e-Government for Development Information Exchange (DIE): Zambia

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Abstract. In most parts of the world, political systems which utilize authoritative rule and mostly employ top-down decision-making processes are slowly transcending towards democratic norms. Information Technology Systems have been identified and adopted as one of the most efficient vehicles for appropriate, transparent and inclusive / participatory decision making. Zambia has shown a higher propensity to indigenous knowledge systems which are full of inefficiencies, a lot of red tape in public service delivery, and prone to corrupt practices. Despite that being the case, it is slowly trying to implement e-government. The adoption of e-government promises a sharp paradigm shift where public institutions will be more responsive and transparent, promote efficient PPP (Public Private Partnerships), and empower citizens by making knowledge and other resources more directly accessible. This paper examines three cases from Zambia where ICT in support of e-government has been implemented for Development Information Exchange (DIE) – knowledge-based decision making. The paper also assesses the challenges, opportunities, and issues together with e-government adoption criteria regarding successful encapsulation of e-government into the Zambian contextual environment. I propose a conceptual model which offers balanced e-government adoption criteria involving a combination of electronic and participatory services. This conceptual e-government adoption model can later be replicated to be used at the Southern African Development Community (SADC) level given the similarity in the contextual environment.

Keywords: E-Government, DIE, e-participation, Zambia, policy-making, ICT, decentralization.

1 Introduction

Throughout the whole world, there has been a paradigm shift where governments and other independent policy/law makers have realised the importance of e-government as a strong tool for responsive governance. Traditionally, many governments have been using paper-and-file approaches in running their day-to-day businesses and this has proved disadvantageous in as far as resource accountability is concerned. With the changing landscape where the majority of government's transactions with citizens,

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businesses and private partners take place at the local level, it is imperative that much effort be devoted towards putting in place mechanisms which allow maximum collaboration and participatory governing. The paradigm shift in way of governance has been brought about also partly by the rapid growth in Information and Communications Technologies (ICT) which has potential to transform the generation and delivery of public services by public institutions.

Along with other countries throughout the world, African governments have understood and appreciated the contribution of e-government to the government agenda. At the moment, strategic plans have been initiated in Egypt, Senegal, Mozambique, South Africa and Kenya. Although, a claim cannot be made that all of African leaders have understood the importance of e-government, a handful of them have accepted the notion of e-government and have recognised that this concept has come to stay if Africa were to compete favourably in global economic value chains. The African continent as a whole cannot be excluded from this paradigm shift of e-government. This can be substantiated by the communiqué which was released by the 4th African Development Forum (Addis Ababa, October 2004) and reads in part:

'E-governance ..... is an important innovation for enhancing good governance and strengthening the democratic process and can also facilitate access to information, freedom of expression, greater equity, efficiency, productivity, growth and social inclusion. Successful e-government initiatives can have demonstrable and tangible impact on improving citizen participation and quality of life as a result of effective multi-stakeholder partnerships.....'

This consensus statement further proves that policy makers in Africa do understand the need for massive engagement of ICT in their governance paradigms in order to be competitive enough in as far as nations' resource accountability is concerned.

Thus, it is right to state that e-government has the potential to improve public service delivery by public institutions towards transparency, accountability and responsiveness, promote collaborative and joint-up administrations in which other stakeholders in the government business can access services through portals or 'one-stop-shops. E-Government also has the potential to enhance the decentralization reforms by bringing decision making closer to the doorsteps of ordinary citizens by collaborative reasoning made possible with the use of ICT.

ICT in the context of e-government is looked at as a portal for information exchange or a platform through which decisions can be made. The growth of the internet has had a transformational effect on the global society making information and services accessible in ways that were not conceived, let alone imagined, just some 30 years ago. Further, the use of the internet and web tools for supporting participatory actions in legislative processes, political or societal decision-making in governmental or communities' context, but also user friendly electronic government services is becoming a common practice, described by the general term *e-Participation*. With regards to e-Participation, many tangible issues suffice; such as are the e-government platforms trusted? What are the security levels in these platforms? Are they user-friendly? What are the issues of privacy? How to organize and present the content to the user? The other issue of great concern is the issue of ICT infrastructure: is the infrastructure advanced enough to handle advanced applications that are evident in government departments? e-Participation discusses the Critical Success Factors

(CSFs) of e-government. The CSFs considered in this paper are tailored according to the local context (Zambia). These are identified after having identified the challenges that have been met in implementing e-government programs such as e-Voting, traffic on government's websites if there are any, government knowledge and information portals, etc.

