ISSN: 3100 – 3082
Volume 9, Number 2, 2023
Academic Journal of Marketing and Management Science

DIGITAL SKILL UTILIZATION AND JOB PERFORMANCE OF INFORMATION MANAGERS IN STATE-OWNED UNIVERSITIES IN RIVERS STATE

Dr. Chux-Nyeche, Gloria Chinyere, Nwaonumah, Julian Oke and Onwukwe, Judith Chinyere
Department of Office and Information Management, Faculty of Management Sciences, Ignatius Ajuru University of Education, Port Harcourt, Rivers State, Nigeria.

Email:glochux@yahoo.com

ABSTRACT

This study examined the relationship between digital skill utilization and Job Performance of Information Managers in State-owned universities in Rivers State. The objective of the study was to examine the relationship between dimensions of digital skill utilization and measures of Job Performance of Information Managers. The study adopted Descriptive survey research design with population of 733 Information Managers. A sample size of 259 Information Managers was selected from State-owned universities in Rivers State. The researchers developed questionnaire validated by experts in measurement and evaluation and two other experts from Office and Information Management all from Ignatius Ajuru University of Education. Cronbach's Alpha was used to determine the reliability of the instrument. The computation was done with the aid of Statistical Package for Social Science (SPSS) version 20.0 for all the clusters which gave a reliability index of 0.75. Data collected was analyzed using mean and grand mean to answer the research questions and Spearman Rank Order Correlation to test the hypotheses at 0.05 level of significance. The results revealed that the respondents disagreed that: information skills relate to their effective information delivery and storage. However, the respondents agreed that their ICT skills relate to their effective information delivery and their critical thinking skills relate to their timely information delivery. The results also show that there is a very low positive relationship between information skills and job performance of Information Managers. Based on the findings, it was recommended amongst other that Information Managers in these universities needs to be provided with up-to-date digital technologies that support their digital skills utilization. They also ought to be trained on the utilization of digital platform for effective service delivery.

KEY WORDS: Digital Skills Utilization Information Skills, ICT skills: Critical thinking skills:

INTRODUCTION

The advancement in technological offerings around the globe and their subsequent integration into every human activity that were formally done manually has significantly expanded the basic literacy required to function effectively in human society to include digital skill. This is due to the fact that the human landscape has expanded with the integration of technology to include digital landscape where individual and corporate organization interact and collaborate in order to achieve personal or organizational goal using digital platforms Jisc, (2015). Hence, to function effectively and efficiently in this technological driven world, individuals whether for personal purpose or for career purpose are required to be digitally literate.

Digital skill is a basic requirement for anyone that wants to fit into today's electronic driven human activities such as: office automation, e-payments, social networking, e-mailing, e-banking, e-commerce, e-learning, e-registration, e-governance, e-library, to mention but a few that permeates digital oriented societies. Digital skill according to Nawaz and Kundi (2010) has to do with the combination of technical procedural, cognitive and emotional-social skills which enable one to use technological devices to file, manage, read and communicate information using users' interface. Ifijeh, Iwu-James and Adebayo (2016) defined digital literacy as the ability to identify, search and utilize required information in multimedia formats from different sources presented through

information and communication technologies. Adeoye and Adeoye (2017) also opined that digital skill is concerned with the ability to understand and use information in multiple formats from wide range of sources using electronic technologies such as computers and smart-phones creatively and safely.

Which-ever of these definitions one embraced, there is no gainsaying that the utilization of digital tools to create, access, process, utilize, communicate and manage information from different digital sources by individuals as well as corporate bodies is dependent on their digital skill competencies. Supporting this position, Chux-Nyeche (2019) noted that the advent and effective integration of mobile communication devices, laptops, i-pads and smart phones that are wirelessly connected to the internet has unarguably changed the requirement for effective information management by practitioners in the mainstream information management practices. This is true considering the fact that someone who does not have adequate competencies in utilizing the various technological tools of the 21st century cannot utilize the available technologies for the purpose of effective information management. Consequently, to function effectively in the 21st century workplace, existing and potential Information Managers need to develop digital skill competencies.

Like general competencies, digital literacy competencies are knowledge, skills and attitude required for the effective and efficient utilization of digital technologies to extract and utilize information capable of improving one's personal and career life as well as productivity from different sources and in different formats (United Nation-Commission on Science and Technology for Development, UN-CSTD, 2018). Although, digital tool knowledge is a basic aspect of digital literacy competency framework, the concentration in this study is on digital literacy skills which are basic abilities that users of digital technologies must possess in order to effectively and efficiently utilize digital technologies to meet their personal goals and contribute to national development. Digital skills utilization according to Naik and Padmini (2014) are more contemporary practical abilities in using digital devices (such as personal computers, laptops and smartphones).

Andrea (2011) opined that Digital skills utilization can be categorized into three groups of skills namely: ICT skills, technological skills and information skills. In the same vein Odu and Omosigho (2017) opined that Digital skills utilization encompass information skills, technical ICT skills for using the internet, and critical thinking skills for selecting, accessing and using the information. United Nation Education Scientific and Cultural Organization (UNESCO, 2018) noted that digital literacy skills include competences that are referred to as computer literacy, ICT literacy, information literacy and media literacy. A cursory examination of the existing evidence relating to the categorization of Digital skills utilization shows that there are varying opinions as to their constituents. However, within the context of this study, digital skills utilization would be classified into three categories which are: information skills, technical ICT skills, and critical thinking skills. The categorization of digital skills utilization in this study are into three groups these includes: information skill, technical ICT skill, and critical thinking skill which are informed by the essential responsibilities carried out by Information Managers across sectors using technological offerings. Nemesh (2020) opined that office information and management personnel basically perform those office functions that are related to information management such as: receiving, recording, arranging, analyzing and transmitting office information for the purpose of facilitating decision making. London Business Training and Consulting (LBTC, 2020) noted that information and management functions of office personnel centres on receiving information, recording information, arranging information, giving information, establishing effective and efficient office systems through planning, controlling and organizing in order to ensure the performance of office operations.

