

# Electronic Records Management at the Department of Justice and Constitutional Development, South Africa: Towards E-government

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## Abstract

Electronic records play a vital role in organisations, as they serve as evidence of organisational transactions and support openness, transparency and improved decision-making. Improved electronic records management ensures that e-government is available to citizens. This paper focuses on the status of electronic records management as it relates to South Africa's Department of Justice and Constitutional Development (DoJ&CD), with the purpose of encouraging more effective public access to information. The qualitative research applied in the study that directed this paper, was founded on the principles of interpretivism. Interviews with electronic records management professionals yielded information on current electronic records management practices and how these could be improved to support and expand e-government activities at the DoJ&CD. Within an e-government environment, the management of electronic records requires a vibrant and organic relationship with organisational affairs to ensure transparency and accountability. Findings indicate that, while the DoJ&CD has been implementing various systems to support electronic records management, there has been no integration of the systems to promote e-government. Guidelines to support and expand electronic records management are crucial at the DoJ&CD to support judiciary activities. The findings support the development and implementation of structured and organised electronic records management guidelines, including the implementation of an integrated electronic records management system, updating of the existing file plan, improvements of ICT infrastructure and extended training opportunities for staff. The development of electronic records management guidelines is imperative to ensure that electronic records can be safeguarded for future access.



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## Introduction

Ambira (2016, 13) explains that electronic records management refers to the use of electronic capabilities to manage records. Electronic records refer to records created in or transformed into a digital format, and then stored electronically by means of computer technology. Moreover, electronic records management comprises the use of technology to radically advance the performance of organisations in improving the effective management of electronic records. Electronic records management initiatives are centred on re-imagining operational processes and business models to improve the accessibility of electronic records (MIT Centre for Digital Business and Capgemini Consulting 2011, 5). Lamont (2020, 27) asserts that the effective management of electronic records is imperative because it also supports more advanced functions associated with the transformation to promote accountability, inclusivity, transparency, and good governance.

Effective records management practices are the foundation of access to government records in the digital environment to support e-government. E-government offers an opportunity to bring the citizenry closer to government departments. Joseph and Olugbara (2017, 1) assert that e-government emanates from the need for efficient service delivery. Furthermore, it is based on grasping the potential of ICT to deliver improved government services to citizens, businesses, as well as public organisations. Within the context of the Department of Justice and Constitutional Development (hereafter DoJ&CD), e-government is the backbone supporting the engagement between the department and citizens in need of judicial records. The outcome of not managing electronic records properly, may be that records become inaccessible and could even be destroyed prematurely (Moloi and Mutula 2007, 290). Abioye (2014, 24) explains that without the effective management of electronic records, the administration of justice would be impossible, as electronic records form the bedrock upon which the judicial service in any country is based. Without records as evidence, the DoJ&CD would struggle to conclude cases. The survival of the judiciary system is, therefore, closely related to the availability and proper management of records, and in the twenty-first century, the proper management of *electronic* records.

As records created and stored by government organisations, such as the DoJ&CD, are regarded as public resources, citizens are entitled to access such information to ascertain the accountability, transparency and good governance applied by government organisations. Ngoepe (2014, 7) observes that effective records management ensures that records are not merely kept, but treated as resources and assets to increase the efficiency of government organisations. As a key department of the South African government, the DoJ&CD has an obligation to ensure that its records are managed in line with the applicable prescripts of promoting effective and efficient service delivery. For the DoJ&CD to remain credible among the citizens of the country, records involved

in court activities and the operations of the DoJ&CD must become paperless. If records are not available in electronic format, e-government will not succeed and citizens' trust in judiciary services will diminish.

