

DIGITAL ECONOMY HARNESSING AND INFORMATION MANAGEMENT EFFECTIVENESS OF COMMERCIAL BANKS IN RIVERS STATE

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ABSTRACT

The study descriptively examined the relationship between digital economy harnessing and information management effectiveness. The dimensions of the predictor variable adopted in this study are: digital proficiency and digital infrastructure while effective information delivery and timely information delivery were adapted as measures of information management effectiveness. Socio-technical theory was adapted as the baseline theory of the study, the study also reviewed empirical literature of previous Scholars work. The study presents digital economy harnessing as a strong predictor of information management effectiveness. Hence, we made the following; Organizations need to have the right tools and technologies in place to effectively manage and leverage their data, and they also need to ensure that their employees are proficient in using these tools, there's need for Organizations to at regular interval train its employees on the use of digital technologies so as to give them competitive advantage over rivals as it is obvious that without this knowledge, organizations may not be able to fully leverage the potential of digital technologies to improve their information management process, Organizations should codify digital literacy as prerequisite specification for intended employees.

Keywords: *Digital economy harnessing, digital proficiency, digital infrastructure, information management effectiveness, effective information delivery, timely information delivery*

INTRODUCTION

In today's digital age, information management has become a critical aspect of every industry, including commercial banking which is one of the issues that necessitate this study. The effective management of information is crucial for commercial banks to remain competitive, delivery information effectively, timely information and renewal of the organizational information.

Information is suggested to be one of the vital assets in an organization. Interestingly, management of information cannot be seen as a waste of effort as it plays a crucial role in attainment of organizational objective. It is therefore important to emphasize that information management practices must be constantly reviewed. Information management innovation is changing the organizational form, practices and process of manipulating the information of the organization. Organizational innovations are typically implemented in order to increase operational efficiency, employee satisfaction or a firm's information renewal. Today there are several examples of organizational innovations, such as Divisionalization ('M-form'), Total Quality Management ('TQM'), Toyota Production System ('TPS'), 'Lean Production' ('Lean'), and Balance Scorecard that have led to competitive advantages for the firms that embraced the innovations (Womack & Jones, 2003; Liker 2004; Birkinshaw et al. 2008). Further, organizational innovations are usually necessary for technical innovations (Freeman, 1982; Leonard Barton, 1988; Tushman & O'Reilly III, 1997).

Effective information delivery is concern with ensuring that the information produces desire result but quality into consideration. An effective data security practice in an organization maintains systematic order and operational efficiency. Since businesses have been more dependent on knowledge to attain their ultimate goals, it is precarious to uninterruptedly improve the awareness principles related to the concept of security in all businesses and renovate an atmosphere of cultural organization.

A cultural organization should be tinged with a real awareness of security measurements. There have been sufficient indications that, under the appropriate consciousness of the philosophy of safekeeping, employees can be converted into the business's sturdiest layer of defense against cyber-attacks (Nica, Potcovaru, & HurdubeiIonescu, 2019). On the other Digital economy harnessing has been sufficiently perceived as a denominator to organizational innovation, it is the transformation of traditional brick-and -mortar economic to a internet, World Wide 6 Web, block-chain and other technological infrastructure digital economy harnessing is the advancing of the technology that the market- place require which must be done innovatively.

Many developed countries, predicting upcoming changes, have begun a systematic movement towards the development of a digital economy (Gerasimov et al., 2019; Vertakova et al., 2019). The first such program was implemented by the United States and China, the countries, which today are leaders in the development of the digital economy. Behind them, the corresponding programs were embraced by England, the countries of the European Union, Australia and others.

Currently, the programs supporting the digital transformation of the economy are widely spread across many countries (e.g. Veselovsky et al., 2018; Glotko et al., 2020). It is important to emphasize that harnessing the digital is very imperative. The study on digital economy harnessing was sub-divide into digital proficiency, digital infrastructure and e-government policy. Digital proficiency is indispensable because it is impossible to advance digital platforms without the animate objects been conversant with the devices especially in its manipulation putting into consideration the inconsistency in the digital world. Digital proficiency is the same thing as digital competence; it is the most recent concept describing technology-related skills. Recent years, several terms have been used to describe the skills and competence of using digital technologies, such as ICT skills, technology skills, digital proficiency skills, 21st century skills, information literacy, digital literacy, and digital skills. These terms are also often used as synonyms; e.g. digital competence and digital literacy (as an example, see Adeyemon, 2009; Krumsvik, 2008).

