. A system where people could directly participate in governance was established (Dahl, 1989). Such a model where there is direct citizen participation is referred to as direct democracy (Kakabadse et al, 2003). Such a government sets a standard by which other forms of government can be measured (Haskell, 2000). In this type of governance system people played the role of ruler and the governed. They participated in the making of the law and obeyed the same laws they made. This government of people and by people is the ideal Athenian democratic model. In his assessment of the Greek democratic system (Dahl, 1989) highlighted six major requirements of a direct democracy. These are:

- Citizens must be in harmony without contradictory interests.
- Homogeneity among Citizens so as to avoid political conflict.
- The citizen body must be relatively small for them to acquire the knowledge of their city and to assemble at one place.
- Citizens should be able to gather and directly decide on political matters.
- Citizens' participation should go beyond the right of assembly to include also administration of the city.
- The city-state must ideally be fully independent.

The question as to whether there are profound benefits to be derived from direct democracy has been debatable. One significant argument about direct democracy is the motivations behind the direct democracy proposals. Different scholars have for a long time argued about the role of interest groups in the whole democratic process. They suggest that various interest groups use their influence to promote their own agenda and the initiative process is prioritised by selfish interests (Schmidt, 1989). These interest groups are usually linked to financial contributions (Schattsneider, 1960). Other scholars however argue that direct democracy benefits more than just interest groups (Matsusaka 2004). Another scholar further states that spending big money has very little influence on policy decisions (Gerber, 1999). He argues that policy creation is driven by the citizens since they are involved in the policy development process. According to (Schmidt, 1989) increased citizen efficacy and participation are benefits to be derived from the direct democracy. However, (Magleby, 1984) points out that there is little evidence of increased participation in elections. (Frey, 2003) believes that for developing countries, direct democracy does increase trust and the perception of honesty in government.

3.3.2 Representative Democracy

Most of the democracies are indirect whereby citizens participate in governance issues through representatives. This kind of democracy is thus referred to as representative democracy (Sartori, 1962). One aspect supporting representative democracy is that direct democracy is difficult to achieve in large states. An average person does not have the resources or the skills required to be an expert on political matters. Hence the citizens elect people with such expertise to represent their interest. Therefore, the representatives are responsible to their citizens and the citizens hold them accountable to the decisions they make. Participation by citizens is indirect in representative democracy (Connolly, 2000). Representative governments are formed on the basis of allowing citizens the power to choose representatives through elections. Therefore, representatives are delegated the power to legislate by the people whom they govern (Sartori, 1962).

As to what extent a state or republic is democratic will vary (Hague, 2001). Though representative governments do get the mandate from the people, it comes down to whether they uphold the principles and values of democracy that have been explained in the earlier sections. The degree to which these values are upheld determines how democratic a

government is. (Gregerson, 2008) came up with cost and benefits of representative democracy. These are presented below as follows:

Benefits

- Every citizen has equal representation (public opinion polls which use representative sampling could be used to reveal the views of constituents, similar to the polls carried out during campaigns)
- It is a real participatory framework because all citizens play a role in deciding policy (each person's opinion counts)
- Self-determination -- decisions that affect the public are essentially made by the public itself.

Cost

- On the downside, the public might be harmed by unwise policies that are put into place based on their uninformed support for them.
- It is important in the representative democracy for citizens to make informed choices. All stakeholders in the democratic society must work hand in hand to achieve good decision making outcomes.

3.4 E-Democracy

This section discusses the concept of e-democracy. The impact of ICTs on democracy has been a subject of debate among different groups in societies in the western world. There have always been expectations to create a virtual 'agora' to engage citizens (Rheingold, 1993; Barber, 1998; Gilder, 2000). With the advancement of technology, new possibilities to harness ICT in democratic decision making are being exploited. As governments and political systems around the globe seek to widen the participation of its citizens, technology is increasingly being used as a tool of engagement and collaboration in decision making processes. There are massive opportunities for the use of ICTs in the political decision making processes.

3.4.1 What is E-Democracy?

There are a number of definitions presented by different scholars on the subject. The definition of e-democracy is a challenging one just as definition of democracy itself (Mejias, 2004). For example, (Whyte and Macintosh, 2002) explain that e-democracy is the use of ICT to allow and support political participation and the democratic decision-making process among citizens and their representatives. (Grönlund, 2002) defines e-democracy as the use of information technology (IT) in democratic processes. (Becker, 2001; Browning, 2002; Davis *et al*) define e-democracy as a tool for replacing the representative system for one with a direct participation approach by citizens. However, Watson *et al* (1999) define electronic democracy in terms of the exploitation of information technology (IT) with the motive of improving the effectiveness and efficiency of democracy. According to Coleman, e-Democracy is defined as “use of new digital technology to augment the process of democratic relationship between representatives and the people they lead (Coleman, 2003).

ICTs are perceived as an enabler for expanding the capabilities of existing democratic practices (FCO, 2001). It can also be argued that ICT can not only change current practices but also transform the way citizens participate.

As citizens began to increase their two way relationships with institutions such as banks, shops universities etc, there have also been growing expectations that those elected into public office should also be available for online interaction. This has led to most government departments and parliaments to have their own websites. Individual members of parliament and other elected officials also own their websites where they can interact with the people they represent (Coleman and Blumer, 2008). Most of these tend to more like electronic brochures which do not conform to the interactive ethos of online communication.

One of the cases that seems to shift the balance of power to the people is Estonia's TOM, where TOM stands for Today I decide (Coleman and Blumer, 2008). With this system, the Estonians can propose laws which need few signatories to support then the law can be considered. The United Kingdom established an e-petitioning system which allows popular petition proposals from the citizens to be debated in parliament. Several governments,

parliaments and councils have different online consultation mechanisms to help them with decision making (Coleman 2006). In the U.S there has been a focus on e-rulemaking, this allows members of the public to search regulatory documents and submit proposed new regulations electronically. More countries whether at national or local government level are using different online initiatives to engage citizens, communities, businesses and pressure groups in policy making (Coleman, 2006; Delakorda 2007).

The concept of e-democracy is founded on the premise of streamlining political communication and changing some aspects of the decision making process. The idea is to improve democracy's effectiveness and efficiency (Browning, 2002). (Mahrer, 2003) developed a model for political communication called society/media/politics (SMP). He identifies four different stages of interaction as follows:

- Public dialogue of political issues and ideas
- Formal decision-making
- Implementation of decisions; and
- Public elections.

The figure below shows the stakeholders within SMP model. It depicts how they interact with one another to achieve political communication.

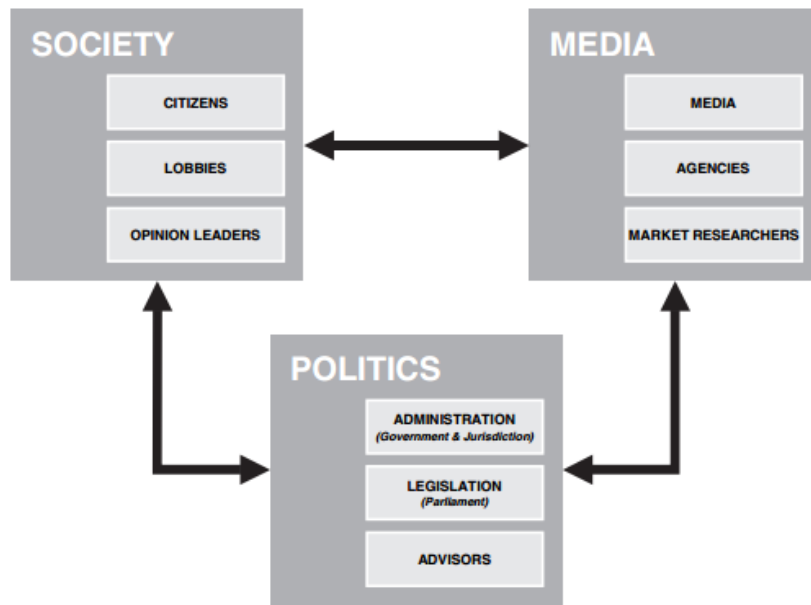


Figure 2: Players within the society/media/politics model

Source: Towards enhancement on e-democracy

The interactions among the players can also be referred to as processes of information, consultation/feedback and participation. The obscure procedure among the different players in the model is clearly shown (Macintosh, 2004). The model tries to depict the behaviours of the members of society (citizens, lobbies and opinion leaders), the media and their attitudes towards government and political representatives. The members of society are continuously calling for political transformation to ensure increased active participation (Mahrer, 2003).

Figure 3 below is a mapping of the areas of administration and legislation. It is a matrix depicting the relations between the phases of interaction and the stages of political communication highlighted above.

Phases of Interaction Stages of political communication	Information	Communication, Feedback & Consultation	Transaction & Participation
	Public Discussion	<ul style="list-style-type: none"> • Administrative Information System (eA) • Parliament Information System (eD) 	<ul style="list-style-type: none"> • Chat/Discussion Boards with Administrators (eA) • Chat/Discussion Boards with Legislators (eD)
Formal Decision Making	<ul style="list-style-type: none"> • Administrative Information System (eA) • Parliament Information System (eD) 	<ul style="list-style-type: none"> • Online Legal Consultation (eA) • Online Petition (eD) 	<ul style="list-style-type: none"> • Online Popular Initiative (eD) • Online Referendum (eD)
Implementation and Execution	<ul style="list-style-type: none"> • Legal Information System (eA/eD) 	<ul style="list-style-type: none"> • Online Citizen Feedback (eA/eD) 	<ul style="list-style-type: none"> • Online Applications via Administrative Information System (eA)
Elections	<ul style="list-style-type: none"> • Election Information Service (eA) • Electee Programme Information System (eD) 	<ul style="list-style-type: none"> • Chat/Discussion Boards with Politician Participation (eD) 	<ul style="list-style-type: none"> • Online Election Stock Market (eD) • Online Voting (eD)

Figure 3: The e-democracy interaction with e-administration portfolio

Source: Towards enhancement on e-democracy

3.4.2 Models of E-democracy

E-democracy as has been explored through the discussions above has different theories by different authors and scholars. These can be put together in different models. Many initiatives address some issues vaguely since there are and complex expectations from the various players in the democratic process (Rose and Saebo, 2005).

(Held, 1993) developed a framework which forms the foundation for a body of theoretical work which relates information and communication Technologies (ICT) to forms of political organisations. (Van Dijk, 2000) abandons the less relevant historical models, and focuses his analysis on the role of ICT in relation to Held's four modern democracy models. According to him, the models are characterised by:

- whether the main goal of democracy is raising opinion or decision making; and
- Whether the primary purpose of democracy is the use of elected representatives, or it is by people's direct vote.

(Bellamy, 2000) also introduces framework of four E-Democracy models. (Van Dijk, 2000) argues that the role of ICT in the democratic decision making is a supplement to traditional communication systems. Bellamy adds a post-internet model known as Cyber democracy which discards the notion of ICT as supplement but rather a cardinal pre-condition to democracy.

(Dahl, 1989), identifies fundamental aspects that should be present in every democratic model. These are inclusion in decisions and control of the agenda. Inclusion refers to the idea that all adults in the society must have equal right to participate as was discussed in sections above. Control of the agenda is related to the idea of who decides what should be decided in the first place. It goes further to question whether citizens are able to table issues influence decisions made.

These two main dimensions and the four concepts of e-democracy are discussed below. The models of e-democracy are:

- the Liberal;
- the Deliberative;
- the Partisan; and
- the Direct.

Citizens set the agenda	Partisan Democracy	Direct Democracy
Government (politicians and officers) sets the agenda	Liberal democracy	Deliberative democracy
	Citizens mainly implicitly included in decision making processes	Citizens have an explicitly defined role in decision making processes

Table 1: Models of e-democracy

Source: Communications of the Association for Information Systems (2006),

Partisan democracy

This type of democracy's main feature is citizen-initiated participation and involvement in the decision-making process. Active Citizens participate in the political discussions, but it's not through traditional channels or their representatives. ICT aims to achieve citizen visibility for alternative political expressions and criticism without interruptions or intimidation from influential political figures (Fung, 2002). These unobstructed discussions set the agenda for the decision making process. Some examples of these include the use of independent online communities discussing politics (Tsaliki, 2002), chat room discussions (Fung, 2003) and blogging (Macintosh, 2005).

