Threats to E-Government Implementation in the Civil Service: Nigeria as a Case Study.

N.A. Azeez¹; A.P. Abidoye¹; A.O. Adesina¹; K.K. Agbele¹; I.M. Venter¹; and A.S. Oyewole²

¹Department of Computer Science, Faculty of Natural Science, University of the Western Cape, Private Bag X17, Bellville, 7535, South Africa.
²Department of Computer Science, Durban University of Technology, Durban, South Africa.

E-mail: nurayhn@yahoo.ca

ABSTRACT

The rapid advancement in Information and Communication Technology (ICT) has undoubtedly influenced positive changes in carrying out administrative functions in government institutions. The ICT adoption rate in Africa is not impressive when compared to the more developed countries of the world. Nigeria, as a case study in this scenario, has also not implemented E-Government impressively, according to the required standards set up by the International Telecommunications Union (ITU).

A comprehensive study conducted on the application and implementation of E-Government in Nigeria has provided some metrics that examine the stumbling blocks for realization of adequate and efficient E-Government implementation in the civil service. The research was carried out in the federal civil service in Nigeria in two phases namely, pre-IT implementation phase and post-IT implementation phase. Our findings reveal that ICT implementation will remain elusive in the civil service as long as the threats explained below remain unaddressed. It has therefore been asserted that the need to overcome these threats is a precondition for realization of E-Government implementation in the federal civil service.

(Keywords: civil service, threats, Nigeria, E-government, implementation)

INTRODUCTION

In order to meet the global challenges in administrative management, the use of ICT for service delivery cannot be abandoned [1]. E-Government is no-doubt a mechanism for the management of civil service at the global level. E-Government simply means the application of Information and Communication Technology to improve the quality of service in the civil service to attain transparency, accountability, efficiency and timeliness. Implementation of E-Government could not be realized without the adoption of modern day technologies [4]. It has been adopted as a new “paradigm shift” for better service delivery both by the developing countries and the developed countries.

Figure 1 shows variance in E-Government implementation in different regions of the world. From all indications, it is clear that Africa is behind all the regions in the world while Europe is the leading region. In developing countries, where Nigeria is a subset, the implementation of E-Government has been futile due to various threats that are yet to be addressed. Table 1 presents a comprehensive statistical value of E-Government adoption rate in the regions of the world.

This paper presents a comprehensive list of various threats at both the pre- and post-implementation of E-Government in the Nigeria’s civil service. The paper also presents various ways of circumventing these threats. On a final note, an architectural framework for E-Government implementation in Nigeria’s civil service is also presented as a means of achieving efficient implementation of this phenomenon in the civil service [2].

The remaining parts of the paper gives the research objectives, research methodology, comprehensive information on pre- and post- E-Government implementation threats, summarized solution to various threats, framework for E-Government implementation in Nigeria’s civil service, and conclusions to this research.
In developing countries, where Nigeria is a subset, the implementation of E-Government has been a futile exercise due to various threats that are yet to be addressed. Also, Table 1, below, presents a comprehensive statistical value of E-Government adoption rates in the regions of the world.

Table 1: A Comparative Appraisal of E-Government by Region.

<table>
<thead>
<tr>
<th>Region</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>0.8670</td>
<td>0.8751</td>
<td>0.8751</td>
</tr>
<tr>
<td>Europe</td>
<td>0.5580</td>
<td>0.5866</td>
<td>0.6012</td>
</tr>
<tr>
<td>South &amp; Central America</td>
<td>0.4420</td>
<td>0.4558</td>
<td>0.4643</td>
</tr>
<tr>
<td>Western Asia</td>
<td>0.4100</td>
<td>0.4093</td>
<td>0.4384</td>
</tr>
<tr>
<td>Caribbean</td>
<td>0.4010</td>
<td>0.4106</td>
<td>0.4282</td>
</tr>
<tr>
<td>South &amp; Central Asia</td>
<td>0.2920</td>
<td>0.3213</td>
<td>0.3448</td>
</tr>
<tr>
<td>Oceania</td>
<td>0.3510</td>
<td>0.3006</td>
<td>0.2888</td>
</tr>
<tr>
<td>Africa</td>
<td>0.2460</td>
<td>0.2528</td>
<td>0.2642</td>
</tr>
<tr>
<td>World Average</td>
<td>0.4267</td>
<td>0.4130</td>
<td>0.4020</td>
</tr>
</tbody>
</table>

Source: United Nations Department of Economic and Social Affairs

“The 2005 regional E-Government readiness for Africa was the lowest in the World, despite a constant growth since 2003. Collectively, Northern America and Europe were around 3 times more e-ready than Africa. The three combined indices taken separately for Africa are also the world lowest” Yayehyirad Kitaw, 2006.

RESEARCH OBJECTIVES

The objective of this study is to explore various challenges facing E-Government implementation in the civil service in Nigeria. This objective poses the following research questions:

- Does poor ICT infrastructure poses a great threat to the realization of efficient E-Government?
- What implication does low ICT literacy have on the full-scale implementation of E-Government in Nigeria?
- How will other various threats contribute to the poor effectiveness of E-Government?

