



Rationalizing ICT services and systems in Government Ministries and Departments: What are the achievements?

Background

The National Development Plan II identified Information and Communications Technology (ICTs) as a driver for growth and social economic transformation. The Ministry of ICT (MoICT) was created in 2006 to provide strategic, technical leadership and coordination in all matters of ICT. In 2009, the National Information Technology Authority-Uganda (NITA-U) was established as an agency under the MoICT and charged with the overall mandate to coordinate, promote and monitor the development of Information Technology (IT) in the context of social and economic development of the country. Underlying this mandate is a core function of streamlining, harmonizing and rationalizing the acquisition, deployment, utilization and disposal of IT services in Government as well as enhancing uptake of e-Government services.

This policy brief discusses the extent to which the ICT rationalization and harmonization strategy 2012 has been implemented and proposes options for achieving the overall objective of improving service delivery.

Introduction

Government agencies separately procure and utilize their own IT systems (hardware, software and personnel) with hardly any standardization. This has led to massive wastage of public resources through duplication, fragmentation of systems and

Key Issues

- Optimal utilisation of the NBI hinges on implementation of the last mile connectivity under the RCIP.
- The Unified Messaging and Collaboration Services (UMCS) is being overtaken by technological advancement.
- Resistance to integration of IT systems for government agencies results into duplication of effort and non-optimal use of resources.
- There is an improvement in turnaround time for services delivered through e-Government.

non-optimization of the IT human resource. It is against this background that in 2015, the Ministry of Information and Communications Technology through the National Information Technology Authority Uganda (NITA-U) developed the Strategy for rationalization of IT in Government.

Rationalization Strategy

Between 2007 and 2017, Government of Uganda (GoU) established the National Transmission Backbone Infrastructure and e-Government Infrastructure (NBI/EGI) in three phases with a total fibre optic network of about 2,300Km and 26 transmission sites. GoU adopted the Rationalization Strategy on the premise that it will enable optimal utilization of the National Data Transmission Backbone



and e-Government Infrastructure (NBI/EGI), and leverage this infrastructure to deliver high speed internet and enhanced data connectivity to Ministries, Department and Agencies (MDAs) and other priority target users including Schools, Universities, Research Institutions, Hospitals, and other vanguard institutions. At the same time, enhance high quality affordable infrastructure, save costs, and facilitate delivery of interoperable electronic government services. The five strategic interventions in the Rationalization Strategy included:

1. Use of the National Data Transmission Backbone and Electronic Government infrastructure (NBI/EGI) as the primary vehicle for all Government data, Internet and voice services starting FY 2012/2013;
2. Centralized hosting Services, Data Centre Services and Disaster Recovery Services for Government Applications and Data;
3. Establishment of a centrally managed National databank;
4. Promotion of Unified Messaging and Collaboration Services (UMCS); and
5. Consolidation and Bulk licensing of applications and software licenses.

Progress and benefits of this strategy

Reduction in Internet costs

At the time the NBI phase II was operationalized by NITA-U (2013/2014), the cost of Internet Bandwidth across Government entities was on average USD 1,200 for a Megabits per second (1 Mbps) per month, however, this cost was reduced to USD 300 in 2014, USD 190 in 2017 to the

current USD 70 in 2018. Further price reduction is expected to be realized in the subsequent financial years as more MDA sites are connected to the NBI/EGI. The NITA-U concluded the contract for centralised procurement of Microsoft Business Application licences thus making licences for MDAs cheaper. Arrangements for central procurement of Oracle application software (database) licences was ongoing.



A completed NBI site in Kasese and switches mounted at the NBI Data Centre

Connecting Government sites to the Government Network

By December 2017, a total of 321 MDAs, Local Government (LG) sites and Government service centres (hospitals, universities) were connected to this network. Once the Metropolitan Area Network (MAN) is operationalized, the cost of collaboration and information sharing within government shall reduce.

Enabling E- Government

The end point of the NBI is to ensure all Government services are online. By December 2017, some Government services were online, they include: One Stop Center for investors under the Uganda Investment Authority, Voters Register under the Electoral Commission, E-Visa, E-Tax, E-



Single Window under the Ministry of Internal Affairs, and Wealth Declaration under the Inspectorate of Government among others. Users are saved the costs of travelling to each individual agency for services.

