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Digital records management in the banking industry within the Eastern and Southern Africa Regional Branch of the International Council on Archives region

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Abstract

This paper assessed the management of digital records in commerce that has seen a rise in digitisation due to technological advancements. Therefore, specifically this paper focuses on the banking sector in the Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA) region. Banks constantly review ways in which they could be more competitive in-service delivery and have an edge over their rivals. To have an advantage over their competitors, some banks have adopted Internet banking to provide services conveniently and effectively electronically, thus providing online banking or e-banking services. Such innovations may pose challenges related to effective records management, specifically digital records management. The purpose of this study was to investigate the contributions made by good digital records management practices in improving the banking experiences of customers within the ESARBICA region. This study's objectives were to investigate the role of records management on internet banking, determine the challenges of managing resultant digital records associated with internet banking and develop a framework to aid in the management of digital records within banking institutions in ESARBICA. For data collection, the study adopted a systematic review of literature and employed a thematic data analysis approach. The main findings were that there is an exponential increase in the use of technology to conduct banking by ESARBICA member states; therefore, risks associated with security and data protection were a concern. The major recommendations were that banking institutions had to improve on data protection and security of information and develop regulatory standards' frameworks that are in sync with legislative frameworks.

Key words: Internet banking, digital records, digital records management, ESARBICA, financial services, e-commerce

Introduction

Commerce has seen drastic growth globally in ways of conducting business from the traditional brick-and-mortar spaces to the new modern virtual offices that have seen a rise over recent years, which are now underpinned by the fifth industrial revolution (5IR) technological advancements. These technological developments brought about many changes in the way firms and governments conduct their business in today's market. Noble, Mende, Grewal and Parasuraman (2022) describe the 5IR as encompassing the notion of harmonious

human–machine collaborations, with a specific focus on the well-being of multiple stakeholders (i.e. society, companies, employees, customers). This paves the way for a revolution in thinking about and leveraging human–machine collaborations for greater societal well-being. Moreover, according to Masocha, Chiliya and Zindiye (2011), technology has aided businesses across all industries to successfully reduce costs through substantially improving efficiency. For that reason, it is worth mentioning that banks have outstandingly diverted their focus towards extensively computerising almost every aspect of their banking processes. Masocha et al. (2011) further observed that several developing nations have lately focused on developing their technological infrastructure with specific focus on digitised banking services, e-commerce and e-learning.

In Africa and specifically the ESARBICA region, the banking fraternity has embraced and adopted the use of information and communication technologies (ICTs) to meet the ever-increasing demands of customers (Binuyo & Aregbeshola 2014; Ejemeyovwi, Osabuohien & Bowale 2021). It goes without saying that these disruptive technologies in financial services have digitally transformed the banking industry with a focus on customer-centric financial services. Therefore, banks have essentially shifted their business models towards digital mobilisation for a faster, more secure and more personalised customer banking experience (Wewege, Lee & Thomsett 2020). For that reason, the automation of business processes within banks because of e-commerce results in the production of large amounts of digital records, which prompts a need to establish measures that are adopted and implemented successfully for the effective management of digital records in banking.

According to Auta (2010), e-banking is defined as an online banking strategy emanating from PC banking. Therefore, e-banking uses the internet as the delivery channel through which to conduct banking activities, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages and purchasing financial instruments and certificates of deposits. Electronic records management, on the other hand, is defined as that part of records management that deals with records in an electronic form. It includes the creation, use, maintenance and disposal of electronically created records for the purposes of providing evidence of business activities (Kyobe, Molai & Salie 2009).

Background information

Traditionally, banking has always relied solely on the physical presence of customers to conduct their transactions. With the advent of technology and the widespread adoption of ICTs by banks, many services are found online as a consequence of business process automation. For that:

“digital banking is an operating model based on a technology platform to exchange information and conduct transactions between banks and customers. This process is done through digital devices which are connected to computer software in the internet environment. Customers do not have to come to physical branches of banks to make transactions” (Nguyen, 2020: 304).

Automated business processes produce a large number of e-records that need to be managed well to allow for future access of the concerned e-records. They also act as evidence of activities that took place between the customers and the bank or between banks.

In the global arena, González, Quesada, Picado and Eckelman (2004) posit that the banking industry has moved rapidly to exploit the new communication/transaction channels offered

by the internet to improve their front-end internet applications. As a result, the number of e-banking websites has increased rapidly. According to González et al (2004) currently there are more than 11,250 e-banking sites % worldwide. In Spain alone, for example, more than 170 online banking sites are available. According to Clemes, Gan & Du (2012) globally there appears to be a correlation between different factors such as but not limited to income, security concerns, age and educational background on e-banking. Countries such as New Zealand view security or privacy in terms of authorised use and abuse of accounts and keeping customers' personal details private as a concern to many banks' customers; therefore, it affects their adoption of internet banking, while the less educated, due to their computer illiteracy, may hinder their adoption of e-banking. On the other hand, the youth are deemed more likely to adopt e-banking than those who are older (Clemes, Gan & Du, 2012). In Malaysia, for instance, Poon (2008) found that one critical factor that affects the adoption of e-banking is convenience. As the majority of the customers view e-banking as convenient, in which time and place flexibility of the system is perceived as an effective tool enabling transactions. For the customers, e-banking enables them to access account information and perform banking transactions electronically conveniently at any time and any place. It also seemingly helps in providing convenience and comfort to customers, and the banking sector conducts business cooperation with online businesses. This is due to cooperation offering a variety of comfortable purchasing and payment systems or policies. In online business transactions nowadays customers do not need to deal with complicated bank verification processes and authorisation systems as well as proof of transfer, with advanced information technology backing up the safety of the online banking transactions (Chaimaa, Najib & Rachid 2020; Nustini & Fadhillah 2020).

