

Full Length Research Paper

E-government project failure in Africa: Lessons for reducing risk

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E-government project implementation in Africa is commonly associated with low levels of success. This review aimed at drawing lessons for successful E-government project implementation in Africa by analysing one of the successfully implemented E-government projects in South Africa namely the South African Revenue Services (SARS) e-filing program. The findings reported in the paper are mainly based on analysis of secondary sources of information relating to the service and direct observation. The review showed that some of the critical factors that can help ensure e-government project success include project support and commitment from top management, having in place a project implementation team with clear deliverables, reliable technical infrastructure, ensuring that users' views and situation are taken into consideration in project implementation and having strong project and monitoring system in place. The findings of this study have wide managerial implications for the success of E-government projects particularly in the African context and these have been highlighted in the paper.

Key words: E-government, Africa, project success, e-tax.

INTRODUCTION

The success with which business in Africa is using information technology to connect with its customers has resulted in increased recognition of the potential to use such technologies in order to promote access and as well as efficiency and effectiveness in the delivery of government services, a phenomenon commonly referred to as E-government. A study by Rorissa and Demissie (2010) noted that almost all governments in Africa have web presence. They further noted there has been an increase in number of projects aimed at improved delivery of services to members of the general public other than through mere static web presence.¹

Despite this, a number of studies looking at E-

government implementation in Africa generally as well as those focusing at country level have often bewailed the large number of E-government projects introduced that ended up not living up to the promise (Mutula and Mostert, 2010; Heeks, 2003). According to Heeks (2003) as many as 35% of E-government projects in Africa can be classified as total failures while 50% are partial failures. He defined total failure as situations where an E-government project was not implemented or was implemented but immediately abandoned. Partial failure was defined as situations where major goals of an E-government project were not attained and/or there were undesirable outcomes.

High failure rate of E-government projects in Africa is a matter of great concern for many stakeholders including government itself and members of the general public. This is mainly due to the fact that E-government project failure results in wasteful spending of often very large sums of money, a situation that most African countries can least afford due to limited financial resources often at their disposal. This paper examines one of the

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successfully implemented E-government project in South Africa namely the South African Revenue Services (SARS) tax e-filing. The aim is to identify factors that can help explain the success of the project as well as to draw lessons that can be used by other E-government project implementation teams around the continent to help minimise risk of project failure.

LITERATURE REVIEW

A review of literature shows that there are many benefits associated with adoption of E-government in both developed and developing countries. Some of the commonly cited benefits include the following.

Improved and Enhanced Delivery of Government Services -Traditional delivery of government services in most developing countries requires face to face interaction with government officials and is often characterized by lots of red tape and lengthy delays. For example, it is not uncommon to hear of stories of people spending lots of hours at government offices such as customs offices in order to get simple services like clearing imports, or stories of people giving money to government officials who demand payment in order to speed up delivery of services. E-government has the potential to help improve and enhance delivery of government services as it enables citizens and business easily access government services and information without the need to visit government offices. Services and information can be accessed 24 hours 7 days a week, from home work or any other place thereby helping in saving time and effort.

Increased Internal Efficiencies in Delivery of Government Services -Provision of services electronically such as through the internet, helps to substantially reduce costs associated with processing transactions (Singh and Sahu, 2008; Kumar and Best, 2006). E-government allows for routine paper work to be eliminated and internal operations streamlined thereby by enabling faster and more informed decision making. UNESCO (2005) noted that judicious deployment of technology can lead to more productivity and a possible reduction and redeployment of the workforce.

Increased Transparency and Accountability of the Government: E-government has made it possible for government to easily share information with the public including information on government processes, procedures and regulations relating to applications for specific services such as applications for child grants, passports etc. Some government departments have even gone further by providing opportunities for one to track the status of submitted applications for public services. All

this helps to increase transparency and accountability in government.

Empowerment and Participation of Citizens: E-government opens opportunities for the common masses to be involved in democratic processes without the need to go through representatives– a phenomenon commonly referred to as direct democracy. It also enables the public to be more aware and informed about government functioning (UNESCO, 2005). Greater access to information enhances opportunities for increased participation of citizens in government functioning and decision making thereby helping to strengthen democracy.

