

E-RECORDS READINESS IN THE ESARBICA REGION: CHALLENGES AND THE WAY FORWARD

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Abstract

Managing e-records is one area that has always challenged archivists and records managers, especially in the developing countries, partly because of the following reasons:

- *Their creation, use and preservation requires acquisition of costly hardware and software.*
- *The archivist and records manager may be required to undergo re-training in the use of information technology in order to be conversant with the management of e-records.*
- *Preservation of e-records is determined by the storage media which are quickly becoming obsolete.*
- *Training institutions where archivists and records managers are being trained locally may be lacking in personnel to teach e-records management.*

However, today a lot of government records are being created with the use of information technology. There is also an increase in online transactions through e-mails and the internet. Such transactions need to be captured in the institutional records management system for accountability and good governance. National archives in the ESARBICA region, however, seems to be shying away from their core responsibility of safeguarding the documented heritage of their respective countries in whatever format (including electronic). This article, therefore, endeavours to examine the e-readiness of each of the ESARBICA national archives and establish the reasons that may have contributed to the current state of affairs.

Keywords: ESARBICA, Electronic Records, E-readiness.

Background

E-records are the recorded information, documents or data that provide evidence of policies, transactions and activities carried out in e-government and e-commerce environments. In other words, these

are the by-products of all e-transactions.

A questionnaire on e-records readiness was sent to all the national archives in the ESARBICA region. Responses were received from nine countries, namely: Botswana, Kenya, Mozambique, South Africa, Swaziland, Tanzania, Zambia, Zanzibar and Zimbabwe.

The aim of this survey was to determine the levels of e-records readiness in the ESARBICA region. The issues considered included policy and legislation, standardisation, authenticity, preservation, training and physical infrastructure. All these issues taken together determine the level of readiness of a country to embrace e-records.

National archives are likely to be at various levels of readiness in the e-records continuum. The essence of this survey was therefore to determine where each of the countries is in the awareness continuum with the aim of seeking the way forward, and as the ICA (2005) noted:

The question of readiness is not whether an archive is ready to begin work in electronic records, as one is never fully ready. Rather, the question is what the archives are ready to attempt. Any assessment needs to consider two aspects in making this determination: government's readiness to adopt electronic record keeping and the archives' readiness to assist them. No matter where the government is on the readiness continuum, there are things that the archives can do to promote the archival mission.

It should be noted that this survey was carried out in March 2005 and for that reason, some of the observations may already have been overtaken by recent developments in the field in the respective countries.

ICT policy issues

Among the countries that responded, only Tanzania and Mozambique have national ICT policies. Tanzania's Department of Records and Archives Management and Kenya National Archives and Documentation Service (KNA&DS) were involved in the formulation of the ICT policies of their respective countries. The National Archives of Botswana, South Africa, Mozambique and Zanzibar were not involved

while Swaziland National Archives claims that it will be involved in the deliberations.

Of the seven countries that do not have an ICT policy as yet, all of them have plans to come up with one. In South Africa the Government Information Technology Officer's Council (GITOC) is working on a government-wide ICT strategy. The GITOC is an advisory body comprising the Chief Information Officers of Government Departments and it advises the Department of Public Service and Administration (DPSA) regarding the information technology policy.

In Kenya, the ICT policy was drafted in 2003 and finalised in 2005. In Botswana, discussions on ICT policy are ongoing and the Draft Policy on ICT is in place. In Swaziland, the Government Computer Centre has identified relevant departments in formulating the ICT policy. While in Zambia, there is a committee that has been set up to formulate this policy, although the National Archives is not part of the Committee. Zanzibar is still discussing the policy issue.

On whether e-records are adequately addressed in the existing and proposed ICT policies in the respective countries, Tanzania feels that they are well represented especially because the Archives was consulted when coming up with the policy. Swaziland is optimistic that e-records issues will be addressed since the National Archives will be represented in the discussions. In Kenya, the opinion is that this issue is poorly addressed, despite the fact that KNA&DS was represented during the initial discussion of the ICT policy. Despite presenting a strong case for e-records in Kenya, the final draft was heavily mutilated in this regard with only a mere mention and KNA&DS was not even invited to the discussion of the final draft.