The opportunity to be heard and to meet an audience can be considered very important in democracy (Moon, 2003), even when the audience is small or not their at all (Galley, 2002). New voices in the political arena and empowered citizens expressing different ideas (Fung, 2002) might make stronger the importance of Partisan democracy solutions, even when the connection to the prevailing decision-making processes remains hidden or absent.

The partisan type of e-democracy is not without challenges. The missing discrete connection to the decision-making process is a challenge (Heald, 2002). Online services that are not connected to the traditional political process (Papacharissi, 2004) can be regarded as a panacea that encourages meaningful debate (Tsaliki, 2002). However, the meaning of such debate may be hard to discern when only a few participants post a considerable number of contributions (Tsaliki, 2002), leaving the representative body confused [Schneider, 1996]. In addition, citizens seem to be more eager to contribute new posts than relating themselves to arguments of other participants (Paolillo and Heald, 2002) this reduces the dynamic development of new arguments.

Liberal democracy

The government-based agenda for decision-making and implicit citizen participation in the decision-making process outside elections characterises Liberal Democracy. This democracy in general is characterised by a representative government, where citizens form the electorate, giving mandates to representatives at the local level but also participating in the public debate (Held, 1996). Individuals are protected from random governance in the majority rule system. Political leadership is based on the liberal principles such as

minimum state intervention in civil society and respect for individual privacy (Van Dijk, 2000). Liberal democracy forms an extensive part of the reported projects.

Absence of interactivity on websites makes them have no influence on election results and turnout (Ward and Gibson, 2003). The audience is limited, technology unstable, and expenses limit the opportunity to develop high quality solutions (Ward and Gibson, 2003). Politician's lack of knowledge makes it difficult to use the new technology (Ward and Gibson, 2003). The workload for different stakeholders has to be limited since new systems often develop on top of traditional systems (Ho and Ni, 2004).

Deliberative democracy

The ideal of Deliberative Democracy connects citizens more explicitly and directly to decision-making processes (Held, 1996) and emphasizes the role of open discussions in a well functioning public sphere (Gimmler, 2001). Politicians and citizens share an interest in dialogue and discourse leading to the formation of political opinion. Still, as it is a form of representative democracy, the contribution and collaboration between citizens and politicians constitute the legalisation of display of power. With regard to Deliberative Democracy, some ideas and concepts have been suggested. The concepts of Participative (Held, 1996), Protective, and Developmental Democracies (Held, 1996) stresses that equal rights and a balance of power can only be accomplished through participation. The importance of citizen participation and involvement are emphasised further in the concepts of Neo-republican and Plebiscitary democracy (Bellamy, 2000, Van Dijk, 2000). Initiatives engaging Information technologies are developed with the purpose of increasing citizen participation and involvement in political decision-making beyond casting their vote in elections or participating in electoral campaigns (Biasiotti, 2004).

DIRECT DEMOCRACY

Characteristics

The Direct Democracy model represents a radical alternative to the representative models of democracy. In Direct Democracy, network-based groups and individuals take over the role of traditional institutions (Bellamy, 2000, Held, 1996, Lynne, 2004). The idea of

citizens participating directly in political decision-making originates from the classical Athenian ideas of democracy and participation. The focus is on equal rights to rule and be ruled in turn by a collective of free society (Held, 1996). Direct Democracy focuses on how traditional institutions lose power in favour of network-based groups or individuals (Bellamy, 2000, Held, 1996, Lynne, 2004). In implementations where the Internet no longer represents a supplement to traditional communication methods, but rather a precondition for democracy (Bellamy, 2000) ICT plays a critical role. Direct E-Democracy initiatives require technology that supports interaction among a great number of decision-makers, such as citizens, who are possibly geographically spread.

Implementation of direct democracy

Direct (cyber) democracy has been suggested as an ideal form of E-Democracy in a few theoretical sources (Bellamy, 2000, Lynne, 2004, Van Dijk, 2000). Despite positive theories, the actual implementation of direct E-Democracy have remains uncommon (Aidemark, 2003).

	Partisan Democracy	Direct Democracy
Citizens set the agenda	<p>Discussion forums are channels for expressing opinions by citizen groups often criticizing existing power structures.</p> <p>No explicit connection to existing governmental or political decision-making processes is defined beforehand. Citizens set the agenda for public discussion but not for decision-making.</p> <p>ICT seeks to obtain visibility for alternative political expressions uninterrupted by political elite.</p>	<p>Discussion forums represent a direct channel to raise issues and affect decisions.</p> <p>The citizens are online affecting the decisions to be made (mostly at the local level). Citizens set the agenda both for public discussion and decision-making.</p> <p>ICT is a crucial pre-condition for democracy to support coordination among decision makers.</p>
	Liberal Democracy	Deliberative Democracy
Government (politicians and officers) sets the agenda	<p>The candidates inform citizens about their arguments whereas the citizens try to lobby the candidates. The purposes of communication are defined beforehand by the authorities,</p> <p>The democracy is regarded as occurring after the citizens have been informed about the candidate viewpoints, and vice versa, before the elections, and about the decisions made in between.</p> <p>ICT seeks to improve the amount and quality of information exchange between government and citizens.</p>	<p>Discussion forums are used for targeted purposes actually involving citizens in public decision-making processes. The politicians and officials are continually sensitive to the opinions from the field.</p> <p>The citizens have a good reason to expect that their voices are heard concerning a particular matter initiated by the government.</p> <p>ICT is developed for increased citizen participation and involvement in decision-making processes.</p>
	Citizens mainly implicitly included in decision-making processes	Citizens have an explicitly defined role in decision-making processes

Table 2: Analyses of Discussion Forums in Light of the Framework
Source: Communications of the Association for Information Systems (Volume 17, 2006),

3.4.3 Implementation of E-democracy

In order to develop an Internet based environment that supports change from the people, it is necessary to encompass the development of localised solutions, where the experiences and aspirations of the community can be harnessed to create an environment of empowerment. (Freire, 1972) argues that knowledge is a critical element in individual and community empowerment.

3.4.3.1 A phased Model

Information and Communications Technology does not exist in a vacuum, it is influenced to some extent by the prevailing circumstances within the environment it operates. According to (Day 2004) components of the community informatics that determine the effectiveness of ICT are policy, partnerships and practice. He goes further to link these components in a framework for the democratic design of community ICT initiatives. The framework aims to create a planning agenda by defining critical criteria for successful community projects. This model is illustrated in table 3.3 below. The framework seeks to embrace community values such as solidarity, participation and coherence. The phases in the model are explained below

Toward Democratic Community

- Citizens who are socially excluded must be given priority.
- Policies that are authoritarian in nature must be avoided.
- Ensure independence and encourage community participation in order to achieve objectives.
- Contribution to public space to ensure shared communications.

Toward Democratic Politics

- Recognition and celebration of diverse opinions, ideas, and values thereby avoiding policies that promote prejudice.
- Encourage self-actualisation through initiatives that support lifelong learning and active participation.
- Investment in social capital by supporting common interests and concerns.

Toward Democratic Work

- Seek to encourage both social and formal economies for targeted communities.

Securing Democratic Sustainability

- Enable engagement with groups and institutions that are active within local communities and form partnerships.
- Create an atmosphere of ownership within communities.

Embracing Community Participation

- Promote universal participation
- Seek to achieve technological flexibility.

Table 3: Framework for the democratic design of ICT initiatives (Day, 2004)

Source: Getting ready for e-democracy

Toward Democratic Community	<p>Seek initiatives that embrace community values; solidarity, participation and coherence.</p> <p>Promote community development through the empowerment of citizens to define their own needs.</p> <p>Relate goals and outcomes to the needs of communities and citizens.</p> <p>Develop activities and services that meet community need identified through sustained and meaningful dialogue between citizens and service providers.</p> <p>Give priority to the needs and interests of a community's socially excluded citizens.</p>
Toward Democratic Politics	<p>Avoid policies that establish authoritarian or elitist social relations.</p> <p>Ensure initiative and independence to encourage participatory community action to achieve goals.</p> <p>Contribute to public space for shared communications that facilitate inter/intra-community conviviality.</p> <p>Recognize and celebrate diversity of opinions and beliefs, values and cultures and avoid policies that promote intolerance and disrespect.</p>
Toward Democratic Work	<p>Promote self-actualization through activities and services that stimulate lifelong learning and active citizenship.</p> <p>Invest in social capital by promoting common community interests and concerns.</p> <p>Seek to stimulate both social and formal economies of local communities.</p>
Securing Democratic Sustainability	<p>Enable meaningful engagement with groups and organisations active within local communities through the development of</p> <p>Promote social innovation by harnessing the indigenous knowledge and creativity of communities with the resources and expertise of public, private and third sectors.</p> <p>Develop a sense of community identity and ownership (essential to sustainability)</p>
Embracing Community Participation	<p>Promote universal participation.</p> <p>Seek 'local' technological flexibility and 'global' technological pluralism.</p>

3.4.3.2 Adoption of Technology

E-democracy is about engaging individuals and groups in the democratic process using ICTs. For it work effectively people must embrace the technology in order to participate fully. Therefore, the adoption of technology is discussed here.

(Marshall and Dekkers, 2003) observe that when considering the adoption of ICT, it is important to consider the fundamental motivators, both societal and personal. They suggest that individuals need to first be aware of and then motivated to want to use ICT. It is necessary that individuals and groups identify the value in using the technology.

(Moore, 1999) suggests that adoption is based on an individual's perception of the value. The attributes of technology and the change it causes by can itself be a barrier to adoption.

(Williamson, 2004) came up with a five stages model for adopting ICT in a community. It is illustrated below in figure 4.

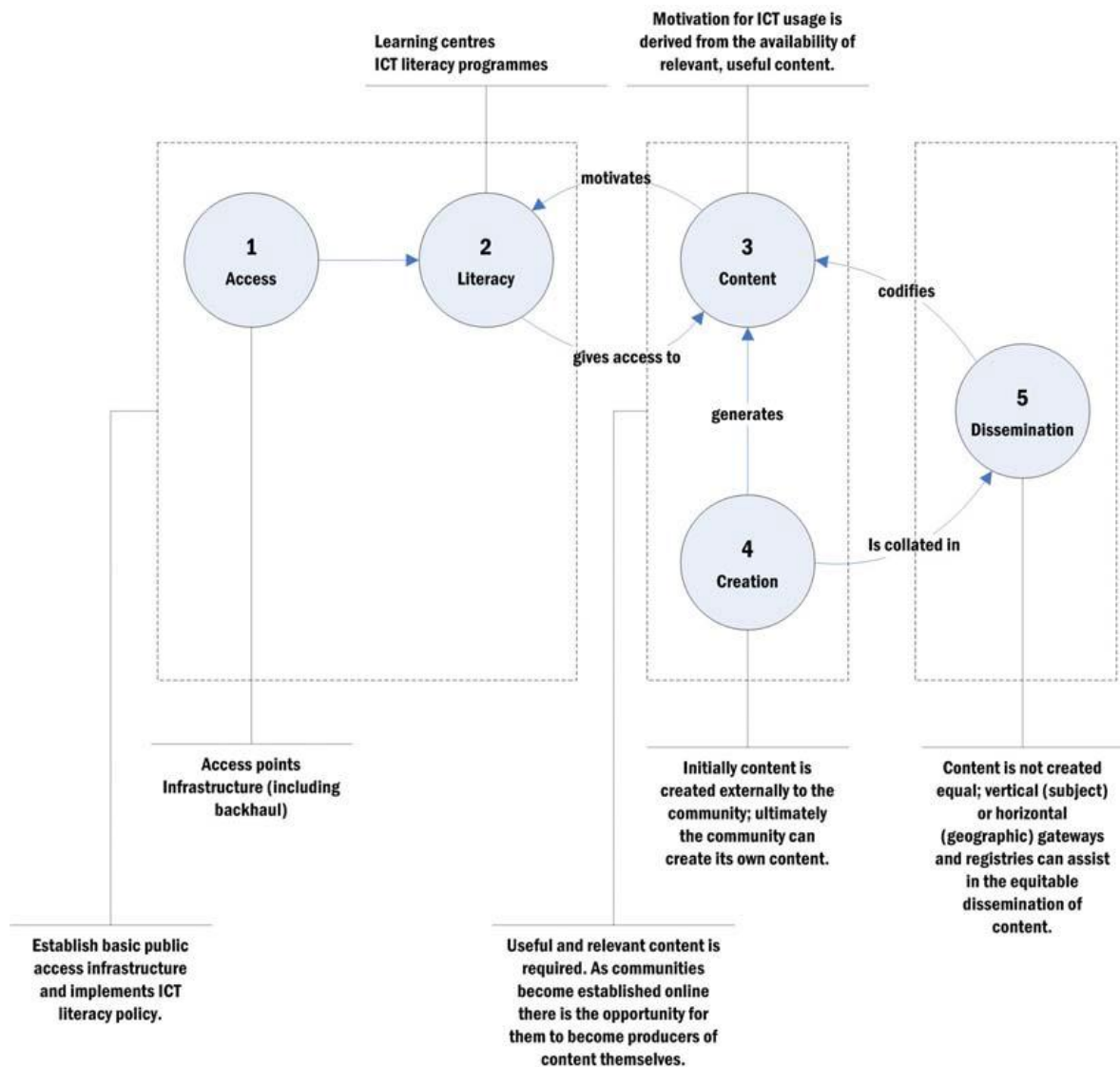


Figure 4: ICT five stage adoption model

Source: Getting ready for e-democracy

The model should not be seen as a linear model but rather whereby the target is to reach the fifth stage but rather a way of seeing to it that technology is being applied in an appropriate way within the community (Williamson, 2004).