Hence, with the adaptation and integration of technologies in the performance of information management functions in this 21st century, it is essential that Office Information Managers develop digital skills utilization. This is to enable them efficiently generate, create and communicate reliable office information for the purpose of supporting workplace productivity through effective decision making. Information skill as one of the basic digital skills utilization to be considered in this study that an office information and management expert needs to develop is essentially for the purpose

of sourcing and meeting the information needs of organizations that would guarantee the achievement of predetermined goals. This is based on the fact that information skill is the ability of knowing when and why information is required, where to find it and how to evaluate, use and communicate it in an ethical way (Naik & Padmini, 2014). In this era of technology, many employers do not depend only on their manual processes for information generation, creation, processing and dissemination. According to Chux-Nyeche (2019), organizations are using software and other digital tools to mine competitive and industry data that can be translated into information capable of helping them learn more about the market and increase their market share.

Technical ICT skill is considered important to the adventure of using ICT tools in the most effective and efficient ways to perform the tasks of information sourcing, creation, management and communication in the 21st century workplace. There is no doubt that with the online structures of most organizations, employees of such organizations need to develop essential skills for ICT tools utilization in order to perform as expected by their employers. Iyanda, Opele and Akintunde (2016) opined that ICT skill refers to the ability to use any digital technology tool for researching, organizing, evaluating and communicating information, and the possession of a fundamental understanding of the ethical and legal issues surrounding access and the use of information from digital sources to solve the information needs of individuals and organizations.

Supporting the relevance of developing Digital skills utilization, Razaq and Olaleye (2017) noted that every citizen requires Digital skills utilization to fully participate in socio-economic activities that engenders development. Odu and Omosigho (2017) also noted that to fully participate and be active in this era of technology employees need digitally literate skills to meet global competitiveness. Therefore, it is expected that Information Managers who possess these digital skills utilization would not only improve their job performance but also would provide their organizations with information capable of enhancing decision making and overall performance. According to Georgeta and Cuza (2010), job performance is the quality and quantity of employee's contribution to employer's activities using personality factors, skills and abilities necessary. Sarasvathy (2013) defined job performance as the result of series of behaviours exerted towards the accomplishment of job responsibilities or tasks performed on a daily basis aimed at achieving the general goals. Markus (2019) opined that job performance on a general note has to do with the contribution of an individual to the overall success of an organization. The author also noted that there is a general consensus that job performance consists of two interplaying components which are task performance and contextual performance. Task performance has to do with specific work outcomes based on work role behaviour that contribute to the attainment of organizational goals, while contextual performance is concerned with contribution to the well-being of an organization through team work.

To understand those categorized as Information Managers, it is important to have a clearer understanding of the concept of Office Information Management. Office information management as a terminology emanated from the combination of three key terminologies that is office, information and management. Looking at each of the constituents before ascribing meaning to the concept, David (2020) opined that office in today's society also referred to as modern office is a workspace that serves as the information centers of organization whether public or private. London Business Training and Consulting (LBTC, 2020) opined that modern office is regarded as a function rather than a place because it enables planning, organizing, coordinating, standardization and supervision of organization's activities, how it is done and who does it. Information from the view of Agu (2017) can be defined as the strategic resources of 21st century organizations. Wendel (2017) also noted that information is an important resource of knowledge-oriented businesses in the 21st century.

Information management as a field of study according to the Rivers State University (2020), is a programme designed to develop mature and articulate minds in information management who can use innovative ability to solve complex problems in the field of Office Administration and Information

Management for business. According to Bourgeois and Bourgeois (2014), there are two categories of information management personnel, the first are those who design, develop and build information systems for managing information while the second are those who use information system to manage information on a day-to-day basis. The second has personnel such as computer operators, database administrators and managers, secretaries and trainers. Welsh (2019) opined that Information Managers are normally required to be the right hand of chief executive officers or top management staff. The author noted that their responsibilities have changed from being about typing and handling stapler to being able to tackle different office responsibilities such as being the central contact person for everyone within an organization, having an overview of different things within an organization and pitch anywhere necessary to ensure the smooth operations of the organization. Neuvoo.ca (2020) outlined other common names for Information Managers to include administrative officer, administrative coordinator, office coordinator and operational officer. Supporting this, Steve (2020) noted that personnel with information management degree mostly work as Administrative Managers with responsibilities relating to creating an engaging workplace that allows for interaction with all visitors and staff. A cursory look at the descriptions of Information Managers by different authors above show that those that falls within this category in government own tertiary institutions are secretaries and administrative staff. According to Azi (2015) secretary and administrative assistant are saddled with the responsibility of information management in most organizations.

Kahirol, Muhammad and Nor (2017) noted that secretaries in most organization serves as executive officers or Office Manager with the responsibilities of coordinating the managing its information flow. Alison (2020) noted that although many confused office Information Manager to mean secretary or administrative assistant, in reality, they actually operate at the highest level of organizations with the responsibility of leading and working with other heads of units in order to build a healthy work environment. In light of the foregoing discussion, the definition of Information Managers within the context of this study is limited to state-owned universities in Rivers State 'employees who by virtual of their job responsibilities collect, process and utilize information using digital platform, that is, heads of department, secretaries and administrative officers. This is because these are the personnel required to generate information through various digital platforms of their employers (state-owned universities) in order to present them in orderly manner to support management decision making. Consequently, to effectively generate reliable, accurate and timely information to support management decision and administrative functions through the public universities' digital platforms, Information Managers needs to be digitally competent, hence the essence of their digital skills utilization in information management on job performance. There are different positions as to the measurement of job performance. (Elson et al., 2018) opined that job performance should be contextual based and it should be aimed at measuring what the participant can do and not what the participant will do to ensure the attainment of the general goal of the workplace. Motowildlo and Kell (2012) noted that task performance should be measured based on identified specific tasks that make up a job and estimates the extent to which employee is able to actualize them. This means that task performance is mostly associated with job responsibilities in a formal job description. Many researchers have conducted studies to examine one aspect of digital skills utilization or the other and relate them with various dependent variables such as productivity and job performance. Emiri (2015) conducted study to find out the digital skills utilization among librarians in university libraries in the 21st century in Edo and Delta States, Nigeria. Flood (2015) conducted a study to determine the effect of information skills and critical thinking skills on discerning online information among high school students. Adeoye and Adeoye (2017) conducted a study to examine the digital skills utilization of undergraduate students, Federal Universities in Southwest, Nigeria. Filson and Kwafoa (2016) conducted study on the impact of information skills on the performance of past students at their workplaces: the case of university of Cape Coast, Ghana. Ayim (2018) conducted a study to access ICT skills of digital library users and staff of Salem University Lokoja, Kogi State; and Israel (2018) carried out an investigation into the information