In Botswana the National Archives and Records Services was neither involved in the discussions on the ICT policy nor has the Draft Policy been circulated to the Department. They are, therefore, unable to tell whether the issues concerning e-records are adequately addressed.

In South Africa e-records issues are not addressed yet, but will be, because the National Archives is represented on the Knowledge and Information Management Workgroup of the GITOC to ensure that records management is addressed in a records management, content

management and service delivery improvement framework that would feed into the ICT policy.

As noted earlier, all e-transactions culminate in the creation of e-records as a by-product. It is therefore important to factor in these by-products in any national ICT policy. The archivists/records managers need to play a proactive role to ensure that e-records management issues are properly articulated in the formulation of such policies. When this role is left to the IT expert, chances are that e-records issues will be relegated to the back seat to the detriment of their preservation.

National Archives in most of the surveyed institutions seems to have abandoned one of their core functions of preserving all archival records irrespective of their format, including e-records, by not participating in national ICT deliberations that would determine the fate of e-records. This is a serious omission as we risk having a gap in our records collections then we shall not be able to account for what was happening, as these records may never be preserved for posterity.

Authenticity of e-records

Out of the nine respondents, only South Africa recognises e-records as authentic records as supported by the Archives Act. In Swaziland there has been an informal discussion for scanned records to be accepted as authentic records.

During the electronic discussion on Electronic Government and Electronic Records: E-Records Readiness and Capacity Building, it was observed that, "there is need to strengthen legislation, organisational frameworks, and policies to create, manage, protect, and preserve electronic records and the products of information technologies" (IRMT 2003).

Other national archives in the ESARBICA region, therefore, need to revise their respective legislation to ensure that electronic records are treated as official records that are admissible as evidence in a court of law. This is the only way for records creating agencies to start taking e-records as part of the wider records management process,

and endeavour to preserve them like their vital paper counterparts for administrative, legal, historical and research value. When e-records are not acceptable as evidence in a court of law, chances are that all e-records will be treated as having transitory value that do not warrant the level of care that they rightfully deserve.

E-governance initiatives

According to the IRMT e-records readiness tool, e-governance is defined as:

using Information and Communication Technology (ICT) to improve the delivery of government services and information, enhance the efficiency and accountability of the public administration and strengthen economic performance (the e-records readiness tool – 2005).

All the survey respondents are positive that their respective governments are putting in place deliberate efforts to embrace e-governance. In the case of Tanzania, this is already spelt out in the national ICT policy while in Zanzibar a pilot project in Zanzibar Municipality, funded by UNESCO, is already underway. In Kenya there have been several initiatives towards e-governance. The government of Kenya formed an e-governance ministerial committee as well as interdepartmental committees to look into issues concerning e-governance. The office of the Head of Public Service has also compiled an inventory of ICT capacity and assets in the entire government. E-governance is also highly emphasised in the draft ICT policy. However, in Kenya these initiatives are highly disjointed with some already duplicating the efforts of others.

In South Africa the government has an e-government drive aimed at improving and simplifying government service delivery and creating a seamless single point of access (gateway) for integrated government services to the public online. The mission of the Government Chief Information Officer (GCIO) is to give effect to the responsibilities of the Minister of Public Service and Administration regarding IT in the public service and to co-ordinate and consolidate all e-Government initiatives.

Three of the National Archives, namely Botswana, Kenya and

Tanzania, are involved in e-governance initiatives while South Africa, Zanzibar, Mozambique and Zambia have not been involved.

It should be noted that e-records issues are inseparable from e-governance issues. As governments endeavour to formulate e-governance strategies, national archives should always play a central role in safeguarding the interests of the records community. Other stakeholders in e-governance will most likely be interested in the business activity processes rather than the records themselves.