Stage one- Access

What causes digital divide is not the lack of access but rather the consequences of that lack of connection (Castells, 2001) hence there is need for initiatives to ensure equity of access and opportunity. Basic access to ICT must be a necessity. The ownership could be

community based or or privately owned access points. This stage can be broken down further into nature of access, cost and availability.

Stage two- Literacy

Provision of ICT resources alone is not enough. For these resources to be fully utilised and to gain intended benefits, intended users must be trained for effective usage. In the post-industrial age, knowledge is superior over physical production. Literacy can be analysed from two perspectives: basic literacy and literacy in ICT (Marshall, 2004).

Stage three- Content

In order for ICT to be useful, the people whom it is intended for must have the motivation to use it. The materials and information services provided online must be seen to be of value by the target group. The people must be aware of such services provided (Marshall, 2004). It is of no use to access information or services which do not add value from the perspective of the people using the technology. That is why these stages need to be intertwined rather than look at as separate and unrelated.

Stage four- Creation

Stage four from a logical point of view occurs elsewhere and provides relevant materials for individuals entering stage three.

Stage five- Dissemination

This is the final stage, a meta-stage. It occurs beyond the community boundaries. At this stage society risks becoming overwhelmed with information.

3.5 E-Participation

One of the most democratic aspects about the internet is the power it has in organising people from different geographical areas into one virtual space. People have the ability to organise and communicate in groups. This freedom of assembly grants citizens new opportunities and increased levels of participation and influence (Clift, 1998).

There are various definitions of e-participation. One such definition refers to e-participation as “the use of information and communication technologies to broaden and deepen political participation by enabling citizens to connect with one another and with their elected representatives” (Macintosh, 2006). “E-Participation is one tool that enables governments to dialogue with their citizens. By enhancing government’s ability to request, receive and incorporate feedback from constituents, policy measures can be better tailored to meet the needs and priorities of citizens” (United Nations 2008). ICTs have the prospect of reinvigorating democracy, making it a useful solution against declining voter turnout and increasing citizens’ disengagement of from politics and political organisations. To adopt e-participation, a framework that takes into consideration the right tools with the objective of increasing the level of participation of the citizens. The model must also to improve the democratic process, policies and legislation (Costa, 2006).

This section will review the general theoretical considerations and distinctions on forms of e-participation and levels of participation. The tools that are employed and the stage in the policy cycle that e-participation is engaged in shall also be discussed.

Masters et al. (2004) express the role of technology in citizen engagement by the key words namely:

- e-enabling which refers to the use technology to provide relevant information;
- e-engaging focuses on the notion that a wider audience can be involved and consulted in policy deliberations; and
- e-empowering which supports active citizen participation and involving them in the determination of the political agendas.

3.5.1 Levels of participation

There are different classifications with respect to level of e-participation. According to (OECD, 2001), there are three levels of participation. These are information, consultation and active participation. Information is a one way channel of communication that informs the citizens about variety of issues. Consultation is a two way channel that is limited while active participation is an enhanced two way channel where citizens have more power (Coleman, 2006). (Meyer,) came up with four levels of citizen engagement, these are information, consultation, engagement and collaboration.

A more complicated classification was presented by the International Association for Public Participation which developed five levels of participation (Fraser, 2006). The levels identified in this model are: Information, Consultation, Involvement, Collaboration and Empowerment. The first two levels are similar to the ones of OECD study. Involvement brings in a new the continuous relationship in which the citizens concerns are taken into consideration, after which partnership sees the public as a associate in developing the alternatives and the solutions to their problems. The last level is Empowerment of the public which this case would be the decision maker.

3.5.2 Forms and areas of application of e-participation

In looking at the forms of e-participation, there needs to be a distinction drawn between top-down approach which is government initiated and the one initiated by citizens which is the bottom-up approach. (Fuchs, 2006) sees e-participation as a bottom-up process. However, the way citizens and government interact is much more complex and depends on a number of factors such as the design of the e-participation and the tools adopted for used.

Both approaches bottom-up and top-down are useful for better flow of information (Ahmed, 2003). These approaches being aligned with the nature and characteristics of the communities can achieve desirable positive effects. There are many areas of e-participation and these depend on the policy being implemented (Fraser, 2006). Some of these areas include consultation, campaigning, deliberation, polling and voting.

3.5.3 Tools for e-participation

E-participation tools are the actual practical medium through which citizens engage with one another and interact with their political representatives. The choices of these tools are getting more and more as technology advances (Coleman 2003). Some choices are more sophisticated than others; governments must choose which ones they can use for wider participation. The choice will depend on a number of factors. Tools for e-participation must create environments where citizens and there elected representatives can interact easily and openly (Phang 2008).

(Macintosh et al, 2004) identify a number of different tools for e-participation. Some of these tools are: e-participation chat rooms; discussion forums/boards; decision making-games; virtual communities; e-panels; e-petitioning; e-deliberative polling; e-consultation; blogs; wikis; and e-voting. Some of these tools have been used successfully others not so widely used.

(Phang, 2004) identifies four main objectives of e-participation initiatives. These are: information exchange; education and support building; decision-making; and input probing. The chosen tool must support the objective of the e-participation initiative. It is important before selection of ICT support tool to identify the objective of the participation.

(phang, 2004) identifies a three step model depicted below.

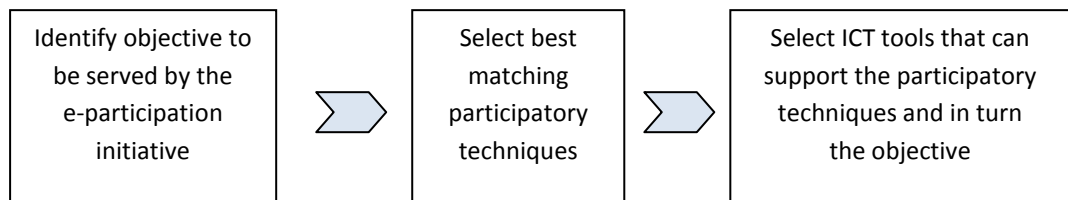


Figure 5: A three step model for e-participation initiative implementation
Source: Getting ready for e-democracy

3.6 Policy formulation

This section explains the essence of policy formulation for effective e-democracy and e-participation. Policy is the driving factor in the implementation of initiatives such as e-participation. Without it, such concepts cannot be implemented in a coherent manner. Policy, according to (Mettler, 2004) can affect the terms by which the engagement takes place online. It is generally agreed that policies do have consequences on the behaviour of the citizenry participation (Coleman, 2008). (Campbell, 2005) agrees that policies affect citizens' capability to participate and how in turn there participation influences the policy decisions by their representatives.

The (OECD, 2002) stages in policy making process shall be discussed here. The tools to be used are dependent on the stage in the policy cycle. The first stage is agenda setting. This stage is about establishing the need for new policy or policy amendment and change. The definition of the problem the policy should address is identified at this stage (Macintosh, 2004). Analysis follows the agenda setting. This stage is characterised by the gathering of

evidence and knowledge. Further, the understanding of the context in which the policy is to be applied is assessed. The third stage is the actual creation of the policy while the fourth and final stage is the implementation. Researchers agree that the earlier in the process the citizens participate, the more the influence they'll have on the policy formulated. Different tools are applicable at different levels as earlier indicated (OECD, 2003). For example, virtual communities could be used at the agenda setting stage.

3.7 Current situation in Zambia

3.7.1 Brief background

Zambia is a land locked country positioned in the southern part of Africa. On the 24th of October 1964 the country attained independence from Britain. The then Prime minister, Kaunda became President till 1991. In 1972, he declared Zambia a single party state with then UNIP(United National Independence party becoming the only legalised party in the land with the main objective of uniting the country under the One Zambia one Nation slogan (Burnell, 2008).

In 1991 Zambia became a democratic state with the MMD (Movement for Multi party Democracy) coming into power. There have been regular elections from this point onward. Elections as discussed in earlier section in this document are an integral part of any democracy.

Zambian politics take place in a model of a President Representative democracy. In this system, the President is both head of state and head of government in a multi party system form. The government has the executive power while both the government and parliament exercise legislative powers.

Respect for human right is deemed to be good for democracy and development (Coleman, 2003). The return of pluralism brought high expectation in governance and making government more accountable to the people. According to (Gould, 2002), the second half of the 1990s, saw increased harassment of civil society and opposition political parties. There was mounting pressure from donors which saw some institutional changes being implemented. The human rights commission and Anti-Corruption commissions are

examples of some changes that took place to better the prevailing situation at the time (Burnell, 2003).

According to (World Bank, 2006) the percentage of people in poverty was at a staggering 59.5 %. Democracy in itself to be legitimate requires a mass participation and government accountability to its citizens. If poverty levels are too high, this inhibits the participation thereby threatening the legitimacy of the whole democratic process. Therefore, the benefits associated with democracy may not be realised (Simon, 2002).

3.7.2 Zambia's standing on democracy

The Democracy index is an index which is compiled by the Economist Intelligence Unit (EIU). An annual report on one hundred and sixty seven countries is produced (EIU, 2010). The criteria on ranking the countries are based on five categories namely:

- Electoral process and pluralism;
- Civil liberties;
- How government functions;
- Political participation by the public; and
- Political culture.

Based on these criteria, a score is attached to each category and the averaged to find the index of the country. The final score is rounded off and that score determines how the country will be classified. Countries are classified as follows:

- Full democracy- scores 8-10;
- Flawed democracy- scores 6 to 7.9;
- Hybrid regime- scores 4 to 5.9;
- Authoritarian regime- scores 0 to 3.9.