Statement of the problem

In the financial services industry, the internet has spurred an IT-based revolution that has fundamentally changed how banking services are provided. Because of this advancement, known as internet banking, customers may now do their financial tasks effectively and affordably at any time of day, no matter where they are in the world (Hanafizadeh, Keating & Khedmatgozar 2014). This paper evaluated the impact of digital records management on banking in the conduct of commerce in the ESARBICA region based on scientific publications. An apparent challenge is a lack of adequate security to protect information as well as a lack of a comprehensive legislative framework that can support good records management and the subsequent efficient delivery of internet banking. These concerns are explained by Jibrila. Pobeeb, Gochhaitc and Chughd (2024) who lament that the adoption of technology is significantly hampered by concerns about privacy and security, especially in transitioning to internet banking. Comparatively, Ajibade and Mutula (2020) observed that in Nigeria cyber-fraud risk and threat levels have increased as a result of ongoing technological advancements. Similarly, another notable concern that is seen is in Ghana's banking sector, where consumers are primarily concerned about the increased prevalence of fraud committed via technological avenues. Security, privacy and financial fraud are identified issues that are consistent with findings of previous studies conducted in Ghana and other developing nations (Jibrila et al., 2024). In the context of ESARBICA member states, Botswana, as pointed out by Mwanza and Oahile (2021), discovered that regarding security, privacy, and reliability, the majority of respondents in their study firmly believed that sending or disclosing sensitive personal information about oneself via online banking systems was unsafe.

Whereas in South Africa, Ramavhona and Mokwena (2016) established that rural South Africans' perception of internet banking is that it is risky since banks that offer it have not yet

implemented sufficient security measures to safeguard their clients. Customers' security concerns continue to be the largest barrier to e-banking adoption in Zimbabwe (Mavaza, 2019). Despite these concerns, it has also been established that issues related to internet banking security in other instances is largely associated with some customers' struggle with technology and security misconceptions as discovered in Zambia's banking institutions (Chibwe & Mwanza, 2024). Therefore, in adopting technology within banking institutions, guarantees on security cannot be overemphasised because improved security cascades into sound digital records management that upholds, among others, information security and privacy of both the bank and its customers, thus enabling the successful adoption and ultimate use of ICTs by banks within the region.

Purpose and objectives of the study

The purpose of this study was to investigate the contributions made by good digital records management practices in improving the banking experiences of customers within the ESARBICA region. This study is guided by the following objectives:

- To investigate the role of digital records management on internet banking.
- To determine the challenges of managing resultant digital records associated with internet banking.
- To develop a framework to aid in the management of digital records within banking institutions in ESARBICA.

Literature review

Literature review of this study was based on and informed by the study's research objectives. Focusing on the research objectives of the study helps in formulating relevant and appropriate sub-themes in the review of the literature section. Thus, literature review is undertaken for numerous reasons, such as to provide an overview of current knowledge in the domain, method or theory, to provide an evaluation of knowledge progression in the domain, method or theory, including the establishment of key knowledge, conflicting or inconclusive findings and emerging and underexplored areas, including also to provide a proposal for potential pathways for advancing knowledge in the domain, method, or theory (Kraus, Breier, Lim, Dabić, Kumar, Kanbach, Mukherjee, Corvello, Piñeiro-Chousa, Liguori & Palacios-Marqués 2022).

E-commerce and internet banking

The brick-and-mortar businesses have been in existence since time immemorial. However, with the technological advancements apparent in our lives, businesses too were not left behind in adopting and utilising the World Wide Web (WWW) to their advantage. Pennarthur (2001) mentions that the internet and the www have made a profound impact on the way the world conducts business today. More customers are demanding services in quick turnaround times and wanting access to those very services at their convenience has encouraged the business community to look no further than the internet, as it offers a wide range of opportunities such as saving time, breaking the distance barrier and cost savings, to mention just a few. Pennarthur (2001) further laments that, while initially slow to jump onto the e-commerce bandwagon, the banking industry understood the importance of establishing an online presence. According to Lusimba and Kwanya (2019), they contend that of late, more than ever, organisations have realised the need to adopt, use and implement technology in

streamlining business processes to garner some sort of competitive advantage and keep up with the forces of the external business environment.

