

The proficient use of Enterprise Content Management systems for access and use of records for decision-making

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Received: 28 March 2023

Revised: 13 June 2023

Accepted: 01 September 2023

Abstract

The paper critically reviews literature on Enterprise Content Management Systems (ECMS). The paper argues that previous studies do not address the complete implementation process of the ECMS. The focus of previous studies has been on the pre-deployment and the actual use of ECMS, leaving out the proficient use of the ECMS after deployment. This paper reviews 43 publications on factors that contribute to the proficient use of the ECMS to access and use records with the aim of determining the current state of knowledge on the subject. The paper reveals that continuous ECMS training; change management and awareness programmes; access to the system by all staff; a robust Information and Communication Technology (ICT) infrastructure for continuous accessibility of the system; integration with existing records producing systems; compliance with legislation, standards, and policies are enablers for the proficient use of ECMS. However, publications on access to the ECMS by all staff and compliance with legislation, standards, and policies, were scarce. Therefore, an agenda for future ECM research is suggested. In addition, the paper proposes a conceptual framework to guide organisations on success factors to consider before, during, and after deployment of an ECMS to facilitate access and use of records. The paper is significant in that it identifies gaps where further research is needed as well as applicable research approaches to be explored in future studies. In addition to contributing to electronic records management and ECM research, the proposed conceptual framework may be used for future studies and to guide ECM strategies.

Keywords: Access, electronic records management, enterprise content management, enterprise content management strategy, enterprise content management system, proficient use

1. Introduction

Records, regardless of medium or form “are created or received during the conduct of business and contain evidence of organisational activities” (Momoti 2021). Records are sources of evidence that are important for decision-making, transparency, and accountability. Thus, records must be continuously accessible for use when needed. Information and communication technologies (ICTs) have provided an opportunity for applications to improve access to records, such as Enterprise Content Management Systems (ECMS). The author noted through discussions at workshops and conferences that several organisations in South Africa are resorting to ECMS to improve records management (RM), among other things. The interest in using ECMS was noted in an earlier study by Katuu (2012) that assessed how enterprise content management (ECM) was implemented in South Africa. The study discovered that eight out of ten institutions had implemented the RM module of the system.

Hullavarad, O'Hare and Roy (2015) and Rockley and Cooper (2012) assert that an ECMS is an ICT application providing various functionalities specific to an industry for the systematic analysis and control of all organisational information throughout its life cycle. Harr, Vom Brocke and Urbach (2019: 1415) list document management, image-processing applications, content workflow, RM, web content management, and social content as the core functionalities of an ECMS. Due to its RM capabilities, an ECMS is expected to improve RM processes while complying with legislation. It is important to note that ECMS is sometimes used interchangeably with the term Content Management Services Platforms (CSPS). The term ECMS was changed to CSPs to include emerging technologies, such as cloud computing, social collaboration, mobile and data analytics to enhance content management (Backaitis, 2017; Clarke, 2018). However, Mixon and Brush (2022) argue that CSPs manage transactional content to solve a particular problem, whereas an ECMS manages all forms of content within the enterprise, regardless of its type or location. For this paper, the term ECMS is preferred because of this explanation. Additionally, the term is commonly used by archives and RM scholars, practitioners, professional organisations such as the Association of Intelligent Information Management (AIIM) (2022) and the Society of American Archivists (2022).

2. Background

Momoti (2021) recommends the use of ECMS for accessing records to improve organisational efficiency and decision-making. Organisational objectives for implementing an ECMS are important in realising its positive benefits after its deployment. However, most research discovered by the author focuses on the actual usage of ECMS, as opposed to its proficient usage. Veiga, Keupp, Floyd and Kellermans (2014) found scant body of literature on the proficient usage of enterprise systems. Thus, this literature review sought to contribute to knowledge on the proficient use of ECMS.

The actual use of an ICT system refers to the time spent using the system to determine positive adoption. Whereas proficient use refers to the ability, effectiveness, and confident use of a system's core applications for what they were intended for by the designers and users with positive outcomes. The system use proficiency includes being able to effortlessly adapt and try out new technological upgrades amid digital technology continuous changes. While it would be unrealistic to expect all ECMS users to be proficient, it would be justified to expect the chief users such as those who use the system on a daily basis (creators of records, RM staff and decision makers) to be proficient for positive outcomes of the system.