## Problem Statement

In court administration, Saman and Haider (2012, 10) state that the large quantity of records and lack of human resources create the utmost challenge to the court officials to handle case management effectively. Given the importance to access judiciary records, the need for effective records management systems is growing. Such records management systems are imperative, as explained by Ngoepe and Maluleka (2015, 289), in that poor record-keeping contributes to lower conviction rates and a justice system that fails to secure the trust of citizens. This is one of the reasons why government departments, such as the DoJ&CD, are moving to provide wider access to records and especially in electronic format. Motsaathebe and Mnjama (2009, 173) state that court structures that are efficient and accountable are generally recognised as critical components in the delivery of justice to the people. Delays in registering cases, locating records, and filing paperwork all have a significant effect on citizens' legal rights. Furthermore, the administration of justice and the defence of citizens' rights are also dependent on records. A study conducted by the International Records Management Trust (IRMT 2002) revealed several concerns about the availability of electronic records to support the judiciary in South Africa, including dockets not available during court proceedings, investigating officers removing dockets making them inaccessible to other parties, and missing documents and case files. The exploration of ways in which to improve the accessibility of records, specifically in digital format to ensure access by various role players, becomes the backbone to support the effective implementation of the judicial process (Raaen 2014, 29). Effective electronic records management guidelines in the judiciary are imperative to support judicial decision-making, documentation of legal status and rights, public access to court proceedings and decisions, enforcement of court orders and judgement, as well as the preservation of records for appellate review and historical evidence. As explained by Hsu, Chen, and Wang (2009, 461), the implementation of a system to ensure the effective digitisation of records to enhance accessibility is imperative to promote e-government services.

According to Sharif, Irani, and Weerakkoddy (2010, 936), the implementation of an e-government strategy reduces the boundaries across government departments, and this ensures an increase in access to electronic records. This, in turn, improves transparency and accountability. It also speeds up the decision-making processes within departments. Sound records management practices form the basis for ensuring access to government records in a digital environment, and are imperative to support and expand e-government activities. As purported by Shepherd (2006, 7), in organisations where records are not properly managed, information is often inadequate for the purposes for which it is needed. For the DoJ&CD to remain credible among the citizens of the

country, records of all forms and formats that are created and received in pursuance of its activities, must be managed in line with the National Archives prescripts. If the DoJ&CD is unable to manage its records—and in particular its electronic records—e-government will not succeed and citizens' trust in the justice system will crumble. Proposing electronic records management measures may be the first step to ensure that records are digitised and arranged in a format that will support improved access and usage towards e-government. In exploring this topic, the main research question that receives attention in this paper is: What measures can be put in place to ensure that electronic records management requirements are met to support e-government?

## Objectives of the Research

Linked to the problem explained in the previous section, the purpose of the research related to this article was to recommend electronic records management practices that can be developed to promote e-government at the DoJ&CD. Linked to this purpose, the research objectives that informed the context of the information provided in this article, are:

- Exploring the current state of records management at the DoJ&CD.
- Proposing a plan of action to promote the improved management of electronic records at the DoJ&CD to support e-government.

## Conceptual Framework

Exploring the key research problem requires the identification of a conceptual setting that could provide a set of basic guidelines against which to contextualise the problems. As purported by Ngulube (2018, 9), a conceptual framework provides key concepts founded on various theories/models/frameworks to inductively propose components to be researched within a specific context. Several theories/models/frameworks were considered during the development of the conceptual setting. These included the requirements of the management of electronic records by the National Archives and Records Services of South Africa (NARSSA 2006), the UN five-stage e-government maturity model (Fath-Allah et al. 2014, 71), and the Model Requirements of Electronic Records (MoReq) (Fresko 2008). Components of these theoretical foundations were considered to provide a foundation to propose electronic records management requirements that can support e-government. In essence, components that were identified related to policies and procedures, ICT infrastructure, training, authentication, and access. Policy and procedures to promote effective electronic records management are important to expand on the commitment to ensure a structure that supports improved access to electronic records by all role players, according to the NARSSA framework. The UN five-stage e-government maturity model and the MoReq theory support the establishment of a stable and effective ICT infrastructure, as e-government is reliant on stable ICT infrastructure. The training component mentioned by both the NARSSA (2006) and the MoReq theory (Fresko 2008) was deemed relevant for this research, as

the DoJ&CD requires the training and re-skilling of its staff members to meet the challenges and requirements of electronic records management. Authentication and access were important components to support the retrieval of valid and reliable electronic records that are arranged according to a functional file plan to promote easy access to the intended audience.