Category scores							
	Rank	Overall score	I Electoral process and pluralism	II Functioning of government	III Political participation	IV Political culture	V Civil liberties
Jamaica	44	7.13	9.17	6.43	5.00	6.25	8.82
Poland	45	7.12	9.58	6.43	6.11	4.38	9.12
Brazil	45	7.12	9.58	7.50	5.00	4.38	9.12
Panama	47	7.08	9.58	6.43	5.56	5.00	8.82
Latvia	48	7.05	9.58	5.36	5.56	5.63	9.12
Hungary	49	7.04	9.58	6.07	4.44	6.88	8.24
Mexico	50	6.93	8.75	7.14	6.11	5.00	7.65
Argentina	51	6.84	8.75	5.71	5.56	6.25	7.94
Bulgaria	52	6.78	9.17	5.71	6.11	4.38	8.53
Croatia	53	6.73	9.17	5.71	5.56	5.00	8.24
Suriname	54	6.65	9.17	6.43	4.44	5.00	8.24
Colombia	55	6.63	9.17	7.50	3.89	3.75	8.82
Peru	56	6.59	9.17	5.00	5.56	5.00	8.24
Sri Lanka	57	6.58	7.00	6.07	5.00	6.88	7.94
Thailand	58	6.55	7.83	6.07	5.56	6.25	7.06
Romania	59	6.54	9.58	6.07	4.44	4.38	8.24
Indonesia	60	6.53	6.92	7.50	5.56	5.63	7.06
El Salvador	61	6.47	9.17	6.07	3.89	5.00	8.24
Paraguay	62	6.40	8.33	6.07	5.00	4.38	8.24
Mali	63	6.36	8.25	6.43	4.44	5.63	7.06
Serbia	64	6.33	9.17	4.64	6.11	4.38	7.35
Lesotho	64	6.33	7.42	5.71	6.11	5.63	6.76
Moldova	64	6.33	8.75	5.00	5.56	4.38	7.94
Papua New Guinea	67	6.32	7.33	6.43	3.33	6.25	8.24
Namibia	68	6.24	5.67	5.00	6.67	5.63	8.24
Mongolia	69	6.23	8.33	5.71	3.89	5.00	8.24
Dominican Republic	70	6.20	8.75	5.00	2.78	6.25	8.24
Malaysia	71	6.19	6.50	6.79	5.56	6.25	5.88
Zambia	71	6.19	7.92	5.00	4.44	6.25	7.35
Macedonia	73	6.16	7.75	4.64	6.11	4.38	7.94
Montenegro	74	6.15	8.75	5.00	5.56	4.38	7.06
Philippines	75	6.12	8.33	5.00	5.00	3.13	9.12
Benin	76	6.06	7.33	6.43	4.44	5.63	6.47
Guyana	77	6.05	7.92	5.36	5.56	4.38	7.06

Figure 6: Democracy index 2011

Source: Economist Intelligence Unit- Democracy index 2011

The figure above illustrates the EUI's democracy index for 2011. According to the report Zambia is currently ranked number 71 with a score of 6.19. Therefore, Zambia is classified as a flawed democracy. This is an improvement from 2010 where the country was ranked number 91 with a score of 5.68 (Economist Intelligence Unit, 2010). This indicates an improvement in some of the categories used as criteria for classification.

3.7.3 Information and Communication Technology in Zambia

In some developing countries like Zambia, zealous efforts are taking place to thwart the lagging behind in science and technology. Zambia has come a long way in strides to improve ICT in the country.

Various developments have taken place to improve access to ICT. Some of these according to (GOAP, 2011) are: Zambia Telecommunications Act of 1994; The Zambia Science and Technology Policy (1996); The Zambia Vision 2030 (in 2005); The Zambia National ICT Policy (launched 2007); The Ministry of Education ICT Policy; The Zambia ICT Act of 2009; The Computer Crimes and misuse Act and other policy and regulatory framework documents. The government visualises a Zambia transformed into an information society supported by consistent development and access to ICT by all citizens (Lungwangwa, 2008). The National ICT Policy and the implementation plan does recognise ICT as a tool for the attainment of the United Nations' Millennium Development Goals in Zambia (Chambeshi 2006). With improved connectivity by means of international submarine cables and a national fibre backbone, the country is experiencing exponential growth in virtual access capacity (GOAP, 2011). The adoption of the ICT policy provides a framework for improving service provision in the ICT sector and therefore encourages more investment especially in rural areas (Lungwangwa, 2008).

The information and Communications Technology in Zambia has substantially grown. It has become a key factor in the country's economic outlook (Mutumweno, 2011). One of the key objectives in the policy that led to this is the development and implementation of special tax instruments and incentives that promote local ICT production and service industry.

The Government in its quest for better regulations to fight cyber crimes established a Computer Crimes Investigation Unit for cyber law enforcement and the National Electronic Communication Security Centre within its structures. Since then, the major development on this score has been the enactment of the Information and Communication Technologies Act No.15 of 2009 that changed the Telecommunications Act and the Radio Communications Act. This development brought about the birth of the Zambia Information and Communications Technology Authority (ZICTA) (Mutumweno, 2011).

These pieces of legislation grant the institution more authority to regulate the players in the ICT sector and thereby achieving its mission of universal access to services provided.

Zambia's state owned telecommunications company (ZAMTEL) announced the completion of the fibre-optic connection to two submarine cables. These are West Africa Cable system and Sat-3, through Namibia Telecom (ZAMTEL 2012). This development goes a long way in boosting the country's broadband capacity. Fibre optic is used as a telecommunication and networking tool due to its flexibility and speed. Furthermore, because light propagates through the fibre with little attenuation compared to electrical cables, long distances to be spanned at high speed can be achieved (NTT, 2010). In as much as they offer advantages, fibre optics are not without disadvantages. Their major downside is high cost and fragility compared to other cables (Chapman 2009).

(GOAP, 2010) identified a number of factors that hinder the full capacity of performance in Zambia. These are:

- lack of coordination and insufficient communication among the institutions tasked with the mandate to implement policies;
- lack of capacities in terms of research and development skills; and
- poor infrastructure.

3.8 Challenges of E-democracy

(OECD, 2001) states that when it comes to democratic decision making, governments must provide complete and equal access treatment to all its citizens. However, in applying ICTs to the democratic process care has to be taken to ensure that the concept of democracy is not made vulnerable.

The digital divide is one potential danger in the application of ICTs in the democratic process. One of the greatest worries of many countries is that there is lack of equal access to quality technological infrastructure (OECD, 2003). The digital divide is composed of individuals, community groups, the employed and unemployed. Poor infrastructure and low adoption of technology creates a divide excluding many who are in socially and economically disadvantaged groups (Coleman, 2004). In countries like Zambia where the

levels of poverty levels are so high especially in the rural areas (USAID, 2010), digital divide becomes a major issue of concern when employing ICTs in a concept that requires mass participation and equal access to ensure legitimacy.

For a long time, digital divide has been taken to mean the division between those who have access to ICTs and those who don't. This notion has brought about some criticism for example (Wilhelm, 2000) who refutes that information underclass can be defined in terms of access. He argues that the definition must look at the broader context such as individual's information seeking behaviour, media usage, environmental and cultural context. Although low income levels, less education and unemployment are great contributors to adoption of technology, other socio-personal factors also do play a role (Foley, 2000). He argues that factors such as awareness, interest and understanding of ICTs are also contributors to the low adoption.

Like any other tool, ICTs may also be used to compromise democracy. Some technological tools could be used for hacking and attacking e-democracy systems with viruses and spyware. Political theorists like Barber reject the adoption of so called "innovative technologies" as being a solution to the problems of modern democracy (Barber, 2004). He argues that these initiatives are detrimental to democratic decision-making, as they tend to privatise political process.

(Coleman; Kaposi, 2006) identify seven challenges which must be tackled in order for a sustainable e-democracy to flourish. Without addressing these concerns, e-democracy may not be fully appreciated and thereby will have no major impact in the decision-making processes. The seven challenges are:

- Need for distinctive civil spaces;
- The fight over bureaucracy;
- Substituting weak media structures;
- Low Internet connectivity;
- Establishing representative legitimacy;
- The necessity for valuable facilitation;
- Evidence of political impact.

4. ANALYTICAL PART

4.0 Introduction

This section presents the data that was collected using a questionnaire that was designed for the study. The questionnaire was focused on the main objective of this work which was to: Explore and analyse the challenges and potential of implementing e-democracy in Zambia. The other specific objectives of this work are to:

- Analyse the current state of democracy in Zambia;
- Identify the challenges of implementing e-democracy in Zambia;
- Design possible solutions to e-democracy.

The current state of democracy in Zambia was presented in the literature review above. The challenges will be put into perspective and a possible solution designed for e-democracy in Zambia.

The above objectives were analysed using the data collected in the field survey. A total of 238 people participated in the survey. These were sampled from urban areas around Zambia. The data is presented in form of charts and tables for easy understanding and interpretation.

Three hypotheses were analysed using the data collected from the survey, these are:

- The proportion of people who think when citizens participate in decision making processes they are more likely to be satisfied with the decisions being made by their political leaders is higher than 0.7.
- There is no relationship between having access to internet and the thinking that internet can be used as a tool for enhancing citizen participation in the democratic process in Zambia.
- The proportion of people who think Mobile technology e.g the use of cell phones for citizen participation is the most efficient and cost effective way for the masses is higher than 0.7.

The above hypotheses were subjected to hypothesis testing using SAS, a statistics software.

4.1 Analysis of data

4.1.1 Gender

The total number of respondents to the survey was 238 as indicated above. The number of males and females who participated was 127 and 111 respectively. There was a fairly balanced distribution in terms of gender.

4.1.2 Age group

The age groups were divided into three categories namely:

- 18-30;
- 31-45; and
- 46+.

There was a total of 104 respondents from the first category which is the age group 18-30. This was the highest number of participants representing 44%. The age group 31-45 had 89 respondents representing 37 % of the whole, while those above 46 years represent 19%. All the age groups had respondents with the highest being those in category 18-30.

4.1.3 Internet usage

From the survey, 160 respondents indicated that they have access to internet while 78 said they had no access. Figure 4.3 below shows this presentation in form bar chart. The number of respondents that have access to internet reprints 67% of those that participated in the survey. This could be attributed to the fact that all respondents were sampled from urban areas. However, if the rural population was included, the picture could have been different.

Among the people that indicate have access to internet, the frequency to accessibility also differed. The respondents were asked to indicate the frequency with which they accessed the internet. There were three options for this namely:

- Daily access;
- Atleast once a week;
- Atleast once a month.

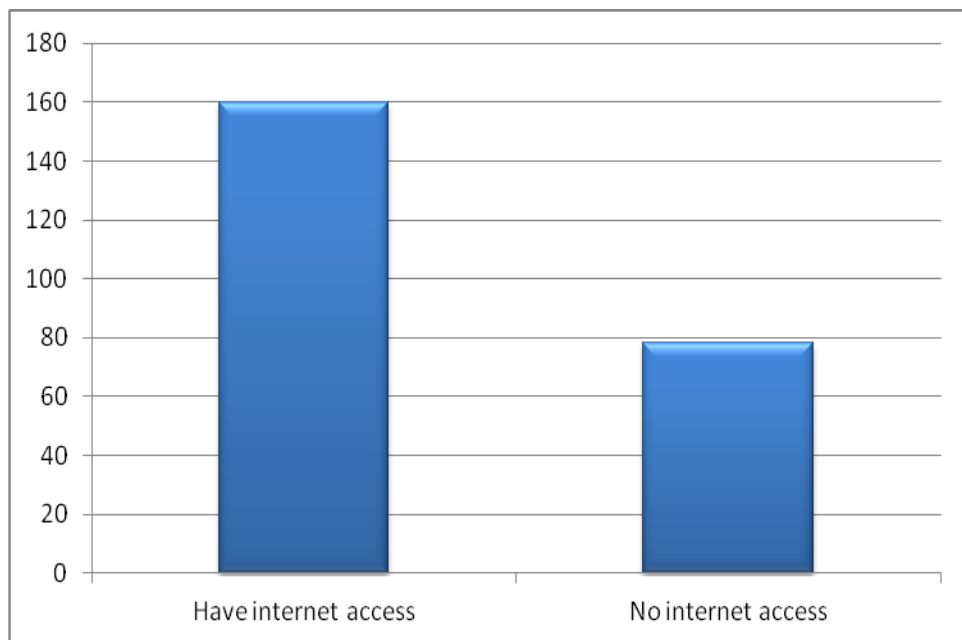


Figure 7: Accessibility to internet Source: field survey 2012

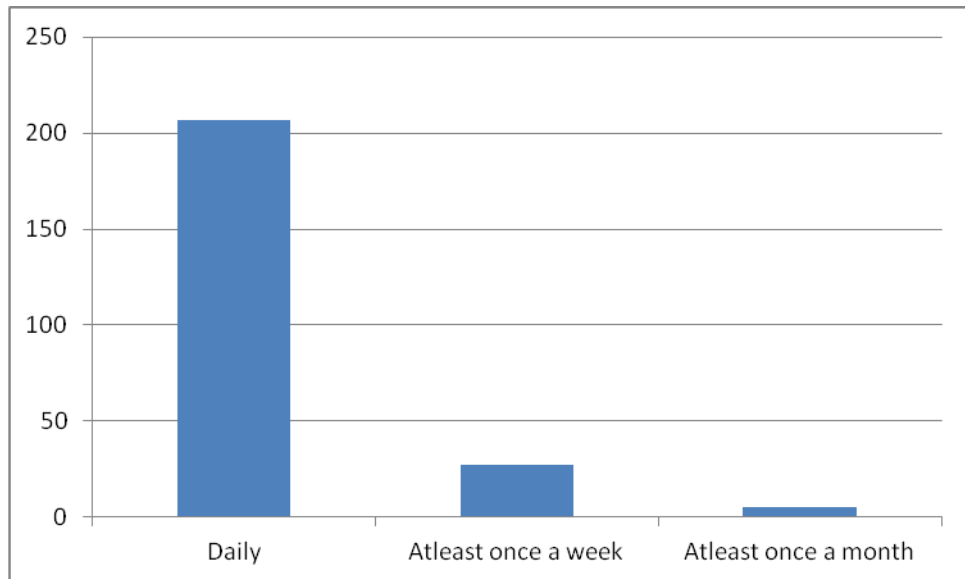


Figure 8: Frequency of internet use. Source: field survey 2012

Figure 8 above indicates that 207 of the participants have access to internet everyday while 27 have access at least once a week and 5 at least once a month. Different factors affect the frequency of accessibility to internet. Some of the factors include cost of internet service, educational levels, availability of infrastructure and reliability of Internet service provide in the area one lives among many others.