It is assumed that governments lie at the centre of driving the development agenda of any one country. In this regard, e-government facilitates a fast track development highway by facilitating information exchange between/amongst the different stakeholders. This brings us to look at e-government as a medium for Development Information Exchange (DIE) where information is freely and largely available for informed decision/policy-making. This paper highlights the important challenges, issues and opportunities that determine the adoption of e-government in Zambia. As aforementioned, three case studies are visited to acquaint the leaders with the current status of the e-government readiness environment in Zambia.

The rest of the paper is organized as follows: section 2 covers the literature review from recent studies that have been covered in the content of e-government implementation and adoption; section 3 looks at the challenges, issues and opportunities that avail themselves for Zambia's e-government initiatives. Three cases are identified: the ZAMLII information portal, the Integrated HMIS, and the Zambia Health Management Information System. After these cases have been looked at, the paper discusses several e-government adoption criteria with much emphasis on the context (Zambia). The conclusion is given at the end of the paper detailing the lessons learnt from the case studies as well as the set of recommendations to make e-government a reality in Zambia.

2 Literature Review

Many studies have defined e-government in different ways: the Bertelsmann Foundation defines e-government as the combination of electronic information-based services (e-administration) with the reinforcement of participatory elements (e-democracy) to achieve the objective of "balanced e-government" [21]. [13] define e-government as the delivery of government information and services online through the internet or other digital means. It is also defined as the delivery of improved services to citizens, businesses, and other members of the society through drastically changing the way governments manage information [17]. Full utilization of e-government will bring a lot of benefits to the management philosophy of many democratic governments and is going to bridge the gap between ordinary citizens and the government. This entails that participatory decision making is going to be achieved and that citizens can collaboratively participate in decision/policy making. This is the case because governments have been viewed as complex, mammoth bureaucratic establishments with a set of information silos that erect barriers to information access and make the provision of services cumbersome and frustrating [10]. E-Government can also result in huge cost savings to governments and citizens alike, increase transparency and reduce corrupt activities in public service delivery. Previous studies have categorized public service delivery in three groups: publishing, interacting, and transacting.

During the past decade, many governments all over the world have embraced the digital revolution to improve domestic and foreign government operations. Having realized the benefits that e-government brings along, many governments the world over have adopted e-government as an effective tool for reaching to its citizens and the other different stakeholders. In general, it is to be mentioned that the growth and development of the internet to what it is today was mainly due to interests by the private sector to conduct businesses on the cyber space. However, nowadays there has been a paradigm shift because even governments are equally interested in using the internet in carrying its day-to-day activities [26].

Despite the huge determination of many governments the world over in implementing e-government, previous studies present mixed cases (failure or success) of implementing and adopting e-government into the socio-economic setup. According to different countries' case studies, there are many challenges and issues that need to be addressed for successful implementation of e-government. E-Governance has shown a lot of maturity in Canada which currently is considered the most developed country in as far as employing of e-government is concerned. This is so because the Canadian government has committed to shaping itself as the government mostly connected to its citizens. Some of the commitments done by the Canadian government have been allocating of a handsome CAD$880 million to support the development of e-government initiatives in Canada [10]. The only bigger challenge that Canada faces is citizen's usage of the available e-government portals, web sites etc. The issues of trust and usability have come in as a barrier to wide-adoption of the e-government in Canada. Previous studies have emphasized website navigability and aesthetics [8], personalization and customization [19] and loyalty programs [17] as key strategies to attracting individuals to visit a website, which, in the context of this discussion are the e-government portals.

