



E-Government in South Africa: A Perspective on Initiatives, Readiness and Developmental Issues

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Abstract

This paper will provide a perspective on e-government in South Africa. Especially with regard to initiatives that is being taken by the South African Government, these initiatives include various aspects, for example the e-filing of tax and e-justice. The readiness of the South African Government Online web-site will be evaluated against criteria given by the United Nations in the report “Benchmarking E-Government: A Global Perspective”. Lastly, this paper will focus on various developmental issues that are hampering the proper developing of e-government in South Africa.

Keywords: E-government, Development, Readiness, Initiatives, Literacy, Education, Socio-economic development, Service delivery.

1. Introduction

Information and communications technology (ICT) has changed the way government at all levels interact and communicate with each other and with its citizens. Traditionally, governments primarily communicated with their citizens through means of public meetings or the printed media. Modern day electronic government-models employ the most modern information and communication technologies, for example to use the Internet and satellites to deliver efficient and cost effective services, information and knowledge. Across the world, public organizations are embarking onto e-government initiatives by publishing substantial volumes of salient information on the Internet. E-government initiatives enable citizens to access government documents, order publications, file taxes, reserve records and renew licenses and permits from any location with an Internet connection (<http://www.aspanet.org>).

2. A Population and Geographical Overview of South Africa

South Africa is situated at the southern tip of the African continent. The discovery of diamonds and gold in 1867 spurred a wealth of immigration to the country. The size of South Africa is 1,219,912 sq km, which equals to less than twice the size of Texas. The population total is 43,586,097. Total percentage of citizens living under the poverty line is 50% and the unemployment rate as established in 2000 is 30%. The number of Internet users in South Africa is 750,000 (World Factbook – South Africa, 2000:1-8).

3. E-government Initiatives in South Africa

The South African government’s commitment towards improving information dissemination across the population was illustrated in 1995 when Mr. Thabo Mbeki (then Deputy President of SA) stated at the G7 meeting of the information society in Brussels, “we must strive to ensure that each individual whatsoever his or her station in life play a meaningful role in decision making and in governance. One of the ways this can be done is to ensure that citizens has access to information”. The South African Minister of Communication stated

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in 2001 "government believes that every region, province, community and citizen whether urban or rural has to benefit from access to the information economy".

In the Budget vote speech for 2002, the Minister for Public Service and Administration announced that South Africa On-line is a single electronic Gateway that will facilitate access to all information about, and services provided by the government. The overall vision that will be provided by the Gateway as it is known, is to provide access to government services, anytime, any place, within a clearly defined and executed e-government strategy. Access to services is the most important aspect of the Gateway. This initiative implies an end to cumbersome processes and travelling long distances to visit a multitude of government departments to conduct business. Citizens will be able to access all the government services from a single point, for example multipurpose walk-in community centres or kiosks that will be established across the country. As part of effecting e-government, the South African government has embarked on a number of initiatives. The South African government has also passed a Bill to promote e-government in South Africa. There are also other initiatives that are undertaken by the South African government.

- *E-Filing-Tax*: The South African Revenue Service's (SARS) e-filing of tax is a co-ordinated effort between SARS and private business. The private businesses identified as service providers, have been appointed by SARS to provide Internet based electronic tax filing and payment services. The main aim of an e-filing system is to facilitate the electronic submission of tax returns and payments by taxpayers and tax practitioners. Income tax payers may still submit their returns in the traditional way. However, E-filing is aimed at improving operational efficiencies in order to deliver a better and quicker service. Those who wish to make use of the e-filing system are required to register at the particular service provider, conclude an agreement and receive a private access code and password to access the available services that are offered by SARS (e-Gov News, Oct/Nov: 2001).
- *E-Justice*: Advances in cyberspace, business pressures, developments in information technology and globalisation, requires that the justice system of a country be re-evaluated. E-justice aims at improving the effectiveness and efficiency of prosecutors in the process of justice prudence. The e-justice system seeks to transform the justice administration system from a manual to an automated system. A current analysis revealed that the justice system is running out of capacity. Currently courts have huge backlogs and prisons in general are overcrowded with a large number of trial-awaiting prisoners. E-justice is one of the ways in which the Department of Justice hope to alleviate some of their problems (e-Gov News, Oct/Nov 2001).
- *The National Automated Archival Information Retrieval System (NAAIRS)*: NAAIRS assist members of the public to identify and locate public records in archival position, containing information that they may require. The NAAIRS interface was located in the newly designed website of the national archives. The national archive website is an important vehicle for electronic service delivery, providing extensive information and documentation about the national archives services to the public and to government bodies (e-Gov News, Oct/Nov 2002).
- *The Department of Home Affairs National Identification System project (HANIS)*: The Department of Home Affairs has launched the Home Affairs Identification System to combat crime. The Department of Home Affairs is building an automated identification database in which massive amounts of fingerprint data will be recorded. The new system will be used in conjunction with the population register to provide life profiles of all citizens; this system will be used for identification and verification purposes. Immense potential exists as far as applying this system as far as for instance, policing, elections, population registering or immigrations and emigrations are concerned (e-Gov News, April/May 2002).
- *Cape Online; An E-Government Strategy for the province of the Western Cape*: Cape Online is a service-driven and citizen-focused e-government initiative. The vision of Cape Online is to deliver access to public

