

# **Implementing Electronic Records and Archives Management Systems in the Public Sector in Namibia and Zimbabwe**

By

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## **Abstract**

**Key words:** Digital records; Electronic records management; Electronic records management systems; Namibia; Zimbabwe

## **Introduction**

The rise in the creation of electronic records by governments' administrations is undeniable. President Bill Clinton transferred 20 million email records and 4 terabytes of electronic records at the end of his administration. His successor, President George W. Bush transferred 200 million email records and 80 terabytes of electronic records. It is envisaged that the figures for the Obama administration have skyrocketed (Morris, 2016). Studies on records management in Namibia (Nengomasha, 2009; Matangira, Lukileni and Katjiveri, 2013) and in Zimbabwe (Sigauke, 2014; Matangira, 2015) have reported on an increase in the use of information and communication technologies by the Governments, and the resultant creation of electronic records. They all however lament challenges in the management of these e-records with recommendations to adopt electronic records management systems to enhance their management. The use of records and archives management systems promotes accountability and transparency that is, they are antidote of corrupt practices by public officers.

A study In South Africa by Kwatsha (2010) concluded that the critical factors that have had an effect on the implementation of EDRMS are of a strategic, social and technical nature, with top management support and commitment; and change management having a profound effect. Communication and user involvement in the implementation process ranked high among the social factors. Kwatsha's study

found similarities in the factors affecting EDRMS implementation within the South African government and identified the need for further research focusing on how these factors differ between various types of organizations. The comparative study of Namibia and Zimbabwe public sectors on which this paper is based is partly a response to this recommendation. According Mosweu, Bwalya and Mutshewa (2016:2), it is important to examine the factors surrounding the implementation of information systems as this will provide insights of their success in the public sector. The authors went on to say that these insights are cardinal for both practitioners and researchers grappling with system implementation issues.

Namibia adopted an electronic document and records management system (EDRMS) in the public service in 2008. In Zimbabwe, the adoption of systems for managing records dates back to 2005. Even though such systems were not fully dedicated for records management, they had records management functions operating at different levels. This study sought to assess the implementation of EDRMSs in Namibia and Zimbabwe to establish the extent of its success.

### **Statement of the problem**

Most government agencies around the world have adopted the use of EDRMS in a bid to improve the management of e-records. However, as indicated by Abdulkadhim, Bahari, Bakri and Ismail (2015:421), many initiatives to implement EDRMS especially in developing countries have failed. Some of the factors that have been cited as major hindrances are perceived to be strategic, social and technical in nature (Kwatsha, 2010). As a response to the rise of e-government, the governments of Namibia and Zimbabwe have also adopted the use of EDRMS in various departments but little has been done to assess their use.

### **Purpose of the study**

The study sought to assess the implementation of EDRMS in the public service in Namibia and Zimbabwe with a view of establishing the extent to which the initiative has been successful. The main research question the study aims to answer is “To what an extent has the implementation of electronic records and management systems in Namibia and Zimbabwe been successful basing on best practices?” The sub-research questions were: (1) What are the factors that promote or hinder the implementation of EDRMS? (2) What can be done to enhance implementation of EDRMS in the public service of these two countries?

### **Methodology**

This multi-case study was informed by an interpretivist paradigm. Qualitative in nature the study applied face to face interviews as the data collection method, supplemented by documents analysis. A semi-structured interviewed guide was used to collect data. The study population was Namibia and Zimbabwe’s public sectors with units of analysis, being the Governments’ Ministries, Offices and Agencies which have implemented EDRMS. Although all Government Ministries, Offices and Agencies which have implemented EDRMS (Namibia -7 and Zimbabwe – 2) were purposively selected to take part in the study, only 2 in the case of Namibia – referred to as Institutions A and B; and one in Zimbabwe – referred to as Institution

C, took part in the study. The others did not grant permission for the study to take part. Interviews were conducted with officers in charge of the system or using the system. In Namibia four officers were interviewed which included a Director, Deputy Director, Control Officer and a Records Officer. In the case of Namibia, the researchers had requested to interview an information and communication technology person in charge of the system, a member of staff in a managerial position to provide on budget and other strategic issues, action officers using the system and records keeping staff in charge of uploading documents on the system. In Zimbabwe three officers who included the permanent secretary, an Acting Deputy Director and a records management officer were interviewed. Efforts to collect data from I.T. personnel were fruitless.