Statement of the Problem

In today's digital age, information management has become a critical aspect of every industry, including commercial banking which is one of the issues that necessitate this study. The effective management of information is crucial for commercial banks to remain competitive, delivery information effectively, timely information and renewal of the organizational information.

Many researchers has conducted studies in the area of digital economy harnessing and information management effectiveness of commercial from different perspective. Such as the work of. Laudon, and Laudon, (2010). Management Information Systems, Managing the Digital Firm. Information systems in management - By E-business and internet applications. Jams, S & Kent, L.(2003). Business Information Management: Improving Performance using Information Systems by Chaffey, D., & Wood, S. (2005).Understanding digital transformation: A review and a research agenda. Vial, G. (2019) The Problem and Barriers of Records and Information management in Africa. Burns, et al (2009).

All of these studies suggested that information management is a crucial activity for sustainable competitive advantage. Zeb-obipi and Victoria (2021) towards virtualization of healthcare system in River State: the needs, hurdles and solutions.

None of these studies was able to provide empirical insight on how dimensions of digital economy harnessing such as digital proficiency, digital infrastructure, and e-government policy interact with measures of information management effectiveness of commercial banks such as effective information delivery, timely information delivery, and information renewal. This suggests that the relationship between digital economy harnessing and information management effectiveness has not received adequate research attention within the context of commercial banks in Rivers State. Nigeria. There is need therefore, to embark on this study.

