Procuring and Implementing Management Systems for Electronic Records

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Abstract

Many organisations in the East and Southern African Regional Branch of the International Council of Archives region are facing serious records management challenges and are developing and implementing strategies to ensure compliance with approved standards. These strategies include policies and procedures for proper record management. Technology and the growth of computerised systems that generate electronic records have further created pressure for implementing electronic systems to manage documents and records as part of the broader records management programme. Several organisations in the East and Southern African Regional Branch of the International Council of Archives region are undertaking initiatives aimed at procuring such systems. Most of these organisations seem to lack guidance on steps to follow, from building a business case to tendering and final implementation. The problem has been worsened by a mushrooming of vendors marketing their products as records management solutions, creating confusion in organisations that have no professional guidance. The data were collected using a questionnaire in the region and confirmed that there is a lack of professional guidance. A framework to guide the procurement of these systems in organisations must be developed to ensure consistency and standardisation in the approach. The article will contribute by developing a framework or standardised strategy that will be used by national archival institutions and other public organisations in countries in the East and Southern African Regional Branch of the International Council of Archives region when procuring and implementing such systems.

Keywords: EDRMS; electronic records; ESARBICA; records management; SOUR

Introduction

The impact of information and communications technologies (ICTs) has pressurised many organisations, especially governmental organisations, to adopt the use of technologies in their operations. According to Katuu and Waltham (2018, 4), investment in ICT initiatives is high, especially the use of software applications to support activities. Governments are spending large amounts of money on such software applications (Katuu and Waltham 2018, 4). Technology is developing fast and there is pressure on organisations to catch up with the developments (Ngoepe and Saurombe 2016, 25). Without a doubt, governments have invested heavily financially to strengthen their ICT environments and have developed enabling national ICT policy frameworks. In Botswana, for example, the National ICT Policy (known as Maitlamo) has been a significant driver in ICT developments in the country (Keakopa and Bwalya 2010, 1-2). Other countries in the region have also developed national ICT policies. In addition to ICT initiatives, electronic government (e-government) strategies are further pressuring governments to move to the delivery of electronic services to citizens. Mosweu (2014, 235), Abdulkadhim et al. (2015, 420), and Thurston and Lemieux (2015, 3–4) have emphasised the benefits of e-government and agreed that many countries were procuring systems for efficiency and to offer services electronically. Technology ensures efficiency and speedy delivery of services and transparency.

ICTs have been adopted in areas of development such as education and health. Information management has not been left behind as governments have also taken advantage of the benefits offered by various ICTs to provide services electronically and to digitise their collections. The archives and record management professions are working on projects to offer online services for archives and records management. They have seen a major shift from paper-based manual systems to electronically generated records and the need for their management (Keakopa 2013, 37–38; Mosweu, Mutshewa, and Bwayla 2014, 235). Several organisations are now investing in the procurement of systems to offer records management services electronically because of the benefits, which include information becoming open to the public. This ensures credibility and authenticity of electronic records and reduces information loss (Thurston and Lemieux 2015, 3–4). In the East and Southern African Regional Branch of the International Council of Archives (ESARBICA) region, archival institutions and other government agencies and parastatals are at the earliest stages of putting in place structures and systems to help them in the management of electronic records.

A large body of literature on electronic record management in the ESARBICA region has been reviewed (Kemoni 2009, 190–203; Mosweu and Kenosi 2018, 234–251; Ngoepe and Saurombe 2016, 26–27). The literature confirms that e-government strategies and the public sector reforms in member countries have created an enabling environment for implementing systems and that these have been used as transformation drivers. In addition, enabling new legislation that facilitates the admissibility of electronic evidence in courts of law is a driving force behind the need to transform.

Infrastructure development has emerged as critical when managing electronic records, and some ESARBICA members are still putting in place the necessary infrastructure. The literature also confirms that although some countries developed policies, they were not fully implemented.