Cox and Dale (2001) define e-commerce as the conduct of business among e-enterprises and consumers where e-business means a business enterprise with the capability to exchange value (money, goods, services and information) electronically. E-commerce refers to a mechanism that mediates transactions to sell goods and services through electronic exchange (Chawla & Kumar, 2022). It is the use of computer networks to improve organisational performance. Critically increasing returns on investments and the business' profitability, a thorough gain in the market share, an improvement in customer service, and faster product delivery are some of what makes organisational performance gains possible with electronic commerce (Chawla & Kumar, 2022; Watson, 2023). Banks, like other businesses from different sectors of the economy, digitised their services to improve their customer service as well as to beat off competitors in attracting new customers retaining their current clients. According to Revathi (2019), customers, whether corporate or retail, are no longer willing to queue in banks, or wait on the phone for basic banking services. Thus, they require and expect a facility to conduct their banking activities at any time and any place. The need to tailor-make services and meet customer needs has propelled the rise in digitising commerce and banking, for an improved customer experience. "An era of cloud and mobile banking with personalized banking experiences and security, predicts that digital banking will continue to develop and be fine-tuned to be more secure and to satisfy the customers" (Wewege et al., 2020:16).

The role of digital records management on internet banking

Digital records management demands a different approach to paper records, as technology brings about different issues concerning how records are managed. Mnjama and Wamukoya (2006) argue that, besides providing essential evidence of organisational activities, transactions and decisions, e-records also support business functions and are critical for the assessment of organisational performance. The large volumes of e-records produced regularly by banks in the ESARBICA region need a good management approach to afford banks an opportunity to develop and move from existing only in the physical world to being available virtually. Sprehe (2005) opines that good records management is an essential element of enterprise infrastructure on par with financial management and human resources management. Records ensure that an enterprise can:

- Conduct its business in an orderly, efficient, and accountable manner.
- Deliver services consistently and equitably.
- Document its policies, decisions and outcomes for stakeholders and regulators.
- Meet its legislative and regulatory requirements, including audits.
- Protect itself in litigation.
- Function in a financially and ethically accountable manner.
- Protect corporate interests as well as the rights of employees, clients and other stakeholders.
- Provide continuity of operations in an emergency or disaster.

According to Omoregie and Popoola (2018), in instances of poor perception on the importance of records management, organisations in Africa with no place in their structure for records management leads to the poor integrity of bank records, as is determined in Nigeria. Therefore, a poor culture of records management tends to lead to records

manipulation and cheating. Records management deals with “all the processes by which recorded information helps an organization achieve its operational and business needs and meet its requirements for accountability” (International Records Management Trust 1999).

Challenges of digital records management in banking

In spite of the clear-cut pointers of how beneficial good e-records management practices are regarding banking and overall, there are challenges facing the management of digital records, especially where there are new innovations every now and then by organisations to rid themselves of the competition. A major challenge is a lack of skills to manage records that are in an electronic format. Asogwa (2012) state that records managers lack the fundamental skills and competences that would enable them to handle records in an electronic environment. According to Mosweu and Rakemane (2020: 111) “archives and records management professionals in ESARBICA lack ICT-related skills and competencies such as digital curation, digital preservation, audio-visual and digital archiving, and digitization.” Moreover, there is a serious problem of technophobia in most offices in Africa, especially among the older employees. Due to inadequate skills in information technology, many traditional librarians, records managers and archivists are very conservative and have a phobia for computers. In their study on e-skills and digital records management in Zimbabwe, Mutsagondo and Khumalo (2023) postulated the narrative of a technophobic workforce in records and information management within Africa due to what they discovered to be the result of government ministries’ deficiencies in pre-service training, in-service training and lack of exposure to trending ICT infrastructure which in turn breeds in the process technophobia.

Also, digital records’ security is of paramount importance largely because there are access points of websites all around and that poses a threat because they could be viewed by those who may use the information found in a rather more illegitimate manner, and therefore it is crucial to have measures in place which protect information available online. Asogwa (2012) reiterates this ideal that security should be a high priority because a loss of security and privacy affects the way in which government and private organisations in Africa preserve and make records in their custody available because databases containing personal financial records, for instance, may be extremely useful to the individuals themselves, but without proper security protection, that information may also be accessed by others, thereby threatening the privacy of the owners. In the ESARBICA region, studies have shown numerous challenges associated with the management of records ranging from incomprehensive legislations, limited resources and records security concerns (Keakopa 2018).

Institutions have to deal with either corporations that develop software that complements the current hardware introducing newer and improved software, or they have hardware that is currently wanting different software altogether. Such developments hinder efforts to equip those who manage e-records with the necessary skills. Asogwa (2012; 205) laments that:

“.....despite tremendous improvements in the capabilities and performance of information systems, the technology continues to evolve rapidly. The introduction of new processes and systems is driven primarily by market forces over which consumers have relatively little influence. Computer hardware and software manufacturers mostly in developing countries increase their market share by introducing new products with new features and enhanced capabilities. Consequently,

organisations and consumers are likely to upgrade their systems frequently and to completely change computing systems every few years if their records are going to be accessible and relevant in future.”

This brings about challenges faced by organisations through their integration of ICTs in their daily activities. In some instances, being the expenditure of funds to acquire infrastructure and retrain workers. Infrastructural limitations that may manifest in the form of poor internet connectivity (Dotto & Mwantimwa 2024; Monyamane 2024).