The E-Government Portal: The GoU has an official portal which is www.gou.go.ug. The portal is one of the milestones in E-government's master plan intended to transform e-services for citizens. This portal provides all e-Services offered in government and LG bodies under one umbrella. The portal enables communication between the citizens and the government representatives and e-Participation through forums, blogs, surveys, polls and social media. The aim of the portal is to provide more information and better online services to Ugandans in one umbrella. It is also to involve citizens in the government's policies, laws, and public interest initiatives with the ultimate goal of achieving transparency.

A number of MDAs are running the Integrated Financial Management System (IFMS) over the NBI. This is not only enabling cost saving but has improved transparency and accountability. These services have proceeded to reduce human interactions and saved the tax payers time and other resources.

Centralized hosting of Government systems: The ICT sector has intensified efforts of centralized hosting of Government systems in order to save costs of operating several data centres in different MDAs. To this effect, the National Data Centre was upgraded and it hosts sixteen (16) MDA applications. The Disaster Recovery (DR) site in Jinja formerly running under the Ministry of

Finance (MFPED) was handed over to NITA-U.

Technical support: Both NITA-U and MoICT provide technical support to key e-Government services e.g. e-Visa, Computerised Prosecution Case Management System (PROCAMIS) under the Directorate of Public Prosecution) and Online Declaration System under the Inspectorate of Government among others. The NITA-U provides technical support to MDAs on matters of ICT. All requests from the MDAs are processed within seven working days in line with the Rationalisation strategy. Overall, there is an improvement in public service delivery through e-Government Services. However, the optimal utilisation of the NBI hinges on implementation of the last mile connectivity under the Regional Communication Infrastructure Programme (RCIP) and investment in supportive infrastructure at MDAs.

Challenges

- Delayed approval and implementation of the Regional Communication Infrastructure Programme (RCIP) affected timely execution of the strategy.
- Although the Unified Messaging and Collaboration Services (UMCS) are being promoted by NITA-U as an option for secure communication at affordable costs across government through the use of Voice over Internet Protocol (VoIP), this endeavour is being overtaken by technological



advancement and requires additional investment in IP enabled telephones.

- Resistance to integration of IT systems for government agencies resulting in duplication of effort and non-optimal use of resources. A number of government agencies still prefer to set up own systems instead of opting for centralised hosting services.
- Conflicting guidance from the executive arm of government on sourcing bandwidth from either NITA-U or Uganda Telecoms Limited.
- Low investment in ICT infrastructure at MDA level.

Conclusion

Information Technology systems are at the centre of government processes. If implemented well, e-Government enables citizens, enterprises and organisations to carry out their business with government in a seamless, robust, interoperable and cost effective way. Implementation of the ICT Rationalisation Strategy is a step in the right direction given the benefits. However, effective implementation requires sizeable investment in ICT infrastructure, mindset change and capacity enhancement. In spite of the challenges, there is a recorded improvement in the delivery of public services through the ICT Rationalisation Strategy.

Policy options

- The ICT sector should develop a change management strategy to ensure that duplication of effort is minimized on procurement and use of ICT

installations. The campaign should enable the public sector embrace e-government to achieve maximum impact to citizens.

- The NITA-U should fast-track implementation of the Regional Communication Infrastructure programme to bridge the infrastructure gap (last mile connectivity, cloud services, Unified Messaging and Collaboration System) in MDAs and LGs.
- The ICT sector should commit additional resources to standardization and development of supporting infrastructure at MDAs such as structured cabling.
- The Executive arm of government should reconcile its position on the use of the NBI and associated services as a primary network for MDAs alongside sourcing of Internet from Uganda Telecoms Limited.
- The ICT sector should review, improve and report on the implementation progress of the Rationalization Strategy.

References

- MFPED 2018, Semi-Annual Budget monitoring report FY 2017/18
- NPA 2015, Second National Development Plan 2015/16-2019/20
- NITA-U 2012, Strategy paper on rationalisation and harmonization of IT initiatives and services in MDAs
- Kasigwa, J. (2006). The Role of ICTs and their Sustainability in Developing Countries. (p. 78-88).

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