In summary, the adoption of E-government and the realization of its associated benefits can significantly help to increase people's confidence in their government. It is however important to note that despite the many advantages associated with E-government, there are many challenges that affect its effective implementation and success more so in the context of African countries. Some of these challenges relate to:

Financial Problems – Effective implementation of E-government projects requires large financial investments to cover costs such as those associated with hardware, software and training of staff. The returns on investment are often negative in the short terms as it often takes long to realize significant benefits. This often makes justification for E-government projects difficult especially in light of limited financial resources and more pressing immediate needs such as ensuring food security and availability of drugs in hospitals. Seifert and McLoughlin (2007) stated that it is important for government to take a long term view of the return on investment in E-government projects. This is because in the long run the savings that government may achieve from among other things, increased levels of efficiencies are likely to outweigh the costs of implementing such projects.

Staff Related Problems – It is common knowledge that Africa faces significant human capital challenges. Shortage of skilled ICT personnel especially in the public sector makes it difficult to effectively implement E-government projects or ensure their sustainability. Apart from the skills gap, another challenge relates to resistance by staff to changes in the way they do their work that often accompany introduction of E-government. UNESCO (2007) observed that it is often difficult to change the prevailing public servants' culture, encourage them to adopt new ways that would cut down bureaucracy, and red tape.

Lack of Leadership and Commitment – According to the OECD (2003) leadership and commitment at both

political and administrative levels is critical to the success of E-government initiatives. This is because committed leaders help champion E-government projects by ensuring that such projects are put onto the government agenda as well as ensuring the availability of financial resources and technical expertise needed for the successful implementation of E-government projects. Udo and Edoho (2000) noted that one of the most serious constraints to E-government diffusion in Africa is the limited number of officials who are willing or able to champion ICTs in government. Kroukamp (2005) noted leaders who do not see E-government as a priority pay little attention to ensuring that IT policies and programmes are introduced.

Infrastructural Problems—The success of any E-government project depends on the availability of appropriate infrastructure to support the plans. Although significant positive strides have been made in most African countries in terms of investment in technological infrastructure especially in the areas of telecommunications, networks and electricity, the fact remains that most African countries are a long way short of the information technology infrastructure on which many E-government initiatives in other parts of the world are based.

Low Adoption Rate—Inequitable access to information and communication technologies such as personal computers, and other internet related technologies by individuals as well as groups of people, possess challenges to the success of E-government projects especially as it affects adoption rates. Alzouma (2005) observed that Africa faces serious problems relating to digital divide not only between countries but also inside countries for example between those in rural and urban settings. UNESCO (2007) argued that that it is imperative for leaders to think about social inclusiveness in the context of infrastructure while making decisions about technology and development.

Apart from problems relating to lack of access to necessary infrastructure, Norris and Moon (2005) noted that security and trust issues are also central to explaining low levels of adoption of E-government services by members of the public. The Internet Society (2007) defined security as “a system condition in which system resources are free from unauthorized access and from unauthorized or accidental change, destruction or loss”. Members of the public are often concerned that personal information provided through electronic channels may end up in the hands of unauthorized individuals.

METHODOLOGY

As stated earlier this paper is based on a review of the South African Revenue Services Tax e-filing program. Secondary sources

of information as well as direct observation were used as a basis for the review. The aim was to understand the dynamics present within the case. The main secondary sources of information reviewed included SARS annual reports (2001-2010), information published on their web sites and other government as well as academic publications relating to the service. Direct observations of the service were made by the author as a user of the service. Multiple sources of evidence were purposefully used in this review in order to not only collect a wide range of information but also to avoid over dependence on a few sources thereby increasing the reliability and validity of the findings.

FINDINGS AND DISCUSSION

Background information

The South African government has long recognised the benefits associated with E-government. In 2001 after wide consultations with the business community as well as ordinary citizens, the government through the department of Public Service and Administration came up with an E-policy document entitled ‘Electronic Government, the Digital Future: A Public Service IT Policy Framework’. In the document the government outlined three major issues that E-government initiatives must address namely:

1. ‘E-governance – the application of IT to intra-governmental operations including interaction between central, provincial and local government (government to government);
2. E-services – the application of IT to transform the delivery of public services from standing in line to online and in an interactive mode (government to citizens). The services affected include general information and regulations, education and culture, health consulting and telemedicine, benefits, taxation etc;
3. E-business –the application of IT to operations performed by government in the manner of business transactions and other contractual relations (government to business)for example in procurement of goods and services’ (Department of Public Administration and Governance, 2001).