3. Problem statement

Despite the somewhat positive benefits of ECMS for RM, published empirical research confirming improved RM and access to records post-implementation of the system is scarce. Instead, most literature focuses on pre-implementation of an ECMS (Rockley & Cooper 2012; Sprehe 2005), technological aspects (Katu 2012), evaluation (Abdurrahman, Owusu & Bakare 2019; Western Cape Government 2018), and implementation (Hoëseb & Seymour 2017; Hullavarad et al. 2015; Katu 2015, Montesinos-Rosales, Salas-Villacorta, Mauricio-Sanchez & Raymundo-Ibañez 2019, Rosman 2020; Salamntu 2016; Simons & Vom Brocke 2014). In addition, some studies focused on the use of the system rather than its use for what it was intended for (Veiga et al. 2014). Mohlala (2020) and Momoti and Dingayo (2022) state that although ECMS were used to retrieve records in some provincial government departments in South Africa, challenges were identified that affected the systems' optimum use. Momoti and Dingayo (2022) recommend continuous system training; change management and

awareness; access to the system by all staff; a robust ICT infrastructure for continuous accessibility; integration with existing ICT systems; and compliance with legislation, standards, and policies for optimum or proficient use. Due to the scarcity of literature on proficient use, the researcher decided to conduct a literature search that used the aforementioned recommendations as themes to examine factors contributing to the proficient use of ECMS to access and use records. The literature review aimed to reveal ECMS studies to guide other researchers and practitioners in implementing successful ECM projects. The literature review was significant since it contributed to RM and ECMS research and identifies gaps for future research. Moreover, it contributed to the scarce body of knowledge on the proficient use of ECMS, which can be used by practitioners when deploying the system. Additionally, future researchers may use the proposed conceptual framework for their studies.

4. Research objectives

The objectives of the study were to:

- determine continuous ECMS records management training in the literature
- assess the impact of change management and awareness programmes on ECMS proficient use as discussed in the literature
- assess ECMS access by all staff as discussed in the literature
- analyse robustness of ICT infrastructure for continuous access to the ECMS
- determine integration of ECMS with other records producing applications
- examine ECMS compliance with records management legislation, standards, and policies.

5. Methodology

This paper employed the integrative literature review method. Snyder (2019) explains that an integrative literature review provides an overview of the knowledge base, critically reviews literature, provides new insights, and develops a conceptual framework or expands on existing theory. Lubbe, ten Ham-Baloyi and Smit (2020) add that integrative literature review includes primary and secondary research, such as opinion papers and policy documents. The literature for this paper was reviewed critically to show the relationship between previous studies, identified gaps, and methodologies for future research. The literature consisted of books, book chapters, conference papers, journal articles, ECM industry expert insights, evaluation reports, and theses published between 2012 and 2022. A meta-analysis review of ECM research by Alalwan and Weistroffer (2012) focused on literature published between 2001 and 2011; hence, this study excluded literature from that period to incorporate recent studies and avoid re-inventing the wheel. Alalwan and Weistroffer's (2012) methodology for the selection and analysis of studies for their literature review was replicated in this paper because of its rigorousness and non-bias.

5.1. Literature review phases

The literature review was conducted in five phases as shown in Figure 1. The first phase involved identifying the review purpose, which was to examine the factors that enabled the proficient use of ECMS to access records. The second phase consisted of the initial scoping of the literature search as well as developing and refining the search strategy. The keywords used for the initial scoping were, "ECM", "enterprise content management", and "enterprise content management system". The third phase involved searching for relevant ECM research papers

from 2012 to 2022. The fourth phase involved analysis, where the literature was categorised under the themes derived from the objectives, namely continuous system training; change management and awareness; access to the system by all staff; a robust ICT infrastructure for continuous accessibility; integration with existing ICT systems; and compliance with legislation, standards, and policies.