The mode of access to internet varied among the participants with most of them accessing the internet using both the mobile phone and PC/Laptop. 16 respondents indicated that they accessed internet only through the mobile phone while 88 said they accessed through PC/Laptop only.

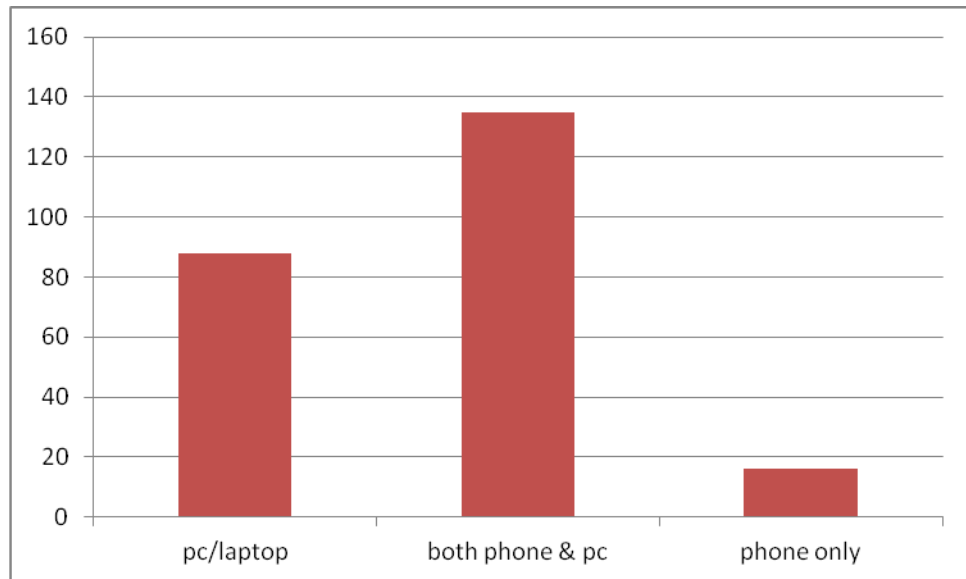


Figure 9: Frequency of internet use. Source: field survey 2012

Figure 10 below shows a presentation of those who use social media such as Facebook and Twitter. 203 respondents said they used social media this represents 85% of those who have access to internet. From those who use social media, 94% said they have facebook accounts. 14 % of those who use facebook also have twitter accounts. This indicates that there is a very high number of internet users using social networking sites. The data indicates that the highest age group the uses social networking sites is the one between 18-30. Only 18% of those in the age group 46+ indicated that they use social media sites.

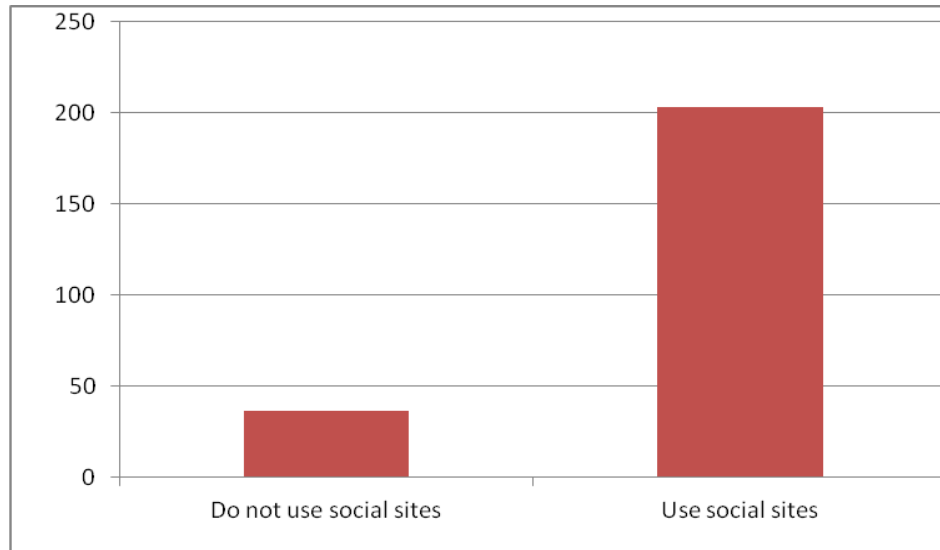


Figure 10: Usage of social sites on internet. Source: field survey 2012

4.1.4 Usage of internet for participation in democracy

The figure below depicts the numbers of people that used the internet as a tool to contact their parliamentary representative. Only 23 % have used the internet to contact their Members of Parliament. The large number have never contacted their representatives using the internet but indicated that it is useful to be in contact with their representatives. The survey however did not request them to give reasons for not having contact though it could be speculated that awareness could be one of the reasons for most of them.

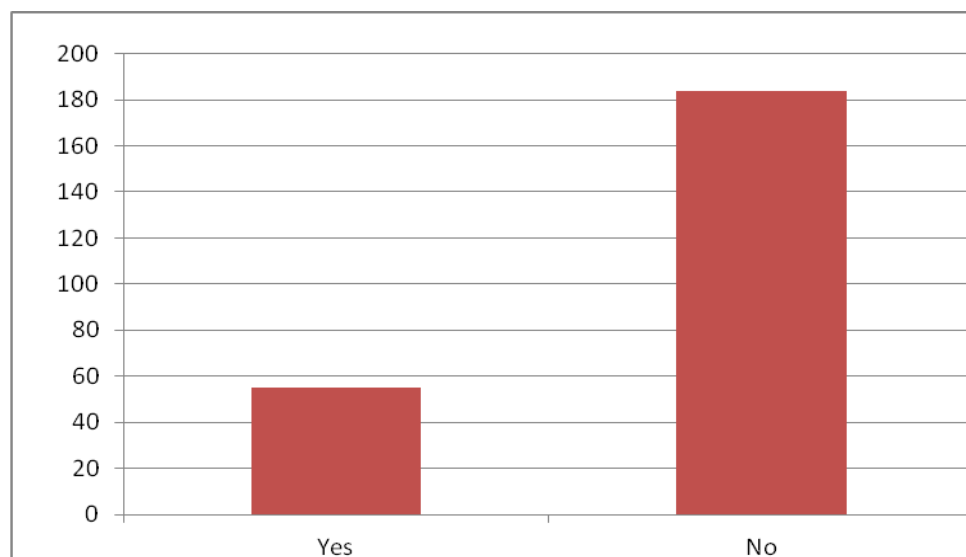


Figure 11: numbers that contacted political representative using internet.

Source: field survey 2012

4.1.5 Hypothesis testing

The hypotheses were analysed based on data of the 238 respondents that participated in the survey. The following criterion was assigned in the analysis and conclusions drawn based on this criterion. The Chi-square tests were used in SAS by the use of two-way frequency in data analysis to test the association between two categorical variables. For the proportion tests, the one way frequency to test proportion using z-test and p-value was used.

- The significance level, 0.05
- The sample size, $n = 238$

Hence the detailed test statistic used in the analysis has been based on the following test criterion:

If the test statistic (P) is less than the significance level (0.05), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted.

Hypothesis 1

- The proportion of people who think when citizens participate in decision making processes they are more likely to be satisfied with the decisions being made by their political leaders is higher than 0.7.

H_0

$$p_i \leq 0.7$$

H_1

$$p_i > 0.7$$

Where p_i is the actual proportion from the survey and 0.7 is the expected proportion

Significance level 0.05

According to the output in table 4 below, $Z = 6.8462$

The P-value is calculated from the z-score. The p-value is $<.0001$ which is less than 0.05 the level of significance therefore null hypothesis is rejected. The proportion from the survey is 0.9034 which is higher than 0.7.

Table 4: SAS output. Source: field survey 2012

F4	Frequency	Percent
y	215	90.34
n	23	9.66
Binomial Proportion for F4 = y		
Proportion		0.9034
ASE		0.0192
Test of H0: Proportion = 0.7		
ASE under H0		0.0297
Z		6.8462
One-sided Pr > Z		<.0001
Two-sided Pr > Z 		<.0001

From the SAS output shown above, it can be seen that there is a statistically significant difference between the expected and the actual proportion obtained from the survey. An overwhelming number of people thought that when citizens participate in the process of decision making they are likely to be satisfied with the decisions that their leaders will make.

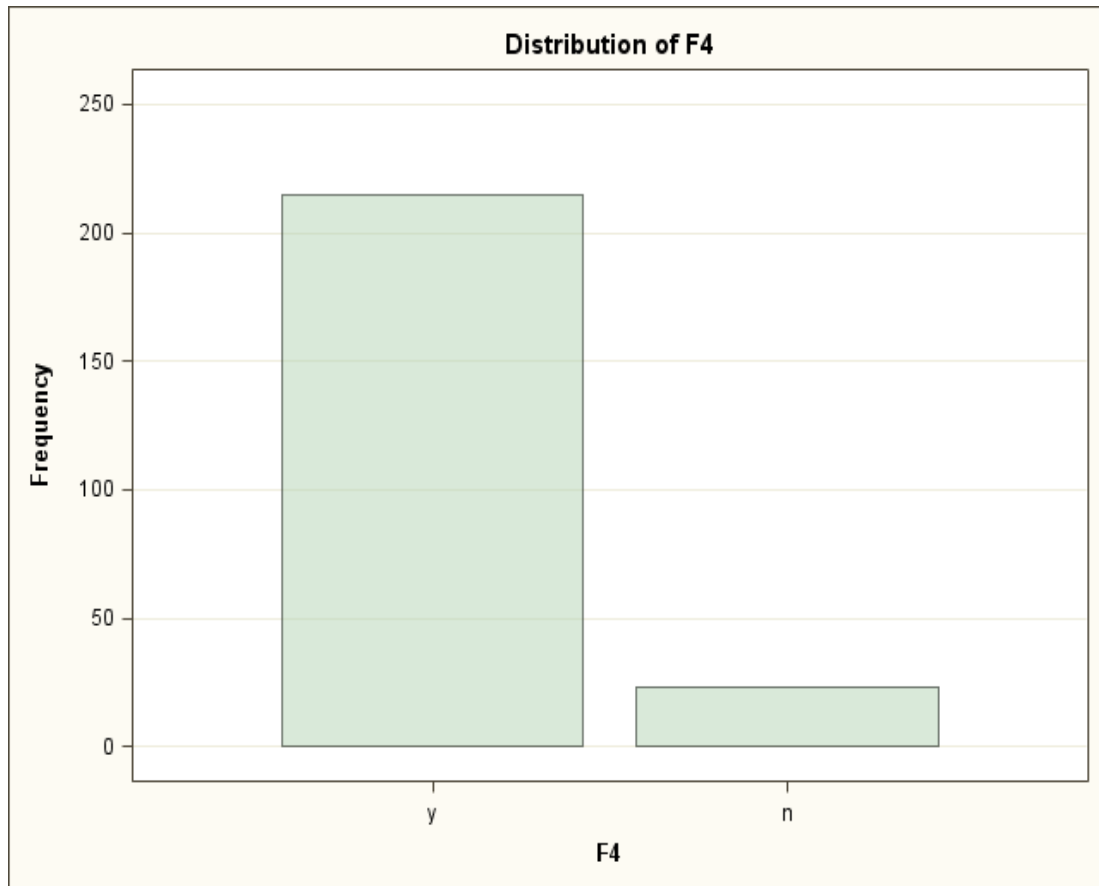


Figure 12: responses on whether citizens were likely to be more satisfied with decisions made if they participated in decision making process. Source: survey 2012

Hypothesis 2

Null Hypothesis (H₀)

- There is no relationship between having access to internet and the thinking that internet can be used as a tool for enhancing citizen participation in the democratic process in Zambia.