In proposing adoption criteria for e-government, [25] proposed a conceptual model with citizen trust as the underlying catalyst for e-government adoption. [4] proposed and tested a model that combines altitude-based and service quality-based approaches. From the literature, it is clear that a number of frameworks founded on the Theory of Reasoned Action and Technology Acceptance model have been utilized to explain the consumer adoption of the internet. The study by [25] proposes perceived risk, perceived behavioral control, usefulness, and perceived ease of use. It defines perceived risk as a fear of losing personal information and fear of being monitored on the internet. The conceptual model proposed ascertains that if an individual had control over how personal information is going to be used, and the control of how and when information can be acquired, then adoption of e-government could be possible. In this model, there was also the power distance which is the distance between the upper and lower castes of the society which states that citizens in higher power distance countries are more likely to adopt e-government that those in lower power distance countries. The other model by [4] brings attitude-based and service-quality-based approaches together. The model outlines the willingness to use e-government services incorporating perceived (confidentiality, ease of use, safety, reliability, visual appeal and enjoyment) and perceived relative benefits. There are three aspects to this model: first, the diffusion of innovation theory which seeks to understand the process through which innovations such as the internet are disseminated in the society; second,

the Technology Acceptance Model (TAM) which has roots in Information Systems theory showing how users accept and use a new technology e.g., the Internet; and the Service-Quality-Based (SQB) approach which seeks to understand the antecedents that affect user behavior. It is desired that a novel eModel be composed of four main components: Application architecture, Channels/interfaces, Info-structure, and Regulation [20]. The following diagram shows the architectural components of a novel eModel scenario which e-governments the world over have been using.

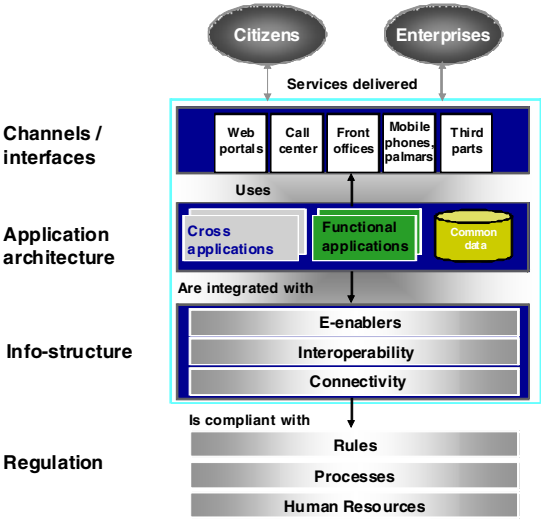

Fig. 1. Basic eModel architectural components (UN e-government report 2002)

An across-the-board analysis of different countries worldwide on the capacity to adopt e-government as a major governing tool depends on a set of factors [15]. The key factors are the country's political will, the availability and strength of their human capital, the ICT (telecommunications) infrastructure, and the presence of administrative priorities. Based on these factors, [20] presents a synthetic 'e-government index' that reflects the 'requisite conditions' that contribute to establishing an enabling environment for e-government. [20] classifies the countries in 4 different groups: High eGov capacity (index = 2.00 – 3.25), Medium eGov capacity (1.60 – 1.99), Minimal eGov capacity (1.00 – 1.59) and Deficient eGov capacity (below 1.00). Zambia is categorized as having deficient eGov capacity with an index of 0.76 below Zimbabwe, Congo, South Africa and Burkina Faso in the Africa category [21]. 2008's E-Government Readiness Index shows Zambia occupying 158th position out of 182 countries surveyed with an e-readiness Index of 0.22 out of 1 [21]. Zambia has just introduced itself in the world of e-government. It is known that in 2005, the country's government literally had no online presence [21]. An excerpt from the table showing E-readiness data for 2008 shows Zambia pitted against the leading nation as follows:

Table 1. E-Government readiness Index and Metrics (2008) – [UN e-government Report - 2008]

Rank	**Country**	**Web Measure Index**	**Infrastructure Index**	**Human Capital Index**	**E-government Readiness Index**
`1	Sweden	0.9833	0.7842	0.9776	0.9157
`2	Denmark	1.0000	0.7441	0.9933	0.9134
					
`157	Djibouti	0.1137	0.0202	0.5531	0.2279
`158	Zambia	0.0000	0.0316	0.6569	0.2266

According to the same survey [21], the United States of America scored a complete 1.0 on the e-participation index, closely followed by South Korea with 0.9773. This was primarily due to its strength in e-information and e-consultation. Zambia's neighbor, Mozambique, came out as the top African country on e-participation out of all the countries surveyed at position 16 with e-participation index of 0.43178.