CONCEPTUAL FRAMEWORK

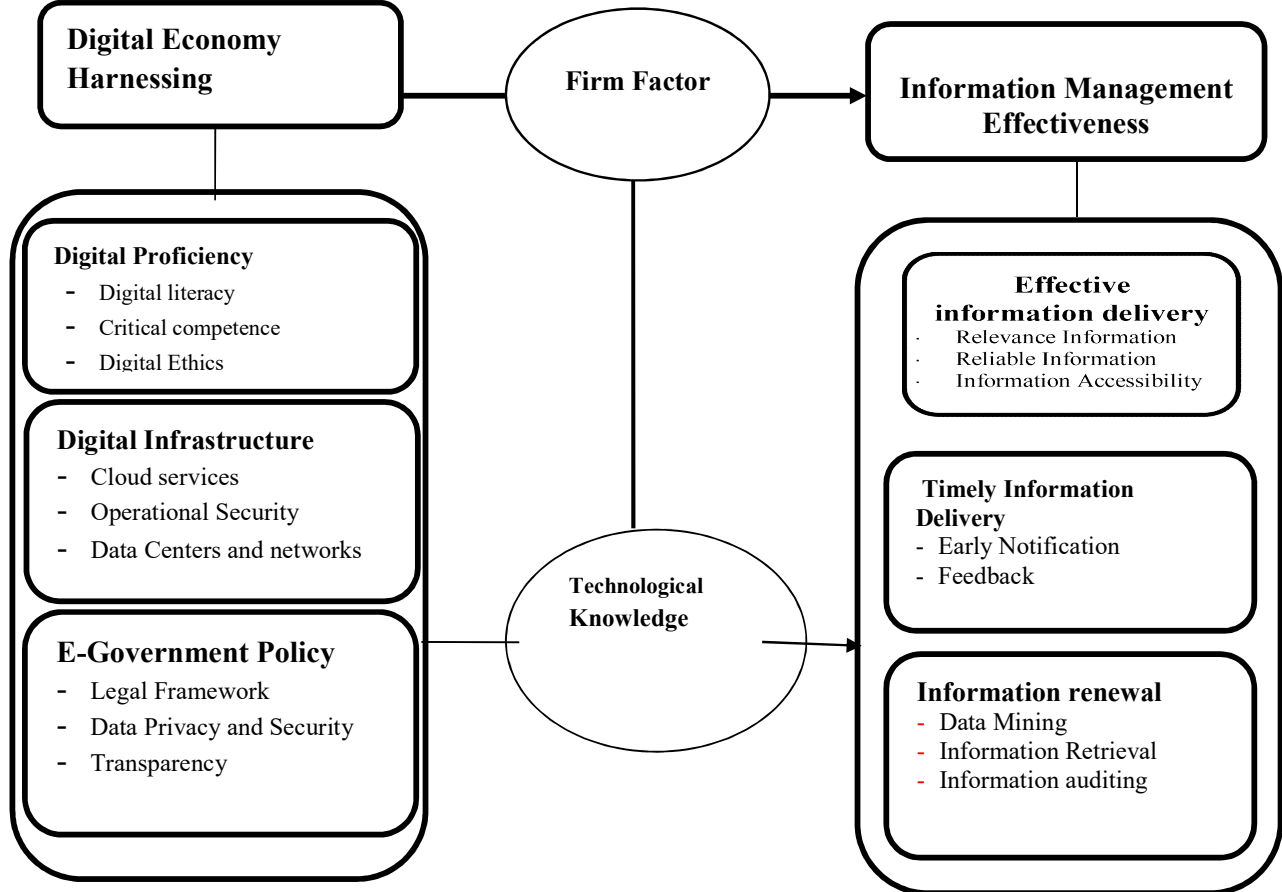


Fig. 1.1: Conceptual Framework Depicting relationship between predictor variable and criterion variable.

Sources: (Mamie et al 2022, Rostamian and Sadrabad 2016)

Aim and Objectives of the Study

Based on the conceptual framework of the study, the main aim of this study was to investigate the relationship that exists between digital economy harnessing and information management effectiveness of commercial banks in Rivers State. In line with the conceptual framework specifically, this study has the following objectives:

1. To examine the relationship between digital proficiency and effective information delivery of commercial banks in Rivers State
2. To determine the relationship between digital proficiency and timely information delivery of commercial banks in Rivers State.

Research Questions

This study has two research and two hypotheses which served as a guide. These are thus:

1. What is the relationship between digital proficiency and effective information delivery of commercial banks in Rivers State?
2. What is the relationship between digital proficiency and timely information delivery of commercial banks in Rivers State?

Hypotheses

In order to be properly guided in the study, the following null hypotheses were tested at 0.05 level of significance:

Ho₁: There is no significant relationship between digital proficiency and effective information delivery of commercial banks in Rivers State.

Ho₂: There is no significant relationship between digital proficiency and timely information delivery of commercial banks in Rivers State.

Significance of the Study

This study on digital economy harnessing is very significant in several aspects. For managers in the organization, the study will help to unveil vital information on the need and current challenges of information system in an organization and possible working solution for overcoming the identified problems to organizations. The findings will be beneficial to management in all corporate organizations; this is because an up to date technological engagement has become an integral feature of organizations in accomplishing set goals.

Secondly, by investigating the impacts of good digital economy harnessing, the study will establish a basis for encouraging the need for organization to constantly prove her information system. Both private and public sectors might also benefit from the study.

This is because it will show how their quality information can lead to the achievement of sustainable information management, productivity, efficiency and their attitude to work. The study will be beneficial to managers and employees in the sense that the study will point out areas of strength and weaknesses, thereby, standing as an improvement measure.

Thirdly, the study will be useful for academic purposes, as it will contribute to the body of knowledge by bridging the gap in literature in the area of digital economy harnessing and information management effectiveness. It will also expand the frontiers of knowledge and help students as well as private/individual researchers who will be interested in carrying out related studies in the future, use this study as a reference material.

Review of Related Literature

Conceptual Review

Concept of Digital Economy Harnessing

Digital economy is a key driver of economic growth and innovation, and its importance is only set to increase in the years ahead, the power of technology to drive economic growth and create new opportunities cannot be overemphasize, digital economy encompasses a wide range of activities, including e-commerce, digital payments, online advertising, social media, cloud computing, and the Internet of Things. The digital economy has transformed the way businesses operate, enabling them to reach new markets, reduce costs, and improve efficiency. It has also created new job opportunities and enabled individuals to work remotely and access a wider range of services. Governments around the world are recognizing the importance of the digital economy and are investing in infrastructure, education, and policies to support its growth.

Digital economy harnessing also entails addressing issues such as data privacy, cyber-security, and digital inclusion to ensure that everyone can benefit from the opportunities created by the digital economy. Information and communication technology, which is defined as "any communication device or application, including radio, television, mobile phones, computers, network hardware and software, satellite systems, and any associated applications," enables digitalization. Digital technology has transformed how businesses operate globally, from e-commerce to business process outsourcing. Furthermore, it has transformed how digital infrastructure communicates (via social media) as well as how governments interact with citizens via government platforms. The five main attributes of the digital economy: Digitized and Tracked, Connected, Shared, Personalized and Direct (Richter et al., 2017). The digitalisation of day-to-day activities has dramatically increased the amount of data available.