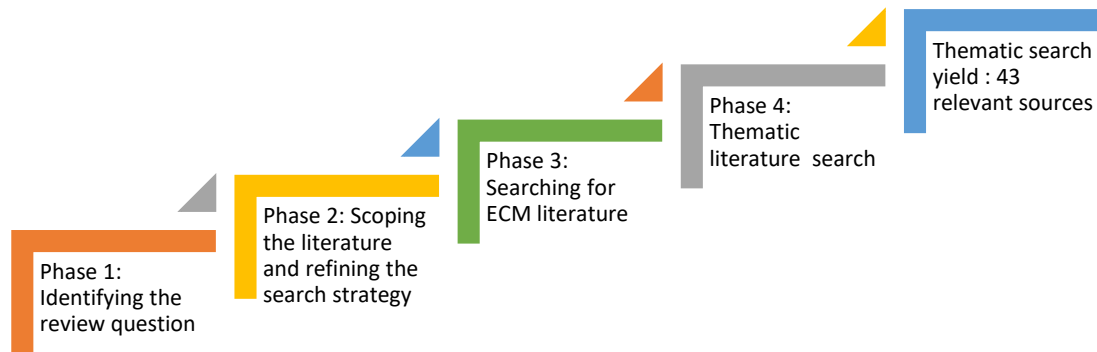


Figure 1: Literature review phases

The literature was sourced and accessed through online databases such as Google Scholar, Scopus, Web of Science, library catalogues of some South African universities, and the World Wide Web. The search terms used were “ECM”, “enterprise content management”, and “enterprise content management system”. Initially, the searches yielded 1190 publications in English. The search was further limited to sources that had the exact search terms in the title. After thorough inspection of the contents, these were reduced to 43 sources whose content was relevant to the study objectives. Unlike Alalwan and Weistroffer (2012) who tabulated the sources by author, methodology, ECM dimension and publication type, the current paper used simple counting of the literature and tabulated the data according to the themes derived from the objectives and literature type on Microsoft Word, as illustrated in Table 1. The data were catalogued in Excel according to the themes derived from the study objectives and literature type (Figure 2) to show gaps in the studies for future research.

Table 1: Literature type according to the themes derived from the study objectives

Literature type	Themes						Total
	Training	Change management	Access	ICT infrastructure	Integration	Compliance	
Books	0	0	1	0	0	0	1
Book chapters	0	5	0	0	0	0	5
Conference papers	1	0	0	0	0	0	1
Evaluations	1	0	1	1	0	1	4
Expert industry articles	1	1	1	1	0	1	5
Journal articles	6	2	0	7	5	4	24
Theses	2	1	0	0	0	0	3
Total	11	9	3	9	5	6	43

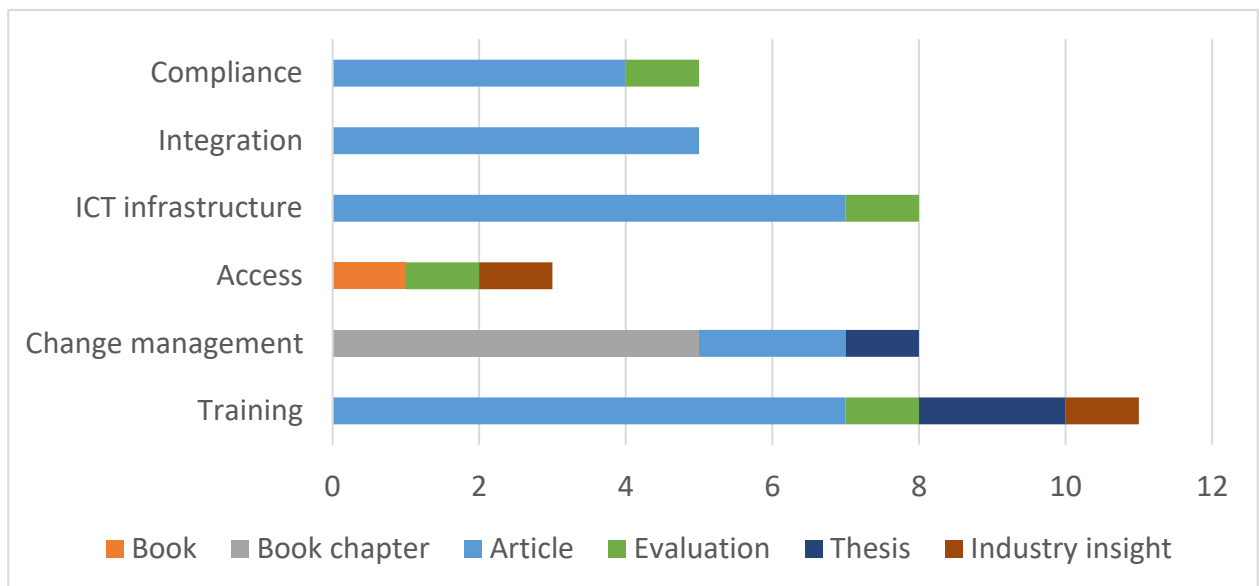


Figure 2: Distribution of literature type according to the themes derived from the study objectives

