



ORIGINAL ARTICLE

Increased Digital Literacy Skills as a Catalyst for Driving Nigerian Digital Economy- An Overview

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Abstract

Digital economy is being promoted in both developed and developing nations of the world. Nigeria, as a developing country, is not left behind in the promotion of the IT-driven economy across different sectors. Digital economy is the type of economy that is built around computing technologies, solutions, and platforms. Preliminary review of literature in this area revealed that focus has been more on the provision of wireless broadband and other technological infrastructure that are needed to support digital economy deployment. It was observed that digital literacy skills that are needed to drive it successfully are less canvassed for. This paper reported the prospects of having widespread digital literacy skills in promoting the digital economy. It focused on discussing how adequate training and exposure on various technologies should be a thing of priority among government and individuals in the country so that the technology-based economy can be fully harnessed. These relevant papers selected reported the overview of using digital literacy skills for attaining improved digital economy across different sectors in Nigeria.

Keywords: Digital Economy, Digital Literacy, Internet Penetration, Technological skills

Introduction

Digital Economy is the part of economic output that is derived primarily from the use of digital technologies such as laptops, mobile platforms, web platforms, smart applications, internet technologies for achieving digital goods and services (Bukht & Heeks, 2018). In another way, Danbatta (2018) defined Digital Economy as a catchphrase for all forms of economic transactions, exchanges and activities that are based on digital technologies and tools. Modern tools and techniques are becoming very popular among citizens of nations and they are re-shaping business models and sectors (Dahlman, Mealy & Wermelinger, 2016). Several nations in the world, including Nigeria, are gaining immensely from Digital technologies as wider opportunities are more accessible. The spread of digital technologies in driving this growth cannot be over-emphasized.

Some of the components of digital economy include government policy and regulation; internet, the world wide web; telecommunication industry; digital service providers; e business and e-commerce industry; information and knowledge management systems; intellectual property rights; human capital and knowledge workers; and emerging technologies (Stephen, 2010). In literature, the major attributes of the Digital Economy have been identified to be digitized, connected, shared, personalized and direct.

For Digital economy to be fully integrated in Nigeria, it has been argued that digital literacy skills must be more promoted at the nook and cranny of the country (Federal Ministry of Communication and Digital Economy, 2019). Digital Literacy skills have been identified as one of the pillars of digital economy. That is, to promote digital transformation across the nation, equal emphasis needs to be allocated to digital skills development much like it has been done to the infrastructure development. That is, there is a need for Nigerian populace to be well trained in different areas of digital platforms to facilitate the promotion of the creation and use of different digital platforms in private and non-governmental sector. To attain sustainable development, the roles of information and digital literacy cannot be ignored (Ifijeh, Iwu-James & Adebayo). In the policy document by Federal Ministry of Communication and Digital Economy in 2019, digital economy is defined as any aspect of the economy that is based on or driven by digital technologies. The policy paper equally claimed that the development of a digital economy will create new technological platforms and industries on one hand, while enhancing the efficiency and productivity of existing industries on the other.

According to Federal Ministry of Communication and Digital Economy (2019), the growth of the digital technology sector over the past few years is an indication that the sector can serve as a catalyst for the rapid development of the economy of Nigeria as a country. In all sectors of the economy, digital tools are used to support various services, and operations. For instance, digital tools are used in banking, educational, entertainment, and government establishments. There are many economic benefits that youths and Nigerians as whole can gain from having good education on digital technologies. Once the necessary skills are acquired, the users will be able to maximally adopt digital solutions for various purposes across all sectors of the economy.

Internet penetration is growing rapidly in Nigeria and the number of youth population in the country according to UNICEF (2020) stood at 46% out of about two hundred million. Thus, Nigeria remains the largest population in Africa with promising youthful population. Aside the COVID-19 pandemic that has shaped the adoption of technological platforms for teaching, learning, research collaboration, there is increased use of online platforms for transacting businesses. That is, more Nigerians have embraced digital tools. This thus translates to the embracing digital economy.

Every aspect of the Digital Economy requires that citizens attain some sophisticated level of awareness, literacy, acceptance and adoption of ICT tools, solutions and techniques. This article sets out to examine the prospects that Digital Literacy, as a component digital economy, has. In the report of UNICEF (2020), it was pointed out that Nigeria has annual population growth of 2.6% and a youthful population below the age of 15 that is about 46% of the country's population. With the way technological solutions and platforms keep evolving; Digital Citizenship will soon be a must in Nigeria. Digital citizenship is defined as the capacity to conduct oneself in a responsible and ethical manner within public digital environments. The composite skills require for student to fit into digital environment in achieving his/her academic pursuit is digital literacy skill (Adeoye & Adeoye, 2017).