Alternative Hypothesis (H₁)

- There is a relationship between having access to internet and the thinking that internet can be used as a tool for enhancing citizen participation in the democratic process in Zambia.

Table 5: SAS output. Source: field survey 2012

Table of F2 by F3				
		F3		Total
		n	y	
F2				
n	Frequency	0	26	26
	Col Pct	0.00	13.98	
y	Frequency	52	160	212
	Col Pct	100.00	86.02	
Total	Frequency	52	186	238

Statistic	DF	Value	Prob
Chi-Square	1	8.1603	0.0043

Analysing the SAS output shown above, using the chi-square test, the P -value is 0.0043 which is less than the significance level 0.05. In consistence with the test criterion, the null hypothesis (H_0) is therefore rejected and the alternative hypothesis (H_1) accepted. It can thus be concluded that There is a relationship between having access to internet and the thinking that internet can be used as a tool for enhancing citizen participation in the democratic process in Zambia.

Hypothesis 3

The proportion of people who think Mobile technology e.g the use of cell phones for citizen participation is the most efficient and cost effective way for the masses is higher than 0.7.

H_0

$$p_i \leq 0.7$$

H_1

$$p_i > 0.7$$

Where p_i is the actual proportion from the survey and 0.7 is the expected proportion
Significance level 0.05

From the result in table 6 below, $Z = 5.2902$.

The P-value is calculated from the z-score. The p-value is <.0001 which is less than 0.05 the level of significance therefore null hypothesis is rejected. The proportion from the survey is 0.8571 which is higher than 0.7.

Table 6: SAS output. Source: field survey 2012

F1	Frequency	Percent
y	204	85.71
n	34	14.29
Binomial Proportion for F1 = y		
Proportion	0.8571	
ASE	0.0227	
Test of H0: Proportion = 0.7		
ASE under H0	0.0297	
Z	5.2902	
One-sided Pr > Z	<.0001	
Two-sided Pr > Z 	<.0001	

From the SAS output shown above, it can be seen that there is a statistically significant difference between the expected and the actual proportion obtained from the survey. The expected proportion was 0.7 but the proportion obtained from the field survey 0.857. A significant number of people felt that mobile technology is the most efficient and cost effective way for the masses to participate.

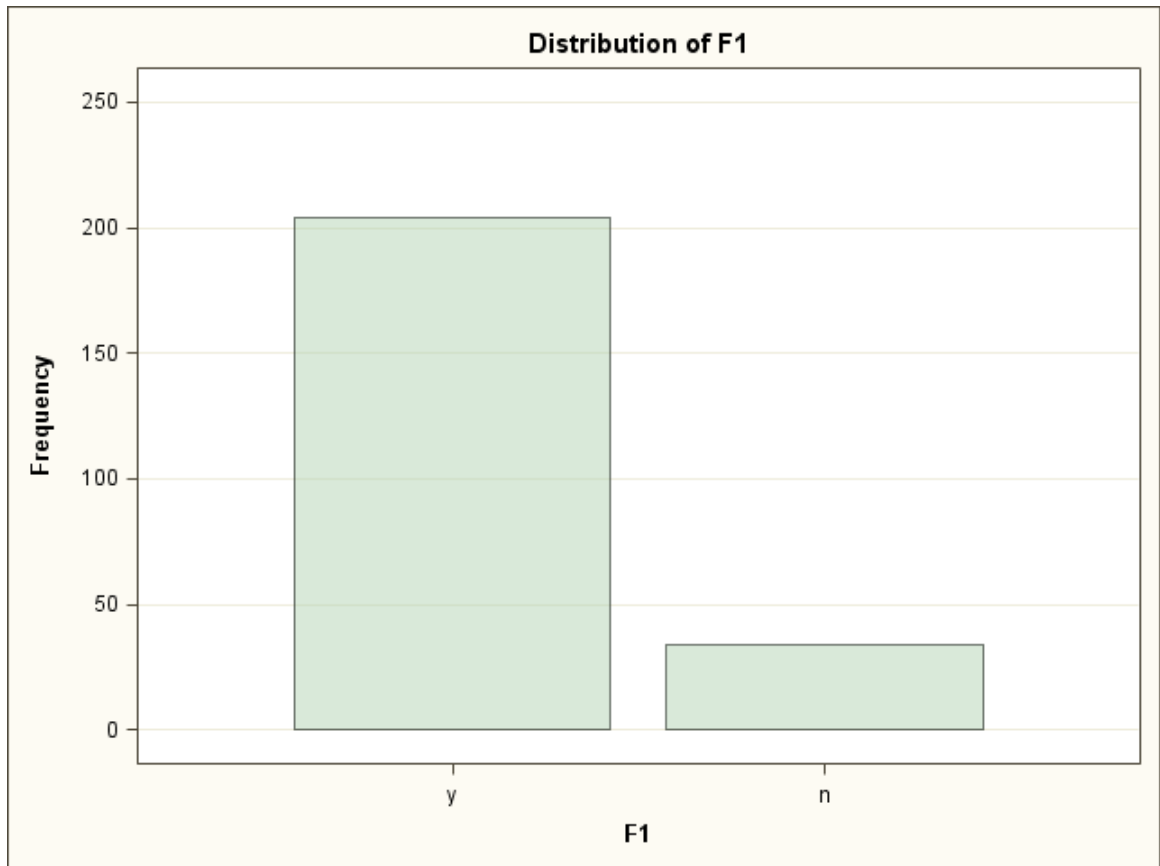


Figure 13: "Do you think access using mobile phones would be the most cost effective way for a lot of people to access such a website?" Source: survey 2012

4.2 SWOT ANALYSIS

Table 7: SWOT Analysis. Source: Author

Strengths	Weaknesses
<ul style="list-style-type: none">➤ Political will➤ Laying of fibre optics network➤ Good mobile penetration	<ul style="list-style-type: none">➤ Poor infrastructure➤ Cost of ICTs➤ Low numbers of people accessing internet
Opportunities	Threats
<ul style="list-style-type: none">➤ Growing numbers of people accessing ICTs➤ Increasing number of ISPs➤ Lowering rates due to increased competition	<ul style="list-style-type: none">➤ Policy Limitations➤ Lack of adherence to set principles

4.3 Solution for enhancing participation through ICTs

4.3.1 Concept model design for e-participation in Zambia

The Literature review explained some of the challenges facing the country. These may act as a deterrent to engaging effective participation of the citizens. The main focus in the implementation is looking at the period in between elections. Using available technology and existing competencies, the solution aims at creating a platform where Members of Parliament and citizens can engage in constructive interaction to ensure good representation and quality service delivery.

The solution encompasses the use of the web and mobile phone technology for both those who have access to internet and those who may not be privileged. The mobile phone technology is taken advantage of because it has gone country wide and covers most of the rural areas although in some areas the signal strength still remains a challenge.

Figure 14 below highlights the concept provided as solution to the challenges that may inhibit the successful implementation of e-participation. The components in this concept must not be looked at in isolation of one another; they need to be looked at as one whole. They are both interlinked and intertwined. All the issues need to be looked into if success is to be guaranteed.

The components in this concept are explained in more details below.

4.3.1.1 Users

The various participants in the system are referred to as the users of the systems. The key identified groups are citizens, government, Members of Parliament and civil society organisations.

The citizens are the main focus of the users. These are the people that hold the power in any democratic dispensation. These should be 18 years and above because they are the people that are allowed to vote by law. The solution aims to embrace as many citizens as possible regardless of their gender, social status or indeed political affiliation. Using the available ICTs within the design framework, they should have the power to voice out on

different issues affecting them in their constituencies. They also must have power to vote on certain issues that are debated in parliament. Through the platform provided by the ICTs they should be able to question and seek clarification from their parliamentary representatives.

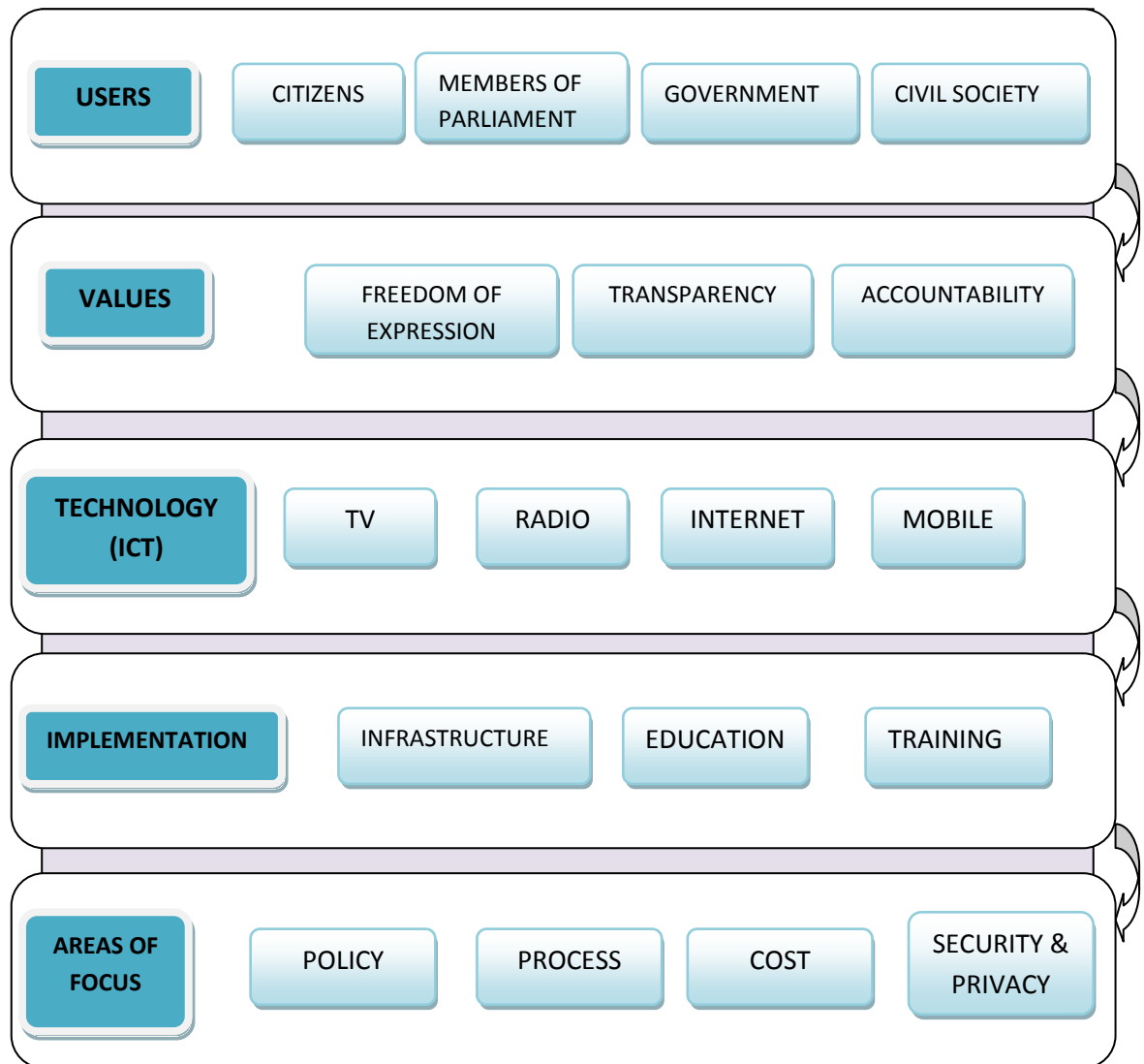


Figure 14: Issues in the design and implementation for e-participation

Source: Coleman; Blumber; modified by Author

Members of Parliament are the representatives of the people who are duly elected to serve the interests of the latter. Among the many responsibilities, these Members of Parliament act as bridges between the government and the people they represent. They have a duty to explain government policies to the people and how those policies will affect

their lives. They must also explain the bills being debated in Parliament. It would be difficult for these people to travel throughout their constituencies to do so. ICTs through the framework developed above could help them reach the wider audience in a more efficient manner. The technology platform would also help them respond to the concerns of the people they represent.