literacy self-efficacy (ILSE) in the use of Electronic Information Resources (EIRs) by Library and Information Science Postgraduate Students in South-South, Nigeria. However, to the best of the researcher's knowledge, none of the available researches have considered investigating

Problem Statement

There is no doubt that today many Nigerians from different works of life can have access to wide range of information in different formats due to the advancement and access to technological tools such as personal computer, smart phones and Internet connectivity. Nevertheless, the researchers observed that there is obvious digital divide amongst many Nigerians as a lot of persons both educated and not educated especially the older ones lack the abilities to use many technological tools to access relevant and reliable information. In some cases, older Nigerian employees (Information Managers inclusive) are skeptical of using technological devices to access information that affects their personal life such as financial information, health information and commercial information as well as that which affects their job performance. However, in a situation where performance of job responsibilities in many sectors of the economic (education, commerce, banking, health, agriculture) depends on the extent to which one can use digital platforms to access and share information related assigned tasks such as improved working techniques and alternatives means of efficient resources utilization, their inability to use and their skepticism in using technologies will not only pose a barrier to their job performance but also to their contribution to the organization's overall performance. In addition, it has also been observed that many office administrators and secretaries who are charged with the responsibility of information management are still seen using manual processes even where they are provided with or have access to technological tools creating digital divide especially in public sector. This act may pose great danger to the efficiency with which they carry out their responsibilities and their ability to collaborate and make available relevant and reliable information to interested users. The spillover effect of poor access to relevant and reliable information from various offices is seen in the rate of access to unverifiable information shared online through social media platforms, such as Facebook, Twitter, WhatsApp and so on that have made the access and sharing of written, audio and visual information quite easy and cheaper. Most of the information emanating from these sources and other digital sources may pose serious dangers to employees and their employers if the users of digital technologies in an organization lack the digital skills utilization to quickly discern manipulative information from reliable ones.

This is based on the fact that digital skills utilization are akin to effective and efficient reliable information usage in the most ethical manner to facilitate effective decision making and performance improvement that can enhance sustainable personal and national development. Consequently, the need to access digital skills utilization of Information Managers and how it affect their job performance becomes imperative if organizations must obtain value from the actions or work behaviour guaranteeing relevant information creation, usage and dissemination with the aid of digital technological offerings. In view of the foregoing stated problems the researcher deems it fit to examine the relationship between digital skills utilization and job performance of Information Managers in state owned universities in Rivers State. This is aimed at filling existing gap in literature on the topic as earlier studies to the best of the researcher's knowledge have either concentrated on accessing digital skills utilization without comparing them with other variables or concentrated on comparing one dimension of digital skills utilization with other variables such as productivity, work performance and academic performance. Below is a conceptual framework showing dimensions of digital skills utilization (as predictor variable) and job performance (as criterion variable).

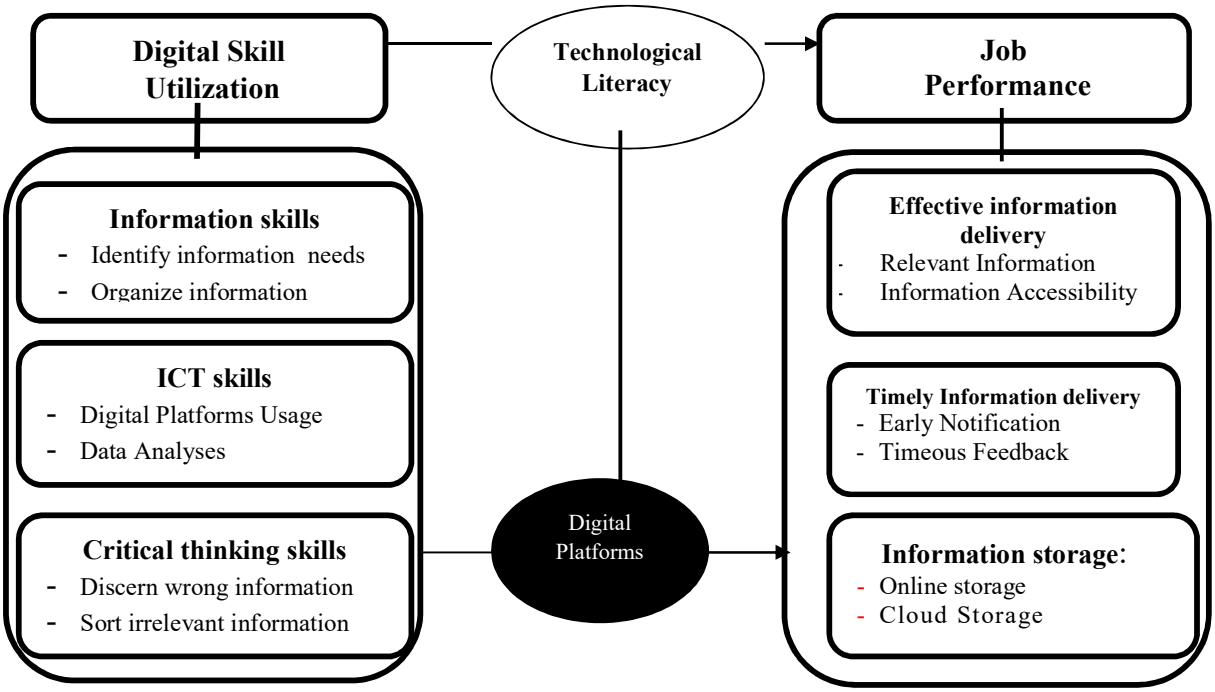

Fig. 1.1: Conceptual Framework Depicting relationship between predictor variable and criterion variable.
Source: Researchers Conceptualization (2022)