## Research Methodology

Linked to the key components of the conceptual setting, the study adopted a qualitative research approach embedded in an interpretivism paradigm. Thanh and Thanh (2015, 24) explain that interpretivism as a worldview allows researchers to view the world through the perceptions and experiences of individuals engaged in the research topic. The qualitative approach associated with interpretivism often produces rich reports that are necessary for researchers to obtain a full understanding of the context of the research topic (Patton and Cochran 2002). Flick, Von Kardoff, and Steinke (2008, 21) explain that qualitative research is more open and thereby requires more involvement from the researcher to gain understanding related to a particular societal aspect. Qualitative research strives to clarify and manage data without losing its nature. Atieno (2009, 16) observes that qualitative research is highly appropriate for questions in which the pre-emptive reduction of the data will prevent discovery. The total population of personnel at the division Access to Information and Records, was 82; however, not all of them were involved in records management practices. Purposive sampling was used to identify participants who could provide insight into the measures needed to improve electronic records management related to the judiciary (DoJ&CD) to promote and enhance e-government. Participants included records management experts at the DoJ&CD as well as the National Archives of South Africa. In total, 13 interviews were conducted with staff members from the divisions Access to Information and Records Management (8); Core business: Master of the High Court and Court Services (3); and Records Management and Information Systems (2). Data were collected through in-depth interviews. Walliman (2011, 100) states that one of the advantages of interviews is that they place the researcher in a good position to judge the quality of the responses. The value of in-depth interviews is also that the actual problem can be explored in depth and detail, thereby truly applying the interpretivism paradigm that informs the research.

## Literature Review

According to Ajegbomogun (2010, 62), digital records (born digital) are generated and stored by means of computer technology, while digitised records are paper-based records that have been converted from analogue into digital format. Within the context of managing electronic records, both digital and digitised records should be considered as part of the records management process (Muchaonyerwa and Khayundi 2014, 41). Electronic records thus comprise a combination of records that encompass text, data, graphics, images, or audio information that are created, maintained, modified, or transmitted in digital format via various technologies (National Archives of the United

Kingdom 2021). For the purposes of this article, electronic records management is used as an overarching term to refer to the management of digital and digitised records.

In the management of electronic records, Abbott (2002, 15) explains that tools such as metadata or blockchain technology can be used to ensure the authenticity and validity of records. The use of such tools is imperative to ensure that records are appraised and organised in a manner that improves accessibility to promote e-government. However, Ngoepe and Katuu (2017, 1) observe that, while electronic records management offers opportunities to support remote access to electronic records and efficient retrieval by means of multiple search criteria, electronic records have not always been managed effectively. One of the reasons for this occurrence is, according to Muchaonyerwa and Khayundi (2014), linked to the speed at which electronic records are being created. Another reason, proposed by Toyo (2017, 1), relates to the speed at which technology develops and the lack of knowledge of technological developments by records management officers. Maseh (2016, 95) explains that the effective management of electronic records is dependent on adequate training, so that records managers become specialised in the area of electronic records management and the technology tools associated with it.

For organisations such as the DoJ&CD, the effective management of electronic records is thus dependent on creating an environment wherein electronic records management techniques are practised by experienced and well-trained staff. Towards achieving such goals, Mnjama and Wamukoya (2007, 280) propose a records management integration process to ensure the effective management of electronic records. This integration process includes maintaining a hybrid system and allowing the gradual integration of an electronic records management system aligned to legislation and institutional policies. Aligning the electronic records management process to legislative requirements is important to provide a clear vision of the focus of the electronic records management process. It also enhances interrelationships within the organisation, so as to discourage working in “silos.” Knowledge of legislative requirements that inform electronic records management practices, supports colleagues within an organisation to work together towards a common goal and optimises the use of knowledge and resources to achieve the vision of an organisation.

Katuu and Van der Walt (2016, 6) explain that the legislation and regulations related to the management of records (regardless of form and format) require adequately defined roles, responsibilities and obligations of both public entities and managers who run them. In South Africa, the National Archives and Records Service of South Africa Act No 43 of 1996 (NARSSA Act), as amended, clearly states that records of government bodies need to be managed in such a manner that the records are accessible—regardless of form or medium. As a government organisation, the DoJ&CD is expected to comply with this legislation in relation to the management of its records and is expected to develop and implement an electronic records management policy in line with the processes and procedures proposed by the National Archives and Records Service of

South Africa (2007, 73). Kyobe, Molai, and Salie (2009, 4) suggest that such an electronic records management policy is key to clarify the responsibility of managing records within different sections of the organisation in terms of retention, ownership, control, classification and the overall management of electronic records. According to the NARSSA Act (1996), such a policy should not just link to legislative requirements, but also the overall mandate and objectives of the organisation it is associated with. The success of an electronic records management policy is, however, dependent on the implementation of the policy through practical processes and procedures (Mnjama and Wamukoya 2007).