Methodology

This study adopted a qualitative research design for both data collection and analysis. According to Creswell (2013), qualitative research allows researchers to observe, analyse and understand social and cultural phenomena. Qualitative research is therefore described as an approach that aims to understand rather than measure. Articulated by Du Plooy (2009:29) as “a method that allows the researcher to obtain an insider perspective on social action, allowing for contextual description and understanding of social phenomena.” The study adopted the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) method of systematic literature review, where the research employed the use of key terms to search for relevant literature and use thematic qualitative thematic analysis for the collection and analysis of data. “The PRISMA Statement recommends that authors report their complete search strategies for all databases, registers, and websites (including any filters and limits used), but it does not include recommendations for designing and conducting literature searches” (Sarkis-Onofre, Catalá-López, Aromataris & Lockwood, 2021:1).

According to Paul, Lim, O’Cass, Hao and Bresciani (2021:2), systematic literature review “encapsulates the process for assembling, arranging, and assessing existing literature in a review domain (i.e., the 3 As), wherein “assembling” refers to the identification and acquisition of literature, “arranging” pertains to the organization and purification of literature, and “assessing” relates to the evaluation and reporting of literature. The outcome of this process suggests that systematic literature reviews, as a method of research, signify a state-of-the-art understanding of existing literature and a stimulating agenda to advance understanding through new literature.”

The systematic literature review processes followed by the study was the use of different search engines such as Web of Science, ScienceDirect and Google Scholar. The literature was derived from sources that ranged from the year 2000 to 2024. The articles reviewed were those that were solely focused on internet banking, digital records management, financial services and e-commerce. Conversely, keywords and themes that emerged from content analysis on digital records management and internet banking in the ESARBICA region were categorised and reported under respective headings that were derived from the research objectives. This study involved retrieving, reviewing and analysing 20 academic articles in total. However, in addition the records that did not meet the selection criteria noted above were categorically eliminated.

For data collection, the review process was guided by the systematic literature review framework (Okoli, 2015)

Table 1: Systematic Literature Review Framework (Okoli, 2015)

Systematic Literature Reviews Steps	Action
1. Identify the purpose	An in-depth examination of the contributions made by good digital records management practices in improving the banking experiences of customers within the ESARBICA region (Angola, Botswana, Eswatini, Kenya, Lesotho, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zambia, Zimbabwe and Zanzibar) was the researcher's priority. As a result of this, the inquiry invariably found gaps in previous research.
2. Draft protocol and train the team	Research questions were developed.
3. Apply practical screen	This required selecting the items that would be reviewed. Papers on banking and commerce had to be published at conferences or in peer-reviewed journals in order to be eligible for inclusion, authored in English, research conducted by ESARBICA member states, should be empirical studies and published between the years 2000 and 2024.
4. Search for literature	An extensive review of literature was undertaken via the use of search engines such as Web of Science, ScienceDirect and Google Scholar and other library databases through the use of the following keywords, “digital banking, commerce, ESARBICA, digital records management.”
5. Extract data	The researcher extracted sources that were in line with the criterion of literature sources that were published between 2000 and 2024, from the ESARBICA region, published on peer-reviewed journals and were written in the English language.
6. Appraise quality	The researcher reviewed the quality of each identified literature source, mainly guided by the self-determined variables on the third step identified above.
7. Synthesise studies	The researcher amassed all relevant information from all sources used and the findings were presented in a qualitative and descriptive approach.
8. Write the review	Research results and implications were discussed and provided.

Findings of the study

Banking services have almost entirely been automated; therefore, banking institutions have adopted the use of ICTs and innovations to enhance service delivery. The study findings are discussed in this section, categorised in relation to the study objectives. The first objective of the study was to investigate the impact of digital records management on internet banking

within ESARBICA. The findings revealed that there is an exponential increase in the use of technology to conduct banking by ESARBICA member states. Also revealed by the study was that technological use has risen in banking due to its convenience to customers. These benefits are reiterated by Ofodile, Odeyemi, Okoye, Addy, Oyewole, Adeoye and Ololade (2024) who argue that digital banking in the contemporary financial landscape is evident, since they have contributed to the transformation of the way financial services are delivered, due to their ability to offering greater convenience, efficiency and accessibility to customers.

The role of digital records management on internet banking within ESARBICA

(a) Kenya

In Kenya, Zimbabwe and South Africa for instance, Lusimba and Kwanya (2019) and Chitimira and Torerai (2023) explain that the banking sector in Kenya is growing at a fast rate and therefore needs to re-engineer existing processes to deal with the ever-increasing workloads. Initially, a Kenyan bank's loan approval and disbursement process would normally take two or more days to complete using the manual processes that required numerous departments to access one file and action it. The approval is dependent on the physical presence of specific approvers. Therefore, there is great risk of documents being mishandled and misplaced, hence putting the integrity of the processes in doubt. This problem has been lifted and solved using an electronic workflow, where loan documents once received at the branch from the client would be loaded into the electronic document management system (EDMS), and the loan application would be routed to a central processing centre at the headquarters where all processes are emphasised for approval and processing through an electronic workflow.