Out of this scenario in the standing of Zambia in the world with regards to e-participation and e-government, and the different studies which have shown that different models can be applied to different environments with different specifications, we need to design a tailor-made conceptual model specifically for Zambia and similar environments (e.g. SADC countries). This paper proposes a conceptual model that is going to weigh the pros and cons out of the models reviewed, get the best approaches and build a model taking into consideration the local context. But before we develop the model, let's review the current e-government status in Zambia by taking a closer look at three e-government projects that were taken in the recent past.

3 Zambia's e-Government Environment: Challenges, Issues and Opportunities

Zambia's government has had the desire to implement e-government as a way to reach to its people with a view of promoting e-participation and e-consultation in the policy/decision-making process with its citizens. Projects have been initiated but have met serious challenges to being adopted by the ordinary citizens. In Zambia's context, usability, trust and ICT infrastructure have acted as the main impediments to e-government adoption. This paper's aim is to suggest a conceptual model that is more accustomed to the e-government uptake status in Zambia at the moment. This model combines the Warkentin et al. and Gilbert and Balestrini models described above. But before we do just that, let us look at three ICT projects (in the context of e-government) that have been implemented in Zambia.

a) Zambia Health Management Information System (ZHMIS)

As a strategic plan towards reaching out to its citizens, the Zambian government through the Ministry of Health contracted Health Partners International (HPI) to set up modern, integrated health management information systems (HMIS) database that would be flexible, user-friendly and able to handle all necessary data sources. This was done in the context of e-government – reaching out to citizens and improving the effectiveness of health care delivery system through the strengthening of HMIS. The HMIS software was acquired to specifically improve health data management. The HMIS software was developed from the manual system and was developed in Access 97. The system had the same screens as the manual HMIS input and output forms and reports. This greatly eased the understanding of the automated system. Automation software also included Microsoft Office 97 Professional edition, Windows 95 operating system, Eudora software for e-mail and Mcafee antivirus software. Computer hardware included Compaq Deskpro 4000 computers, with the following minimum specs, 166mhz pentium processor, 32MB Ram, 1.2gig hard disk capacity, 28.8 kps external modem, 15 inch colour monitor, APC UPS and HP 690c Deskjet printers.

In the pipeline, there is an implementation of the Hospital Information System (at major hospitals countrywide) and Financial and Administrative Management System (FAMS). The HMIS will integrate with the HMIS to provide an online and active information system for the health system.

As in the previous cases, e-government even in HMIS is being looked at as the sole provision of better service to the citizens. The HMIS is being used particularly to help the medical staff in addressing illnesses in a more convenient and appropriate manner. The citizens do not have access to this system. Because of lack of developed ICT infrastructure, health centers that are located in remote places of Zambia do not have chance to benefit from this initiative. The full potential of this system could not be tapped because, in some places which had some ICT infrastructure, the human resources do not have the necessary skills to operate the HMIS. In some districts, there may be even 1 person to manage all the HMIS systems installed at different health centers (Simenda 2009).

b) Zambia Online Legal Information Portal (Zamlii)

Zamlii which is the online Zambian legal information portal is a comprehensive online collection of documents and research relating to Zambian legal and constitutional issues, intended as a legal network for lawyers, judges, academics, students and citizens http://www.zamlii.ac.zm/ . Through this portal, citizens can download documents to their convenience. This site contains up-to-date legal information about Zambia and is highly friendly to even people with limited computer skills.

c) Zambia Immigration Management System (ZIMS)

ZIMS has been implemented by the Zambia Immigration Authority as part of its agenda to provide its services efficiently and therefore contribute a substantial amount of tax returns to Zambia. The need for the authority to introduce this computer-based application was specifically to improve immigration service delivery; reduce the time it takes for the department to issue Permits and Visas and Clearing of persons at the ports of entry by about 50% ultimately reducing the cost of doing business for the applicants in