### **Literature review and theoretical framework**

As the use of ICTs by both private and public organisations continue to increase, calls have been made to implement EDRMS. An electronic document and records managements system (EDRMS) manages the creation, use, and the disposal of documents and records be they manual or electronic. The purposes of an EDRMS is to support the creation, revision and management of digital documents; improve an organization's work-flow; and provide evidence of business activities (State Records Office of Western Australia, 2015). Nguyen and Swatman (2008) explain that as governments put emphasis on effective records keeping, they require their institutions to have proper records management programmes.

However “not all implementing organisations adopt an EDRMS solution in the most optimal way; and many such systems fail to meet organisational needs, or gain acceptance from all (or even most) users” (Nguyen & Swatman, 2008:1). Nguyen (as cited in Abdulkadhim, Bahari, Bakri & Ismail, 2015) concluded in a study an Australian study on electronic document management system (EDMS) implementation that the ultimate goal of EDMS was achieved when there was widespread use of the system by users. Other common factors in the implementation of EDMS in governments include top management support, implementation planning, user involvement, data quality and collaboration (Abudulkadhim, et al., 2015, Mosweu 2016). Studies on EDRMS implementation by governments in Southern Africa (Karlos, 2015; Kwatsha, 2010, Mosweu, 2016; Mosweu, et al., 2016) confirm these views. A study by Karlos (2015) in Namibia identified low use of the system by users and change management as hindrance factors. In addition to change management, Kwatsha’s study in South Africa (2010) also identified lack of policies and procedures to support EDRMS implementation as these in most cases “only came long after the implementations, usually as corrective measures once it became evident that the users were not complying” (p. 105).

Best practices on the implementation of EDRMS are documented in guidelines such as the *JISC toolkit for Implementing Electronic Document and Records Management Systems* (JISC, 2007); *Management of digital records: An information management guideline for state organisations* (State Records Office of Western Australia, 2015); and *Implementing an EDRMS: Lessons from agencies* (Australia Government, National Archives of Australia 2011). The following lessons from the Australian

government agencies as presented by the National Archives of Australia were considered by the researchers to portray the guidelines for EDRMS implementation process and were therefore adopted to guide this study. These are highlighted below:

- **Justifying the need for an EDRMS** - The justification for an EDRMS is best driven by business needs rather than a belief that technology can solve all issues and challenges.
- **Change management** - implementation of an EDRMS should be treated as a change management project.
- **Management support** - A critical factor in the success of an EDRMS implementation is senior management support. This influences the availability of the required resources, funding and staff for implementation, as well as system take-up across the agency.
- **User involvement** - overall success of an EDRMS implementation depends on the extent to which end users accept and adopt the new system.
- **Composition of project team** - implementing an agency-wide EDRMS requires the involvement of a cross-section of staff at appropriate levels and with a mix of skills.
- **Getting the organisation's information management right** - Investing in getting the file plan right and training staff to understand records management reduces the risks of successful EDRMS adoption.
- **Addressing migration, integration and conversion issues that affect other systems and processes** - Evaluating EDRMS options requires consideration of standard operating environment issues.
- **Designing the EDRMS implementation approach to suit the organisation's environment** – the introduction of the records management component of the EDRMS in a pilot implementation, allows for adjustments before organisation-wide deployment.
- **End users training immediately before EDRMS implementation** - a training needs analysis is useful to understand the skill levels of staff and to indicate the amount of training required for the EDRMS implementation to succeed.
- **Resources to monitor the quality of data input, train new staff and provide system support** - it is essential to consider requirements for the ongoing support and operation of the system once implemented. Strategies are needed to: incorporate basic training into induction programs; monitor EDRMS uptake to identify areas of use and non-use to target extra training and awareness programs; ensure the quality of data entry; and manage technical maintenance.

(Australia Government, National Archives of Australia, 2011)

## Discussion of Findings

This section presents and discusses the findings under the ten implementation issues as informed by lessons from the Australia Government agencies (Australia Government, National Archives of Australia, 2011).

**Justifying the need for an EDRMS** - The justification for an EDRMS is best driven by business needs rather than a belief that technology can solve all issues and challenges.