According to Lusimba and Kwanya (2019), several digitalisation techniques and technologies are currently in use by Kenyan banks. The Straight Through Processing (STP) technique was one of the techniques utilised. Banks utilise this method to expedite transaction processing, primarily in the back office. The software allows banks to streamline a procedure at several points using the same information. This is accomplished by enabling the movement of electronically recorded information between parties without requiring the human re-entry of the same data points over the course of the full event. As information only reaches the intended bank employees, the technology improves confidentiality, saves time and helps prevent data capture errors. The authors further mentioned that the Credit Quest (CQ) program is another system that Kenyan banks and other financial institutions employ. This system is a collection of tools that offer simple, integrated solutions designed to meet the particular requirements of records management. Additionally, it speeds up application processing and increases efficiency by automating repetitive processes (Lusimba & Kwanya, 2019). Another is that of the SIMBA system that has seen about 90% of customs processes automated owing to the 2005 introduction of the system of information management and banking (SIMBA), which includes, online manifests and entry filing, electronic processing and automated reports and reconciliations (Ndung'u, 2017).

As illustrated above, automated records management processes aid banks in effectively executing their responsibilities on a timely manner and with improved precision and accuracy.

(b) Zimbabwe

Rabson and Shiri (2015) explain that the introduction of internet banking services by Zimbabwean banks is a result of globalisation and the necessity to improve services to standards that are recognised globally. Despite the ease, this innovation offers to both banks and their clients, its adoption in Zimbabwe's banking industry has remained modest (Kwarteng, 2015). The use of digital financial services has basically opened several opportunities for the poor, low-income earners and unbanked individuals to access financial services in many countries, including Zimbabwe and South Africa. Many of the poor do not have access to useful, convenient and suitable financial services. In this regard, digital financial services significantly promote financial inclusion for the poor and low-income earners who were previously excluded from the formal financial systems. The poor, low-income earners and unbanked individuals can now rely on digital financial services such as mobile money to access affordable, useful and convenient financial services (Chitimira & Torerai, 2023). Despite an interest regarding the automation of banking processes that subsequently creates digital records, studies have shown that there is a deficiency in relation to the formal standardisation of digital records management processes in Zimbabwe. According to Chikomba, Rodrigues and Ngoepe (2021:253), "all the financial services parastatals under investigation had embraced ICTs and this had increased the generation of digital records. These were mainly created through various business systems that have been adopted. The participants indicated that e-mails constituted the majority of digital records that were created or captured in their working environment. Other digital records created included Word/Excel documents, websites, databases, and social media postings. However, it was revealed that there were no guidelines or policies used for effective management of digital records."

(c) Namibia

A parallel reality regarding digital banking is found in Namibia. Despite the positives brought about by digital banking, in their study, Asa, Tsanga, Januarie and Kamati (2021), argued that from the Namibian perspective, there has been increased use of digital technology in transacting online at any given time due to the introduction of digital platforms by banks that include e-wallet, blue-wallet, easy-wallet and internet banking. However, despite these technological developments, these technologies are still facing some resistance with concerns surrounding cyber-criminal activities, a lack of comprehensive knowledge on the benefits of digital systems and, in certain instances, a sheer ignorance of the availability of such facilities.

(d) Botswana

According to Mosweu (2019), digital records are captured into the government accounting and budgeting system (GABS) by importing them from different banking institutions without necessarily scanning them. It is apparent through the acquisition of digital records into the GABS that digital records are being created and managed digitally within the banking sector of Botswana. There is an increase by commercial banks in Botswana to gradually introduce online, mobile and telephone banking in order to appeal to the broader customer base, to be able to sell their products to customers easily. Therefore, a gradual growth in acceptance and use by many bank customers of these ICT-based services is evident, as they save them time and cost (Mogotlhwane, Talib & Mokwena 2011). For organisations to successfully implement the management of digital records, especially banking institutions, they require

commitment by staff and management to develop appropriate tools needed to ease the integration of systems onto records management processes. Kalusopa and Ngulube (2012) explain this assertion by observing that it is necessary to incorporate records management components into both electronic business and office systems so that they can capture records seamlessly and protect the integrity of records over time.

The other objective the study focused on was to determine the challenges of managing resultant digital records associated with internet banking. It is worth noting that the study revealed that there are concerns with regard to the implementation of data-protection standards, as they are weak, and there is also poor network connectivity and a lack of funds to upskill workers to match the newer technologies or even acquire appropriate infrastructure to begin with. According to Bani Issa, Al-Akour, Ibrahim, Almarzouqi, Abbas, Hisham and Griffiths (2020), security is central to preserving data integrity with access safeguards that include strategies that control access to workstations, along with physical means of security such as system design, software, firewalls and anti-virus protection against threats that could endanger stored information.

Challenges of internet banking on digital records management within the ESARBICA region

(a) Kenya

The Kenyan online banking space as mentioned by Ibrahimnur (2023) revealed that 37% of data losses due to cyber-attacks were client information losses and data theft. These risks associated with information losses were linked to the inability of some financial institutions' incapacity to invest and acquire advanced cybersecurity systems (Ibrahimnur 2023). These challenges of information losses are a subsequent result of the overall poor management to digital records. According to Asogwa (2012:207), "databases containing personal financial and medical records, for instance, may be extremely useful to the individuals themselves, but without proper security protections that information may also be accessed by others, thereby threatening the privacy of the owners." Therefore, the inability to effectively provide adequate security measures to adopt and implement in ensuring that banks in Kenya protect both clients and the enterprise against breaches and information losses is a grave concern. Despite such shortcomings, the Kenyan government enacted a law that helps to grant information protection by service providers such as banks which is the Computer Misuse and Cybercrime (Critical Information Infrastructure and Cybercrime Management) Regulations, 2024. These regulations point out that the owner of a critical information infrastructure shall regulate and manage access to critical information infrastructure systems and services.