The ESARBICA conferences held in Zimbabwe in 2015 and in Malawi in 2017 recognised the importance of undertaking projects to computerise records management services and adopted a regional strategy to redress the challenges of managing electronic records. The second annual conference organised by the Botswana National Archives and Records Services (BNARS) focused on the theme Archives and Records in the 4th Industrial Revolution towards attaining a knowledge-based economy. The presentations focused on updates with regard to procurement and implementation of the electronic document and records management system (EDRMS) in both government and parastatal organisations. Although there were encouraging implementation testimonies from Botswana, there were also challenges that limited success. The presentations shared their procurement and implementation experiences with the EDRMS.

The International Records Management Trust (IRMT) (2009, 16) defines an EDRMS as an electronic system or process managed aided by computers and software which is implemented to manage both electronic documents and electronic records in an organisation. EDRMSs combine document and records management functions. The presentations at the conference identified a gap in the lack of guidelines on system procurement and implementation and urged the national archives to assume responsibility for guiding to ensure standardisation and consistency in practice. This model is used in South Africa, and it will be discussed further in the subsection on review of available frameworks. As a result of the discussions at the ESARBICA and BNARS conferences, the approaches in the region remain fragmented, and there is still a lack of coordinated research on electronic records and no clear regional framework.

Many organisations lack clear guidelines for managing electronic records and lack capacity with regard to professionals trained to operate in an electronic environment. So, most countries in the region are working on procuring systems and implementing them despite the lack of clear guidelines. This prompted the current study, which aims to propose a framework for guiding procurement and implementation in the region. The framework is generic and should fit in any country based on similar traditions, legislation, histories and records management systems shared by member countries, and political and economic stability.

Background to the ESARBICA

The ESARBICA is a professional regional body that brings together national archives, other information institutions and individuals in the region to discuss matters of archives, preservation of documentary heritage, and management of records and information. It is one of the 13 branches of the International Council on Archives (ICA) and was established in 1969 to carry out the aims and objectives of its mother body, the

ICA. Member countries include Botswana, Eswatini, Kenya, Lesotho, Mozambique, Namibia, South Africa, South Sudan, Tanzania, Zambia, Zanzibar, Zimbabwe, Mozambique and Angola. Mnjama (2005, 457–469) and Kemoni (2009, 190–203) have provided an overview of archival developments in the ESARBICA region. The region shares similar challenges in the creation, maintenance, use and preservation of records (Ngoepe and Saurombe 2016, 26–27). The region has faced several challenges to records management in the manual environment and now has concerns resulting from the impact of ICTs. Emerging from the literature, the region shares many similarities and follows common practices in archives and records management. Whatever solutions are found to the region's challenges in electronic record management will apply to the settings in each country and can be adapted to fit the individual context.

Ngoepe and Saurombe (2016, 26–27) summarised developments in the Southern African Development Community (SADC), which includes the same countries as the ESARBICA region. With regard to archival legislative frameworks, countries such as Botswana, Lesotho, Namibia, Malawi, South Africa, Eswatini, Tanzania, Zambia and Zimbabwe have legislation based on the British system, which colonised much of this region and does not, except for South Africa, provide for the management of electronic records. Various surveys have revealed that many people are still experiencing challenges, including those inherited from the colonial period. Although the region has produced many resolutions at the conclusion of each conference held every two years since 1969, little has been accomplished, and the strategic plan (Ngulube and Tafor 2006, 77) must still be implemented. Within this context, a proposed EDRMS framework for the region will be discussed.

Stating the Problem

The article was inspired by concerns about EDRMS projects that fail during the initial phase of implementation owing to a lack of proper planning and guiding implementation frameworks. As previously stated, organisations are under pressure to procure electronic document and management systems, but there are no clear guidelines and methodological frameworks to guide implementation. Several of these projects failed and some were abandoned (Abdulkadhim et al. 2015, 421). At the ESARBICA conference at the Victoria Falls, Zimbabwe, in June 2015, a deliberate decision was made to adopt a regional strategic plan, whose objectives is to develop strategies for EDRMS implementation in the region. Because of this, there is still a significant gap in the region's successful implementation of the EDRMS.