Government plays a very important role in making the solution work. They create the policies that support the engagement of citizens in issues affecting them.

Civil society organisations also play an important role in enlightening the citizens and putting pressure on those in public offices to act in the interest of the people who put them in power.

As can be seen, the users have different roles which are all brought together in one space to achieve democracy. Technology defies geographical boundaries. The distance is removed and the gap among the users bridged.

4.3.1.2 Values

The issue about values was explained in greater detail in section 3.2 in the literature review. However, in the conceptual solution only three are highlighted which are felt to directly affect the participation of all the users of the system.

Transparency is a key virtue in the system. This implies that the people who are entrusted to hold public offices act and communicate with the people they represent openly. When they are confronted by the electorate over an issue they should be able to respond without compromising the truth. Embracing transparency helps in affirming the citizens right to access information. By increasing access to information, citizens can trust their representatives more and may in a reduce corruption.

Another important value is accountability. People's representatives must take responsibility of their actions, policies and decisions they make. They would use the system to state there case and explain to their constituents why they made those decisions and are answerable to the consequences of the choices made. Those elected have a moral responsibility to inform the electorate about their policies and justify to them. However, in

the event that they divert from their duty and act according their selfish interest, they must suffer the consequences of their actions. The technology will provide a platform for them to express their decisions and actions.

The freedom of expression is a fundamental right needed for the system to work effectively. The importance of this virtue has been dealt with a great length in the literature review above. Citizens will freely express their wishes opinions and ideas about different issues affecting them. Technology brings all these people from different backgrounds and social status and engages them with their representatives.

4.3.1.3 Technology

Accessibility and effective usage of ICTs are uneven across the spectrum of society. There lies a big gap between those living in urban areas and rural areas. There are gaps in usage among the highly educated and lesser educated the literate and illiterate. There are also accessibility challenges among groups such as the blind, deaf and those in extreme poverty.

Like in most developing countries, internet access is not widely available especially among those who live in rural areas. However, broadcast technologies such as Television and Radio have very high penetration levels. These technologies are being incorporated within the solution to meet the wider community who may not have access to the internet.

Radio has a very strong presence in rural areas with the mushrooming of community stations, citizens in these areas gain access to information happening around the country. Radio has worked well as a one-to-many tool of communication. The solution incorporates the power of this technology to allow the representatives of the people reach out to their electorate in the rural communities. There already is parliamentary radio that allows members of the public to listen to the proceedings in the house. Using the same approach other programmes that allow parliamentarians to respond to diverse issues from the public could also be implemented. Radio technology reaches out to the widest audience.

The internet as highlighted above still does not have widespread coverage. It still is a privileged technology rather than a right to individuals. The high cost of ICTs and poor or lack of infrastructure remain a great challenge in the nation. The limited infrastructure and

lack of electricity in most rural areas has led to lack of access to this technology that has revolutionised the world. There is low internet usage in schools and some public institutions due to the cost and lack of infrastructure.

The penetration level of internet in Zambia is less than 15% (www.internetworldstats.com). These are very low levels and mainly reflect populations in urban areas. An initiative that only concentrates on internet as a platform for listening to the voices of the people undermines one principle of democracy which is inclusiveness. The solution aims to utilise both the internet and other ICTs available to achieve the principle of having as many people as possible participate.

The laying of the fibre optics network in the country brings so much hope for high broadband internet and reduction in costs. The project is currently entering the third phase which will see all provincial headquarters and some districts being connected. The lowering of costs and broadening of the network means more people can have access and enjoy this service.

The mobile phone technology has a very high penetration level in Zambia in comparison to internet. The number of subscribers was 8,164,553 as at year end 2011 (ZICTA, 2011). This represents over 60% of the population. The number of subscribers keeps on increasing as the service providers expand their networks. There are presently mobile service providers namely Zamtel, MTN and Airtel.

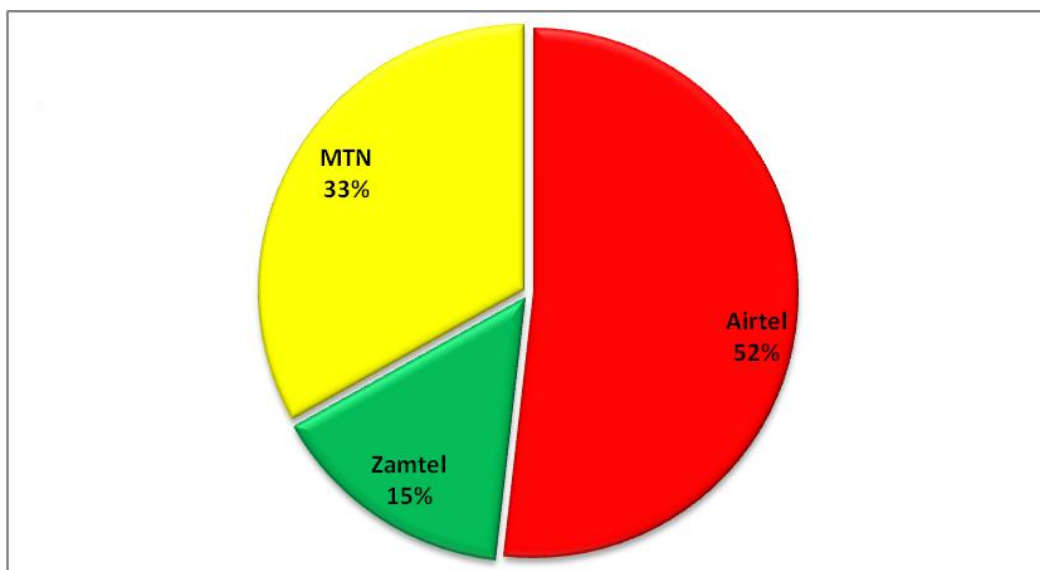


Figure 15: Market Share of Mobile Operator' based on subscription. Source: www.zicta.zm

A fourth provider is likely to enter the market and this will stiffen competition and further lower the costs of communication. With lower costs, more people will have access to this service. The cheapest mode of communication on the mobile phone is sms (Short Message Service).

The design framework proposes use of the sms service to allow citizen participation. This is the cheapest mode of communication available on the mobile network. The system would allow members of the public to send text to a specified number and their contribution, question or clarification would be reflected on the website for the attention of their representative.

4.3.1.4 Implementation

The importance of ICT infrastructure can not be over emphasised. It determines how much or how little an initiative or idea can achieve. High speed, reliable and versatile ICT networks all rely on high quality well implemented infrastructure. ICT Infrastructure is key to achievement of this proposed system. It is necessary for increase in ICT usage and stimulates innovation and social inclusion.

There is need for more investment in infrastructure development so that more people especially those in the rural areas could have access.

Educating the citizens on their rights is also key in this process. The members of the public must also be made aware of their civic duties. The importance of them participating in the democratic processes must be emphasised. Otherwise it would be pointless to have a system in place and the people it is meant for do not seem to have an appreciation for it. Beyond the awareness campaigns, these people need to be trained on the usage of ICTs for them to effectively contribute.

4.3.1.5 Focus areas

The major critical area of focus is policy. This is the cornerstone of the success of the system. There is need for a clear and concise e-democracy policy in order to deliver and achieve meaningful participation and maximum appreciation. The policy must aim to embrace everyone including those that belong to marginalised groups. It should encourage citizen to their political leaders interaction and citizen to citizen collaboration as well.

The processes are equally important. There needs to be a clear outline of procedures that need to be followed in the undertaking of various activities. Responsibilities by all the stakeholders in the system must be known. For those in charge with the implementation, there must be no ambiguity in the roles that they must perform to ensure successful implementation. Who does what and when must be clearly set out so that there is smooth operation and minimal conflicts.

The system will cost a reasonable amount of resources therefore; there is need to look at the budget critically. The costs of Hardware, software needed and the human resource to implement the system must be taken into consideration.

Whenever there is implementation of a computerised system, security is one area that must never be overlooked. This is the security over both the Hardware and software. The security must preserve the integrity of the system to ensure increased trust by the users.

4.4 Modelling the system (Use case Diagram)

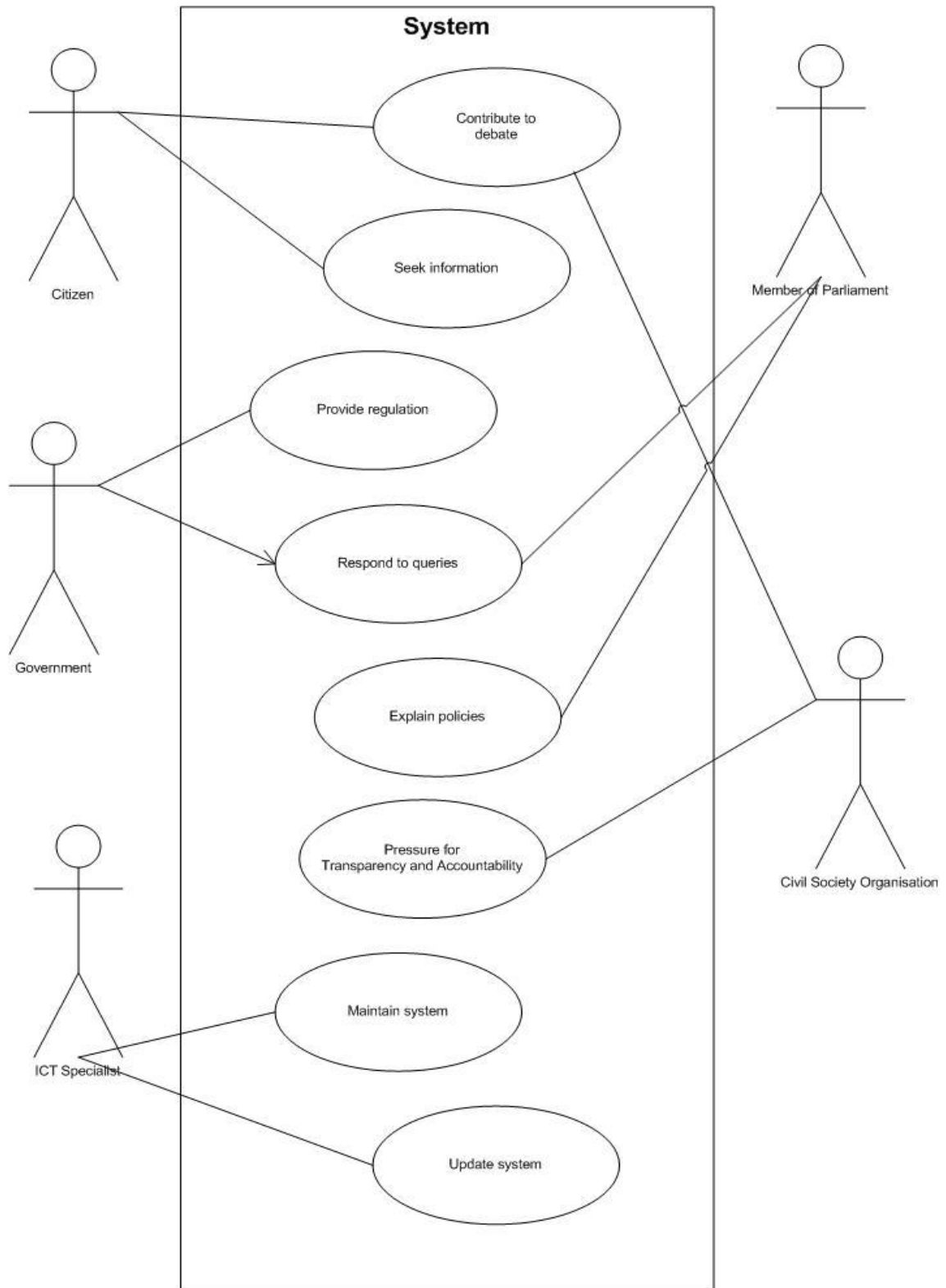


Figure 16: Use Case Diagram depicting roles of participants in the system. Source: Author

5. EVALUATION OF RESULTS AND RECOMMENDATIONS

5.1 Evaluation of results

From the survey carried out, 85 percent of the respondents said they are more likely to be satisfied with decisions made by their political representatives if they participated in the decision making process. It is therefore prudent those citizens are accorded a platform to be able to raise their concerns and get feedback from their representatives. The importance of public debate and diverse political views can therefore not be over emphasised. The study has highlighted a number of challenges that may act as impediment to engaging citizens through electronic means such as internet. It is for this reason why an approach that combines a hybrid of technologies is suggested.