Such practical processes and procedures differ, according to Osei-Kojo (2017, 8), based on the scope and extent of electronic records management practices to be implemented and maintained within an organisation. What is, however, of importance is that a technology infrastructure must be put in place to support the effective management of digital records. Toyo (2017, 1) explains that computer-related technology provides the foundation of the processes, storage methods and access opportunities to gain admission to electronic records. A well-structured and well-maintained ICT infrastructure is imperative to offer solid support in terms of systems infrastructure (hardware), network connectivity, as well as programs (software) required to ensure the effective management of electronic records.

In an electronic environment, a stable network connection is imperative to support digital transformation. Hardware must be maintained and managed in line with the ICT developments and the needs of an organisation. This is important because, as Osei-Kojo (2017, 8) observes, a weak ICT infrastructure undermines the potential of offering public service quality and promoting e-government. It is impossible to manage and ensure accessibility to electronic records without the appropriate hardware and software needed to create an infrastructure for the storage and retrieval of electronic records. To this effect, Duff (2001, 229) asserts that electronic records management systems are dependent on the continuous upgrading of hardware and software. Furthermore, electronic records require constant migration and conversion to ensure that records are preserved for long-term and future access. For instance, an organisation may need to convert sound recordings from audio cassettes into wave, mp3 or other computer readable formats, for the information to be preserved and made accessible. Such conversions do not only require access to the latest technological tools, but also sound knowledge of the use of these tools to ensure that migrated records remain, for example, accessible.

Proper electronic records management skills must be developed and expanded through continuous training, education, staff development courses, and exposure to new technological tools (Mutsagondo and Ngulube 2018). Training and skills development needs to be a continuous undertaking, as technologies supporting electronic records management, continue to advance (Maseh 2016, 95). Vednere (2009, 40) explains that the management of electronic records necessitates changes to the normal way of

working. The focus should not be on policies and procedures only, but on the acceptable way of dealing with electronic records within an environment of constant technological advancements. In other words, while one can acknowledge that policies and procedures are important, training should prepare electronic records managers to apply policies and procedures in a world where change is a constant (Chigariro and Khumalo 2018, 170). Important aspects such as the new or different ways of creating and managing electronic records should form part of continuous training and development opportunities, while the roles and responsibilities of personnel in the digital environment should be clearly articulated to ensure the development of a skills set that truly supports the management of digital records towards realising e-government (Mutula and Mostert 2008, 45).

## Key Findings: Electronic Records, Management Practices at the Department of Justice and Constitutional Development

A five-step process was followed to analyse and interpret the views from participants who engaged in this research. Data were prepared and organised, transcribed, main themes identified, codes assigned and eventually interpreted.

Linked to the first objective of this study, the key findings discussed in this section deal with the status of records management at the DoJ&CD. One of the most important viewpoints expressed by participants was that, even though the DoJ&CD is engaged in electronic records management, the extent is not sufficient to support the judiciary process. Many records are still created in paper-based format and as these are often kept in the offices of the creator, the information is inaccessible to other role players within the judiciary. It was also evident from views shared by participants that many divisions within the DoJ&CD are implementing their own electronic records management systems, without there being an integrated approach coordinated by the department's records management office. One such example is the PEAS system that the Master of the High Court implemented to manage documents related to deceased estates. Inconsistency and the "silo" implementation of digital records management systems, with no coordination between branches of the judiciary, will result in an extended limitation of access to records. Even though records may be digitised, they are still inaccessible to various sections of the judiciary as no coordination exists between branches. The implication is that there is a lack of project coordination, and no systematic process is followed to ensure the effective management, preservation and disposal of records. This poses a risk, as records may not be managed in line with the NARSSA Act and may be lost due to a lack of approved preservation strategies. To eradicate such practices, Mnjama and Wamukoya (2007, 280) emphasise the need for following an integrated records management process to offer opportunities for a file plan to be put in place in line with policy guidelines to break down the "silo" mentality of managing records within different divisions.