The study was also motivated by the current author's personal experience developing and implementing records management strategies in Botswana parastatals, and developing documents for Statement of User Requirements (SOUR) to guide the procurement of EDRMSs. The author's teaching of the core course of the master's degree for electronic records management revealed a lack of knowledge of managing records using electronic systems. This study is significant because it provides a framework to guide organisations that plan to purchase and implement EDRMSs. Those

archival institutions and other organisations that have tried and failed to implement systems will find this study very useful in resuscitating their projects.

Objectives of the Study

The main objectives of this study were to:

- identify available ICT infrastructure for management of electronic records in the region;

- determine existing guidelines and procedures for managing electronic records in the region;

- establish staffing capacity for managing electronic records in the region;

- review the current status of EDRMS implementation in the region; and

- propose a regional framework for guiding procurement of systems for management of electronic records in the region.

Research Methodology

The information used in this article was mainly from literature review and personal experiences in having guided implementation of a records management strategy at the Botswana Unified Revenue Service and the Botswana Housing Corporation. Presentations made to organisations and discussions with professionals in the ICT industry and other records professionals shed light on some conclusions made. Interactions with other academics at universities in the region also guided observations made in this article. During the ESARBICA conference in 2019, the author used the opportunity to interview representatives from member countries on updates in EDRMS implementation. Presentations from different countries informed the discussions in this article. Furthermore, during the second annual conference hosted by the BNARS, which focused on the role of archives and records in the Fourth Industrial Revolution, different government agencies and parastatals made presentations on their EDRMS projects.

A questionnaire focusing on information related to the management of electronic records in the ESARBICA was also distributed electronically to national archives, universities, and other organisations in the region. Emerging themes from the literature review guided the questions asked. Eleven responses were received from various organisations in the region's five countries, namely Zimbabwe, Malawi, Namibia, South Africa and Botswana. Follow-up interviews with the directors of regional archival institutions revealed significant developments in electronic record management projects in the region.

Literature Review

Review of Available Frameworks

Frameworks have been developed around the world to guide the implementation of EDRMSs. These guiding frameworks have been documented in the literature and they generally recommend different steps which include, among other things, top management support, change management, and developing a business case, the SOUR document and a communication strategy to guide the implementation of projects (Mafatlhe 2020). Generally, the frameworks advocate the need to have a champion of change, a clear communication strategy, and participation of senior management. For example, Swartz (2015, 9–14) recommended the need for top management support and twelve other factors. Mafatlhe (2020) revealed that with regard to the Atom implementation by BNARS, they considered the following factors: developing a business case for approval, building a project team, an implementation plan, training and quality assurance. Katuu (2012, 468–469) has also provided a framework on phases of system implementation which includes the pre-selection phase (analysis of business, technology and records), the selection and installation phase, and the post-implementation phase. Some phases covered by Katuu (2012, 440–441) and Keakopa (2013, 37–38) are included in the current proposed framework even though they are limited in covering all important factors of the new model proposed in this article. Keakopa (2013, 37–38) further mentioned the need for project methodology, an action plan consisting of governance structure and all key elements in records management.

In their guiding framework, the National Archives of Australia has developed a structure to support an implementation approach. This approach focuses on support from senior management, change management, awareness and training, migration, copyright issues and culture (Swartz 2015, 9–14). Abdulkadhim et al. (2015, 421) have proposed a framework which focuses mainly on the change management process. Even though their framework has three phases such as the one proposed in this article, their phases are different because they look at different factors mainly in the change management process. Only top management support is common to all other frameworks. The authors have also looked at implementing EDRMSs in South Africa and the National Archives of Australia, which provide good examples of successful implementation. The authors also reviewed some of the implementation failures, as in the case of Iraq, which were due to a lack of an appropriate framework.