Table 2. Zambia's e-government initiatives: strengths and weaknesses

	Strengths	**Weaknesses / challenges**
ZIMLII	- Contains up-date legal information - Highly friendly to ordinary citizens (good usability)	- Access restricted to people with internet connectivity
Integrated HMIS (2007 to ...)	- full backing of the Zambian Government and cooperating partners - decentralized platforms - on time responsiveness - used local people during its design phase of the HMIS	- Difficult to mobilize funds for full-scale implementation - Rampant costs in training of local population in the use of the software - Lack of political continuity and commitment from the co-operating partners - Poor-grade procurement of IT equipment - Limited ICT infrastructures at local health centers - Exorbitant fees charged by local ISPs for internet connectivity - Unreliable and no guaranteed donor support for project sustainability.
ZIMS	- Faster processes of applications for VISAs, PERMITs, etc. - Convenient and easy method of accessing s ervices - Anytime, anywhere	- Lack of synergy between ZIMS and the immigration website - Unwillingness of the staff to adopt ZIMS - Limited ICT infrastructure - Shaky sustainability framework of the new system

ZIMS – Zambia Immigration Management System
HMIS – Health Management Information System
MOH – Ministry of Health

the country [18]. In line with this, and with a quest to reach more citizens with this improved service, the authority has opened a website where various services offered by the co-operation can be accessed (http://www.zambiaimmigration.gov.zm). ZIMS is an electronic integrated visa and permit approval system which also has a component of border management within itself just the website. This means the processing of applications for permits and visas is done through ZIMS.

Some of the challenges faced in the full-scale implementation of this project have been the following: a) it was not easy to bring all the staff on board due to education limitations (computer illiteracy), mind set (attitude problems towards computers); b) lack of linkage between the Zambia Immigration Website and ZIMS. This would have created an atmosphere where clients file in queries and monitor the status of their queries; c) there is generally inadequate physical ICT infrastructure at various Immigration Offices and Border Controls in the country to facilitate speedy processing of applications and the efficient handling of travelers (Citizens, tourists and other visitors) at all Borders; d) limitation in the confidence levels of the staff in the new system as it is a IT based system, and how to revamp that confidence; e) lack of trust in the new system by most people, rendering the newly introduced ZIMS platform unreliable; and f) sustainability of the institutional capacity building in ICTs at various departments countrywide.

In summary, the following table outlines the characteristics of the initiatives for e-government taken by the Zambian Government.

The other major setback of these systems is that they concentrate on, and give accessibility to the workers in different departments that have implemented e-government systems. Despite having websites, these websites are used as online information stores rather than as interaction bridges between the government and the people. E-Government in Zambia is much more centered on improving public service delivery, with almost neglecting the collaboration nature (between citizens and the government) of e-government. Put in other words, the e-participation component of e-government is almost completely ignored for the case of Zambia.

4 e-Government Adoption Criteria

Before we understand fully the adoption criteria according to the local context in Zambia, let's consider the following hypothesis which can be either rejected or accepted given a set of conditions (Kumar et al. 2007):

a) *The characteristic feature of "correct" e-government shall be a balanced combination of electronic services and forms of electronic participation. Many decision-makers still concentrate one-sidedly on the provision of electronic services (The case of Zambia).*
b) *E-democracy in the form of specific possibilities for participation must be anchored as a central element in all e-government strategies from the very start. If the modernization of the public sector initially concentrates exclusively on the implementation of electronic services, it will make the subsequent introduction of participatory elements more difficult.*
c) *The implementation of participation-promoting e-government initially increases the complexity of institutional control, inter alia, as a result of the increasing in-*

fluence of the citizens and the demands on the service providers in the form of a mix of technical and business management elements.