6. Literature review

The literature review is presented according to themes derived from the study objectives:

6.1 Continuous ECMS RM training

The implementation of ECMS poses challenges for organisations; thus, training and motivation of staff are necessary for adoption and use of the technology. This was corroborated by the reviewed literature. For instance, Barlaoura (2016) conducted a qualitative study that discussed the implementation of ECMS in the private and public sectors in Canada. Data were collected through interviews with records managers from a municipality and an energy company. The premise of the study was that people are important in implementing information systems; therefore, organisations must invest in ongoing training of personnel. The study uncovered that both organisations had invested in continuous training to develop in-house expertise on the use and better implementation of the ECMS. However, because there was no ECM implementation strategy, the training programme was not enough due to lack of robust governance. The author commended the cooperation between IT and RM professionals in both organisations. Similarly, Kashaija (2022) recommends cooperation and communication between RM and ICT staff on how to deal with e-records. However, contrary to Barlaoura (2016) and Kashaija's (2022) qualitative study that used interviews, observations, group discussions, and documentary review revealed that RM staff were not offered training in electronic RM and other ICT applications. The limited knowledge and skills of staff negatively affected organisational readiness for an electronic RM system at a local municipality in Tanzania where the study was conducted. The study recommended continuous RM and ICT systems training. Similarly, in a published conference paper, Wiltzius, Simons, Seidel and Vom Brocke (2014) emphasised the importance of user training after implementation of an ECMS. The paper was framed by the Technology Acceptance Model and recommended continuous high-quality training for employees to trust and use the system.

Continuous user training after implementation was recommended in an ECMS evaluation study conducted on behalf of the Western Cape Government (2018). The aim of the evaluation was to assess whether the design of the ECMS in use in some departments was appropriate, adequately resourced, and utilised effectively. The study revealed that on-boarding training on selected modules was conducted by the vendor. Thus, the training was vendor biased. The study noted that of the 4328 registered system users, 1916 (44%) were trained to use the system. However, 45 (1%) registered users were trained on the Electronic Records Management Module. The study concluded that the training was insufficient to ensure user confidence to adopt and use the system. An ECM training curriculum responsive to user needs was recommended. In addition, the study recommended that the RM training offered by the ECMS implementation team must be synchronised with the one offered by the Western Cape Archives and Records Service. Furthermore, continuous user training through channels such as e-learning, staff orientation, and induction programmes was recommended. A subsequent study by Mohlala (2020) on the same Western Cape Government ECMS implementation, established that 36 (84%) of 43 respondents had received training on how to use the system, while 7 (16%) had not. Mohlala's (2020) study was framed by the ECM3 maturity model. One of the constructs focuses on employee and executive education and understanding of core ECM precepts. Similar to the study conducted in 2018, the study recommended regular and continuous training on the ECMS modules and higher education qualifications to upskill staff in digital records management.

Dzandza's (2019) mixed methods PhD study employed the Delone & McLean Information System Success Theory to examine the use and management of information systems of nine academic libraries in Ghana. While the study did not focus on ECMS, it shed light on continuous user training as one of the success factors encouraging the use of information systems. The study revealed that system users were given training, but the time and content were not enough for independent and maximum use of the information system. Pre-implementation training by the vendor during and after implementation of in-house refresher training were recommended for users to not lose momentum in using an information system. Al-Okaily and Al-Okaily (2022) also used the Delone & McLean success model to assess the success of enterprise information systems implementation in listed organisations in Jordan. The authors assert that the use of an information system is not a determining factor for its successful implementation. The study recommended that future research should investigate training quality as a success factor since lack of effective training programmes is a constraint in achieving the perceived benefits of enterprise information systems. Sharing lesson learnt, Mancini (2015) advises that when implementing ECMS, user training must be a priority to encourage adoption and effective use of the system. However, the author does not emphasise continuous user training. Similarly, a case study by Montesinos-Rosales et al. (2019), which proposed implementation of an ECM model supported by cloud computing in Peru, encouraged user training in the early stages of deployment. However, the study was also silent on any further training after deployment.