The combination of traditional ways of communication with new technologies helps broaden the concept of inclusiveness. There are too many gaps among the people so using different technologies helps those who may not have the privilege of accessing certain technologies not to be left out. New technologies allow people to communicate shattering forms of social status and breaking the barriers of geography.

It is important to create capacity among the citizens to enable them to participate in issues that affect them. Civil society and other social groups can join together with citizens to ensure transparency and accountability in decision making processes. The government and members of parliament including representatives at different levels need to embrace culture of openness and tolerance.

ICTs provide possibilities for effective information exchange and thereby quicker and efficient delivery of the mandate politicians have been given by the people. Political representatives should take advantage of forums created within the proposed solutions so that they are not only seen to be closer to the people but also responsive.

The survey showed that 85 percent of the people that used internet used social media such as Facebook and Twitter. The website for the suggested solution therefore should have linkage to social media sites. This would make it more effective as a significant number of

internet users employ social media for networking. This would allow the political representatives to reach out to their constituents on the internet.

For every system to work effectively it needs to be backed up by clear policy. Policy shape the members of the public debate and how at the same time they influence outcomes in the issues the engage in. policy has power in either stimulating or constraining citizen participation. The policy on e-participation should aim at embracing the principles listed below:

- Inclusion
- Openness
- Security and privacy
- Responsiveness
- Deliberation

A policy that strengthens institutions with desirable norms helps increase public trust and confidence in the system.

While there are presently a lot of challenges with regard to internet accessibility, the accessibility to mobile phone technology is quite high. According to (ZICTA, 2012), there are over eight million subscribers representing over sixty percent of the population. From the survey carried over 86 percent of the respondents felt that the mobile phone can be used as a more effective way of engaging citizen participation. The cost effective way is to short message service (sms). The rapid growth and widespread use of mobile phones makes them a potential bridge for the digital divide that exists.

5.2 Recommendations

The recommendations are biased towards institutional strengthening and empowerment of citizens regardless of status or indeed their divergent views on issues. These are based on the study undertaken baring in mind what is available on the ground and the opportunities that exist

- Firstly, awareness needs to be raised on the potential that ICTs bring to the democratic landscape. People need to be enlightened in the potential that ICTs

bring and the benefits that come along with the embracing of technology. This can be done at various levels through conducting workshops and consultative meetings with various stakeholders. Printing out of booklets and making as much information as possible to the public. Programmes related to ICTs use for increased participation to be available on radio, television and all other media available so that more people can have access to the information.

- Promote an appreciation of the role of democracy among the people. Without clearly understanding their wider role in society, the platform for participation maybe there but people will not use it.
- Strengthen and build leadership capacity of institutions that are charged with ICT development. Further, leadership among policy developers should be fostered to ensure that they come up with legislation that supports progressive ICT participation. This entails building new skills among the leadership and support for the institutions that are charged with policy formulation.
- There must be innovation centred around the application of mobile phones since it is the widely used ICT available at the moment. Competent ICT specialists and academicians should be engaged in order to produce a system that is usable by all stakeholders.
- Strengthen the voice of citizens especially the marginalised groups. Create discussion forums where members can easily send sms to contribute. For certain pertinent issues that require wider participation, there should be a number which is toll free for more people to contribute.
- Put in place deliberate policies that reduce the cost of ICTs
- Encourage new participants in the ICTs market to increase competition thereby improving service delivery and lower costs.
- Parliamentary offices in constituencies to have internet where every citizen can go and enquire about projects within their constituency. They should also be able to raise whatever issues they have through this platform. The parliamentary office

must have someone who will be able to take all citizens concerns; this is particularly for those in rural areas who do not have access to facilities that enable them to be heard.

- The infrastructure needs to be broadened especially into the rural areas for increased penetration levels.

6. CONCLUSION

This work was aimed at exploring and analysing the potential for e-democracy in Zambia. The study also sought to explore the challenges and possibilities for ICT to enhance citizen participation in Zambia. The study contains a variety of issues surrounding democracy and how ICTs fit in to resolve some of the challenges. The relevant areas of ICTs and issues that require to be dealt with before the implementation have been discussed at length.

The analysis of the survey that was undertaken brought out important results that help understand the challenges and opportunities available for e-democracy. A significant number of people felt that if citizens to participate in the democratic decision making process they were more likely to be satisfied with the decisions that were finally made by their leaders. This outcome is a good premise for implementing a system that helps raise the voice of the people and in this case it is through the use of ICTs. However, a number of challenges were identified which could impede successful implementation. These included poor infrastructure, cost of ICTs and accessibility among others.

Despite these challenges, the increase in the numbers of Internet Service Providers which is making the environment more competitive has helped bring down the cost of internet accessibility. Penetration levels are slowly increasing as infrastructure is being expanded. Amidst the challenges with accessibility to internet, over 80% of the respondents felt the internet could be used as a tool for enhancing democracy.

A significant number of the respondents also felt that mobile technology would be the most cost effective way of engaging more people. The solution that is proposed in this work brings together web technology and mobile phone technology.

Having explored and analysed the various challenges and opportunities for engaging citizens, employing the use of ICTs seems the way to go as developments arise. However, e-participation must not in anyway be seen as a panacea for all the democratic challenges. It must act as a complement to the traditional means already available.

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APPENDIX 1

Czech University of Life Sciences Prague

Department of Information technologies

Faculty of Economics and Management



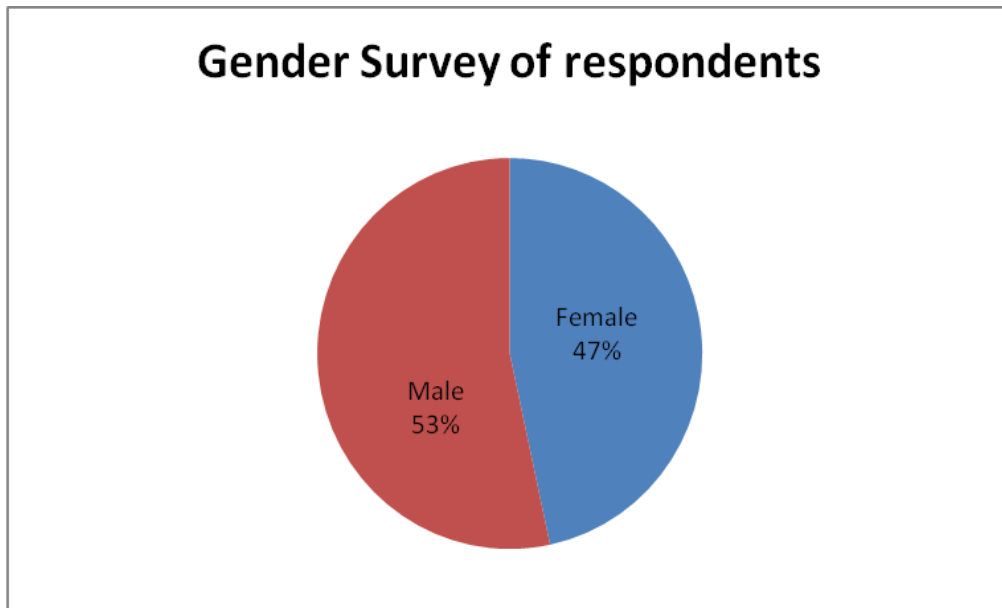
EVALUATION QUESTIONNAIRE TO INVESTIGATE THE POTENTIAL AND CHALLENGES eDEMOCRACY IN ZAMBIA

The researcher undertaking this survey is a student at the Czech University of Life Sciences studying a Masters in Informatics. In partial fulfilment of his programme, he is doing a thesis titled ‘‘Enhancing citizen participation through e-Democracy in Zambia.’’ the questionnaire below is designed to help the researcher collect and analyse the data for the purpose of this study. The researcher guarantees complete confidentiality of all responses. You are further encouraged to give as much information as possible without fear of anything. Your response to this questionnaire will be highly appreciated.

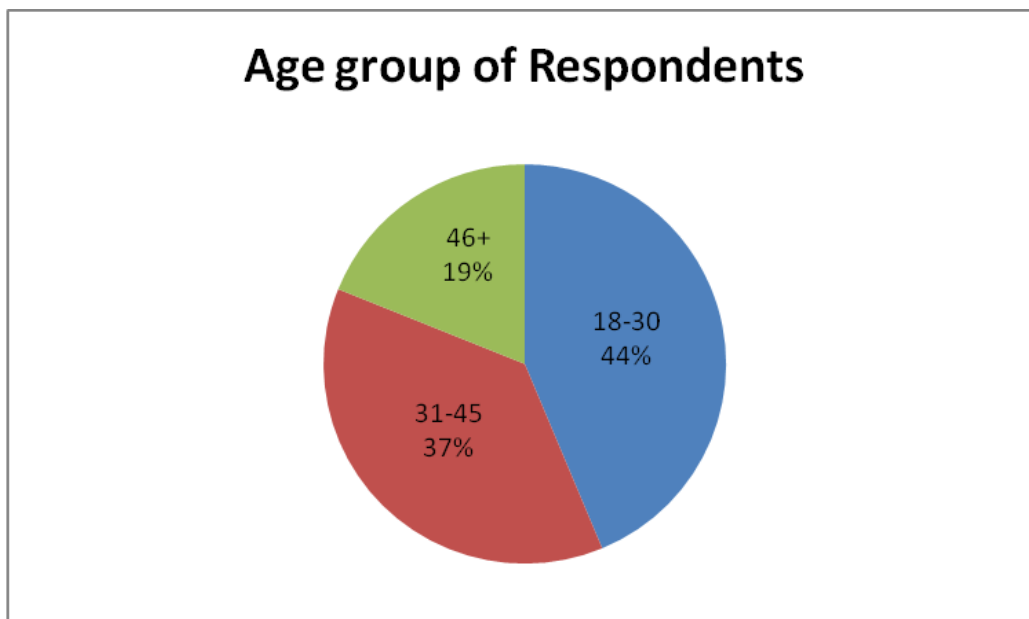
1. Sex: Male Female
2. Are you Zambian Yes No
3. Age group: 18-30 31-45 46+

4. Do you think when citizens participate in decision making processes they are more likely to be satisfied with the decisions being made by their political leaders?
Yes No
5. Do you have access to internet? Yes No
6. If yes, how do you frequently access the internet? a). Mobile phone b). PC/Laptop
c). other
7. How frequent do you use the internet? a). Everyday b). Atleast once a week c).
once a month
8. Do you use social network sites e.g facebook, twitter e.t.c? Yes No
9. If yes, which one do you normally use?
10. Do you think the internet can be used as a tool for enhancing citizen participation in
the democratic process? Yes No
11. Have you ever used a website to contact your political parliamentary representative
or share your views on issues affecting the society where u live? Yes No
12. What do you think about a site where people can voice out on issues and influence
democratic decision making a) Useful b). Not useful c). Waste of time
13. What would you like to see on such a website?
14. Do you think access using mobile phones would be the most cost effective way for
a lot of people to access such a website? Yes No
15. What do you think should be done to increase citizen participation in democratic
decision making through use of technology such as internet?

APPENDIX 2



Source: field survey 2012



Source: field survey 2012