Resources and training for records management personnel

All the respondents described e-records skills among their staff as inadequate. Kenya, Tanzania, Botswana, South Africa, Mozambique and Zambia described these levels as low. In Botswana, besides basic training in the introduction of computers, office automation, e-mail and internet surfing, the human resources have no advanced skills and knowledge in managing e-records. However, there is a provision for the position of Senior Systems Analyst whose responsibility is to manage the computerization project of the Botswana National Archives and of course the management of e-records, unfortunately the post is yet to be filled. In Mozambique, there has been brain drain of skilled staff to greener pastures.

Zanzibar and Swaziland described the skills levels as moderate. In Swaziland, members of staff have basic ICT skills but not e-records skills. Zanzibar has no expertise in e-records.

To ensure some level of success in the management of electronic records, there is need to improve the skills level among the archivists and records managers in the national archives in the area of information technology. However, this does not mean that all archivists become experts in technology, but they should understand such things as systems management and software development so as to ensure successful dialogue with their IT counterparts. The latter should also strive to understand archives/records management principles to ensure that records functionalities are embedded in the systems that they create.

E-records readiness among new graduates

Botswana and South Africa contend that new graduates have no e-records skills. Kenya, Tanzania, Zanzibar and Zimbabwe felt that these graduates have low skills. In the KNA&DS case, it should be pointed out that the last graduate was employed in 1996 when the use of ICT was not very widespread. Therefore, it cannot be ascertained what skills new graduates currently possess. In Swaziland and Zambia the skills for new graduates are moderate. However, the general feeling, is that most of these fresh graduates are not properly equipped in terms of IT despite the fact that the young graduates are expected to be technology-savvy. Therefore, training institutions should lay more emphasis on the area of electronic records management as the young graduates are the ones who will be expected to champion the revolution towards e-records readiness.

Acquisition of e-records skills among serving staff

All the respondents concurred that their staff are acquiring e-records skills through seminars and workshops. In Kenya, Tanzania, South Africa, Zanzibar, Mozambique and Zambia, the skills are also acquired through self-training. Only Tanzania and Zambia are acquiring these skills through formal training.

Education is a life-long process and serving archivists/records managers should not wait until they are taken to a classroom to learn e-records management as such a chance may not materialise soon. It is for this reason that all serving archivist should develop an interest in the management of electronic records before they are rendered obsolete professionally. Staff could draw from the enormous educational resources on the internet which can be used to develop in-house or self-study programmes to enhance their capabilities. ESARBICA should also be organising workshops and seminars where people can meet and exchange their ideas in this area.

Empowerment for records creators

Six respondents, namely Kenya, Tanzania, Botswana, South Africa, Mozambique and Zanzibar are sensitising records creators on e-records issues. Most of these National Archives are using seminars

or workshops on records management to achieve this goal. Circulars are also used in Kenya and Tanzania to sensitise records creators. However, only South Africa has come up with comprehensive guidelines as contained in their publication *Managing electronic records in governmental bodies: policy guidelines*. Swaziland and Zambia are not carrying out any sensitisation on e-records.

E-records readiness initiatives may not go far if the records creators are not involved in the process. The records creators are the ones who will take care of the records in the first phases of the life cycle before they are finally retired to the national archives. Therefore, they should be educated on how to create, use and maintain the e-records. Failure to put such skills in place will endanger the records to an extent where the archivists will not have anything to preserve.

Status of e-records

All the respondents said that their national archives have never carried out a survey on the status of e-records created by governmental bodies. However, in Botswana a study was conducted in 2003 by IRMT, Botswana National Archives and the University of Botswana (Department of Information Studies) to establish the readiness of the use and management of e-records in the public service, with the aim of coming up with a module that can address the management of public service e-records.

In South Africa, through its representation on the Knowledge and Information Management Workgroup of the GITOC, the National Archives is also collaborating with the State Information Technology Agency (SITA) towards the establishment of a database of electronic documents and records management systems that meet archival records management requirements.

