

Challenges of ICT and Electronic-Governance for Service Delivery in the Public Service

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ABSTRACT This paper uses an in-depth literature review to clarify that paperwork in the public service is slowly becoming a thing of the past and more governments are seeking to adapt to an electronic administrative system, for efficient public service delivery. The primary objective of the paper was to examine the challenges of electronic-governance through the use of information and communications technology (ICT) to service delivery in the public service. The paper reveals how ICT is increasingly supporting government activities in response to service delivery challenges currently underpinning the South African public service. An in-depth literature review of the study concluded that technological infrastructure must be available for e-governance to be fully functional as a strong support system for public service provision.

INTRODUCTION

E-governance is defined as the use of ICT in the public sector to improve its operations and delivery of services (Pardo et al. 2016). The application of ICT is the primary tool that enables the objectives of e-governance to be driven into complete momentum as facilitated by web-technology. Attention has been given to e-governance since the 1990s, when it was realized that ICT and internet and web technology were being used to positively and productively transform business practices (Pardo et al. 2016). The pressure has kept rising in recent years on the government to deliver services in a more effective and cost-efficient way as evidenced by the ever increasing and recurring public service delivery protests. Thus e-governance is the future of public governance and public service delivery globally and this is entrenched in most of the South African e-governance initiatives and tools that are meant to augment the public service (Cloete 2012). Harnessing ICT through the implementation of e-governance has been extensively commended for providing innovative momentum to deliver services quickly and efficiently (Evans and Yen 2006).

Background

Various arms of the South African government have already embarked on ICT driven initiatives through the implementation of a number

of e-governance programs (DPSA 2015). These are inclusive of the Batho Pele portal, South Africa Revenue Services e-filing system, the e-Natis system, electronic processing of grant applications from remote sites and several other departmental information websites and portals (StatsSA 2015). It is one-dimensional that every year there is governmental commitment to exploit the efforts of ICT and through the provision of e-governance services in the State of the Nation Address and State of the Province Address and these commitments have not been either adequately met or fulfilled. This is substantiated through the state of e-governance in South Africa, which is at elementary stages because of the challenges hampering the success of e-governance (Cloete 2012). Factors contributing to such devaluation are a lack of electronic-readiness, lack of electricity, infrastructural capacity, language barrier and a lack of skilled human capital (Ijeoma and Nwaodu 2013). This paper does not imply that e-governance will be a panacea to poor service provision in South Africa, but that its role in the public service is essential for efficient and effective service delivery to the benefit of the general public who are at the receiving end.

METHODOLOGY

In-depth literature review served as preliminary research to clarify the primary objective of the paper, which was to examine how the chal-

lenges of ICT in the electronic-governance spectrum hamper the service delivery challenges in South Africa. In-depth literature review enables the investigation of a given problem on data that is already available (Rosnow and Rosenthal 2008). This type of data is also referred to as secondary data. The authors investigated the challenges of ICT and e-governance for service delivery by analyzing data that has already been gathered primarily by other researchers as derived from annual reports, government websites, academic journals and e-governance literature.

RESULTS

The Experiences of ICT and E-governance in Service Delivery in the Public Service

The trail of ICT and e-governance has moved through a reflective success route in South Africa (Stats 2015). However, progress with implementation of e-governance initiatives and tools has been stunted by negligible awareness of the relevant stakeholders within the e-governance framework (DPSA 2015). Simultaneously, the results of the electronic-barometer report also reflect that there are still loopholes for ICT within the South African e-governance internal and external environment (DoC 2015).

Challenges of E-governance in South Africa

The authors identified challenges curtailing the successful implementation of e-governance as a support system for public service delivery as explained in detail below.

Human Capital

South Africa faces significant human capital development challenges in building the inclusive information society. One of the key challenges is the shortage of skilled ICT personnel in the country as worsened by the brain drain of skilled ICT personnel to more developed countries, and from the public to the private sector (StatsSA 2015). ICT human resource development and training within the public service needs major prioritization. Thus, the public service needs to be strategically aligned with the ICT demands of the country and scarce ICT skills

need to be attracted and retained particularly within the government to change the levels of access, uptake and intake of e-governance services (DoC 2015).

Infrastructural Incapacity

South Africa lacks a comprehensive and easily accessible evidence base to support strategic policy decision-making and program design to leverage ICT for South Africa's information society development (DoC 2015). This is negatively affecting timely detection of public service delivery challenges for the purpose of effecting corrective action with proper e-governance initiatives (DPSA 2015). This is resulting encroachment on the ability of the state to deliver effectively and efficiently in terms of the ICT for development agenda. Infrastructural incapacity is hampering the nation's development obligations on an international scale as based on the progress made towards the implementation of the World Summit on Information Society and the Plan of Action by South Africa (DoC 2015). The Gauteng Shared Services Centre, which is responsible for providing IT services and introducing provincial broadband infrastructure to support educational and healthcare applications in schools and provincial hospitals, created high expectations, but it is collapsing and the most viable of its core functions have been incorporated into the Gauteng Finance Department (StatsSA 2015). This is a clear indication that the full implementation of e-governance programs for public service requires more effort to ensure the achievement of the set objectives.