- services online anytime, anywhere. The goal of Cape Online is to improve the internal efficiency and a more effective service by the Provincial Administration to the community. Cape Online focuses on three delivery areas: (1) *Digital delivery* allows government to provide information and deliver services more efficiently and effectively. The goal of digital delivery is to make it easier for businesses and individuals to deal with government. (2) *Digital democracy* is a government strategy that attempts to make the functioning of local government more transparent and improve both accountability and legitimacy. Digital democracy envisages the posting of government tenders, reports and meeting transcripts on the Internet. (3) *Digital development* is a development strategy to improve public access, develop information technology skills and development regional information and communication technology (e-Gov News, Oct/Nov 2001). Cape Online presents a simple interface that will remove the complexities that citizens and businesses currently face in order to obtain services in the Western Cape area (e-Gov News, Oct/Nov 2001).
- *South Africa Government Online Web-site*: This site has over the past year increased its information that are available to the public. Information that is available on the web-site include: Access to government department web-sites; government documents, reports and forms, these include: visa applications, passport applications, birth certificates, marriage certificates, death certificates, temporary residence permits, permanent residence permits, application for registration as a voter and unemployment insurance fund registration; all government speeches; a South African overview; information about travel and tourism; government notices; various acts, bills and draft bills; new government tenders and tender regulations; frequently ask questions about the South African Government system; and news statements made by the South African Government.

The South African Government online web-site has increased its services and information to the public. But the question still remains, at what stage of development is the South African Government online web-site? According to the United Nations paper "Benchmarking E-government: A Global Perspective" there are five stages of e-government. These stages include the following:

Table 1 Stages of e-government

Stage	Explanation
Emerging	Government will have an official online presence.
Enhanced	At this stage government will increase the information on the site and become more dynamic.
Interactive	Citizens are now able to download forms, e-mail officials and interact through the web.
Transactional	Users are now able to pay for services and other transactions online.
Seamless	At this stage full integration of e-services are found.

Source: Adapted from information found in "Benchmarking E-government: A Global Perspective", UN. 2002.

South Africa has characteristics of both enhanced and interactive e-government. Although it is possible to download various forms from the web-site it is still not completely interactive. For example, it is not possible to complete the various government forms online, after printing government forms it should be mailed or delivered to the various government departments. The successful implementation and use of e-government in South Africa will to a large extent depend on citizens' ability to make use of the Internet and information and communication technology (ICT). The issue of comprehension of the intricacies involved in applying the functions of such facilities, is also in question. In terms of Internet infrastructure, Internet subscription statistics in South Africa is estimated at approximately 750 000. According to the United Nations report "Benchmarking E-government: A Global Perspective" that was published in May 2002, it was found that South Africa is internationally ranked 65th in the world as far as e-government capacity. On the African continent South Africa is ranked first. According to the report, South Africa's e-government capacity is the strongest in Africa, allowing the government to successfully emulate the programs of industrialized countries. South Africa far exceeds the rest of the continent in e-government capacity and capability (www.un.org). Even though South Africa rates best in Africa, these statistics do not reflect infrastructurally disadvantaged areas, especially rural

areas, and access to electricity and telephone lines are still limited. This state of affairs impacts on the level of Internet connectivity and the utilisation of e-governance facilities.