Guidelines and standards, in addition to the guiding frameworks, play an important role in informing the frameworks. Katuu (2012, 457–476) summarised the guidelines and best practice requirements that guide procurement of systems in the United States of America (USA), the United Kingdom (UK), South Africa, Australia, the European Union and the ICA. As a result, clear guidelines for the development and implementation of these systems have been developed, such as the Association of Information Image Management (AIIM) Standards and the DOD Directive 5015.2-STD, the USA Department of Defence and the European Union, Model Requirements

for the Management of Electronic Records (MoReq2/MoReq2010 Specification), which provide recommended professional guidelines. The Digital Recordkeeping Guidelines of the National Archives of Australia (Kemoni 2009, 190–203), the AIIM (ECM Association), the National Archives and Records Administration and ARMA in the USA also provide professional guidelines.

South Africa is also doing well in these areas, and its model, in addition to the proposed framework, can be used by the region. The State Information Technology Agency (SITA) provides electronic records management system services to South African government bodies (Ngoepe and Keakopa 2011, 157). The country has a clear procurement process following the Tender 398. The National Archives and Records Services of South Africa and the SITA have collaborated to develop three classes of EMC application. Class A contains fully integrated modules, Class B contains core solutions, and Class C contains stand-alone integrated modules (Katuu 2012, 463). The list has names of vendors and solutions to guide the procurement of systems.

In summary, the general factors that emerge in all frameworks are top management support, change management, and the proposed framework. However, based on a review of the available frameworks, there is no agreed-upon framework and the reviewed frameworks are based on different factors. There is still a gap in comprehensive frameworks, which motivated this study to develop a framework. The article focuses on developing a framework that can be used as a guide for countries in the region to ensure standardisation in approach.

Overview of EDRMS Implementation in the ESARBICA Region

The adoption of e-government strategies has resulted in a significant shift from manual to electronic systems. As a result, a number of countries around the world have worked on efforts to procure and implement EDRMSs as part of their larger records management programmes. This is primarily owing to the systems' benefits with regard to increased efficiency and improved business processes. According to the National Archives of Australia, one benefit of EDRMS is increased efficiency (Kalusopa et al. 2016, 6–23; Mosweu 2016, 38–67). Also, Katuu and Waltham (2018) and Wamukoya and Mutula (2005, 71) have reviewed developments with regard to implementation of EDRMSs in the region.

The systems procured in Botswana include the Court Records Management System (Kalusopa et al. 2016; Mosweu and Kenosi 2018), the National Archives and Records Management System (NARMS) Project by the BNARS, and the Student Loan Management System Document Management Workflow (Wamukoya and Mutula 2005). South Africa in the region was said to be doing well and could be used by member countries for benchmarking (Mosweu 2016). The Document Workflow Management System has been implemented at the Ministry of Trade and Industry.

Despite the trend towards computerisation of services, governments and organisations in the ESARBICA region continue to face challenges in records management, particularly electronic records management. Although many countries are moving towards system procurement, others, such as Botswana, are still dealing with the challenges of managing a manual environment (Kalusopa et al. 2016). Literature in the region, except in South Africa, points to a lack of a clear framework for implementation of the EDRMS. These challenges are well documented in the literature and centre on the lack of clear model guidelines and procedures to support a regional framework. Where policies and procedures exist, there is a lack of awareness and management support. There are also issues with inadequate professional staff to handle records management responsibilities, high volumes of paper-based records creation, insufficient storage facilities, congestion and backlogs of closed files in offices, particularly government offices, and insufficient infrastructure to accept and preserve electronic archives.

There is also a lack of system integration and infrastructure for e-archive preservation, technical support and infrastructure upgrades (Kalusopa 2016, 6–23; Kemoni 2009; Mafatlhe 2020; Mosweu 2016, 38–67; Ngoepe and Keakopa 2011; Ngoepe and Saurombe 2016, 25; Ngulube and Tafor 2006). Katuu and Waltham (2018, 4) also investigated the challenges of the new technological environment that records professionals face as they work in increasingly complex technological environments. Many are struggling owing to a lack of capacity and frameworks for implementation (Keakopa 2013, 37–38). System upkeep is also expensive. Many organisations, however, are making significant strides in developing policies and procedures. In recent years, some countries in the ESARBICA region have developed records management strategies that focused on the procurement and implementation of systems for managing electronically generated documents and records. However, the level of development in the region varies by country, and as Ngulube and Tafor (2006, 77) point out, no one size fits all.