Objectives

The main aim of this study was to examine the relationship between digital skills utilization and job performance of Information Managers in state-owned universities in Rivers State. Specifically, the study sought to:

1. To examine the relationship between information skills and effective information delivery of Information Managers in State-owned universities in Rivers State.
2. To examine the relationships between ICT skills and timely information delivery of Information Managers in State-owned universities in Rivers State.
3. To examine the relationships between Critical skills and information storage in State-owned universities in Rivers State

Research Questions

Emanating from the objectives stated above, the following research questions guided this study:

1. What are the relationship between information skills and effective information delivery of Information Managers in state-owned universities in Rivers State?
2. What are the relationships between ICT skills and timely information delivery of Information Managers in State-owned universities in Rivers State?
3. What are the relationships between Critical skills and information storage in State-owned universities in Rivers State?

Research Hypotheses

The following hypotheses were tested at 0.05 level of significance:

$H0_1$ Information skills have no significant relationship on effective information delivery of Information Managers in state-owned universities in Rivers State.

$H0_2$ ICT skills have no significant relationship on effective information delivery of Information Managers in State-owned universities in Rivers State.

$H0_3$ Critical skills have no significant relationship on information storage of Information Managers in state-owned universities in Rivers State.

Benefit of the Study

The findings of this study would be of immense significant to information management personnel, students of information management, lecturers in information management, employers of information management graduates and future researchers in the field of information management studies. Information Managers will utilize the findings of this study to understand the relationship between digital skills utilization and job performance with effective information, timely information and information storage. This would enable them decide on areas of their digital skills utilization they need to improve on in order to enhance their productivity in the workplace. It will enable students of information management understand digital skills utilization that are needed for job performance when employed as information management personnel which will in turn enable them device the means of developing these skills before graduation or immediately after graduation.

Lecturers in information management studies will utilize the findings of this study to identify digital skills that would enhance the future performance of their students. This will enable them develop instructional strategies to assist their students develop digital skills before graduation. As information and management experts too, the lecturers will utilize the findings of the study to assess areas of digital skills utilization that can enhance their job performance. Employers of Information management graduates, who want to deploy technological devices to create digital platforms for information access, sharing and work collaboration, will utilize the findings of this study to determine digital skills utilization that employees need to possess to aid their work.

Conceptual Review

According to Casey, Bruce, Martins, Reynolds, Gerry, Coffey, Brown and Hallissy (2009), the traditional view of digital skill limits its scope to technical knowledge and skills for using software and technological devices but the modern view of the concept expands it to include making meaning out of digital content and assessing the impact of using digital tools. Chux-Nyeche (2019) opined that digital skill or computer literacy as used in this study implies the ability to use the computer and other information and communication technologies confidently in the transaction of businesses. In light of the foregoing definitions, it would be realized that digital skill is vital to bridge the gap in technological application to drive productivity in human society in this technological era.

It is for this reason that United Nation Commission on Science and Technology for Development (UN-CSTD, 2018) defined digital literacy as the knowledge and skills required by an individual to be able to use ICT to accomplish goals in his or her personal or professional life. United Nation Education Scientific and Cultural Organization (UNESCO, 2018) also defined digital literacy as the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through using digital technologies for employment, decent jobs and entrepreneurship. No little wonder, Andrea (2011) opined that digital skill is significant to the employability of employees who want to contribute significantly to the productivity of their workplace in this 21st century. Supporting this, Ifijeh, Iwu-James and Adebayo (2016) noted that in this era where technology drives virtually every aspect of human activities, it is significant that individual develop digital literacy in order not to be at disadvantage when it comes to the use of digital technology to access and utilize quality information that can drive their productivity and ensure their contribution to national developmental agenda. To live and contribute meaningfully to personal and national discourse, digital literary is most life skill for citizens. Supporting this, Andrea (2011) noted that digital literacy is a life skill because it touches all areas of contemporary human existence. Odu and Omosigho (2017) also noted that digital skill is essential life skill for the workforce of a nation within today's digital world since it empowers workers with critical thinking skills and the skills to evaluate; understand and interpret information from online sources. UN-CSTD (2018) noted that 'digital literacy for all' is a basic requirement to enable every citizen to participate fully in today's

digital driven society. Alugbin (2020) opined that digital skills utilization empower people to work from their places of comfort efficiently without wastage of much resources and overcoming many barriers such as: distance and place which would have hindered productivity.

On Digital Skills Utilization, Nawaz and Kundi (2010), digital skill has to do with the combination of technical procedural, cognitive and emotional-social skills which enable one to use technological devices to file, manage, read and communicate information using users' interface. Alexander, Adams, Becker and Cummins (2016) opined that digital skill is an umbrella term that includes a continuum of meanings that cut across the ability to use digital devices or software, to being capable of consuming and producing digital content, to meaningfully participating in digital communities. Ifijeh, Iwu-James and Adebayo (2016) defined digital literacy as the ability to identify, search and utilize required information in multimedia formats from different sources presented through information and communication technologies. Adeoye and Adeoye (2017) also opined that digital skill is concerned with the ability to understand and use information in multiple formats from wide range of sources using electronic technologies such as computers and smart-phones creatively and safely. Perućica, Anđelković, Radunović and Markovski (2019) digital skill encompasses knowledge and skills needed to use technological offerings as well as to critical assess the impact of utilizing digital technology on personal development and society, that is, in addition to ICT competence, it incorporates three pillars known as: smart use, nurturing values, and an understanding of the digital age.