When asked about the existence of a policy that may coordinate and standardise the management of electronic records, participants indicated that though a basic records

management policy is available at the DoJ&CD, it does not make provision for the integrated management of electronic records. Due to the lack of clearly stipulated guidelines in the policy pertaining to the management of electronic records, participants indicated that the file plan that should guide the management of electronic records, lacks depth and detail. A file plan is available for national and regional offices, but it is outdated and does not cater for the management of electronic records and other functions of the DoJ&CD. The existing file plan also does not cater for amendments in legislation such as the Administration of Estates Act; compelling divisions such as the Master of the High Court to implement an unapproved file plan that caters for the disposal instruction of electronic records as per the guidelines of the Administration of Estates Act. As the file plan is one of the building blocks of an effective electronic records management system (Gregory 2005, 83), Mnjama and Wamukoya (2007, 275) propose that a file plan be regularly updated in line with organisational functions. This aligns with the NARSSA requirements indicating that a departmental file plan should be reviewed to include all the functions of a department. Participants indicated that in line with the NARSSA requirements, a new file plan had been created, but at the time of publication of this article, it had not been implemented.

Once the newly revised file plan has been implemented, the success of managing electronic records will, according to Maseh (2016) depend on the coordination in implementing a standardised records management system throughout the judiciary. In this context, Ngoepe and Makhubela (2015) purport that it is the responsibility of well-trained records management officers to take stewardship in the coordination of the process. Migration strategies and clear guidelines towards integration into a single records management system must be established, communicated, and managed throughout the DoJ&CD. Hsu et al. (2009, 462) state that without proper planning and adoption, electronic records created through modern technology are likely to become inaccessible. Through the establishment of guidelines, records can be created and managed in a structured manner for the duration of their life cycle. Chigariro and Khumalo (2018, 161) assert that without strategies in place to manage electronic records in complex environments, organisations will invest poorly in records management systems and will fail to achieve set outcomes due to the lack of strategic direction.

According to the MoReq model (Fresko 2008), key components should form part of the strategic direction that should be established to ensure the effective management of electronic records. These include processes and procedures to ensure the authentication of electronic records, access and control, as well as security measures. In probing participants on the current processes and procedures, one participant indicated that:

When the department implements electronic records towards e-government, the department must protect information from viruses and hacking and also from people being able to manipulate or change the information. The department must ensure that the records and information are protected from any form of manipulation, hacking or other threats to maintain their authenticity. The department must ensure that the quality of content is of high standard.

Various other participants presented similar views and explained that measures should be put in place to monitor all actions performed on each digital record from the time of creation until disposal. This requires that the electronic records management system must be able to produce audit trails, indicate who performed what action, on which date and for which record. Ngoepe and Makhubela (2015, 296) observe that one of the leading projects in South Africa is the implementation of an e-justice system, which is aimed at harnessing balanced technology to enhance the efficiency of legal procedures. However, like the views of participants, Ngoepe and Makhubela (2015) indicate that this system is not integrated with the system used by the police and correctional services, which impedes access to records and compromises security and control components to ensure the authentication of electronic records included in the e-justice system.

The lack of such a system also has a negative impact on the promotion of e-government. As asserted by Wilkins, Swatman and Holt (2009, 45), poor electronic records management practices are a hindrance to the effective management of electronic records. This, in turn, negatively affects the promotion of e-government within the DoJ&CD. As indicated by one of the participants: “The strategy of the department should fully support the implementation of e-government. We therefore need to have a proper document and records management system to support e-government.” To ensure the successful implementation of an electronic records management system towards e-government, the DoJ&CD should ensure that critical elements are in place and managed accordingly. Such critical elements relate, according to Mnjama and Wamukoya (2007, 277), to creating an infrastructure wherein electronic records and the information they contain, are readily accessible as an asset that must be management and protected. E-government relates to the use of ICTs to enable the government to deliver services and information more effectively, to enhance the accountability of the public administration, and to strengthen economic performance (Muchaonyerwa and Khayundi 2014, 41). Therefore, the importance of establishing an integrated electronic records management system to support the activities of the DoJ&CD cannot be over-emphasised.

The importance of an integrated electronic records management system is emphasised by Verhoef et al. (2019, 5), who explain that Information Technology (IT) infrastructure must support communication and data flow in an orchestrated manner to support the digital value chain. When asked about their perception of the state of readiness of ICT infrastructure to support electronic records management, participants believed that while some resources may be available in the urban areas, the rural areas fall behind. Participants also indicated that the lack of integration between the systems within the department is a challenge. Participants were of the view that the DoJ&CD is lacking behind in the context of the Fourth Industrial Revolution (4IR), which may result in the loss of information contained in outdated technology systems. Mnjama and Wamkoya (2007, 278) state that as part of assessing the e-readiness in terms of the ICT infrastructure to implement electronic records management, an analysis of the ICT infrastructure of an organisation is important. Computer capacity, servers, hubs, bandwidth, security and storage facilities should be reviewed to determine the extent of

the capacity available, and the upgrades required to implement an integrated electronic records management system. Participants proposed that further assessments may be required to evaluate the current ICT infrastructure to determine the readiness of the DoJ&CD to implement an integrated electronic records management system.