4. Problems Hampering E-Government Development in South Africa

There are various problems that are currently preventing South Africa from making proper use of e-government. Literacy plays a big role in the use of computers and new technology, it is estimated that the adult literacy rate is 15.1%. Vast differences in literacy rate occur between rural and metropolitan areas. Schools in South Africa play a big role with regard to literacy and teaching students to use computers and the Internet. However, schools in South Africa are facing various problems (Naidoo & Schutte,2001:113). Many schools lack the necessary electricity. A further problem that face schools is the payment of electricity. A lack of management expertise exist as far as ICT facilities among schools are concerned. This includes technical and software expertise. There is a lack of qualified teachers, to teach computer use. There is a substantial security problem for ICT equipment at schools. Many schools in rural areas are pray for theft and vandalism. Many schools don't have access to telephone lines. There is no ICT budget in schools. Six schools currently have full Internet access, that is being paid by the parents.

Another aspect that needs to be taken into account in this regard is also the diverse language groupings within South Africa. Many people may be able to speak different languages but appropriate reading and comprehension proficiency, especially relating to e-government facility utilisation may be limited. Accessing e-governance facilities is important, especially for communities living in remote rural areas - the very communities that, according to demographical data, are less likely to be able to make use thereof. Infrastructure in the form of electricity, telecommunications, computers and Internet access is needed especially in rural areas, in South Africa to make proper use of e-government. Information and communication technology is an expensive resource; the cost of hardware remains considerable for many citizens. Technology also implies constant upgrading of equipment and obtaining the adequate software that will be needed. The cost of online telephone charges for the use of the Internet remains high, unless it is subsidised by government. Developing countries in Africa already suffers from poorly developed infrastructure, which implies that the cost of obtaining hardware and software, plus maintenance and training, are likely to be unreachable for many African countries (Byron & Gagliardi,1998:1-5).

Per capita income impacts on ICT utilisation in that affordability, standard of living and education is related. If the South African government wishes to make e-government a practical reality, it should address socio-economic aspects simultaneously. A well co-ordinated effort and a holistic approach to development to ensure sustainability is needed. Even so, additional barriers and problems need to be addressed by the South African government, before e-government initiatives could be implemented. Political leadership lacks the drive to bring change in the public sector. If e-government is not a priority for the government little attention is given to ensure that policies and programmes meet the needs of the citizens or are implemented at all. An example, in this regard is where in an African country, recently, researchers, policy analysts and practitioners conducted an extensive investigation into information and communications technology and e-government aspects relating to government's role and policy. A submission was made to the relevant ministry but due to the fact that the minister concerned wasn't supportive of the propositions, the recommendations languished and were not implemented (Roadmap for E-government in the Developing World, April 2002: 12).

In many cases, the flow of information between government departments and agencies are developed and operated in such a way, that it meets only the needs of the government departments and agencies and not the citizen in South Africa. In many cases the government is slow in making and implementing choices with regard to e-government, this can lead to many delays in developing e-government. Government structures are slow to change; public officials resist change, because they are scared of the unknown. Many public officials and politicians are comfortable with their environment and don't want change to upset what is familiar to them. It is

important for citizens to obtain computer literacy and Internet skills. Without the proper skills and knowledge e-government cannot be used.

In addition, from a service rendering point of view, public servants should also have the skills to properly utilise the information and communication technologies in their work environment. According to the South African Department of Public Service and Administration (Budget Vote Speech, 2002), the ICT literacy levels of public officials and current patterns of access to computers indicate that less than 20% of the public sector functionaries are computer literate or computer users.

The South African Minister of Public Service and Administration (Budget Vote Speech, 2002) remarked that, with the increased introduction of ICT's in government functioning, instead of being an equaliser and a tool for development, it results in increasing the divisions between different segments within society. One effective way of improving information and communications technology skills, could be to transform curricular tertiary education and training programmes by for instance making use of the Internet to teach Public Administration.

5. Suggested Strategies and Frameworks for the Development of E-Government in South Africa

The South African Government should consider these suggestions below, for ICT-utilisation and e-governance implementation. The government is to change the mindset of public servants working in government. People are very often scared of the unknown or new technology. Training programs and information sessions can help to inform public servants, this will also create a positive attitude in them about the new developments in government.

Public servants must be computer literate, and have knowledge in the different technologies that are available. Public servants should be able to use the Internet and should know how to deliver services by making use of the Internet. Government employees need to change their attitudes, to become employees of change, it is important that government employees understand what e-government is and that employees become willing to implement e-government (Information Management 361,2002: 41).