It creates extremely large and complex data sets, commonly referred to as "Big Data". Big Data could also potentially be used for internal risk management and outside monitoring of financial services and institutions and thus make supervision more efficient (Adamczewski, 2016., Dorofeyev et al., 2018). Innovative applications of digital technology for financial services, or Fintech, are being used to alter the interface between financial consumers and service providers and are helping to improve communication with consumers and increase their engagement (Keller and Hott, 2015). Electronic currency serves as one of the essential infrastructure elements of the digital economy (Pshenichnikov, 2017; Vovchenko et al., 2017). Note that the digital economy is still in the middle of formation, so any effects on productivity will occur only with developed digital technology

Dimensions of digital economy harnessing

Digital infrastructure

Digital infrastructure refers to the physical and virtual components that support the flow of digital information. It includes both hardware and software elements that enable the storage, processing, and transmission of data. At its core, digital infrastructure is built upon a network of interconnected devices, servers, and data centers that form the foundation of the internet. One of the key components of digital infrastructure is the internet itself. The internet is a global network of networks that allows computers and other devices to communicate with each other. It provides the infrastructure for various online services, such as email, social media, e-commerce and cloud computing. The internet is made up of millions of interconnected devices, including routers, switches, and servers, which route and transmit data packets across the network. Data centers are another critical component of digital infrastructure.

These facilities house the servers and storage systems that store and process vast amounts of digital data. Data centers are designed to provide high levels of security, reliability, and scalability to meet the growing demands of digital services.

They are equipped with redundant power supplies, cooling systems, and backup generators to ensure uninterrupted operation. Fiber optic cables form the physical backbone of digital infrastructure. These thin strands of glass or plastic transmit data as pulses of light over long distances. Fiber optic cables offer high bandwidth and low latency, making them ideal for transmitting large amounts of data quickly and efficiently. They are used to connect data centers, internet exchange points, and other critical infrastructure components. Wireless networks, such as Wi-Fi and cellular networks, provide connectivity to devices without the need for physical cables. These networks rely on radio waves to transmit data between devices and access points. Wireless networks have become increasingly important in recent years, enabling mobile devices, IoT devices, and smart homes to connect to the internet and communicate with each other. Digital infrastructure is imperative in information security, smooth file retrieval, and document production can be made much easier and possible by proficient deployment of cloud computing which is a made up of digital infrastructure.

Cloud computing proficiency, where Google document ability, Google drive ability and online database management ability, etc. play diverse but collective roles, helps increase the productivity of a remote workforce by allowing teams to communicate and collaborate seamlessly in real-time. With cloud computing, individuals can utilize services and also collaborate over a network where distance is no longer a barrier. Employees can access information stored in the cloud service via a host machine anytime and from anywhere so they can collaborate with colleagues in other locations in real-time. With the cloud service(s), official data/information can be well secure, colleagues can easily share and retrieve files from their ends, and mailable documents can be quickly produced. This is because there are the proficient usages of Google document, Google drive and online database management system. This is a plus point of adopting virtual computing in business - the remote access. Employees of the organization can access any required data or information and carry on working remotely. All they need is an internet connection. The majority of cloud computing

services available today also offer mobile apps that can be readily used to access data from smart phones anywhere at any time (Ward, 2019).

Digital Proficiency

Digital Proficiency It is a well-known fact that today's rapidly developing science and technology have also changed the structure of society. Parallel to these changes, changes are needed in banks administration. This situation necessitates the regulation of financial institutions in a way that will adapt to changing and developing social, cultural, economic and technological conditions and requirements (Alharthi, 2020; Hartono & Ozturk, 2022; Kibici & Sarıkaya, 2021). Digital Proficiency is the competence and fluency in utilizing digital technologies, applications, and platforms to accomplish tasks, solve problems, and achieve goals. It involves understanding and applying digital literacy, information management, digital communication, and critical thinking skills to effectively engage with digital environments.

It also represents the capability to ethically and effectively use digital tools and resources to access, manage, evaluate, and communicate information. It involves the ability to navigate digital platforms, critically assess digital content, protect digital privacy and security, and leverage digital technologies for learning, communication, and productivity.

In this development process, especially information technologies have taken their place in the banking sector by showing a significant development. There are reasons for computerization in financial institutions. Worthy of note also is that Digital proficiency has a positive relational influence on information management effectiveness. It enables effective information delivery, ensures timeliness, and facilitates information renewal. Organizations or individuals with high digital proficiency are more likely to have efficient and effective information management processes, leading to better decision-making, improved performance, and a competitive advantage.