Presentation and Discussion of Findings

According to the data presented in this section, all countries in the region recognise the need for a regional framework to guide the procurement and implementation of EDRMSs to manage electronic records.

ICT Infrastructure for Managing Electronic Records

The data collected on ICT infrastructure revealed that the countries in the study had computers and used them in their daily business activities, resulting in electronic records primarily stored in computer memories, shared folders for divisions and units, individual PCs, and other electronic formats such as CDs. This was confirmed by responses from institutions in five countries in the region. Member-country organisations reported that they all have access to email, which is used for official communication. The data collected, however, revealed there are no guidelines for filing

email records, and officers were encouraged to print and file emails and their attachments in relevant files in such cases. Staff were encouraged to print and file in the absence of an EDRMS.

All the respondents indicated that they have information backup strategies in place, with the majority using flash drives and CDs to do so. Staff members were also encouraged to back up any important records, including emails, on external hard drives. With regard to digitisation, some had no digitisation programmes in place but indicated that they planned to implement them. For example, plans were in place at Zimbabwe's National University of Science and Technology (NUST) to digitise student records. The university has also created electronic folders based on paper record filing systems. The National Archives of Zimbabwe (ZNA) was only doing pilot projects at the time. The NUST and the ZNA have microfilms, audio-visual tapes (VHS, cassettes and films (16 and 35 mm)), CDs and OH videos on external hard drives. The National Archives of Namibia (NAN) on the other hand, already has a digitisation project in place. There are plans to digitise both paper records and audio-visual archives, but no EDRMS has been designated for that; perhaps that will be decided when resources to kickstart the project become available. Scanning is also in progress. Family Search has also been in contact with us, but they are more interested in records relating to family history, and I am not sure what software they use. So, as evidenced by the data, the region is doing well regarding the development of infrastructure.

Guidelines and Procedures for Managing Electronic Records

The second objective was to determine the availability of guidelines and procedures. According to the findings, there are no clearly approved guidelines for proper record-keeping in an electronic environment. Many organisations do not have guidelines in place to manage electronic records. For example, because there are no email policies in place, no one can authorise deletions in some cases. Staff use their own discretion in determining the disposal of electronic records because no authority is normally sought. There are no formal controls to guide disposition, so it is up to individuals to decide. There were no specific guidelines for e-records, only a general one that applied to all types of record. Some organisations are making strides because they have a dedicated IT unit staffed by IT personnel and run a hybrid system.

Responses to a questionnaire distributed to countries in the region attest to these challenges, as many organisations continue to operate without approved policies and procedures. All responses from the ZNA, for example, indicated the existence of a records management policy. Interestingly, several other policies focus on acquisition, records transfer, record retention and disposition, and a draft audio-visual collection policy. The NUST is also developing a policy.

In Botswana, organisations that have not yet developed policies follow guidelines from the Records Management Procedures Manual issued by the BNARS. The Procedures

Manual is under review. At the University of Namibia, it was revealed there is a policy, filing system and retention schedule.

The NAN, on the other hand, has a draft policy that has yet to be approved by Parliament. There is also a registry manual and a file plan. There was a willingness and pressure to develop these tools because they will be required when a system is procured.

Capacity for Managing Electronic Records

The third objective was aimed at establishing staffing capacity to guide organisations on procurement and implementation of EDRMSs. According to reports, most countries in the region delegate responsibility for managing records to records management officers, archivists, executive assistants, secretaries, administration assistants, departmental clerks, and individual office bearers, depending on the organisational structure and level of records management in the organisation. Most of these employees had training in records management except those not in the field of records management but who handle records and those at the lower levels. However, it was reported that the training provided could not redress challenges in the electronic environment and that more is required, particularly for managing electronic records and databases, and using ICTs in record management. Many people in the region still lack the competencies needed to manage electronic records, including the creation of metadata.