Electronic Readiness (E-readiness)

E-readiness is the degree to which a society is prepared to participate in the digital economy with the underlying concept that the digital economy can help build a better society (Pardo et al. 2016). The success of e-governance particularly depends on the e-readiness of the citizens because they are the primary users of the e-governance tools and initiatives (DoC 2015). The success of e-governance in South Africa requires an electronic-ready reception from both the public servants and the general public. This implies that if all the relevant stakeholders involved in

the e-governance spherical environment are not receptive to the e-governance initiatives and tools incepted, this disarrays the success of e-governance. South Africa might have the required legal framework and governance model, infrastructure and human capital needed for e-governance but if the citizens and the public servants are not electronically-ready, it dissolves the mandate of ICT for e-governance. Some of the constraints of e-readiness are unawareness of the e-governance initiatives in place, limited access to internet in the aspect of the e-governance initiatives that require advanced ICT, and limited electricity, which is also affecting the success of e-governance initiatives (Pardo et al. 2016).

Upgrade of Provincial Web Portals

The nine provincial governments in South Africa have their own electronic portals, the best functioning of which are the Gauteng and Western Cape Provincial Governments. The Cape Gateway portal probably pioneered the e-governance platform (Cape Gateway 2004). However more content is still needed because there is a lack of centralized content management, a lack in stronger technology base, a lack of ICT specialist skills, a lack of a dedicated electronic-culture and a lack of better access to a systematic monitoring and evaluation program. There is need for tactical importance of mobile government strategies to optimize the functionality of the e-governance system (Cape Gateway 2004). Public servants are also finding it increasingly difficult to maintain and upgrade the portal to meet the continuously emerging needs because of lack of intensive ICT skills (Cloete 2012). Basic information like contact details and addresses are not regularly updated on the portal, while important new documentation is not made available immediately after the publication of the information and in other cases it is not added at all (Doc 2015).

Language Barrier

South Africa has eleven official languages and the successful implementation of e-governance is dependent upon the incorporation of all these languages into the e-governance system as leverage for the public service (DPSA

2015). The initial undertaking to increasingly provide content on the portals in English, Afrikaans and isiXhosa has also not even fully materialized (Rasool 2011). The Nelson Mandela Bay Municipality portal is effectively attempting to break the language barrier through the provision of information in isiXhosa on its provincial web portal since isiXhosa is the main language in that municipality. The Gauteng provincial portal has also been experiencing failure with its system in reporting media, although it started off well with an attempt to create a one-stop-shop accessible to the public (Abrahams and Newton-Reid 2008).

Rural Electrification of Schools

Electronic learning (e-learning) is an efficient tool to address the hard copy book shortages and book distribution challenges (DPSA 2015). The Department of Education acknowledges that e-learning has a profound positive impact on the South African education system (South Africa's Children 2013). Despite its transformational impact on the learning process, e-learning is however stunted by several barriers to its successful implementation in South Africa. Electrification was noted as the major setback to e-learning in South Africa because twenty percent of the public schools still have no power supply whatsoever and electricity is the basic mechanism driving e-governance and whose absence is stagnating e-learning (South Africa's Children 2013). The reality is for the learners who are deprived access to e-learning services, because when they get to higher learning institutions and simultaneously into the corporate world, basic ICT proficiency is a fundamental requirement that they cannot do without. On understanding that the world is fast becoming more digitalized, the Gauteng Department of Education announced its intention to harness the e-learning initiative to the province's public schools by aiming to distribute eighty-eight thousand tablets. However the challenge is that the announcement has not yet materialized and this is diminishing the impact of e-learning (South Africa's Children 2013).

The Digital Divide

Digital divide is a challenge to the implementation of e-governance, which is caused by the

disparity in access to electronic-services, and this may outcome from factors inclusive of class, race, age, culture and geographical location (Pardo et al. 2016). The impact of digital divide in South Africa is worsened because South Africa is characterized as one of the most unequal societies in the world due to the increasingly widening gap between the rich and the poor as proven by the Gini co-efficiency of 63.1 (World Bank Data 2016). This is despite the fact that increasing e-governance in public service delivery presents an opportunity to leverage the infrastructure that assists the marginalized citizens through the provision of economic, efficient and effective local electronic-services, which save them transport, time and related costs (World Bank Data 2016).

DISCUSSION

The inception of ICT into the continuum of e-governance has had plausible effects on service delivery in the South African public service. Conversely, e-governance is more than implementing e-governance tools and initiatives because it goes beyond planning for capacity building through the inception of ICT for the public good (Porrua 2015). Resultantly, e-governance has particularly addressed some public service delivery challenges. However, it has also had its fair share of challenges in ensuring that the implementation of these e-governance programs reaches an advanced stage. The findings revealed that the successful inception of e-governance is being derailed by several challenges. The reason for this state of affairs is because there are a number of favorable political, cultural, social, economic and technological conditions that still need to exist for the e-government and e-governance paradigm shift to take a strong hold (Ijeoma and Nwaodu 2013). The South African public service is effectively attempting to address some of these barriers that are hampering the successful implementation of e-governance initiatives. Thus it is imperative to note that e-governance is a gradual public policy initiative that needs constant monitoring and evaluation of within the established projects (Porrua 2015). This is essential to achieve the anticipated benefits and ultimately address the unanticipated setbacks within the e-governance process (Pardo et al. 2016).