In addition, knowing how technology works can help users improve the efficiency of usage and optimize the outcome of technology usage. Emiri (2015) opined that for a person to be classified as someone who possess digital literacy skills, one must have: The knowledge of the basic principles of computing devices, skills in using computer networks, having ability to engage in online communities and social networks with adherence to behavioural protocols, being able to find, capture and evaluate information, and understand the societal issues raised by digital technologies and possess critical thinking skills. Adeoye and Adeoye (2017) in their review of digital skills enumerated six fundamental skills that digital technology users need to develop in this 21st century to include: photo-visual skills ("reading" instructions from graphical displays), reproduction skills (utilizing digital reproduction to create new, meaningful materials from existing ones), branching skills (constructing knowledge from non-linear, hyper-textual navigation), information skills (evaluating the quality and validity of information), and socio-emotional skills (understanding the "rules" that prevail in cyberspace and applying this understanding in online cyberspace communication); and real-time thinking skill (the ability to process and evaluate large volumes of information in real time). The authors explained that these six digital skills areas can be regroup into three categories of digital skills which are: information skills, ICT skills and media skills. Odu and Omosigho (2017) also noted that digital skills encompass information skills, technical ICT skills for using the internet, and critical thinking skills for selecting, accessing and using the information. UNESCO (2018) noted that digital skills include competences that are referred to as computer skill, ICT skill, information skill and media skill.

According to Carretero, Vuorikari and Punie, (2017), DigComp 2.0 and DigCamp 2.1 have become the reference competency framework for determining and assessing the digital literary skills in European and Member State level. The authors noted that DigComp 2.0 was first developed and published in 2013 and has undergone a lot of updating of its terminology and conceptual model in order to produce DigComp 2.1 which contains five major areas of digital skills and 21 competencies as well as eight proficiency level as shown in the tables below:

Method

In order to enable the researchers determine the relationship between the variables under investigation, the correlation research design was adopted. While the population for this study comprised 733 Information Managers in State-owned universities in Rivers State. A sample size of 259 Information Managers were selected from two State owned universities in Rivers State. The

sample size was determined using Taro Yamen's formula. The researchers developed instrument titled "Digital Skills Utilization and Job Performance of Information Managers in State-owned Universities Questionnaire (DSUQUEST)" was used for data collection. The face and content validity was done by subjecting the instrument to three experts in the field of information management who scrutinized and verified its suitability. To determine the reliability of internal consistency of the instrument, the validated Questionnaire were administered to 25 secretaries from Niger Delta University, Bayelsa State in order to generate data to run Cronbach's Alpha test computed with the aid of Statistical Package for Social Science (SPSS) version 20.0. The Cronbach alpha computation gave a reliability index of 0.72. This showed that the instrument was reliable. The data collected was analyzed using mean and grand mean to answer the research questions. The null hypotheses were tested using Spearman Rank Correlation. All data was analyzed using SPSS.

Univariate Analysis of Results

Research Question 1: What are the relationships between information skills and effective information delivery of Information Managers in State-owned universities in Rivers State?

Table 1: **Responses on the relationship between information skills and effective information delivery of Information Managers in State-owned universities in Rivers State.**

S/N	Description	SA	A	SD	D	$\bar{x}$	Decision
1.	Ability to identify information needed through digital platforms relates to provide the information need of the users	11	24	147	77	1.90	Disagreed
2.	Ability to distinguish the information needed from digital platforms in each phase of work from the others relates to information delivery to users.	79	73	78	29	2.78	Agreed
3.	Ability to locate information needed using digital platforms relates to provision of information to users	71	112	59	17	2.92	Agreed
4.	Ability to organize information needed for works using digital platforms relates to delivery of information to users	13	32	149	65	1.97	Disagreed
5.	Ability to apply information needed for works through digital platforms to achieve daily objectives relates to provision of information to users	08	31	143	77	1.88	Disagreed
	Grand Mean					**2.29**	**Disagreed**

Source: Field Survey, 2022

Table 1 above shows that the respondents disagreed that their ability to identify information needed through digital platform, to organize information needed for works using digital platforms and their ability to apply information relates to information delivery with mean scores of 1.90, 1.97 and 1.88 respectively. The respondents agreed that their ability to distinguish the information needed from digital platforms and their ability to locate information needed using digital platforms relates to information delivery with mean scores of 2.78 and 2.92 respectively. However, when the grand mean is considered, it can be concluded that the respondents disagreed that their information skills relate to effective information delivery.

Research Question 2: What are the relationships between ICT skills and effective information delivery of Information Managers in state-owned universities in Rivers State?

Table 2: **Responses on the relationship between ICT skills and effective information delivery of information managers in state-owned universities in Rivers State.**

S/N	Description	SA	A	SD	D	$\bar{x}$	Decision
1.	Ability to use digital platform to compare data or information with other sources relates to effective information provision	80	60	67	52	2.64	Agreed
2.	Ability to use digital platform to evaluate the quality of information generated for office use relates to effective information delivery	87	58	71	43	2.73	Agreed
3.	Ability to use digital platform to understand the logical connections between data or information generated for office use relates to effective information delivery	84	83	55	37	2.83	Agreed
4.	Ability to use digital platforms to discern on fake data or information relates to effective information delivery	62	34	92	71	2.34	Disagreed
	Grand mean					**2.64**	**Agreed**

Source: Field Survey, 2022

Table 2 above shows that the respondents disagreed that their ability to use digital platform to discern on fake data or information relates to effective information delivery with mean score of 2.34. The respondents also agreed that their ability to use digital platform to compare data or information with other sources, ability to use digital platform to evaluate the quality of information generated for office use and ability to use digital platform to understand the logical connections of information generated for office use relates to effective information delivery with mean score of 2.64, 2.73 and 2.83 respectively. In same vein, when the grand mean of 2.64 is considered, it can be concluded that the respondents agreed that their ICT skills relate to effective information delivery.