It can be deduced from most of the reviewed literature that continuous ECMS user training after deployment must be included in the system implementation strategy and conducted for adoption and use of the system. While vendor training is necessary for users to understand the system, it should not be vendor biased, but be customised to an organisation to use the ECMS for what it was initially intended to do. The studies emphasised cooperation between the ICT and records management departments since their specialist knowledge and skills would enhance the ECMS training programme.

6.2. Impact of change management and awareness programmes on ECMS use

The implementation of an ECMS ushers change into organisations. To ensure smooth transition of implementing, deploying, adoption, and use of the system, change management processes must be in place. Success of change management programmes must be measured by assessing whether the vision of the change has been met internally and externally (Mogogole & Jokonya, 2018). Providing awareness to employees and communicating the ECMS are important for successful change management. Wiltzius et al. (2014) suggest communication through company in-house magazines and presentations. In support, Mancini (2015) contends that all employees should know and understand what an ECMS is, its benefits, and changes that will result from its implementation. A qualitative study by Simons et al. (2014) discovered that the understanding of an ECMS differed among the respondents. Therefore, confusion about conceptual understanding raises different expectations to the detriment of adoption and use of the system. To avoid the confusion, the ECMS project implementation team at the National Public Administration in Liechtenstein, Europe, conducted seminars and workshops to regularly inform users about the subject, scope, purpose, benefits, and disadvantages of the ECM initiative. The study recommended that change agents or champions must be knowledgeable about and trained in how to use new ECMS and how to convince their colleagues of its benefits. Explaining the role of change agents, Herbst, Simons, Vom Brocke

& Derungs (2014) posit they are people in an organisation who have an ability to promote a new project and motivate others to accept it.

System training as part of change management was encouraged by Svard (2014). The study employed a literature review and interviews at two Swedish municipalities. The literature review uncovered that change management was an enabler of successful implementation of ECM and RM projects. The empirical investigation revealed that the municipalities conducted change management when new systems were implemented to facilitate adoption, use, and upskilling. Similarly, the importance of change management was emphasised by Schmiedel and Vom Brocke (2014) in a qualitative study on the role of organisational culture in ECM. The authors asserted that the implementation of an ECMS brings about cultural change. Responsiveness to change was identified as an element of an ECM-supportive culture. The authors recommended that organisations must be open and transparent about similar previously implemented systems and involve both experienced and inexperienced employees in work teams so that everyone in the organisation is on the same page.

Although change management is vital for adoption and proficient use of an ECMS, implementation of the system must be guided by a change management strategy. Weilbach (2014) stated lack of a change management strategy contributed to the minimal adoption of an Open Source ECM system in a government department in South Africa. Weilbach's (2014) PhD study investigated the migration of a proprietary ECMS to a Free Open-Source System (FOSS) in a South African government department. The Human Environment Conceptual Model, Improvisation Change Management Model, and Institutional Theory framed the interpretive longitudinal case study. The study recommended analysis of user perceptions towards organisational changes to inform the development of a formal change management strategy. In support of the strategic importance of change management, Alalwan and Weistroffer (2012) recommend that users must be continuously involved in the system design, be provided with post-implementation training, and there should be leadership engagement from inception to use. From the discussion, there is agreement about the importance of change management and awareness for the adoption and proficient use of an ECMS.

6.3. Access to the ECMS by all staff

Access to an ECMS is based on the roles of the users, therefore is controlled. Access control specifies rules for who may read, edit, and delete content (Rockley & Cooper 2012). Access to an ECMS by all staff can contribute to adoption and use of the system. Mancini (2015) advises that the ECMS must be deployed as widely as possible in the organisation. In tandem, the Western Cape Government (2018) evaluation report uncovered that 32000 ECMS licences were acquired in the 2016-17 financial year and were adequate for the identified users. The report recommended adequate financial and human resources for a phased rollout of the ECMS to all staff in all Western Cape government departments.

Literature under this theme was limited, which calls for more research on access to the ECMS. Nonetheless, the reviewed studies convey the need to provide wide access to the ECMS for adoption and proficient use.