The implementation of an EDRMS in the public service of Namibia was driven by the need to enhance records management in the public service. The Office of the Prime Minister (OPM) justifies the adoption of EDRMS due to the need for a reliable and proper documents and records management system as an enabler for the achievement of policies and projects being executed in the context of Vision 2030. The OPM also observed that “The effective and efficient maintenance of the Government’s manual based archival system has been undermined over the last few years, especially as a result of the ever increasing use of electronic means of communication” (Republic of Namibia, Office of the Prime Minister, n. d. p. 2).

The following statement confirms the poor records keeping alluded to by the OPM.

The current filing systems, in the government are not in order and non-functional as per National Archives requirements. Staff members are not using the system as stipulated in the National Archives Act of 1992. All documents are supposed to be sent to the registry office for proper filing but not to be kept in the office to occupy office space. Therefore, the Office of the Prime Minister introduced the Electronic Documents and Records Management System (EDRMS) (Republic of Namibia, Ministry of finance, n. d.)

Several studies (Abankwah & Hamutumwa, 2016; Matangira, Lukileni & Katjiveri, 2013; Nengomasha, 2009, Nengomasha & Nyanga, 2012) have lamented the poor records keeping in the public service of Namibia. The problems include: outdated records file plans or where file plans exist failure to use them; files which cannot be located or retrieved and if they are found, there are missing documents from the files; absence of retention schedules; and a failure to manage electronic records as evidenced by mismanagement of emails. The operation of “mini registries” a negative term applied to the keeping of records by staff in their offices instead of the central registries is a significant challenge. During the interviews with Institution A in Namibia, one of the interviewees reported that at the commencement of implementation of the EDRMS, there were many records kept by officers in their mini registries.

Similarly, records management in the public service of Zimbabwe has always been a challenge. Missing or misplaced records have led to some instances of poor service delivery and accountability has been compromised (Chaterera, 2016).

The implementation of EDRMS in Zimbabwe was necessitated by the need to make increase efficiency in information management and make information readily available for decision making. As highlighted by one of the respondents, with paper records, information was not always readily available which caused delays in assisting people. The respondent mentioned that many times files were not found when needed. Officers delayed taking action on files and as result they were always in the pending tray.

**Change management** - implementation of an EDRMS should be treated as a change management project.

Change management was mentioned as one of the factors posing challenges with the implementation of the EDRMS in public service of Namibia. This was confirmed by both Institutions A and B. One of the Interviewees in Institution A had this to say “Progress has been slow. Its only when their records are uploaded that they see the usefulness of the system. It’s a problem of resisting change. People still want to see physical documents.” This is similar to experiences of the Australian Agencies which “recognised the need to communicate at the start of an EDRMS project that a successful implementation could be a relatively slow process, and that the full benefits may not be realised until new business procedures and the EDRMS are working well for end users” (The Government of Australia, National Archives of Australia, 2011, p.6). According to Abdulkadhim, et al. (2015), raising awareness of the benefits of EDRMS leads to effective implementation and encourages associations. This in turn will make staff informed and minimise the risk from “staff behaviour that seeks to disrupt, hinder, challenge, or invert prevailing assumptions, discourses and power relations” (p. 428).

In Zimbabwe, the system was introduced in 2009 but up to now its use has been restricted to one department. Efforts to spread it to other departments had not been successful. One of the main reasons was fear of change. Some officers seemed to prefer paper records. They saw technology as a threat to their positions. One of the interviewees indicated that there were no plans, policies or procedures in place to promote the use of the system. Again, there were no measures in place to raise awareness. Change management, communication and user involvement are some of the critical factors which have an effect on the implementation of EDRMS (Kwatsha, 2010).

**Management support** - A critical factor in the success of an EDRMS implementation is senior management support. This influences the availability of the required resources, funding and staff for implementation, as well as system take-up across the institution.