Current Status of EDRMS Implementation in the Region

The fourth objective was to assess the current state of EDRMS implementation in the region. The findings revealed that there have been very few attempts in the ESARBICA region to procure and implement EDRMSs. Several countries, however, have plans in place to acquire and implement the system. As a result, they are at various stages of development. Some are still unsure of the way in which to proceed. Some have vendors marketing themselves, but none have visited the implementation site, and there are no known plans to investigate other plans. They indicated that many were planning benchmarking visits to see sites of implementation once plans are finalised. For some, there were no plans to purchase an EDRMS because the priority was to improve the management of manual records before procuring an EDRMS.

For example, the NAN indicated that it was procuring an EDRMS for the entire organisation. Its staff are working on the SOUR document. Vendors also come to market their products. With regard to benchmarking, they are gathering information, which includes identifying institutions with experience using EDRMSs. However, as a government office implementing the EDRMS, the Office of the Prime Minister provides the EDRMS. With regard to digitisation projects, the NAN is digitising its finding aids using the ICA Atom and Koha, both open source software. Namibia has a procurement strategy in place. According to an update provided by the Director of the National Archives, the EDRMS is being implemented in 14 government ministries, and although they all have adopted the system, only four are operational. Their challenge is that they

lack approved procedure filing systems. Records offices are untrained and incapable of compiling file lists, let alone operating the system. When the project began, little thought was given to training and procedure development.

According to an interview with the Director of the National Archives of Eswatini, the country is implementing the EDRMS and is piloting it in five ministries, with plans to expand to two more. Under each ministry, local system administrators who will serve as champions have been identified. On-site training is taking place and a call centre has been established. The challenges are the unavailability of users for system training sessions and a slow implementation of the system in pilot ministries. In Mozambique, the Director of the National Archives stated that they were working on guidelines with the Central State Department of Records Management and the Ministry of Coordination.

South Africa emerged as one country doing well and leading in the region because it has so many sites that other regional members use for benchmarking. The country is upgrading its infrastructure and revamping its website. Malawi is also procuring a system for the entire government. According to an interview with the Director of the National Archives of Malawi, the country received World Bank funding for the EDRMS project and is recruiting technical advisors to assist with the procurement, training and implementation of the EDRMS. The project will be implemented in phases, beginning with a few pilot ministries. A consultant EDRMS trainer has been recruited to conduct EDRMS sensitisation training for various categories of public-service personnel. Processes for recruiting a consultant technical advisor for the EDRMS, who is guiding the process, have been completed. The summary of findings show that there is no implementation framework, which is required for standardisation in the region.

A Proposed EDRMS Implementation Framework for the ESARBICA Region

There are several models that have been developed which share commonalities in actions to be followed, as has emerged in the literature review under frameworks. Following discussions and updates on regional developments, there is no standard framework to guide the procurement and implementation of the EDRMS. This study proposes a framework with a phased approach that can be used in the region. The proposed framework is generic and modelled to fit different environments in the region. Member countries in the ESARBICA region share many similarities regarding historical developments, and cultural, political and economic environments. They have a similar history in archival and records management developments. Within this background, the framework can fit well in the region but is adapted to fit the different environments. The proposed framework has been further informed and guided by practical experiences and the available literature from developed regions. Keakopa (2013) argues that there is a need for developing a business case for approval by management, the SOUR document budget and partnership with IT staff.