Concept of Information Management Effectiveness

Information management effectiveness refers to the ability of an organization to efficiently and effectively manage its information assets. It involves the processes, systems, and strategies used to collect, store, organize, analyze, and disseminate information within an organization. An effective information management system ensures that information is accurate, reliable, accessible, and secure. It enables organizations to make informed decisions, improve operational efficiency, enhance customer service and gain a competitive advantage. Some key components of information management effectiveness include establishing policies, procedures, and controls to ensure the quality, integrity and 55 securities of data. This involves defining data ownership, roles and responsibilities, as well as implementing data standards and data management practices.

Management as used in this context means the organization of and control over the structure, the processes and the delivery of information. Henczel, (2000) and Ravi, (2011) consider information management as the systematic imaginative and responsible management of information in order to create and use information that will contribute strategically to the achievement of an organization's goals and make sure that groups and individuals have efficient access to and make effective use of the information they need to do their work and to develop themselves. Information management effectiveness opines protecting information assets from unauthorized access, use, disclosure, disruption, modification, or destruction. Effective information management includes implementing security measures to safeguard sensitive and valuable information.

Effective information management includes integrating disparate data sources and systems to enable better decision-making and analysis. Information management is theorized to involve a continuous cycle of closely related activities such as identification of informational needs, acquisition and creation of information, analysis and interpretation of information, organization and storage of information, information access and dissemination and information use (Henczel, 2000; Robertson, 2005; Ravi, 2011).

For information to be describing as effective it is opine that analyzing and interpreting data to gain insights and make informed decisions. Effective information management includes implementing analytics tools and techniques to extract valuable insights from data.¹⁰ Information Governance Maturity: Information effectiveness refers to the level of maturity of an organization's information governance practices. Identification of informational needs involves realization of the pivotal roles of information in the achievement of organizational goals and strategically plan for it. Maceviciute and Wilson (2002) define information management to include developing and implementing information policy and strategy; data creation and management; processing, storage and information delivery; and information usage.

Measures of Information Management Effectiveness

Effective Information Delivery

Effective information delivery refers to the ability to successfully transmit and communicate information to the intended recipients in a timely and accurate manner. Information spread has been revolutionized by technological break-through and rapid advances. Technological development has greatly changed the way in which information is stored and transmitted. Chapman & Slaymaker (2002) avers that industrial society has progressed into an era of advance technological innovations, thereby affecting the way digital infrastructure live their lives and how organizations run their daily business activities. It is a crucial measure of information management effectiveness as it determines how well an organization is able to leverage its information assets to support decision-making, problem-solving, and overall operational efficiency. Effective information denote that Information should be easily accessible to those who need it, whether it is stored in databases, documents, or other systems. This requires efficient organization and indexing of information, as well as user-friendly interfaces that allow users to quickly find and retrieve the information they need.

Effective information delivery also emphasizes that information must be accurate and reliable to be effective. This requires robust data quality management processes to ensure that information is complete, consistent, and free from errors or biases. It also requires effective validation and verification mechanisms to ensure the accuracy of information before it is delivered. Importantly, effective information strongly suggest that information should be relevant and tailored to the specific needs of the recipients. This requires understanding the information needs of different user groups and customizing the delivery of information to meet their specific requirements. It may involve filtering or summarizing information, as well as providing personalized recommendations or insights based on user preferences or past interactions.

Information Relevance

Information relevance is a critical factor in determining the effectiveness of information delivery. When information is relevant, it is more likely to be useful and actionable for the recipient. Relevant information is also more likely to be remembered and applied in decision-making processes. Effective information delivery requires that the information provided is tailored to the needs and interests of the recipient. This means that the information must be relevant to the recipient's goals, priorities, and challenges. When information is not relevant, it may be ignored or dismissed as irrelevant noise. Information relevance can be accessed through various metrics, such as the recipient's feedback, engagement, and actions taken based on the information provided.