SARS E-filing is one of South Africa’s E-government initiatives. In brief, SARS E-filing is a free online service that allows individual taxpayers, businesses and tax practitioners to register and submit tax returns, make payments and perform a number of other interactions with SARS in a secure online environment (SARS, 2011). It was first launched in 2003 as a replacement process for the manual tax returns submissions. According to the 2004 SARS annual report, a total of 51,396 tax returns were submitted using E-filing in its first year of running. The figure jumped to 122,219 in the second year, representing an annual growth of 138 percent. Statistics for the 2009/2010 financial year shows that the number of returns submitted using E-filing reached 11,050,530 a

growth of 82.60percent from the previous year (SARS, 2010a). Statistics further shows that for the 2009/2010 financial year 95 percent of all income tax returns were submitted using E-filing (SARS, 2010b). According to SARS 2010a annual report, the average turnaround time in working days for processing of income tax stood at 1.93 days in the 2009/2010 financial year compared to 18.94 days in the 2008/2009 financial year. These statistics are a good testament to the success of the E-filing project.

SARS –E-filing services

SARS E-filing offers the facility to submit a variety of tax returns including value added tax (VAT), pay as you earn (PAYE), personal income tax, skills development levy, unemployment insurance fund, provisional tax, customs payments. Other services available include VAT vendor search, tax notification tool, tax practitioner registration, tax calculators as well as complete history of E-filing usage. It was also noted during the study that SARS has been expanding the range of services offered through E-filing through the years. This is aimed at providing as many services as possible on line so that the need to visit SARS offices can be significantly reduced. For each transactional service provided, SARS offers comprehensive information on what it is as well as on how to access the service. This helps to reduce the number of enquiries that citizens and businesses may have thereby also helping to reduce the need to contact the organisations' call centre.

Development and Implementation of the Online Services

From the review done in this study it was clear that the implementation of the E-filing system had strong political and management support right from the beginning. The project was in line with government vision on improving service delivery using E-government. The need for proper strategic planning of the project as recognised right from the inception stage. A project coordinating team was put in place. The main responsibilities of the coordinating team was to spell out a clear vision of what needed to be achieved, set out a program of action with clear priorities, define the generic prerequisites of the project including the need to involve internal and external stakeholders as well as monitor implementation. External IT companies were involved in the project to help provide specialist knowledge. These were also expected to involve staff as well as train them on the workings of the system. This was deemed necessary in order to avoid over dependence on external organisations in the on-going delivery of the planned services.

During the planning and implementation phase of the

project the input of the intended users of the services i.e. individual tax payers and businesses was solicited. The main reason for doing so was to make sure that the planned services were in line with the needs of the users as well as identify factors that may likely influence their willingness to adopt the services. It is important to note that SARS engagement with users of its services is an ongoing activity and many of the additions made to the range of services offered are identified to be in line with needs of users of their services. Some of the issues identified during the organisations engagement with intended users of the services particularly during the project planning stage included concerns relating to security and risk, the need to create awareness of the services, problems relating to access to online infrastructure as well as technical knowledge relating to tax.

Security and Risk – with regards to security and risks, users of E-services are often concerned about unauthorised access and use of their personal information provided through electronic channels. In order to deal with this concern SARS has made it a point to let the users of its services realize these concerns, as well as communicating the measures in place to reduce the risk. According to SARS (2011) in order to prevent unauthorised access to any data, all transactions transmitted by E-filing from both SARS as well as tax papers are encrypted. Furthermore, SARS has a clear privacy statement on their website which any user of their services can refer to for more details.

Awareness of E-services – adoption of E-services very much depends on users' awareness of the existence of such services. SARS has a dedicated communications department. One of the primary functions of the department is to ensure that users are aware of the services available on line. Awareness campaigns in this regard are run using mass media including television, newspapers and online through the organisations website. It is important to also note that every year at the beginning of the tax filing system, SARS organises a special program to mark the opening of the season. Members of the media are invited to such launch programs and often the commissioner (head of the organisation) and other SARS officials gives interviews encouraging tax payers to make use of the E-filing system. Such efforts help in not only creating awareness but also help to portray a culture of openness and enhance credibility in the organisation.