(b) Zimbabwe

Similarly, it is observed that of utmost significance in the digital space are concerns surrounding cybercrime activities ranging from personal information theft and fraud; a risk that the country of Zimbabwe is not exempted from. According to Moyo, Makota and Kabote (2024), computer-related crimes have increased in Zimbabwe. Verizon reports that 37% of security breaches in Zimbabwe's financial services' sector resulted from identity theft (Maphosa, 2023). To effectuate appropriate security measures by any organisation. It becomes easy to undertake, provided it is all anchored on supporting regulatory and legislative frameworks. It was discovered and posited by Maphosa (2023) that in Zimbabwe, the visible lack of or inadequate policies impacts cybersecurity.

(c) Namibia

Quite a number of banks in Namibia have been identified as users of online platforms to improve on service delivery. A few benefits associated with digital banking are the reasons why that transition has been realised. According to Kamutuezu (2016), internet banking saves time and costs, enhances efficiency, customer service and satisfaction, and it also helps increase customer base and removes geographical limitations that may inevitably be imposed upon customers. The researcher further observed that, despite these benefits, there are concerns surrounding the use of internet banking in Namibia. “Internet banking exposes high risk of cybercrime such as fraud and identity theft” (Kamutuezu, 2016:26). Thus, efforts and focus are critical to address such anomalies of cybercrime that poses a risk of compromising the safety and security of information for both the bank and its clients. To postulate the importance of security to digital records, a case study conducted at the prime minister’s office in Namibia revealed that to ensure that safety and usability of records are achieved for prolonged periods for as long as they are needed, security needs to be prioritised Nakale (2023).

(d) South Africa

Researchers (Keakopa, 2010; Kemoni, 2009) found that South Africa is an advanced African country in the implementation of software applications used to manage digital records. A survey of South African institutions aimed at investigating their experiences in implementing enterprise content management (ECM) applications revealed that more than 40% of the institutions had five or more years of practical experience in ECM implementation. According to Fatima (2011), who opines that e-banking platforms offer several methods to ensure a high level of security: (a) identification and authentication, (b) encryption and (3) firewalls mechanism. The identification of an online bank takes the form of a known internet address or uniform resource locator (URL), while the customer is identified by his login ID and password to ensure only authorised users can access their accounts.

(e) Botswana

In their study, (Mosweu,, Luthuli and Mosweu, 2019) undertook several studies on the implementation of systems to manage trustworthy digital records in Botswana, Kenya, and Zimbabwe. Emergent technologies such as cloud computing are not a part of records management and therefore records keeping principles that ensure that the integrity of digital records are upheld may be undermined and the reliability of such records being questioned. Cloud computing is technological infrastructure used for storing records that can be used to save costs of ICT hardware (Bassett & Schellnack-Kelly 2018).

Auta (2010) postulates that digital banking provides retail and small value banking products and services through electronic channels. Such products and services can include but are not limited to deposit-taking, lending, account management, the provision of financial advice, electronic bill payment and the provision of other electronic payment products and services such as electronic money. It is these services that are provided electronically that produce and amass e-records that need a system that would support good e-records keeping. Fatima (2011) further lamented a threat associated with digital banking that, several malicious applications targeting online banking transactions has increased dramatically in recent years, and a disclosure of important information that should otherwise remain confidential, by

unauthorised persons or that exceed their authority can cause significant losses for financial institutions. Moreover, alteration of information by entering, modifying or overwriting data into the system without authorisation or by exceeding one's authority is a type of attack that could potentially cause great harm to the banks and their customers (Fatima, 2011). According to Shonhe and Kolobe (2023), Botswana scored poorly in comparison to other countries regarding online services and e-participation that may well be attributed to challenges, such as a lack of a digital identity (ID) system, weak implementation of data-protection standards, poor network connectivity, lack of an all-encompassing enterprise architecture guiding services, weak digital payment systems, limited interoperability across platforms and applications.

Recommendations

This section proposes a framework to incorporate digital records management into the banks' digitisation drive. The study recommends that banks should improve on data protection and security. With the growth in technologies used in banking, it is recommended that staff be re-equipped with tools- to match the current technological needs. Another recommendation is to develop robust regulatory standards that are subsequently implemented to ensure data quality. The framework incorporates the interaction between technology, customers and banks to guarantee a seamless and comprehensive access to banking services without compromising the quality of information.

This framework should look at digital records and their management being underpinned onto data-protection standards. To be able to have available, reliable records to use for evidential purposes. Also, with technological developments, data-protection standards are reviewed or developed to be at par with the use of technology to create, manage and use records in the banking world. Banking institutions can benefit extensively from the availability of data-protection standards, as it helps to contribute to the promulgation of appropriate security protection protocols, relevant to the digital environment, especially in digital records keeping. The advocacy of security measures is achieved through data-protection standards, whereas these data-protection standards are developed to match the requirements posed by the standards. Similarly, with the shift from the brick-and-mortar to the virtual office, like ESARBICA banks, the data-protection standards, once they are availed, will aid banks to retain customers and continue to serve. Customers require for a trustworthy bank, an end achieved through trust that develops due to accurate information made available whenever it is requested for, maintaining convenience and breaking down barriers of time-distance realities.