Such surveys form the baseline for defining the situation on the ground. They provide information on the situation of the records, identify the obsolete records, determine storage needs, identify vital e-records, raise awareness of the need for e-records management, develop a needs assessment and provide a foundation for the way forward.

In Botswana, South Africa and Zimbabwe, creation of e-records is deemed to be high while in Kenya, Tanzania and Zanzibar it is deemed to be moderate. Only Zambia deems the amount of e-records to be low while Mozambique did not respond to this question. This assessment may not be accurate in the absence of national surveys on e-records. Therefore, it is imperative for each of the National Archives to conduct a survey on the e-records in their respective countries with the aim of determining their amount, nature, storage and formats. It is out of this survey that the national archives will be able to determine where they are and what needs to be done to move forward to the next stage.

Standard format for creating and preserving e-records

Seven respondents said that there are no standard formats for creating and storing e-records for future transfer to the archives. However, Zambia has a system of creating and transferring electronic records to the National Archives. In Botswana the Department of Information Technology within the Ministry of Communication, has guidelines and procedures of creating their own e-records, while the rest of the government agencies do not have a standard.

E-records are being created in the form of web based content, e-mails, word processed documents, databases, and digitised correspondence in all the responding countries.

It should be the prerogative of national archives in collaboration with the relevant Information Technology department to come up with standard formats for the creation and preservation of electronic records. Such standard formats should set out the functional requirements for e-records management to consistently create, capture, organise, store, search, retrieve and preserve e-records and to protect the integrity and trustworthiness of the e-records. It is important to adopt a national minimum standard so that government systems are interoperable and share a common baseline of e-records functionality.

Globally, archivists have tried to identify platform-independent formats for the creation and preservation of e-records. One such

format is Portable Document Format/Archive (PDF/A), a bare-bones version of PDF based on Version 1.4 of Adobe Systems Inc.'s public-domain specification. PDF/A was developed with help from government agencies that have large-scale document retention needs, such as the Internal Revenue Service and the US Courts.

Capacity to preserve e-records

All respondents claim that their national archives have no capacity to preserve e-records from government creating agencies. The problems include lack of specialised storage facilities, lack of skills and controlled environment. In cases where issues of electronic records management have been addressed in the archival legislation, practical steps have not been taken to ensure that the National Archives are capacitated to preserve these records. There is a general feeling that management of paper records is still a big problem, thus electronic records are not a big priority.

As of now, none of the national archives that responded have started acquiring electronic records from government creating agencies.

ICT infrastructure

Kenya, Tanzania, Botswana, South Africa, Mozambique and Zambia rates the infrastructural levels as moderate, while Zanzibar and Swaziland rates it as low. Among the reasons given is that computer hardware and software still remains relatively expensive while some of the countries are not well served with power and telecommunication networks. Hence, making it difficult for rural areas to exploit ICT.

The National Archives and Records Service of South Africa has registered an application with the National Treasury for a feasibility study to determine whether there would be scope for a Public-Private Partnership in terms of government policy. It is hoped that the viability of conducting such a study would be determined in the current year (2005). The National Archives and Records Service has been in the process of developing its own IT infrastructure and implementing an integrated electronic records management system although the full functionality has not yet been implemented.

ICT physical infrastructures are a fundamental factor in the development of e-records readiness as they determine the extent to which the technology is being used not just in the urban areas, but also in the rural areas. The trend is for the infrastructure to be concentrated in the head offices while the district offices are still using manual systems. This creates a digital divide that needs to be bridged before other issues can be considered. Such a digital divide is created by the high cost of technology, a situation that national governments need to address to ensure equitable distribution of this resource as a prerequisite of e-governance initiatives. E-governance cannot be said to be successful when only a small minority of the citizens have access to the technology. It will also fail if electricity and telecommunication services are erratic, thus negating any meaningful ICT developments.

Records management system for authenticity

For e-records to remain authentic there is need to capture and maintain them in an Electronic Records Management System (ERMS). An ERMS is one that retains the functionality of a record over time.