6.4 A robust ICT infrastructure for continuous accessibility of an ECMS

Technology is an ECM dimension discussed in most literature (Alalwan & Weistroffer 2012; Barlaoura 2016). Technology in ECM literature refers to IT infrastructure for managing

enterprise content (Haug 2012; Rosman 2020). Barlaoura (2016) explains that IT infrastructure supports the functionality of systems and enables access and sharing of content. The study by Barlaoura (2016) revealed that due to lack of an ECM strategy, the IT infrastructure of both organisations was inadequate to support the application. The evaluation report by the Western Cape Government (2018) discovered that due to delays in upgrading the infrastructure, there were marked delays in rolling out the ECMS to the intended users. The report notes that the success of an ECMS depends on infrastructure, that is, sufficient storage capacity, network bandwidth, and wider accessibility. Hence, investments must be made in IT infrastructure, user training, and support.

Hullavarad et al. (2015) and Marutha and Ngulube (2018) recommend an assessment and costing of existing and required hardware, network infrastructure, and internet connectivity for successful implementation of the ECMS. Marutha and Ngulube (2018) conducted a quantitative survey supplemented by observations and document analysis to establish readiness of 40 public hospitals to implement an ECMS to improve medical records management. The study found that the network infrastructure and internet connectivity of the hospitals were inadequate for implementation of an ECMS. In some instances, the technology was outdated, some computers were not connected to the organisational network, and internet connectivity had long periods of down-time. Such inadequacies hampers continuous access to the systems. Ngoepe and Mello (2021) recommend ICT infrastructure such as optimal network availability, computers with enough memory, and printers for successful integration of ECM and ERP systems. Haag and Cummings (2013), Hullavarad et al. (2015), Montesinos-Rosales et al. (2019), and Rats and Ernestsons (2013) advise that cloud technology can enable continuous access to ECMS. For instance, Montesinos-Rosales et al. (2019) discovered that an open-source cloud-based ECMS implemented in an SME, improved on-site and remote access, efficiency, and collaboration between employees, suppliers, and customers. On the other hand, Hullavarad et al. (2015) and Klegová and Rábová (2013) argue that cloud technology poses a risk to the security of enterprise content. In view of the dichotomy, Rosman (2020) suggests further research on cloud technology, new platforms, and architecture in ECMS. Nonetheless, the literature reviewed shows the need for a robust ICT infrastructure and adequate equipment for the adoption and proficient use of an ECMS.

6.5 Integration of ECMS with existing records-producing systems

ECMS are useful because they can be integrated with existing systems of an organisation, such as Customer Relationship Management and Enterprise Resource Planning applications (Maican & Lixandriou, 2016; Mixon & Brush, 2020). Wiltzius et al. (2014) explain that ECM systems must be able to integrate technologies, such as hardware, software, standards, content, and its users. Jaakonmaki, Simons, Müller and Vom Brocke (2018) discovered that some companies had implemented an ECMS that was able to integrate sophisticated ERP applications in cloud-based environments. The authors conducted a study by analysing the content of approximately 1,200 ECM case reports shared by software vendors and consultancies to conceptualise and define ECM. The study was significant in assisting organisations to integrate ECM with other enterprise-wide applications. Ngoepe and Mello (2021) state that most organisations found it difficult and expensive to integrate ERP systems with ECMS. They opine that the systems were not integrated due to incompatibility, silo mentality, lack of leadership support, non-agile network infrastructure, unskilled staff, and lack of understanding of the purpose of integration. The study proposed a systems integration framework. However, Maican and Lixandriou (2016) state that legacy systems were unable to integrate with open-source software, but Mixon and Brush (2022) discovered that most ECMS

use application program interfaces (APIs) integrate with other systems and web services. An API is a set of rules defining how applications or devices can connect to and communicate with each other. Thus, it can be deduced from the literature that ECMS can be integrated with other existing systems in an organisation.

6.6 ECMS compliance with information and RM legislation, standards, and policies

In ECM literature, compliance refers to abiding to established laws, protocols, policies, and standards concerning the management of content (Harr et al, 2019). The Western Cape Government (2018) states that the ECMS evaluated was not legally compliant with RM legislation and policies. Thus, the evidential value of e-records was questioned for audit purposes. Additionally, the naming conventions were not aligned with the approved transversal file plan used by provincial government departments. The report discovered that users lacked understanding of national and provincial ICT, accounting, audit, and RM policies to support the evidential weight of electronic documents. Furthermore, the said policies were not aligned with each other. Legally uncompliant RM systems render organisations vulnerable to security breaches, prosecution, and embarrassment (Kulcu & Cakmak 2012; Maican & Lixandriou 2016). The authors added that governments worldwide are legally mandated to archive vital business records, including e-mails, for a stipulated period. Therefore, an ECMS must comply with archives and RM legislation with a functionality that designates information as an official record together with specific retention rules.