With a digitisation approach in place. Banks will have to continuously stay on par with techno-ingenuities to be consistent in meeting their customer needs. Similarly, The ICT infrastructure acquired will be in line with the banks' ultimate vision regarding their intentions of operating largely or entirely online.

Conclusion

In conclusion, the incorporation of digital records management is of the utmost importance to achieve a functional digital banking institution. It is critical to have data-protection standards to guide on that front. Also, the acquisition of relevant ICT infrastructure to support a successful digitisation effort by banks cannot be overemphasised. To be able to effectively use the infrastructure to deliver on the set mandate is key.

References

- Ajibade, P. and Mutula, S.M., 2020. Big data, 4IR and electronic banking and banking systems applications in South Africa and Nigeria. *Banks and Bank Systems*, 15(2): 187. [Online]. Available WWW: [Business Perspectives - Big data, 4IR and electronic banking and banking systems applications in South Africa and Nigeria10.21511/bbs.15\(2\).2020.17](https://doi.org/10.21511/bbs.15(2).2020.17) (Accessed 11 May 2023).
- Asa, A.R., Tsanga, D., Januarie, C. and Kamati, M. 2021. Technological innovation as a strategy for competitive advantage within the Namibian banking industry. *International Journal of Management Science and Business Administration*, 8(1): 68-72. [Online]. Available WWW: [MicrosoftWord 06 Technological Innovation as a Strategy for Competitive Advantage \(1\).docx](https://www.microsoft.com/word/06-Technological-Innovation-as-a-Strategy-for-Competitive-Advantage-1.docx) (Accessed 18 June 2023).
- Chaimaa, B., Najib, E. and Rachid, H. 2021. E-banking overview: concepts, challenges and solutions. *Wireless Personal Communications*. 117: 1059-1078.[Online]. Available WWW: <https://doi.org/10.1007/s11277-020-07911-0> (Accessed 14 May 2023).
- Chawla, N. and Kumar, B. 2022. E-commerce and consumer protection in India: the emerging trend. *Journal of Business Ethics*, 180(2): 581-604. [Online]. Available WWW:<https://doi.org/10.1007/s10551-021-04884-3> (Accessed 5 June 2024).
- Chikomba, A., Rodrigues, A. And Ngoepe, M. 2020. Management of digital records in selected financial services parastatals in Zimbabwe. *Information Development*, 37. [Online]. Available WWW: <https://doi.org/10.1177/0266666920906858> (Accessed 17 November 2024).
- Chitimira, H. and Torerai, E. 2023. A regulatory analysis of digital financial services and the adoption of central bank digital currencies in Zimbabwe and South Africa. *Juridical Trib.* 13: 384. [Online]. Available WWW: <https://DOI: 10.24818/TBJ/2023/13/3.04> (Accessed 17 November 2024).
- Hanafizadeh, P., Keating, B.W. and Khedmatgozar, H.R. 2014. A systematic review of internet banking adoption. *Telematics and Informatics*, 31(3): 492-510. [Online]. Available WWW: <https://doi.org/10.1016/j.tele.2013.04.003> (Accessed 17 November 2024).
- Hassan Dotto, M. and Mwantimwa, K. 2024. Electronic records management in Tanzanian courts. *Information Development*, 40(1): 131-146.[Online]. Available WWW: <https://DOI: 10.1177/02666669221101574> (Accessed 17 November 2024).
- Keakopa, S.M. 2018. Management of financial records in selected public institutions in Botswana. *Journal of the South African Society of Archivists*, 51:1-33. [Online]. Available WWW: <https://www.ajol.info/index.php/jsasa/article/view/186141> (Accessed 9 September 2023).
- Kemoni, H.N. 2009. Management of electronic records – review of empirical studies from the Eastern, Southern Africa Regional Branch of the International Council on Archives (ESARBICA) region. *Records Management Journal*, 19(3): 190-203. [Online]. Available WWW: <https://doi.org/10.1108/09565690910999184> (Accessed 12 September 2023).
- Kraus, S., Breier, M., Lim, W.M., Dabić, M., Kumar, S., Kanbach, D., Mukherjee, D., Corvello, V., Piñeiro-Chousa, J., Liguori, E. and Palacios-Marqués, D. 2022. Literature reviews as independent studies: Guidelines for academic practice. *Review*