These hypotheses are intertwined with the fact that e-participation shall not only contain the provision of services to the citizen (what I call a damp-and-take scenario) but will comprise feedback from the citizens to the government (e-participation). Thus, we can state succinctly that the profound objective of the e-government initiative ought to be the frequent and recurring use of online services by citizens not only for obtaining information but also for interacting with the government in the form of e-participation. [25] described adoption as the intention of citizens to engage in e-government to receive information and request services from the government. [4] measure it as the willingness to use e-government services while Carter and Belanger (2005) measure it as the intent to use e-government services. The model proposed in this paper aims to make an extension of the conceptual model proposed in [10]. In that paper, the model was premised on the belief that e-government adoption is largely shaped by the extent to which the government can provide a rich, engaging, and hassle-free experience that is reliable and can provide higher levels of satisfaction. The model in [10] says for effective e-government adoption, the different attributes to be satisfied are the following: a) User characteristics (perceived risk, perceived control, internet …); b) Website design (perceived usefulness, perceived ease of use (usability); c) service quality; and d) client satisfaction.

As distinct to earlier models which were only unidimensional in nature, [10] looked at e-government adoption as a multi-dimensional construct. However, a careful look at the model presented by [10] reviews that, despite it being multi-dimensional in nature, it

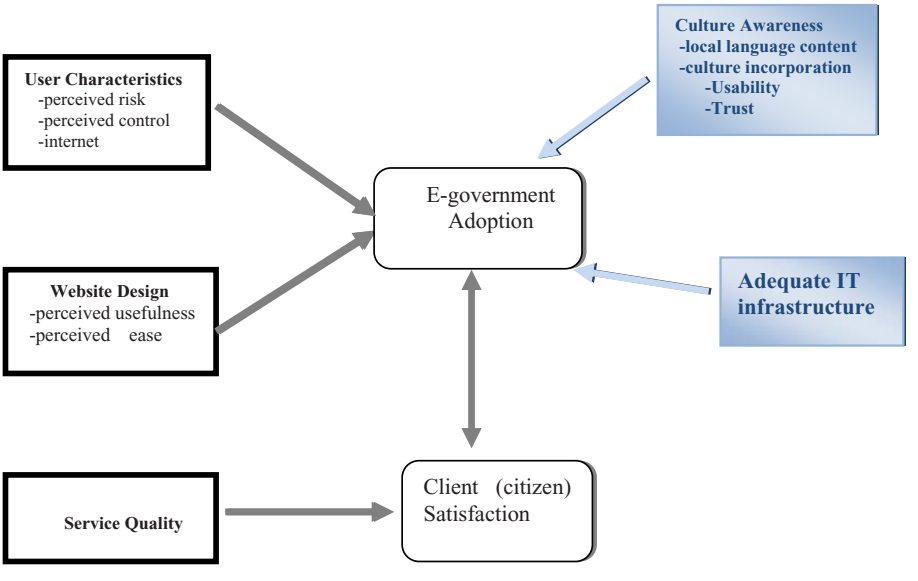

Fig. 2. Proposed e-adoption model

lacks certain attributes thus rendering it not very suitable to be applied for the Zambian case. The figure below represents the different attributes that may be needed for a normal to be suitable for the case of Zambia. Note that some of the explanations of the attributes can be found in [10, 17, 28]. The blue attributes are proposed.

From the case studies outlined in this paper, it is clear that limited ICT **infrastructure is** limiting the number of people accessing digital content presented online on websites. Computers, especially ones connected to the internet, are still hard to come by. The relatively few computers that are found especially in business areas of major cities of Zambia are very expensive to access. This is attributed to the exorbitant rates charged for the internet service by Internet Service Providers (ISPs). Another impediment has also been attributed to the content being presented only in English. Although English is the official language in Zambia, we cannot claim that it is the mostly spoken. The case studies have shown that people continue shunning away from e-government services (mostly the website) because they cannot understand the content presented in them. Simple, properly designed websites to meet the local specifications should be put in place. It is also desired that culture of the local people should be incorporated into the design of these information systems.

Thus, the complete conceptual model this paper is proposing incorporates all the attributes found in the earlier model with the extension of the culture awareness and the need to improve on the ICT infrastructure for the content to be easily accessible. Once the culture content is incorporated into the conceptual model, this will mean that the implementation of the e-government initiative will not only depend on the 'dump-and-take scenario' but will also have e-participation of the citizens as a feedback mechanism for policy/decision making.