Access to Online Infrastructure –Use of online services requires that targeted users have access to the infrastructure used to deliver such services. As already stated before, the problem of digital divide is a serious one in Africa. The South African Government recognizes this problem and its potential negative impact on adoption of services provided through E-government initiatives. To this end a number of programs have been implemented

in order to increase the penetration levels of internet services in the country. These include provision of access to internet in public schools as well as public libraries, establishment of multipurpose community centres also known as Thusong Service centres. The Thusong centres are mainly located in less advantaged areas including rural areas. The centres are a one stop, integrated community development centres aimed at empowering the poor and disadvantaged through access to information, services and resources from government, non-governmental organization parastatals, business etc (Department of Government Communications and Information Systems, 2011).

Technical knowledge relating to Tax –SARS recognises that the service it provides has a lot of technical concepts to it. The ability of tax payers especially individual tax payers to file tax returns or engage in most tax matters is often limited due to lack of understanding of the tax language. In order to help deal with this problem SARS provides detailed tax information through its website. Additionally SARS has a department dedicated to tax payer education. It also provides tax payers with E-filing assistance at its tax offices located throughout the country.

Other measures taken by SARS in order to encourage adoption of their E-filing system include fast processing of tax returns. According to SARS (2010) most annual returns submitted through E-filing takes on average less than a week to process, while those submitted manually can take up to a month or more.

CONCLUSION AND RECOMMENDATIONS

This paper provides a review of the E-filing program by the South African Revenue Services (SARS) as an example of a successful E-government project in Africa. The aim was to identify factors that can help explain the reasons behind its success as well as draw lessons that can be used by other E-government project teams around the continents to help minimize chances of E-government project failure. From the analysis it is clear that a number of lessons can be drawn from the case. These include:

The Need for Top Leadership Support – E-government requires proper strategic planning, coordination, re-engineering of work process as well as commitment of resources. All these cannot be possible without committed leaders who understand the benefits associated with such initiatives and are willing to provide leadership and support to ensure that the projects become a success. It is thus important for governments wanting to implement such projects to make sure that departmental managers are sensitised of the plans and their associated benefits.

The Need for a Project Coordinating Team—A project

team with clear terms of reference in relation to what need to be achieved within a stipulated time period is essential. Such a team needs to take primary responsibility in terms of steering up project implementation, ensure that effective planning and control measures are in place to minimise risk of project failure. Often times government departments may lack specialist skills when it comes to project implementation or IT systems development. Private-public partnerships need to be considered in order to access specialist knowledge and expertise. It is however important to avoid over-dependence on private partners. Measures thus need to be in place to make sure that skills transfer to internal staff members' takes place and that government employees can be able to take ownership and control over the running of the project into the future so as to ensure the sustainability of the project.

The Need for Reliable Technical Infrastructure – Delivery of E-government projects depends on availability of reliable technical infrastructure that is able to deliver levels of services expected. Particular attention should be paid to reducing 'down time' as well as the speed at which transactions are processed as slow systems can be frustrating to users. It is therefore important to ensure that the handling capacity of the system is upgraded as the number of users grows so as to avoid system failure.

Involve Users of the Services in the Implementation of the E-government Initiatives – It is possible to build a state of the art system and yet have problems convincing targeted users to make use of it. In order to avoid the problem of low adoption rates, particular attention needs to be paid to a number of issues including ensuring that the needs of users are taken into consideration in the designing the project; building knowledge societies through initiatives aimed at reducing the 'digital divide'; raising awareness of the services available through E-government and associated benefits. It is also critically important to ensure the integrity of the system security and maintain privacy measures in order to gain and maintain users trust.

Continuous Monitoring and Evaluation –Each E-government project needs to have clear goals in place and how progress in project implementation as well as project impact will be measured. Continuous monitoring and evaluation of the project throughout its life cycle will help identify the benefits realised and identify project risk factors. The positive project outcomes can be used to help keep and enhance public support for E-government initiatives.

Finally it is important to understand that delivering of government services electronically is not an end in itself but rather a means to an end. This end includes improving efficiency and effectiveness in delivery of public services and transforming the relations between

government and citizens.

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