The first Institutions to implement EDRMS in the public service of Namibia were Office of the Prime Minister and Office of the President. The Permanent Secretaries in these two Offices authorised the implementation of EDRMS on 18 November 2009 and 8 December 2009 (Republic of Namibia, Office of the Prime Minister, 2010). What this shows is an interest of EDRMS implementation at a very high level of Government. Top management support is one of the critical factors for successful EDRMS implementation (Kwatsha, 2010). During interviews both Institutions A and B

indicated that there was senior management support for EDRMS implementation. Initially there were adequate funds and resources allocated for the project, which allowed the necessary equipment to be bought and training to be conducted. However over the years there has not been enough funds allocated for maintenance and upkeep of the system. In Institution B, the project came to a stand-still after a year into implementation when the person who was doing scanning and uploading of records on the system left. This is in line with what was reported by Institution A that changes in staff were affecting implementation of the EDRMS.

In Zimbabwe, the project got off with a slow uptake from the employees. The top management supported and promoted the implementation of EDRMS. The initiative received great support from senior management. Officers were encouraged to use the system for information sharing. However, there was a need for a dedicated budget for records management.

**User involvement** - overall success of an EDRMS implementation depends on the extent to which end users accept and adopt the new system.

The study observed that in Namibia public service, the adoption of the system by staff was not as much as expected. One respondent in Institution B said “Currently we are operating manually and there is nothing going on in terms of EDRMS.” Although the system was actively being implemented in Institution B, there were also some challenges. Challenges included changes in the organisation structures due to high staff mobility which meant that the system had to be constantly updated to assign roles to new people. The other challenge was the revision of the file plans which was done after the training on file plans. The training came after the implementation of the EDRMS hence a lot of existing codes on the system had to be changed. These factors were in addition to resistance to change explained earlier. The new factors mentioned here made the system frustrating to use thereby worsening the resistance to change. Roger’s diffusion of innovation theory explains factors which determine the rate of adoption of an innovation. One of these is complexity, which is how easy it is to understand or use the innovation. A respondent in Institution B had this to say “As members of staff do not use the system regularly, they keep forgetting the passwords. There is need for refresher courses as we forget.”

In Zimbabwe, the users have accepted the system and is being used intensively within the organisation. All officers had undergone training in ICDL and system training. However only two had undergone records management training. Although trainings were done, they were not frequently conducted. Respondents expressed a need to keep on training staff members to equip them with new skills.

**Composition of project team** - implementing an agency-wide EDRMS requires the involvement of a cross-section of staff at appropriate levels and with a mix of skills.

The EDRMS project teams in the various ministries, offices and agencies of the public service consisted of records keeping staff responsible for scanning and uploading the records, action officers/senior management who had the role to do

approvals before the scanned records were uploaded onto the system; as well as information technology personnel. Training was given to these people at the start of the implementation. However due to staff mobility there was continuous change of members and need for training of new members. In Institution B, the IT officer who was trained to give technical support left and the position was vacant for more than a year. Members with experience were always moving to other Ministries, Offices, and Agencies. One respondent in Institution A mentioned that these roles were considered as extra responsibilities and not a part of their actual jobs.

**Getting the organisation's information management right** - Investing in getting the file plan right and training staff to understand records management reduces the risks of successful EDRMS adoption.

The challenges posed by revising a filing plan in the middle of the implementation process has been explained above. The effects of not getting the file plan right prior to implementation were felt in Institution A in Namibia, low user adoption being one of them. This experience is similar to the Australian Agencies which found that "introducing a new file plan or records classification scheme during an EDRMS implementation was too much change at once (Government of Australia, National Archives of Australia, 2011, p. 10). The Office in charge of EDRMS in Namibia has since made it a requirement that a Ministry, Office or Agency has to have a file plan approved by the National Archives before the EDRMS could be rolled out to them.

**Addressing migration, integration and conversion issues that affect other systems and processes** - Evaluating EDRMS options requires consideration of standard operating environment issues.

The problem of mini registries was discussed earlier. This is the environment which Institution A in Namibia was when it started implementing EDRMS. Explaining how the Institution dealt with the problem, one respondent explained that they had to be firm and get the records out of the offices to the registry. With no mini registries for them to help themselves the action officers had to come on board the EDRMS. This is in line with the experiences of the Australian Agencies whose "Staff were required to clean out shared directories and email systems, file all records and return hard-copy files to the records management unit" (Australian Government, National Archives of Australia, 2011, p. 11).

**Designing the EDRMS implementation approach to suit the organisation's environment** – the introduction of the records management component of the EDRMS in a pilot implementation, allows for adjustments before organisation-wide deployment.