7. Discussion of findings

This study agrees that ECM literature focuses on the technological benefits. A dearth of studies were found on the proficient use of the system and RM benefits. Moreover, the study revealed a decline of relevant ECMS publications since 2014. This calls for empirical research and evaluation of realised ECMS benefits after implementation to encourage proficient use.

7.1 Continuous ECMS RM training

Continuous training renews and increases knowledge, skills, and abilities on how to perform a task. Creators of records and RM staff must be equipped with the necessary skills to capture and manage records (Momoti 2017). However, the literature review did not yield many studies on ECMS RM training. The need for continuous training to facilitate adoption and proficient use of an ECMS to access records was revealed by the literature. Thus, this study hypothesises that in-house continuous RM training offered by IT, ECM, and RM professionals facilitates proficient use of the system to create, access, and use records.

7.2 The impact of change management and awareness programmes for ECMS use

The positive impact of change management and awareness programmes on ECMS adoption and proficient use was noted in the literature. Regular awareness workshops and communication through channels such as company intranet, newsletters, and magazines were found effective.

Lack of a change management strategy was noted to have negatively affect the use of an ECMS, such as unstandardised knowledge. Thus, this study hypothesises that a change management plan facilitates awareness and adoption of changes and proficient use of the system.

7.3 ECMS access by all staff

Although literature was scant, the review uncovered that access to an ECMS by all staff facilitates adoption and proficient use. However, universal access requires a phased approach, control, and investment in a robust ICT infrastructure, user licences, and support. Therefore, this study hypothesises that a planned, phased, and controlled universal access to an ECMS facilitates its proficient use.

7.4 Robust ICT infrastructure for continuous access to the ECMS

Inadequate IT infrastructure, for instance server space and bandwidth, hampers access to the ECMS, thus impacting negatively on user experience. Inadequate bandwidth slows down the network, thus users become frustrated with the time it takes to upload, download, and save documents. Due to inadequate funding for a robust ICT infrastructure for ECMS in the public sector, cloud computing seems to be the best way forward. Cloud computing is a technology that provides processing power, application servers, storage, software development tools, reusable software components, and security at a minimal cost (Haag & Cummings 2013). In South Africa, Salamntu (2016) laments the weak IT infrastructure in the public sector. However, the matter seems to be resolved since the State Information Technology Agency (2022) has a cloud programme to provide a common and secure private cloud for government departments. Thus, this study hypothesises that a cloud-based ECMS provides a robust infrastructure for continuous access and proficient use of records.

7.5 Integration of ECMS with other records producing applications

Studies revealed that ECMS have the capability to integrate with other ICT applications through API. To ensure that all enterprise content is easily accessible and loss of organisational information and duplication minimised, the ECMS must be integrated with other RM-related applications. Thus, the study hypothesises that integration of an ECMS with other records-producing applications facilitates proficient use.

7.6 ECMS compliance with information and RM legislation, standards, and policies

Lack of or minimal consultation and cooperation between the ECM implementation team and RM professionals hamper compliance with relevant legislation. Non-aligned legislation confuses users. Understanding the legislative framework enables users to apply RM regulatory procedures. This study hypothesises that shared responsibilities between ICT, the ECM team and RM staff enable compliance with applicable legislation and policies for proficient use of the ECMS.

8. Proposed conceptual framework

An integrative review method should result in the advancement of knowledge by generating conceptual and theoretical frameworks. This paper presents a conceptual framework (Figure 3) emanating from reviewed literature.