RESEARCH METHODOLOGY

To carry out this research, a Case Study of a Ministry in the Federal civil service was used to
explore various threats facing E-Government in Nigeria’s civil service, with the aid of questionnaires.

PRE- AND POST- E-GOVERNMENT IMPLEMENTATION THREATS

E-Government simply means the adoption of Information and Communication to ensure smooth service delivery in governance. It could also be defined as a mean of ensuring coordinated information sharing process to achieve transparency, precision and accountability in government establishment [3].

Some of the threats discussed below are those noticed and encountered while carrying out our study using a case study method.

- **Fraud**
  The beginning of each year usually witnesses the presentation of a budget by the President of Nigeria; who allocates the percentage of money to be spent by each of the Ministries and Parastatals. However, there is a public perception that a significant amount of money being allocated on yearly basis is being diverted by a few people for their personal use at the expense of the main objective for which it is allocated. This has resulted in the failure of the government to realize the objective of implementing E-Government in the civil service in the country.

- **Dearth of IT Experts**
  ICT being a new innovation in most of the federal civil service in the country is threatened by lack of skilled personnel to manage the infrastructure [5]. The cost of training people to garner up-to-date skills has also skyrocketed and is unaffordable. Because of this, government is completely reluctant in introducing E-Government.

- **Low Budgetary Allocations for ICT infrastructures (Weak Commitment)**
  This is another threat for the implementation of E-Government in the country. Government allocates very meager amounts budgetary allocations to the development of ICT in the country. This has limited the scope of government’s commitment towards full scale implementation of E-Government.

- **Illiteracy**
  It has been established that one of the major threat to E-Government implementation in the country is lack of computer literate staff to handle various online services and applications that are peculiar to E-Government. Without competent hands to handle and monitor the IT infrastructures, there may be no justification for the procurement of equipment. In few ministries where there are few IT infrastructures, they could not be put into use due to high level of illiteracy [6].

- **Energy and Power Factors**
  During our study, it was clearly established that the failure of the government to implement E-Government projects in the country’s civil service is as a result of irregular power supply. In fact, a few of IT infrastructures have been reportedly damaged due to surges in the electricity distribution grid. A stable and regular power supply has been identified as a precondition for having E-Government implementation in the country.

- **Cost of IT Equipment and Poor Maintenance Culture**
  The cost of IT equipment is another identified threat for the establishment of E-Government in the country [4]. A PC is considered exorbitant for procurement where the economy is very bad. More so, its maintenance culture is so bad that the few that are being procured are abandoned when they experience faults.

- **Organizational Attitude**
  Some of the Ministries in the country have already taken decisions of not implementing E-Government. The decision is due mainly to some of the previously identified problems and lack of proper orientation on what E-Government has for their Ministries.

- **Poor Remuneration for IT Staff**
  The few skilled IT staff currently in the country are not well remunerated, hence they look for greener pastures where they are properly paid for their services. This has contributed to the dwindling number of IT staff currently being experienced in the country.
Lack of Government IT Regulatory Policy
The need for the government to come up with IT regulatory framework is very important. In developed countries like USA, UK, and Canada, their governments have IT regulatory frameworks which assist in implementing E-Government. In Nigeria, the reverse is the case. There is no government position on E-Governance and other IT policies to assist the nation in developing her ICT framework, and most importantly, E-Government strategies.

SOLUTION TO THE THREATS
To summarize the expected solution to the above mentioned threats, government should find urgent solution to each of the mentioned problems if Nigeria civil service is expected to witness good IT and E-Governance innovations in the country. From our research, it has been established that majority of the problems identified are caused by the government as well as various Ministries and Parastatals [3]. Therefore, appropriate solution should be given to each of the above discussed threats in order to build efficient and dependable E-Governance in Nigeria’s civil service.

FRAMEWORK FOR E-GOVERNMENT IMPLEMENTATION IN NIGERIA’S CIVIL SERVICE

It is of the opinion of the authors of this article that a reliable framework for implementing E-Government is sacrosanct. This framework is proposed for implementation at the federal civil service.

Figure 2: Architectural Framework for E-Government Implementation in Nigeria’s Civil Service.
A newly established Ministry of ICT in Nigeria is proposed to set up an IT policy implementation framework which is expected to be headed by the Permanent Secretary in the Ministry. The objective is to come up with a policy formulation and implementation for E-Government in the country. The policy should include creation of IT awareness with computer literacy programs in the civil service (federal, state and local) as well as schools (primary, secondary and university).

After achieving the above, the trend should continue for the procurement of IT infrastructures for implementing E-Government in the country. At the end whole process, the cycle should be evaluated by the entities involved by giving feedback in form of report providing information about the effectiveness of the E-Government in the country. Doing the later will ensure transparency in the process and provide evaluative mechanism on the suitability of the framework.

CONCLUSION

There is no doubt that the problems identified are great threats to the implementation of E-Governance in the country. It is of our opinion that both the government and the stakeholders should take it up a challenge in finding quick and lasting solutions to them.

As a primary plan for solving the above threats, we have presented this paper before the Ministry of ICT in the country as a guide for identifying and solving these problems in our country. The authors strongly believe that solutions to the above problems will serve as a guide towards a smooth implementation of E-Government in Nigeria.

REFERENCES


SUGGESTED CITATION