Research Question 3: What are the relationships between Critical thinking skills and information storage of Information Managers in state-owned universities in Rivers State?

Table 3: **Responses on the relationship between critical thinking skills and information storage of information managers in state-owned universities in Rivers State.**

S/N	Description	SA	A	SD	D	$\bar{x}$	Decision
1	Ability to compare data or information with other sources in order to detect falsified information relates to information storage	89	40	77	53	2.63	Agreed
2.	Ability to evaluate information usefulness for office use relates to information storage	23	05	154	77	1.90	Disagreed
3.	Ability to understand reliable information for office use relates to information storage	60	106	59	34	2.74	Agreed
4.	Ability to discern on fake data or information relates to information storage using digital platforms	11	0	174	74	1.81	Disagreed
5.	Ability to assess website security in order to prevent access to irrelevant	130	128	0	01	3.5	Strongly Agreed

	data or information relates to information storage						
6.	Ability to dispose irrelevant information with digital platforms relates to information storage	16	25	118	100	1.85	Disagreed
	Grand mean					**2.41**	**Disagreed**

Source: Field Survey, 2022

Table 3 above, shows the respondents disagreed their ability evaluate information usefulness for office use, their ability to discern on fake data or information and their ability to dispose irrelevant information with digital platforms relate to information storage with mean scores of 1.90, 1.81 and 1.85 respectively. The respondents also agreed that their ability to compare data or information with other sources in order to detect falsified information and their ability to understand reliable information for office use relate to information storage with mean scores of 2.63 and 2.74 respectively. They also strongly agreed with mean of 3.5 that their ability to assess website security in order to prevent access to irrelevant data or information relates to information storage using digital platforms. However when the grand mean score of 2.41 is considered, it can be concluded that the respondents disagreed that their critical thinking skills relate to performing information storage.

Bivariate Correlation Analysis

Hypothesis 1: Information skills have no significant relationship on effective information delivery of Information Managers in state owned universities in Rivers State.

Table 4. **Summary of Spearman Rank Correlation on the Relationship between information skills and effective information delivery of information managers**

			Information skills	Effective information delivery
Spearman's rho	Information Skills	Correlation Coefficient	1.000	.078
		Sig. (2-tailed)	.	.542
		N	195	64
	Effective information delivery	Correlation Coefficient	.078	1.000
		Sig. (2-tailed)	.542	.
		N	64	64

Table 4 above shows that there is a very low positive relationship between information skills and effective information delivery of information management r (257) = 0.078, p = 0.542. Since the p value at 0.542 is greater than the critical level of 0.05, the null hypothesis is accepted. Therefore, information skills have no significant relationship with effective information delivery of information managers in state-owned universities in Rivers State.

Hypothesis 2: There is no significant relationship between ICT skills of Information Managers and Timely information delivery in state owned universities in Rivers State.

Table 5 **Summary of Spearman Rank Correlation on the Relationship between ICT skills and timely information delivery of information managers**

			ICT skills	Timely information delivery
Spearman's rho	ICT skills	Correlation Coefficient	1.000	-.417**
		Sig. (2-tailed)	.	.001
		N	195	64
		Correlation Coefficient	-.417**	1.000

	Timely information delivery	Sig. (2-tailed)	.001	.
		N	64	64

**. Correlation is significant at the 0.05 level (2-tailed).

Table 5 above shows that there is moderate negative relationship between ICT skills and timely information delivery of information management r (257) = - 0.417, p = 0.001. Since the p value at 0.001 is less than the critical level of 0.05, the null hypothesis is rejected. Therefore, ICT skills have significant relationship with timely information delivery of information managers in state-owned universities in Rivers State.

Hypothesis 3: Critical thinking skills have no significant relationship on information storage of Information Managers in state owned universities in Rivers State.

Table 6: Summary of Spearman Rank Correlation on the Relationship between critical thinking skills and information storage of information managers

			Critical thinking skills	Information storage
Spearman's rho	Critical thinking skills	Correlation Coefficient	1.000	.496**
		Sig. (2-tailed)	.	.000
		N	195	64
	Information storage	Correlation Coefficient	.496**	1.000
		Sig. (2-tailed)	.000	.
		N	64	64

**. Correlation is significant at the 0.05 level (2-tailed).

Table 6 above shows that there is moderate positive relationship between ICT skills and information storage of information management r (257) = 0.496, p = 0.000. Since the p value at 0.000 is less than the critical level of 0.05, the null hypothesis is rejected. Therefore, critical thinking skills have significant relationship with information storage of information managers in state-owned universities in Rivers State.

Multivariate Analysis (Partial Correlation)

Table 7: Summary of Partial Correlation on the Relationship between Digital Skills Utilization and Job Performance of Information Managers when Moderated by Access to Digital Platforms in State Owned Universities in Rivers State.

Control Variables			Digital skills	Job Performance	Digital platforms
-none-[a]	Digital skills	Correlation	1.000	.467	-.294
		Significance (2-tailed)	.	.000	.018
		Df	0	62	62
	Job performance	Correlation	.467	1.000	-.159
		Significance (2-tailed)	.000	.	.208
		Df	62	0	62
	Digital platforms	Correlation	-.294	-.159	1.000
		Significance (2-tailed)	.018	.208	.
		Df	62	62	0
Digital platforms	Digital skills	Correlation	1.000	.445	
		Significance (2-tailed)	.	.000	
		df	0	61	
	Job performance	Correlation	.445	1.000	
		Significance (2-tailed)	.000	.	
		df	61	0	

Cells a contain zero-order (Pearson) correlations.

Table 7 shows that access to digital platforms negatively moderate the relationship between digital skills utilization and job performance of information managers with r value of -0.29, p = 0.018. This provides answer to research question 10 which investigates how access to digital platforms moderates the independent and dependent variables. In addition, when p value at 0.018 is considered, because it is less than p value provided at 0.05, the null hypothesis is rejected. This means that there is significant relationship on the extent to which digital platform moderates digital skills utilization and Job Performance of Information Managers in state owned universities in Rivers State.