Information relevance is a critical indicator of effective information delivery. Relevant information is more likely to be useful, remembered, and applied in decision-making processes, leading to better outcomes for the recipient. Communication is the process by which information is transferred from one end to another using a wide range of mediums such as electronic, paper and voice as well as signs and gestures which has to do with any act or process that entails the process of exchanging messages and interaction between a speaker or sender and his audience or receiver based on mutually reasonable codes (Moscovici, 1967). The school is the center for knowledge production. This knowledge is transferred as information to students, teachers and the society at large with the

administrator as the expert coordinator of its operations. Though saddled with enormous responsibility which ranges from administrative, managerial and supervisory. It is the duty of school administrator to ensure everyone is personally involved in the interaction and dialogue with key internal and external stakeholders in order to present ideas, articulate the rationale for sustaining quality effective information delivery and implore questions for clarification and suggestions for improvement. This means that administrative process revolves around gaining information and communicating it to the teachers in order to achieve educational goals (Marcellina, 2020).

Relationship between Digital Economy Harnessing and Effective Information Delivery

Digital proficiency enables banks to implement effective cybersecurity protocols, such as encryption, multi-factor authentication, and intrusion detection systems, to safeguard their information assets. In conclusion, digital proficiency has a significant relational influence on information management effectiveness in commercial banks. It enables banks to leverage data analytics, enhance cybersecurity, and promote efficient information sharing and collaboration. However, challenges such as the rapid pace of technological advancements and the potential digital divide need to be addressed to fully harness the benefits of digital proficiency. Commercial banks that prioritize digital proficiency and invest in the necessary resources will be better equipped to navigate the digital landscape and achieve superior information management effectiveness.

The relational influence between digital proficiency and information management effectiveness in commercial banks is multifaceted. Firstly, digital proficiency enables commercial banks to leverage advanced data analytics tools and techniques to extract valuable insights from vast amounts of data. This, in turn, enhances their ability to make data-driven decisions, identify market trends, and develop innovative products and services (Aviram and Eshet-Alkalai 2006).

In today's rapidly evolving digital landscape, technological knowledge plays a crucial role in shaping the success of businesses. The development of digital skills among people is nowadays one of the main concerns for digital inclusion programmes, which attempt to identify skills required for people to move easily within an increasingly digitalised society: the so-called twenty-first century skills (Van Laar, et al., 2020).

Theoretical Review

This study is hinged on the assumptions of the socio-technical theory, the theory holds that business organizations are made up of human beings working together in social groups using equipment, tools, methodologies and knowledge to achieve desirable changes in the system and to bring about the achievement of corporate goals as well as outperforming competitors (Walker et al., 2016). This theory holds that changes in organizations and the capacity of organizations to compete favourably in the market are influenced by demands from the external environment which impacts information systems changes in an organization. The socio-technical theory describes how societal changes provoke or necessitates changes in the techniques, procedures, infrastructure and technologies used in organizations (Norris & Moon, 2015).

This theory holds that changes in organizations and the capacity of organizations to compete favourably in the market are influenced by demands from the external environment which impacts information systems changes in an organization. The socio-technical theory describes how societal changes provoke or necessitates changes in the techniques, procedures, infrastructure and technologies used in organizations (Norris & Moon, 2015). Commercial banks more than ever before are facing serious competition from sister banks especially in the developed countries and as a way of coping and outperforming their competitors, commercial banks has to digital economy harnessing in our case such as digital proficiency, digital infrastructure, and e-government policy to harness and maximize the information management in our case in terms of effective information delivery, timely information delivery and information renewal. The socio-technical theory is founded on two cardinal assumptions: The interactions of social and technical factors create the conditions for successful (or unsuccessful) system performance" (Walker, et al., 2016). These interactions are

comprised partly of linear 'cause and effect' relationships, the relationships that are normally 'designed', and partly from 'non-linear', complex, even unpredictable relationships, which are those that are often unexpected. ii) The second major principle of socio-technical theory is that "optimization of either socio, or far more commonly the technical, tends to increase not only the quantity of unpredictable, 'un-designed', non-linear relationships, but those relationships that are actually injurious to the system's performance" (Walker, et al., 2016). Thus, second principle of socio-technical theory hinges on joint optimisation.

This second principle holds that improving only one aspect of the organization (e.g. workforce) and abandoning the other element (technical computer systems and other needed gadgets) will be detrimental to the system. Both the human and technological resources of an organization must be optimized simultaneously for expected results to be achieved. The implication of the joint optimization principle of socio-technical theory in the commercial banks is that continuous capacity building to increase workers' awareness of digital economy harnessing, which will lead to information management effectiveness. The justification of the socio-technical theory as the theoretical foundation of this study is based on the fact that the theory talks about how the interaction between people and digitalization and how it could triggers information management effectiveness. It is therefore reasonable to adopt a theory such as this since the work is aimed at getting empirical evidence on how digital economy harnessing interacts with information management.