CONCLUSION

E-governance has played and will continue to play a central role in the development of a nation, especially South Africa, where the impact of ICT through e-governance will be even greater. The paper affirms that harnessing ICT for e-governance is beneficial for the government, its people and every relevant stakeholder involved. This is because of the merits of e-governance through ICT attached to the public service notwithstanding its efficiency, effectiveness and promotion of equity for the public. The functionality of e-governance through its correlation with ICT for boosting service delivery keeps transcending over the turmoil associated with the public service delivery backlog in the South African public service. Overly, public participation is an essential key to the success of e-governance initiatives, because the initiatives are designed for the public and it is imperative that the public be well informed and well involved in the establishment and implementation of these services.

RECOMMENDATIONS

ICT enabled public services should be easily accessible to people with disabilities because there are several barriers within e-governance that still obstruct people with disabilities from making effective use of e-governance services as much as the general able-bodied populace can do. The content provided on the national, provincial and local government portals is mostly in the English language and this can be a setback of e-governance service because of the language barrier. South Africa has eleven official languages, thus as a democratic nation the information accessed and delivered through e-governance should be representative of the entire population in the ration of the eleven language divisions. Security breaches should be prevented because they threaten the integrity of ICT and diminish the validity of e-governance initiatives.

Digital divide is also a challenge to the implementation of e-governance, which is caused by the disparity in access to ICT, and this may outcome from factors inclusive of class, race, age, culture and geographical location. Solutions need to be formulated to address the negativity of digital divide by opening more general Multipurpose Community Centers. Education

through development and training becomes a significant tool in an attempt to purge the digital divide. E-governance is non-functional without the provisions of ICT, electricity or internet to ensure the successful implementation of e-governance. Therefore, for e-governance to be fully functional and effectual as a strong support system for public service provision, a strong technological infrastructure must be available.

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The revelation for enabling the efficient harnessing of ICT for the implementation of e-governance in South Africa is to render quality and effective public services around life episodes of the citizens that follow a series of events, from cradle to the grave. Therefore, public services must be accessible to all citizens anytime, anywhere and through different electronic access devices. This paper is based on data collected for the master's dissertation of the first author completed at the University of Fort Hare, South Africa. The first author acknowledges Govan Mbeki Research and Development Centre at the University of Fort Hare for funding the paper.

REFERENCES

- Abrahams L, Newton-Reid L 2008. Paths and limitations to progress. *Journal of Public Administration*, 44(4.1): 1010-1025.
- Cape Gateway 2004. Integrated Access Portal to Services and Facilities Provided by the Western Cape Provincial Government in South Africa. From <<http://www.capegateway.gov.za/>> (Retrieved on 6 July 2016).
- Cloete F 2012. E-government lessons from South Africa 2001–2011: Institutions, state of progress and measurement. *The African Journal of Information and Communication*, 12(2): 33-42.
- Department of Public Administration (DPSA) 2015. Pretoria. From <<http://www.dpsa.gov.za/documents/acts®ulations/frameworks/>> (Retrieved on 23 May 2015).
- DoC 2015. *E-barometer: Measuring the Impact of ICTs on Development in South Africa*. Pretoria: Department of Communications.
- Evans D, Yen DC 2006. E-government: Evolving relationship of citizens. *Government Information Quarterly*, 23(2): 207-235.
- Ijeoma E, Nwaodu N (Eds.) 2013. *Third World Development Strategies: Decades of Fascinations and Frustrations - A Reader on African Vistas*. Pretoria: Verity Publishers.
- Pardo TA, Nam T, Burke GB 2016. E-government interoperability: Interaction of policy, management, and technology dimensions. *Social Science Computer Review*, 30(1): 7-23.
- Porrua MA 2015. E-Government in America: A Review of the Success in Colombia Uruguay and Panama. Organization for American States. *Global Information Technology Report 2013*. Geneva: Switzerland, World Economic Forum.
- Rasool F 2011. Gauteng Online is Failing. IT Web, 13 July 2011. From <http://www.itweb.co.za/index.Option=com_content&view=article&id=45334:Gauteng-online-is-failing. Republic of South Africa 2013.> (Retrieved on 9 July 2016).
- Rosnow RL, Rosenthal R 2008. *Beginning Behavioral Research: A Conceptual Primer*. USA: Pearson Prentice Hall.
- South Africa's Children 2013. *A Review of Equity and Child Rights*. South Africa: The South African Human Rights Commission and UNICEF.
- Statistics South Africa 2015. *Living Conditions Survey (LCS) 2014/2015*. Pretoria: South Africa.
- World Bank 2016. *E-government Tool Kit for Developing Countries*. World Bank: Washington DC.

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