- of Managerial Science*, 16(8): 2577-2595. [Online]. Available WWW: <https://doi.org/10.1007/s11846-022-00588-8.pdf> (Accessed 19 June 2024).
- Mavaza, T. 2019. E-banking adoption by Zimbabwe banks: An exploratory study. *PM World Journal*, 8(11): 1-10. [Online]. Available WWW: <pmwj88-Dec2019-Mavaza-ebanking-adoption-by-Zimbabwe-banks.pdf> (Accessed 5 June 2023).
- Mogotlhwane, T.M., Talib, M. and Mokwena, M. 2011. Eradication of poverty with the use of ICT in the third world: Botswana as an example in SADC. *International Journal of Digital Information and Wireless Communications (IJDWC)*, 1(1): 54-63. [Online]. Available WWW: [Eradication of Poverty With the Use of ICT in the Third World: Botswana as an Example in SADC | Request PDF](#) (Accessed 6 June 2024).
- Monyamane, N. 2023. Addressing limitations of the digitalization of the private sector in Botswana: The thesis contributes to the Government of Botswana's effort to roll out the digital transformation strategy under the Ministry of Communications, Knowledge and Technology. *European Academic Journal-I*, 2(001). [Online]. Available WWW: Available at: [View of ADDRESSING LIMITATIONS OF THE DIGITALIZATION OF THE PRIVATE SECTOR IN BOTSWANA](#) (Accessed 28 June 2024).
- Mosweu, O. 2019. Management of authentic digital accounting records in an enterprise resource planning system in the public sector of Botswana. *ESARBICA Journal: Journal of the Eastern and Southern Africa Regional Branch of the International Council on Archives*, 38: 1-20. [Online]. Available WWW: <https://dx.doi.org/10.4314/esarj.v38i1.1> (Accessed 16 August 2023).
- Mosweu, T., Luthuli, L. and Mosweu, O. 2019. Implications of cloud-computing services in records management in Africa: Achilles heels of the digital era? *SA Journal of Information Management*. 21. [Online]. Available WWW: <https://doi.org/10.4102/sajim.v21i1.1069> (Accessed 16 August 2023).
- Nguyen, O.T. 2020. Factors affecting the intention to use digital banking in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(3): 303-310. [Online]. Available WWW: <http://doi:10.13106/jafeb.2020.vol7.no3.30> (Accessed 16 August 2023).
- Noble, S.M., Mende, M., Grewal, D. and Parasuraman, A. 2022. The Fifth Industrial Revolution: How harmonious human-machine collaboration is triggering a retail and service [r] evolution. *Journal of Retailing*, 98(2): 199-208. [Online]. Available WWW: <https://doi.org/10.1016/j.jretai.2022.04.003> (Accessed 1 February 2024).
- Nustini, Y. and Fadhillah, N. 2020. Factors that influence the use of e-banking and the effect on consumptivism. *Review of Integrative Business and Economics Research*, 9: 330-345. [Online]. Available WWW: riber_9-s1_38_s19-176_330-345.pdf (Accessed 23 March 2023).
- Ofodile, O.C., Odeyemi, O., Okoye, C.C., Addy, W.A., Oyewole, A.T., Adeoye, O.B. and Ololade, Y.J. 2024. Digital banking regulations: A comparative review between Nigeria and the USA. *Finance & Accounting Research Journal*, 6(3): 347-371. [Online]. Available WWW: www.fepbl.com/index.php/farj (Accessed 23 March 2023).
- Okoli, C., 2015. A guide to conducting a standalone systematic literature review. *Communications of the Association for Information Systems*, 37(1): 879-910. [Online]. Available WWW: [A Guide to Conducting a Standalone Systematic Literature Review](#) (Accessed 23 March 2023).
- Omoregie, G.I. and Popoola, S. 2018. Organizational culture, information sharing and perception of records management system as factors affecting organizational effectiveness in the banking industry in Nigeria. *Research Journal of Library and*

- Information Science*, 2(3): 53-73. [Online]. Available WWW: [5-libre.pdf](#) (Accessed 18 April 2024).
- Paul, J., Lim, W.M., O’Cass, A., Hao, A.W. and Bresciani, S. 2021. Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies*, 45(4): O1-O16. [Online]. Available WWW: <https://doi.org/10.1111/ijcs.12695> (Accessed 8 October 2023).
- Ramavhona, T.C. and Mokwena, S. 2016. Factors influencing Internet banking adoption in South African rural areas. *South African Journal of Information Management*, 18(2): 1-8. [Online]. Available WWW: <http://dx.doi.org/10.4102/sajim.v18i2.642> (Accessed 8 October 2023).
- Revathi, P. 2019. Digital banking challenges and opportunities in India. *EPRA International Journal of Economic and Business Review*, 7(12): 20-23.[Online]. Available WWW: <https://doi.org/10.36713/epra2985> (Accessed 8 October 2023).
- Sarkis-Onofre, R., Catalá-López, F., Aromataris, E. and Lockwood, C. 2021. How to properly use the PRISMA Statement. *Systematic Reviews*, 10: 1-3. [Online]. Available WWW: <https://doi.org/10.1186/s13643-021-01671-z> (Accessed 13 January 2025).
- Shonhe, L. and Kolobe, M., 2023. A glimpse into Botswana’s AI readiness landscape. *JeDEM-eJournal of eDemocracy and Open Government*, 15(2): 37-67.[Online]. Available WWW: <https://doi.org/10.29379/jedem.v15i2.812> (Accessed 13 January 2025).
- Wewege, L., Lee, J. and Thomsett, M.C. 2020. Disruptions and digital banking trends. *Journal of Applied Finance and Banking* 10(6): 15-56. [Online]. Available WWW: [Style ISP](#) (Accessed 12 August 2023).