The proposed framework is divided into three phases. Phase 1 is the preparatory stage, which focuses on preliminary administrative preparations to ensure an environment that is conducive to the procurement and implementation processes. The phase consists of the following steps: defining the scope; undertaking a situation analysis; developing a strategy and an action plan; and benchmarking. Phase 2 is the EDRMS procurement stage, which includes developing the business case, the SOUR document, the invitation to tender, and the implementation plan with a budget. Phase 3 includes a review and evaluation to redress any emerging challenges that arise during implementation. Figure 1 depicts the proposed framework, which is further explained in the sections that follow.
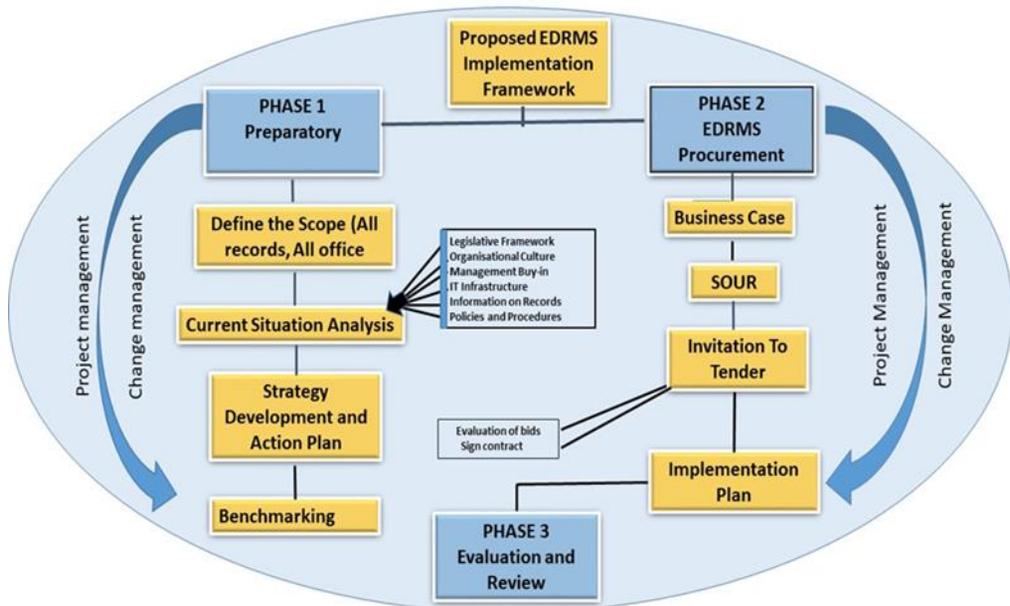

Figure 1: Proposed EDRMS implementation framework

Phase 1: Preparatory Stage

Defining the Scope

It is important to understand the scope of the records management project to prepare for implementation. The scope should be broader and should cover two main areas of records creation and records location. Firstly, it should cover all records regardless of medium or format. Secondly, it should cover records in all offices, including head office and all regional offices.

Conducting the Current Situation Analysis

In addition to the broader scope of the programme, it will be important to understand the organisational environment, as this may have an impact on implementation. The organisational culture, the legislative and technological environment and the availability

of resources support implementation regarding infrastructure. Business operations and challenges in existing manual and electronic systems will aid in the identification of an appropriate solution. All procedures for classification, retention and disposition and an approved records management policy should be available. Finally, the availability of funding for resources is a critical factor, as proper ICT infrastructure will be required.

As part of this phase, there will be a need to engage staff and to collect data on the regulatory framework, existing information systems, physical infrastructure, resources, skills and training needs. Interviews and direct observation will also be used to understand organisational operations. The data collected will help to understand business processes that generate records. Relevant documents on legislation establishing the organisation, annual reports, corporate and IT strategies, records management standards (ISO 15489) and other document management standards have to be reviewed. The raw data will be analysed to produce the report on the current situation analysis or the records survey report. Ngulube and Tafor (2006) have noted the importance of undertaking surveys as key to establishing records management programmes in the region. These are conducted irregularly.

Management Buy-In, Support and Commitment

Management support is also critical as it will ensure buy-in to the business case justifying procurement of such a system.

Developing the Strategy and Action Plan

The action plan should include objectives, with each having a series of activities to be undertaken. These objectives and activities should be derived from a records management strategy and include the following:

- Raising awareness: It is important to have all stakeholders support and play a role in the creation and management of records. The phase will involve interviewing relevant personnel in the organisation to ascertain the use of records, the levels of such use, and the qualifications to determine records management training required by staff for competent records management.