The implementation approach followed by the public service of Namibia was one of the introduction of records management component in a pilot. Following the piloting of the system in Office of the Prime Minister and Office of the President The EDRMS Project Office, in consultation with the National Archives, identified the second intake



of OMAs [Offices, Ministries and Agencies] namely: Ministry of Veterans Affairs; Ministry of Regional, Local Government, Housing and Rural Development (now Ministry of ; National Archives; Anti-Corruption Commission; Ministry of Safety and Security; Ministry of Foreign Affairs and National Planning Commission “ (Republic of Namibia, Office of the Prime Minister, 2010). To date seven Ministries have gone live. These include five of the OMAs mentioned here.

**End users training immediately before EDRMS implementation** - a training needs analysis is useful to understand the skill levels of staff and to indicate the amount of training required for the EDRMS implementation to succeed.

Institutions A and B explained that training was given to the project team which comprised records keeping staff who role is to scan and upload records and the action officers/senior managers responsible for approving the records before uploading onto the system. The training was not given to other all members of staff which is contrary to the advice that technical training should be for all staff - general, experienced and helpdesk users, and as part of records management awareness sessions (Australia Government, National Archives of Australia, 2011). Training sessions therefore are not for technical skills only but for awareness purposes as well. According to Abdulkadhim, et al. (2015), training for staff must be considered to enhance awareness with the system. Both Institutions A and B mentioned the following training strategies: manuals and system demonstrations.

**Resources to monitor the quality of data input, train new staff and provide system support** - it is essential to consider requirements for the ongoing support and operation of the system once implemented. Strategies are needed to: incorporate basic training into induction programs; monitor EDRMS uptake to identify areas of use and non-use to target extra training and awareness programs; ensure the quality of data entry; and manage technical maintenance.

In response to the question whether resources were adequate to support EDRMS implementation, interviewees in Institution A in Namibia responded that the resources were adequate. Their reasoning was that since the Institution uses existing staff who have to carry out EDRMS tasks in addition to their usual responsibilities, there is no need for additional resources. One wonders how the data quality is ensured by the constant changes in staff when staff leave through promotion or other reasons. This is a challenge which was reported by the interviewees and has been discussed earlier. Could staff dedicated to EDRMS tasks not enhance EDRMS implementation? However the interviewees in Institutions A and B responded that the EDRMS Project Office conducted regular training sessions for new staff and OMAs could also make special requests as and when they had new staff requiring training. In terms of technical support, Institutions A said that their only challenge was acquisition of heavy duty copiers for scanning purposes. The situation in Institution B was more as explained earlier. The new IT officer joined Institution B in May 2017 but a year later EDRMS was still inactive. Institution B also faced challenges of a scanner which was non-functional and computers which could not support the system.

In support of EDRMS implementation, The National Archives of Zimbabwe, in charge of providing a records and archives management service to the public service, was coming up with a digital records transition framework which would guide the move from paper to digital records and the management of electronic records.

## **Conclusions and Recommendations**

The study showed that the National Archives of Australia guidelines for EDRMS Implementation provide an appropriate framework not for EDRMS implementation research. The conclusions which can be drawn from the studies on implementation of EDRMSs in Zimbabwe and Namibia are that a lot still needs to be done in terms of EDRMS implementation. Although initially a lot of financial resources were put into EDRMS project in Namibia, the preparatory groundwork in terms of file plans and retention schedules was not done hence the update of file plans caused problems of implementation. Failure to have a cadre specifically for EDRMS has resulted in problems of continuity hindering successful EDRMS implementation. Management support seems to have waned along the way.

The Namibia and Zimbabwe situation confirm Kwatsha's (2010) South African study which concluded that the critical factors that have an effect on the implementation of EDRMS are of a strategic, social and technical nature, with top management support and commitment; and change management having a profound effect; and communication and user involvement ranking high among the social factors.

The authors recommend a dedicated cadre for EDRMS implementation as informed by the challenges of staff mobility faced Namibia public service. There should be proper records management groundwork in terms of getting the filing plans and retention schedules in place, as they are a pre-requisite for successful EDRMS implementation. Change management should be an important component of an EDRMS implementation strategic plan.

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