5 Conclusions

E-Government is a channel through which the ruling class interacts with its citizens. This creates a win-win relationship where the work of the government is made easier by providing a public service at the disposal of a citizen. Also, time is saved, corruption is reduced and hence transparency and accountability of different resources is promoted. E-Government can also allow the government to timely collect more tax from different sectors of the economy. The citizen benefits by having a say in the policy/decision-making on different issues affecting the country. Efficient service delivery to citizens is also achieved by the employing of e-government.

This paper has looked at different e-government initiatives and conceptual adoption models that have been employed to achieve appropriate e-government. The cases presented from different government (Zambia's) departments employing different e-government strategies suggest that Zambia may not be completely ready to fully implement or replicate the implementation of e-government. There is need to involve the e-participation component of e-government adoption which is to be looked at as e-government for development information exchange (DIE). It is desired that there is a flow of information between the government and different stakeholders involved in the development process. In order to achieve the same, the following recommendations are in order:

1) The government should create an enabling environment for the adoption of ICT in everyday lives of its citizens as this is the start-point of e-government. For the case of Zambia, the government's commitment has been shown by the ICT policy that has been put in place. The only attribute lacking in this case is the follow-up to implementation of the same. It seems all the nice policies are just on paper and implementation is lacking.
2) The government should play a leading role in developing the ICT infrastructure. This can be making sure that the nation's internet backbone and the International Gateway are managed responsibly. Further, the government should encourage developing of fiber-optic network for efficient broadband communication, reducing the rates for internet access through ISPs, and subsidizing the prices for getting Personal Computers (Desktops and Laptops). This can be done indirectly by reducing import duty on internet accessories, computers and computer gadgetry.
3) The government should take full advantage of various initiatives taken by the international community to assist African governments in their bid towards adoption of e-government models such as the Information Technology Center for Africa (ITCA); and the CAFRAD which is Center for Research in Administration and Government. These initiatives basically offer technical support and training (to address HR concerns who are competent enough for change management from paper to electronic form of governing) to different African governments. ZIMS above has shown that even employees in the government department trying to implement e-government can actually reject it.
4) There should be a lot of awareness campaigns sensitizing the ordinary citizens on the benefits of e-government for them to fully adopt it and incorporate it as part of their culture.
5) The development of e-government systems should be funded locally. Over-dependence on foreign (donor) support has its own repercussions (The case of HMIS outlined above). The local people should be part and parcel of developing the system to instill sense of ownership in them.

Zambia presents a case where the transition from pre-colonial practices to contemporary practices has been very slow. There is need to change the pre-colonial administrative culture and mentality which was characteristic for under-resourced and unaccountable bureaucracies. Having outlined Zambia's ignorance of e-participation, it is worth noting that the whole 'package' of e-government is not attained, and if this continues to be the case, the much talked –about benefits of e-government will not be attained. The notion of e-government brings along e-participation which reconfigures relationships between government and citizens (G2C), Government and Businesses (G2B) as well as between governments (G2G). Such kinds of interactions provide a framework where important inputs even in the line of decision-making can be tapped.

There is need to develop appropriate ICT infrastructure and adequately inform the citizens before e-government can be promoted. Zambia has not done enough on the basics and has overridden over necessary steps towards full-scale implementation of e-government. For e-government to thrive in Zambia, there is need that the conceptual model presented here is taken into consideration, and the necessary ICT infrastructure together with appropriate awareness campaigns be put in place.

This paper has further looked at three cases of implementing e-government by different public institutions in Zambia. The cases have shown that there is a lot of discrepancy in the quest to implement e-government systems in Zambia. A conceptual model based on the findings of the three cases, and reference to other models developed thus far, is being suggested. Future works for this study are analyzing more e-government cases for Zambia and comparing them with cases from other countries in the SADC (Southern African Development Community) region. This will bring us to understand the major issues and challenges that are faced in this region in as far as e-government is concerned and how we can overcome these. At the end of such a study, a general conceptual model for the entire region of Southern Africa can be designed. The usefulness of such a model would be to create checks and balances against the implementation of e-government in the SADC region and ascertain whether the SADC strategic framework for the development of e-government is working or not.

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