- Policies and procedures (objective 2): The availability of policies and procedures is important for compliance. Approved classification and retention schedules for a hybrid environment are required. The policies and procedures, functional classification systems, and records retention and disposition schedule should be provided to the preferred vendor.

Phase 2: Procurement and Implementation

Phase 2 of the framework looks at the actual procurement process of tendering, awarding and implementation, which includes project management. As part of preparations for procurement and implementation of an EDRMS, a strong business case has to be developed and presented to management. It is advisable that a system of this

magnitude be made part of a national agenda. It should be followed by developing the SOUR document to guide vendors during the tender process, an invitation to tender, and an implementation plan.

Preparing the Business Case

The business case should justify the need and funding for the EDRMS. It should state clearly why the EDRMS should be part of the national agenda.

Preparing the SOUR Document

The SOUR document should be developed to guide the procurement of a system for the management of electronic records. The first part of this document covers the SOUR overview and business environment. The records management environment and records management processes and tasks are also described. By describing these processes, bidders are invited to gain an appreciation of the main focus for the provision of a solution for records management in the Records Management Unit while taking cognisance of the other processes that may be part of records in the business units. The first part of the document therefore covers the main business processes. The second part of the document provides a list of the desired functionality of the solution expected to deal with records management across all functions.

Preparing the Invitation to Tender

Working closely with the procurement team and the IT division, the business team will develop the invitation to tender and clearly specify the functional and technical requirements. There are available generic guidelines that can assist or be referred to. The SOUR document is divided into two parts. Part 1 consists of records management functionalities and Part 2 consists of technical requirements by the IT department. The records professional must specify the functional requirements for record-keeping, whereas the IT professional must specify the technical requirements, primarily the IT environment in which the system will be implemented. Professional standards for records management that must be followed should be clearly stated. There are many vendors that are marketing records management systems but who are not compliant with the required standards. So it is important to ensure that the organisation is aware of professional standards and other guidelines. In this case, ISO 15489; DoD 5015.2 and MoReq2 apply. Other standards are specific to different countries.

References and site visits to see similar projects that have been implemented are also important to measure the capability of the vendors. Benchmarking is important to learn from what other organisations and countries have done in similar environments. According to data collected from a few countries in the region, many organisations have plans in place for benchmarking visits once they are ready for procurement. This will be followed by an evaluation and tender awarding.

Implementation Plan

Once the system has been procured, implementation should begin with pilot testing by the business unit and IT division to ensure that everyone understands the system before it is rolled out and integrated. Piloting should be the first step in the implementation process. When the friendly testing is complete, a division or unit should be selected for integration. Management should be part of the first team to use the system. A communication strategy should then be developed and rolled out to the rest of the organisation.

Change Management

The project office, if available, could be used to guide the transformation and to manage the change. Training will be required as part of the change process. The change management plan will provide standardised methods and procedures to meet the requirements of change management. The EDRMS project will alter organisational work processes because systems and strategies must evolve for the organisation to achieve its goal. The change management plan will outline the way in which to manage the change process, including communication, training, awareness, and identifying support structures for implementation.

Phase 3: Evaluation and Review

It is essential that the project be reviewed to redress any emerging challenges. Change management includes training, monitoring and evaluation, and communication about the changes. As a result, the proposed model can be tested, reviewed and improved.

Conclusion

The discussions in this article have clearly revealed that most organisations are still in the early stages of developing records management strategies, including management of electronic records and procurement of EDRMSs. The article proposes an integrated framework for successful implementation of electronic records management systems. It is important to take the right steps, which can be achieved by starting slowly. Rushing the implementation just because of a budget can result in discovering that many steps had been omitted, which will require a restart. One such example is the NARMS project by the BNARS, which had to be aborted and resuscitated four years later. Member countries in the region could perform better if they shared their experiences, adhered to a generic regional framework, and forged partnerships and cooperation with the ICT industry.

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