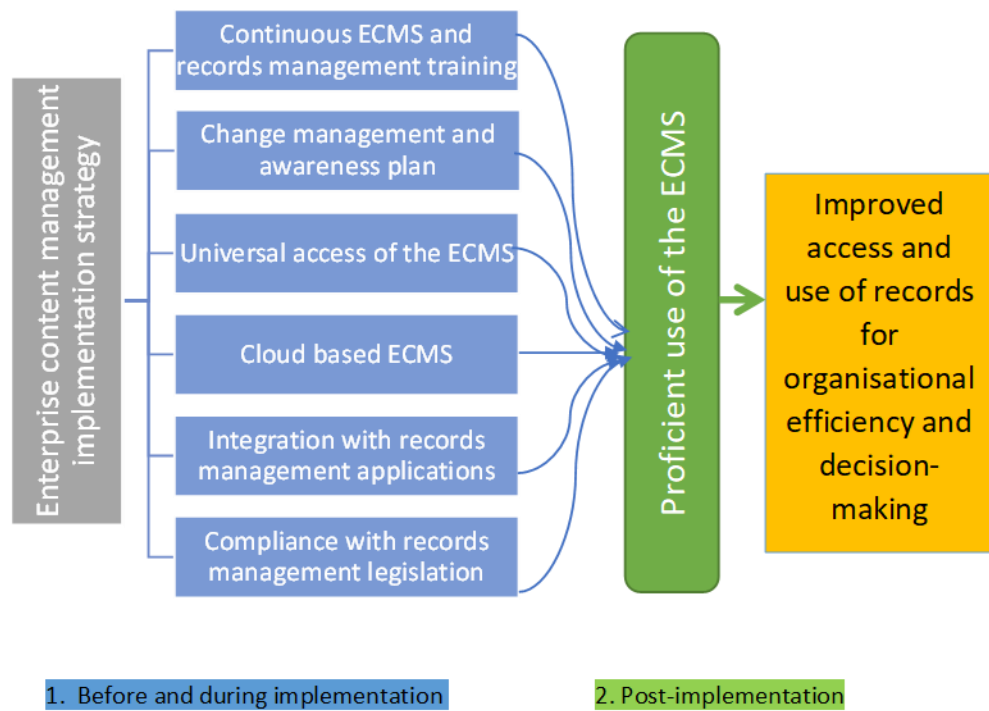


Figure 3: Proposed conceptual framework

A comprehensive ECM strategy (grey block) must be developed before deploying the ECMS. The ECM strategy must include the enablers (blue blocks). The enablers are continuous RM training offered jointly by IT, ECM, and RM professionals; a change management plan; a planned phased and controlled universal access to a cloud-based legally compliant ECMS, which is integrated with other records-producing applications facilitate the proficient use of the system (green block) for improved access and use of records for organisational efficiency and decision-making (yellow block). The proposed model suggests that organisations intending to deploy an ECMS must have an ECM strategy that incorporates all the aspects that enable the proficient use of the system for improved access and use of records.

9. Study limitations

The literature review was limited to ECMS for RM studies between 2012 and 2022. Thus, the study did not cover the ECMS functionalities from other years. Moreover, the literature is not exhaustive since some relevant publications may have been left out due to human or technological errors.

10. Conclusion

ECMS have RM capabilities to improve access to records. However, some studies revealed that the ECMS implemented were not used proficiently to access records. Moreover, the literature review revealed scant studies on the access of ECMS by all staff and compliance with RM legislation as enablers for the proficient use of the system. The scarcity of literature presents an avenue for future studies. Continuous ECMS RM training; change management and awareness; access to the system by all staff; a robust ICT infrastructure for continuous accessibility; integration with existing ICT systems; and compliance with legislation,

standards, and policies were used to frame this literature review to examine factors facilitating the proficient use of ECMS to access records. From the reviewed literature, the study concludes that access and proficient use of ECMS by all staff are possible through a legally compliant cloud-based ECMS that can integrate with other RM applications. A conceptual framework for the proficient use of ECMS to access records for decision-making and efficiency was proposed to guide practitioners and frame future research.

Declarations

I declare that:

- There was no conflict of interest in this research.
- The manuscript has not been previously published and is not under consideration for publication with any other journal or copyrighted publishing platform of any kind.
- The manuscript is a literature review; therefore, all reference sources cited are acknowledged both in-text and in the reference list.
- Unlawful statements that infringe any existing copyrights are avoided in the manuscript.
- I sought permission for copyright from third parties by obtaining the necessary permission from the copyright holder/s to reproduce their materials in different media in the article, such as tables, diagrams, and photographs owned by them.
- Manuscript and study meet all the ethical requirements of the journal and that of my institution or company, as well as legal requirements of the study country.
- I take responsibility to keep participants' information confidential, as required by legislation, including the Protection of Personal Information Act.
- I give consent to the Journal of South African Society of Archivist to publish the manuscript.

Acknowledgements

None.

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