In South Africa, the National Archives and Records Service of South Africa Act gives the National Archivist the responsibility to determine the conditions subject to which electronic records systems shall be managed in governmental bodies. In accordance with this mandate, policy guidelines have been issued *Managing electronic records in governmental bodies: policy guidelines*. The National Archives prescribes that it should approve a file plan for the management of paper and electronic records that is specifically designed according to certain principles to meet the functional needs of the governmental body.

In Botswana, the National Archives plans to computerise all records management related functions in the entire public service with effect from June 2005 on a phased out approach to be completed in five years time. The appropriate solution to address both paper records and e-records is currently being evaluated.

The rest of the respondents do not have a Records Management System to capture and maintain electronic records throughout the government. A standard Electronic Records Management System is necessary in all the countries to ensure that e-records are created in uniform formats. Such a system should also set out disposal schedules for e-records to seamlessly transfer valuable e-records to the national archives. In the absence of such a system, records creating agencies will be capturing their e-records in formats that may prove difficult to transfer to the archives, let alone migrating in other formats in the future.

Archives legislation

Of the nine respondents, archival legislation in four countries, namely South Africa, Tanzania, Zanzibar and Swaziland have addressed the unique issues of e-records. Kenya, Botswana, Mozambique, Zambia and Zimbabwe are yet to address these issues.

In terms of its statutory powers, the National Archives and Records Service of South Africa has developed policies to regulate the creation of electronic records in governmental bodies to ensure sound records management and the potential for archival preservation. The overall records management policy is contained in the *Records Management Policy Manual*, while the policies that apply to electronic records systems are contained in the publication *Managing Electronic Records in Governmental Bodies: Policy Guidelines*. This is supplemented by draft functional specifications for integrated document and records management systems and draft minimum mandatory metadata, as well as a leaflet providing a brief overview of the requirements (*Electronic records and the law: what governmental bodies need to know*).

Of the three who have not addressed this issue, Botswana and Mozambique have plans to revise the archives legislation to cater for this deficiency.

E-records pose some unique challenges that need to be addressed specifically in archival legislation. For example, it has been noted

that in all but one country, e-records are not recognised as evidence in a court of law. Such anomaly needs to be addressed in archival legislations to set out clear guidelines under which such records can be considered authentic. In Kenya, for example, the proposed review of the public archives bill has not factored e-records as a component that needs to be addressed specifically, thus aggravating the situation.

Challenges of e-records management

Among the eight respondents, lack of skilled manpower to handle e-records was the leading challenge accounting for 24%, followed closely by lack of clear policies on e-records with 17%. Inadequate archival legislations came third with 14% while lack of senior management support was fourth with 12%. Financial constraints and the current problem of managing paper records tied at fifth with 10% each. Digital divide was seventh with 7% while technological obsolescence was considered the least challenging with only 6%.

This goes against the popular belief that financial constraints were the major impediment in our endeavour to embrace e-records readiness. It is evident that most countries are spending inordinate amounts on hardware and software at the expense of developing human resources to operate these systems. There is need to come up with clear policies of implementing e-readiness to ensure that the financial resources are fairly distributed to avoid a situation where expensive hardware and software are lying idle for lack of skilled manpower to operate them.

Conclusion

The archivists/records managers need to shift their focus from being champions of paper records management to electronic records. This calls for upgrading of skills to include ICT aspects that will allow the archivist to understand the operations of technology and how it impacts on the creation, use, maintenance and preservation of electronic records. Records creating agencies will only take the archivist's advice on e-records seriously if the latter shows a fair command in the technology field. However, this may remain an uphill

task for the archivist to surmount in the near future if we remain technology-shy.

This survey shows that the ESARBICA region is not yet e-records ready. Except South Africa, which has come up with a comprehensive programme for e-records, other countries' efforts seems to be disjointed. However, Botswana has taken a holistic approach to e-records and if successfully implemented will be a showcase for the region. One of the ways forward would be for ESARBICA to come up with some minimum standards for e-records that each of the countries would be expected to implement on a pilot basis. This could possibly be followed by peer review where others would learn from the best practices of colleagues.

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