Major Findings

The discussions of major findings were done under each of the specific objectives they addressed as follows:

Relationship between information skills and effective information delivery of Information Managers in State-owned universities in Rivers State.: The results related to this specific objective revealed that there is a very low positive but no significant relationship between information skills and effective information delivery of information managers in State-owned universities in Rivers State. The results also showed that the respondents disagreed that their information skills relate to their effective information delivery. These results emanated from the fact that as the information skills of the respondents increase, their effective information delivery tends to decrease as rated by their Heads of department, hence, the disagreement of the respondents on the relationship of the variables. These findings are contrary to the findings of Filson and Kwafoa (2016) when they revealed that the benefits of information skills are enormous; thus information skill is a contributory factor to effective job delivery of workers and employability skills required of job seekers. The findings is also contrary to the findings of Wu (2018) discovered that information skills of employees improve their self-efficacy in defining information needs, self-efficacy in evaluating information and self-efficacy in using information and these have positively significant influence on their creativity at work and job performance.

To examine the relationship between ICT skills and effective information delivery of Information Managers in State owned universities in Rivers State.: The results related to this specific objective revealed that there is very low negative but no significant relationship between ICT skills and effective information delivery of information managers in state-owned universities in Rivers State. The results also showed that the respondents agreed that their ICT skills relate to their effective information delivery. These results emanated from the fact that as the respondents' ICT skills increases, the effective information delivery as assessed by the Heads of departments decreased very low, hence, the agreed relationship is a very low negative one. The findings of this study is supported by the finding of Quadri (2012) who discovered that ICT skills are more likely to use the electronic information resources to bring improvement in service delivery more than those with inadequate ICT skills. The findings are also supported by Kaluyu, Wambugu and Odour (2015) who reported significant effect of employees' level of ICT skills for quality management on job performance.

To determine the relationship between Critical thinking skills and information storage of Information Managers in state-owned universities in Rivers State: The results of the study revealed that there is moderate positive significant relationship between critical skills and information storage of information managers in two state-owned universities in Rivers State. The results also showed that the respondents disagreed that critical thinking skills relate to their information storage. These findings emanated from the fact that as the respondents' critical skills increased moderately, their information storage also increased moderate. The findings of this study are supported by the findings of Ejiogu, Yang, Trent and Mark (2006) when they discovered positive relationship between measures of critical thinking ability and future information use from database for job delivery. The

findings are also supported by the findings of Duran and Sendag (2012) when they discovered that in information era the work environment value critical thinking skill because it enables employees to database of relevant information and improves their tasks performance. The findings are also supported by Flood (2015) who found that those with information skills and critical thinking skills were able to retrieve and save more relevant information from online sources.

Ascertain the extent to which digital platform moderates the relationship between digital skills utilization and job performance of Information Managers in state owned universities in Rivers State. The results of related to this specific objective revealed that digital platform significantly influenced the relationship between digital skills utilization and job performance of users. This shows that access to relevant digital tools enable users to utilize their skills in improving their performance. These findings are supported by the findings of James (2013) who found that the usage of computer, telecommunication and video techniques positively and significantly improved the job delivery of public sector secretaries' in Bayelsa State, Nigeria. The findings are also supported by Jacques, Tanguy, and Miklos (2019) when they reported that the use of digital platform proves to improve job performance through increased service delivery with spillover effect on the overall earnings of the organization. Information skills, ICT skills relate to their effective information and timely information delivery. More so, critical thinking skills relate to their information storage and a very low positive but no significant relationship between information skills and effective information delivery of Information Managers in state-owned universities in Rivers State. There is also a moderate negative but significant relationship between ICT skills and timely information delivery of Information Managers in State-owned universities in Rivers State. There is high positive significant relationship between critical skills and effective information delivery of information managers in State-owned universities in Rivers State. There is moderate positive significant relationship between critical skills and information storage of Information Managers in state-owned universities in Rivers State. Digital platforms significantly affect the relationship between digital skills utilization and Information Managers' job performance.

CONCLUSIONS

Based on the findings of this study, it can be concluded that information skills possessed by Information Managers have no relationship to their job performance. Some of the ICT skills are not related to the performance of Information Managers in State-owned universities in Rivers State. This is due to the fact that the ICT skills have become obsolete due to advancement in ICT tools. Consequently, it can be concluded that the decrease in performance of information managers is based on the use of traditional means of information creation, processing and dissemination when had since move on with technological officering.

RECOMMENDATIONS

Based on findings, the conclusions drawn and the implications highlighted, the following recommendations are put forward for implementation:

1. Information Managers and administrative officers in State-owned universities in Rivers State need to be provided with up-to-date digital technologies that support their digital skills utilization.
2 Administrators of State owned universities in Rivers State must enact policy that encourage full digitalization of their respective institutions' service delivery and reduces human interface as much as possible. This will aid Information Managers' digital job performance and reduce corruption within the system.
3 Information management experts within State universities in Rivers State should organize seminars and workshop to train secretaries and administration office on critical thinking and information discerning, information literacy and database creation, and ICT skills and cloud storage.
4 Information management experts within State universities in Rivers State should endeavor to expose their students to digital literacy skills before graduation in order to enhance their skills development and future utilization.

REFERENCES

Adeoye, A. A. & Adeoye, B. J. (2017). Digital literacy skills of undergraduate's students in Nigeria universities. *Library Philosophy and Practice (e-Journal).* 1665. https://digitalcommons.unl.edu/libphilprac/1665

Agu, L. O. (2017). Information impact. *Journal of Information and Knowledge Management,* 8 (4) 123-136.