It is important for the South African government to develop a centralized strategy to improve the countries ICT infrastructure, while upgrading information management. This strategy will help government to decide how new policies will be implemented and how to create better administration in government. The upgrading of the government's information management infrastructure and an integrated and coherent ICT strategy for government is very important. Various government departments have developed ICT systems separately instead of developing an inter-connected system (Information Management 361, 2002:42).

It is important that service delivery is audited in order to identify those services that would be economically viable to be delivered electronically. Health services for example can be provided by tele-health, e-commerce has for some time been delivered online. A good starting point for the South African government, would be to do an audit of the existing services that are currently being offered by the various government departments and to evaluate the savings that can occur when the same service is to be offered on-line (Information Management 361, 2002:42).

Services that are electronically available from government should be accessible to the public by making use of call centres, mobile phones, digital TV, telecentres, kiosks, smart cards and personal computers. Citizens should be able to access government services from any where in the country (Information Management 361, 2002:42).

6. Concluding Remarks

E-government forms a very important part of future governance in South Africa. It is necessary that public servants and citizens acquire the applicable skills and knowledge. Without proper training, it will be impossible to optimise the use and usage of e-government and its associated benefits. By availing programmes online, to public servants and equipping them with information technology commodities, the required skills and knowledge, that will be needed for future e-government applications, could be inculcated. Professionals must be in a constant learning situation to keep abreast with the developments in their areas of specialization. Skills in using computers, the Internet, telecommunication and related technologies also need to be part of the core curriculum for schools, beginning at the primary level, through universities and graduate programmes. The provision of locally relevant content should be added to the South African governments e-strategy. Government agencies should work together with the private sector partners and other institutions to help maximise the benefits of e-government through co-ordinated policies and programmes. Extensive research both normative and empirical, is needed to cement the fusion, between the realities associated with South Africa's capacities and the possibilities, presented by advances in information technologies.

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Introduction of E-Government and its Implications for Developing Countries

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Abstract

It is evident that globalization and information technology is impacting on how developing countries, conduct their business and how these governments, implement their day-to-day activities. Globalization suggests, that developing countries should be linked to the international community and to the degree to which companies can interact productively with the global community. The maxim of having to be 'worldly-wise' in a global village, has now become a reality for many developing countries. E-Government is about competing in an electronically enabled world, which creates fundamental shifts in existing markets and creates new industry opportunities. The electronic model, is also the key element in helping developing governments', to provide better services to the citizens. However, in examining developing governments' in the SADC region, it becomes obvious that they face a number of challenges, in transforming conventional government into electronic government. It is within this confine, that this paper is forced to examine the introduction and implications of the electronic model for governments in developing countries.

Keywords: e-Government, Electronic model of service delivery, Internet, Developing countries

1. Introduction

The information revolution is affecting how governments, including developing countries respond to the needs of their clients in the public sector. It has opened up new possibilities for the delivery of programs and services in their government ministries. E-Government has also presents new opportunities for economic growth in developing countries. The Internet makes it possible for governments' to streamline their interaction with business people, private citizens and government agencies, while at the same time, ensuring an improved public access to government information and services. It also provides for an improved quality and cost-effectiveness of government services, through the utilization of effective information sharing mechanism and communication with its citizens. This mode of communication further allows the development and growth of an improved set of opportunities, for participation in democratic institutions. By so doing, it cultivates an environment, which stimulates and promotes better relationships with the business community and private citizens. New information technologies thus offer the possibility of close and ongoing interaction between government and citizens. More importantly, online forms of governance are replicable and empowering. Hence, the legitimacy and relevance of governments in developing countries can actually be enhanced. This paper presents an overview of e-Government. The benefits and the challenges that e-Government presents for developing countries, are also reflected in this paper. A number of suggestions are put forward, to ensure the successful entrance of e-Government in developing countries.

According to Shilubane, (2001) electronic government or e-Government "is the continuous optimization of government service delivery, constituency participation and governance by transforming internal and external relationships through technology, the Internet and new media". This implies the transformation of how citizens, be they legal or natural persons, perceive and experience government. It is the investigation and formulation of new methods, to enable the public to access government services. The electronic model entails a shift to the customer, where citizens must be able to access more public services online, at their convenience hence at 'anytime' and 'at any place' (A Framework for Global Electronic Commerce, 1997). Thus, metrics must be clearly defined and continuous and accurate measurement implemented. The *critical metrics to measure the*

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