However, in line with the views of Mosweu and Ngoepe (2019, 18), it is not just the ICT infrastructure that requires assessment to determine the e-readiness of an organisation to implement electronic records management, but also the skills and expertise of its staff. Research by Mutsagondo and Ngulube (2018) shows that records management personnel lack the capacity to manage electronic records. In line with the ISO 15489 standards, Kalusopa and Ngulube (2012, 9) assert that training in the management of electronic records should be ongoing to update and maintain the skills of records management officers. When asked about regular training in the management of electronic records, eight participants indicated that they had never received training. For records management personnel at the DoJ&CD to be equipped with the competencies and skills required, they need to be trained adequately on the management of electronic records. In order to fulfil the need for training related to electronic records management, the International Council on Archives developed a Digital Records Curation Programme (ICA 2016), focusing specifically on digital records management planning, authenticity, reliability, metadata, and cloud computing. This is a short course for which records management officers at the DoJ&CD can enrol to improve knowledge and skills related to the management of digital records. In addition, the University of the Western Cape and the University of South Africa offer formalised courses in digital curation, information and knowledge governance and digital records forensics that records management personnel can enrol for to obtain formal qualifications in the field of electronic records management.

## Key Recommendations to Improve Electronic Records Management at the Department of Justice and Constitutional Development

Linked to the second objective of this research, this section proposes measures that can be put in place to ensure that the DoJ&CD meets electronic records management requirements to support e-government. Results from the research revealed that the DoJ&CD needs to ensure the approval and urgent implementation of a file plan that caters for the management of paper-based, digitised and digital records through an integrated electronic records management system to support the accessibility and retrieval of electronic records. For this to be realised, support from management is imperative; not just in terms of backing such a project, but also by providing sufficient funding and advocating the importance of endorsing an electronic records management system.

Buy-in from staff, through training, is imperative to ensure that staff members embrace the use of an electronic records management system. In conjunction with the Human Resources Division, it is recommended that the Records Management Division starts

working on a change management strategy to prepare the employees for the implementation of an integrated electronic records management system towards e-government. The change management strategy should focus on the implementation of the new file plan and on understanding the employees' skills and training needs. In order to implement the new file plan, it is recommended that the department ensures that all new files are created by using file reference numbers from the new file plan. It is also recommended that the staff members exercise caution—particularly at the beginning of the implementation—to ensure that correct file reference numbers are allocated for each of the files. As explained by Ngoepo (2017, 37), this file plan must align with the National Archives and Records Service Act, Section 11(2), as well as any other legislation which indicates that public records should be made accessible to enhance transparency and accountability.

The Records Management Division must play a key role in supporting employees to understand the requirements of legislation and the practical implementation thereof when identifying and utilising file reference numbers. To avoid media degradation, and in line with NARSSA requirements, records management officers at the DoJ&CD should ensure that all media are stored, used and handled in appropriate environmental conditions. The ongoing migration to new technology should occur on a regular basis and before the expected disposal of records. Towards promoting e-government, basic information should be provided on the departmental website related to public policy, governance, laws, regulations, relevant documents, and certain services. Towards protecting its records, the DoJ&CD should implement security and control measures to protect, but also to support access to electronic records. Towards this goal, an electronic records management system should support audit trails for all activities involving records and the related documents or data, to ensure legal admissibility.

## Conclusion

NARSSA has set requirements and endorses certain standards for the management of electronic records. These requirements and endorsed standards are imperative to ensure that electronic records at the DoJ&CD are managed in such a way as to maintain the authenticity of electronic records. This authenticity is of particular importance when managing judiciary records to support digital records forensics. Based on the limited skill due to a lack of training for records management personnel and the evolving technology, which both impact the management of records, there is a need for creating opportunities for records management staff to improve their expertise in terms of electronic records management. Research on the training needs of the records management personnel to prepare them for the challenges and demands involved in the 4IR, is a key focus area to ensure effective electronic records management within the DoJ&CD. Further research is also needed to encourage the sharing of information within the justice cluster departments towards e-government. There is also a need for research exploring electronic records preservation strategies in a 4IR environment related to the larger South African government context.

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