Alison, D. (2020). Importance of job skills for office managers. The balance careers. https://www.thebalancecareers.com/list-of-office-manager-skills-2062446

Andrea, K. (2011). Policy brief. Kedrova, Mascow. Published by United Nation Educational, Scientific and Cultural Organization (UNESCO) Institute of Information Technologies in Education (IITE). http://portal.unesco.org/iite/policy-brief

Anyim, W. O. (2018). Assessment of ICT literacy skills of digital library users and staff in Salem University Lokoja, Kogi. *Library Philosophy and Practice (e-journal).* 1801. https://digitalcommons.unl.edu/libphilprac/1801

Azi, S. (2015). Assessment of factors affecting job performance of secretaries. *Journal of Professional Secretaries and Office Administrators, 23* (1). 109 – 128

Bourgeois, D. & Bourgeois, D. T. (2014). Information system for business and beyond. https://bus206.pressbooks.com/chapter/chapter-people/

Campbell, U. (2016). *Office management in Nigeria*. Educational publications (Nig) limited,

Chandra S. A. (2014). Office Information Systems: A Retrospective and a Call to Arms. *Journal of Software Engineering and Applications* 7 (8). DOI:10.4236/jsea.2014.78065

Chux-Nyeche, G. C., (2019). Infopreneurship, implications and employment sustainability of small and medium enterprises in Rivers State. [Unpublished master of science Thesis, Rivers State University, Port Harcourt].

David, M. (2020). Office technology. CENGAGE. https://www.encyclopedia.com/social-sciences-and-law/economics-business and labor/businesses-and-occupations/office-technology

Filson, K. C. & Kwafoa, P. N. Y. (2016). The impact of information literacy skills on the performance of past students at their workplaces: the case of university of Cape Coast, Ghana. *Journal of Applied Information Science*, *4* (Issue 2). 1 - 8.

Georgeta, A. I. & Cuza, A. I. (2010). Factors that determine job performance. *Studies and Scientific Researches. Economics Edition*. *15*. 365 – 372

Ifijeh,G., Iwu-James, J. & Adebayo, O. (2016). Digital inclusion and sustainable development in Nigeria: the role of libraries. A paper presented at the 3rd international conference on African development issues held at Covenant University, Ota – Ogun State, Nigeria.

Ismail, M. & Hussin, N. (2017). Fundamentals of information management in organization academic writing. *International Journal of Academic Research in Business and Social Sciences. 7* (12). 394 – 404.

Israel O. O. (2018). *Information literacy self-efficacy in the use of electronic information resources by library and information science postgraduate students in south-south, Nigeria.* (Unpublished Doctor of Philosophy Thesis. School of Social Sciences, College of Humanities, University of KwaZulu-Natal, Pietermaritzburg, South Africa].

Iyanda D. F., Opele J. K. & Akintunde, B. O. (2016). A study of ICT literacy skills and internet usage pattern of library users in Osun state college of education, Ila-Orangun, Nigeria. *FUTA Journal of Management and Technology Maiden Edition***.** 137-149. Doi: 1.1/fjmt.2016/v1n1p12

Jisc. (2015). Building digital capability: building capability for new digital leadership, pedagogy and efficiency. Bristol: Jisc. https://www.jisc.ac.uk/rd/projects/building digital capability

John, S. (2019). Examples of database skills. https://simplicable.com/new/database-skills.

Kahirol, M. S., Muhammad, Y. M. & Nor, L. S. (2017).The use of Information and Communication Technology (ICT) and its effects on office technology and management practitioner's performance in Malaysia. *Man in India. 97* (10): 233-245.

London Business Training and Consulting (LBTC, 2020). What are the functions of a modern office. https://www.lbtc.co.uk/administrative-secretarial-skills-blog/ what- are-the-functions -of -a-modern-office/

Markus, N. (2019). Job performance: why task and contextual performance matter from an Evidence-based Management perspective. Work harder. CQNet. https://www.ckju.net/en/dossier/Job-Performance-Evidence-based-Management-Perspective-Why-Task-and-Contextual-Performance-Matters/1258

Motowidlo, S. J. & Kell, H. J. (2012). Job performance. In N. W. Schmitt. *Handbook of industrial and organizational psychology 12, Edition: 2nd*. Wiley.82-103

Naik, M. M. & Padmini, I. (2014). Importance of information literacy. *International Journal of Digital Library Services. 4* (issue 3). 92 – 100.

Nawaz, A. & Kundi, G. M. (2010). Digital literacy: an analysis of contemporary paradigms. Journal of Science and Technology Education Research. *1*(2), 19 – 29.

Nemesh, A. (2020). Office technology. Encyclopedia of Business and Finance, 2nd ed. https://www.encyclopedia.com/social-sciences-and-law/business-and-finance/office-technology

Neuvoo.ca (2020). What does an office manager do? https://neuvoo.ca/neuvoo Pedia/en/office-manager/

Odu, A. O. & Omosigho, N. (2017). Digital library and the implication on Nigerian digital library. *International Journal of Library and Information Science Studies. 3* (2). 13 – 19

Ogu, A. E. (2019). Critical and digital literacy for development and security. *International Journal of English Language Teaching*. *7* (3). 52 – 66.

Razaq, F. Q. & Olaleye, S. A. (2017). Evaluation of ICT literacy skills among students of federal polytechnic Offa, Kwara state, Nigeria: a review of related literatures. *SCIREA Journal of Energy*. *2* (issue 2). 27 – 41.

Rivers State University (2020). Philosophy: information management. Department of information management. https://www.rsu.edu.ng/index.php/management/142-office-and-information-management

Steve, H. (2020). Administrative manager. Community link. http://communitylinkcr.org/wp-content/uploads/2011/09/Admin-Manager.pdf

United Nation Education Scientific and Cultural Organization (UNESCO, 2018). *Global education monitoring report: Migration, displacement and education, building bridges, not walls*. UNESCO

Welsh, S. (2019). Office manager job description. Total jobs. https://www.totaljobs.com/advice/office-manager-job-description

Wendel, C. (2017). Challenges of information management. https://bizfluent.com/list-6759560-challenges-information-management.html