Empirical Review

Nmehielle (2019) investigated the influence of digitalization on organizational communication success of tertiary institutions in Rivers State, Nigeria. The objective of the study was to examine the extent to which dimensions of digitalization such as digital access, digital infrastructure usage, and digital innovation influence measures of organizational communication success such as content quality, timeousness of information, and effective collaboration/interaction. The study also sought to determine the moderating role of technological level of employees in the relationship between digitalization and organizational communication success. The study adopted the cross sectional explanatory research design, using multiple stage sampling techniques, a sample size of 5 prominent tertiary institutions in Rivers State with 162 administrative heads as respondents. After validation by the supervisor, 162 copies of structured questionnaire were administered while 150 copies were retrieved. The reliability of the instrument was ascertained using Cronbach alpha. Mean and standard deviation were used for the univariate analysis while multiple regression was used for the bivariate analysis. Partial correlation was used for the multivariate analysis. The results showed that dimensions of digitalization such as digital access, digital infrastructure usage, and digital innovation significantly and positively influence measures of organizational communication success such as content quality, timeousness of information, and effective collaboration/interaction. The study concluded that 100 digitalization enhances organizational communication success. Consequently, the study recommended among other things that tertiary institutions should invest heavily in digital technologies and as well provide hands-on ICT training to promote digital access and digital literacy in order to enhance organizational communication success.

Roland et al. (2013) explored measuring the degree of virtualization - An empirical analysis in two Austrian industries. The main aim of the study was to critically measures the degree of virtualization in two Austrian industries. Exploratory research design was adopted for the study. This survey collected data from a sample of 1003 companies of Austrian service industries (39.08 % response rate) on technology and innovation. The questionnaire was used as tool for data collection for this study. The questionnaire used in this analysis consists of two sets of items. Cronbach alpha was used to ascertain the reliability of the instrument. Analysis of variance (ANOVA) was used as statistical tool for data analyses for this study. It was found that there is no significant difference between core competence focus and virtual sourcing, although the engineering industry had a slightly higher mean in Virtual Sourcing. There is also no significant difference in the factors of virtual identity and formalization. Only the factor of fairness is significantly higher in the engineering

industry as compared to the data processing industry. It was also found that ICT implementation and use are significantly higher in the data processing industry. It was concluded that virtual organizing is an ICT-enabled meta-management principle for goal oriented enterprises.

Timipre (2020) examined the relationship between workplace networking tools application and office administrators' effectiveness in Government Parastatals in Bayelsa State. The objective of the study was to examine the extent to which dimensions of Workplace networking tools application such as video conferencing application usage, whatsapp instant message usage, and departmental online computing influence measures of office administrators' effectiveness in Government parastatals such as staff coordination, communication, and information security. The explanatory survey research design was adopted in this study. The population of the study was one thousand three hundred and twelve (1312) consisting of 189 administrative heads and 1123 administrative assistants (secretaries and clerical officers). Using the Krejcie and Morgan Sample Size Determination of 1970, the sample size of this study was three hundred and two (302) respondents; 240 copies were retrieved. The Statistical Package for Social Sciences (SPSS) Version 20.0 was used for the analysis. Univariate analyses was done using mean and standard deviation while the test of hypotheses was done using Correlational Statistical tool such as Spearman Rank Order Correlation. The results showed that there is a significant positive relationship between dimensions of workplace networking tools application such as video conferencing application usage, whatsapp instant message usage, and departmental online computing and measures of office administrators' effectiveness in Government parastatals such as staff coordination, communication, and information security. The study concluded that workplace networking tools application influence office administrators' effectiveness in government parastatals in Bayelsa State. Amongst other things, the study recommended that government parastatals should imbibe the culture of hosting virtual meetings that will involve the use of Skype and Zoom applications, to acquaint their administrators and employees with all necessary digital skills, and as well improve administrators' staff coordination and communication.

Knowledge Gap

This study is a baseline-study, this is because to the best of my knowledge; it is the very first study to have examined the influential relationship between digital economy harnessing and information management effectiveness. This is evident in the empirical literature available online such as include Nmehielle (2019) The influence of digitalization on organizational communication success of tertiary institutions in Rivers State, Nigeria., Roland et al. (2013) Measuring the degree of virtualization An empirical analysis in two Austrian industries., Timipre (2020) Relationship between workplace networking tools application and office administrators' effectiveness, Janssen (2018) The effect of digital transformation changes on work design Steel company in Kenya., Tom (2020) Digital technologies and organizational productivity of construction companies in Rivers State., Naheed and Tasawar (2014) Impact of social networking on employee performance of banks in Pakistan. Hence, we took a departure from the prevalent to undertake this study.

METHODOLOGY

The study adopted the cross- sectional and correlational survey method in its assessment of the relationship between digital economy harnessing and information management effectiveness of commercial banks in Rivers State. The study adopted the census sampling technique. The census sampling technique refers to as a complete enumeration or a census survey, is a research method that involves collecting data from every member of a defined population or group rather than selecting a sample. The population of the study is therefore twenty-one (21) commercial banks with two hundred and thirty-one (231) respondents which are of the category of selected department in the commercial banks in Rivers State. After distribution of the questionnaire only 220 were retrieved and use in data analysis. The study analysed the two of the hypotheses earlier stated in the introduction.

Ho2: There is no significant relationship between Digital proficiency and information management effectiveness of commercial banks in Rivers State.

Correlation Matrix for digital proficiency and information management effectiveness

		Digital proficiency				Information Management effectiveness			
Digital proficiency	Pearson Correlation	1				-	.	7	8
	Sig. (2-tailed)					.	0	0	0
	N	2	2	0	2			2	0
	Pearson Correlation	-	.	7	8	7	1		
	Sig. (2-tailed)	.	0	0	0				
Information management effectiveness.									
	N	2	2	0	2			2	0

From the result in the table above, the correlation coefficient (rho) shows that there is relationship between digital proficiency and management information effectiveness. The correlation coefficient 0.787 confirms the magnitude and strength of this relationship and it is a strong positive correlation between the variables. The correlation represents is significant at $p\ 0.000 < 0.05$. Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a statistically significant relationship between digital proficiency and information management effectiveness in commercial banks in Rivers State.

Ho2: There is no significant relationship between Digital infrastructure and information management effectiveness of commercial banks in Rivers State.

Correlation Matrix for digital infrastructure and information management effectiveness

		Digital infrastructure				Information Management effectiveness			
Digital infrastructure	Pearson Correlation			1	-	.	9	5	7
	Sig. (2-tailed)				.	0	0	0	0
	N	2	2	0	2		2		0
	Pearson Correlation	-	.	9	5	7			1
	Sig. (2-tailed)	.	0	0	0				
Information management effectiveness.									
	N	2	2	0	2		2		0

From the result in the table above, the correlation coefficient (rho) shows that there is relationship between Digital infrastructure and information management effectiveness. The correlation coefficient 0.957 confirms the magnitude and strength of this relationship and it is a strong positive correlation between the variables. The correlation represents is significant at $p\ 0.000 < 0.05$. Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a statistically significant relationship between Digital infrastructure and information management effectiveness in commercial banks in Rivers State.

CONCLUSION

This study affirmed digital economy harnessing as a strong predictor of effective information management delivery, this is evident in empirical literature reviewed above in this study.

RECOMMENDATIONS

Based on the above conclusions therefore, we give the following recommendations

- i. Digital proficiency is key to ensuring information management effectiveness. Organizations need to have the right tools and technologies in place to effectively manage and leverage their data, and they also need to ensure that their employees are proficient in using these tools.
- ii. There's need for Organizations to at regular interval train its employees on the use of digital technologies so as to give them competitive advantage over rivals as it is obvious that without this knowledge, organizations may not be able to fully leverage the potential of digital technologies to improve their information management process.
- iii. Organizations should codify digital literacy as prerequisite specification for intended employees.

Contribution to Knowledge

This study is a baseline as it is apparently the very first to have investigated the relationship between digital economy harnessing and information management effectiveness in commercial banks in Rivers State and contributes to the body of knowledge in the following areas:

- i. This study contributes by addressing the relationship between the variables based on a conceptual model, developed by the researcher, which details the operational relationship between the variables and assesses the unique measurement of each variable based on adapted operational features and indicators. In this way, it presents a basis and reference material for future assessment of the variables based on a clear and detailed identification of their characteristics, dimensions, and measures, as well as their operationalized indicators.
- ii. The study also contributes by specifying the unique qualities of digital economy harnessing and the extent to which its dimensions, such as digital proficiency, digital infrastructure, and e-government policy, impact information management effectiveness.

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