According to UNESCO Institute for Information Technology in Education (2011), digital literacy is more than the ability to handle computers. Rather, it comprises a set of basic skills which include the use and production of digital media, information processing and retrieval, participation in social networks for creation and sharing of knowledge, and a wide range of professional computing skills. Digital literacy has been found to improve employability because it is a gate skill, demanded by many employers when they first evaluate a job application. The paper argued that digital literacy serves as a catalyst because it enables the acquisition of other important life skills.

This study focuses on the survey of relevant papers and governmental documents concerning digital literacy as a component of Digital Economy. The important roles that high level of digital literacy will play in the attainment of improved digital economy in Nigeria cannot be over-emphasized. Forenbacher, Husnjak, Cvitić, and Jovović (2019) carried out studies that established the determinants of mobile phone ownership in Nigeria. Authors reported some of the factors that contributed to the phone ownership among Nigerians. Authors equally emphasised that phone penetration level is part of the technological revolution that drives digital economy. This work reports the overview of prospects and challenges of digital literacy and how digital literacy skills can boost digital economy.

Materials and Methods

Research Approach

This paper provides overview of the of the prospects and challenges of digital literacy in the Nigerian digital economy space. Relevant articles from notable research outlets such as, journals, conferences, government policy documents and technical reports from technological and economic groups were sourced. The survey provided evidence on the need to focus more on digital literacy skills that can help drive digital economy further in the country.

Results and Discussion

Current Nigeria Government Drive on Digital Economy

Nigeria as a country has been moving towards a good attainment in digital economy. For instance, in the new policy document released by the Federal Ministry of Communication and Digital Economy tagged “National Digital Economy Policy and Strategy (2020-2030)”, it is evident that the country is making giant strides towards attaining improved participation of her citizens in the digital economy. According to the document, the 8 pillars of digital economy are: Developmental Regulation; Digital Literacy & Skills; Solid Infrastructure; Service Infrastructure; Digital Services Development & Promotion; Soft Infrastructure; Digital Society & Emerging Technologies; and Indigenous Content Development & Adoption. It is evident that the Digital literacy is on the second list and one can thus deduce that it takes a very good position towards the realization of the targeted objectives of the government. In fact, it can be argued that as more innovative systems are being deployed in the world. For this reason, having adequate training and exposure on these newer technologies should be a thing of priority among government and individuals within the country.

Overview of Prospects of Digital Literacy Skills in Nigerian Digital Economy

G20 Insights (2017) argued that the digital divide has to be reduced as newer learning technologies and solutions keep appearing in the market. The author pointed out that to promote digital transformation, equal emphasis needs to be allocated to digital skills development as is to infrastructure development. This argument is based on the fact that there is need to step up digital literacy skills among citizens of every country, now that digital devices are pervasive. Zubairu, Oyefolahan, Babakano, Etuk and Mohammed (2020) assessed the level of readiness of Nigeria for digital economy. The study employed e-readiness indices and secondary data from Nigerian Communications Commission (NCC), International Telecommunications Union (ITU) report, Economics Intelligent Unit (EIU) report, Alliance for Affordable Internet (A4AI), report, Nigeria Ministry of Communication Technology and Digital Economy, Research ICT Africa, United Nations report, World Economic Forum (WEF) report and other related literatures. The study revealed that the currently available ICT facilities and infrastructures are not enough to reap the full potentials

of the digital economy in the country. World Bank Group (2019) in its report on Nigeria Digital Economy pursuit discussed the challenges and opportunities of the digital economy for Nigeria. The paper further argued that accelerating access to digital technologies spurs innovation, efficiency, and productivity, and as a result brings about choice and opportunities for greater growth and inclusion.

Semyachkov (2019) in his study expressed his views on the problems and prospects of digital economy in some selected developing countries. The author identified various difficulties and promises that digital economy brought in the developing countries under focus. Dele-Ajayi and Taddese (2020) carried out a study that investigates and report a rapid scan on the use of technology in educational sector in the country. The paper emphasized was how the journey of educational technology landscape has been evolving in Nigeria over the years. The article provided updates on how the learning technology has progressed in the country over the years. The authors equally emphasized how the educational sector in Nigeria has been supported by government agencies, various development partners such as UNESCO, World Bank, DFID, UNICEF as well as private organizations such as International Business Machines (IBM), Oracle, CISCO and others.

Adeoye and Adeoye (2017) carried out a study that investigated the level of the digital literacy skills of undergraduate students of Federal Universities in Southwest, Nigeria. The authors adopted a descriptive survey design. The population used for the study was 60,997 undergraduate students of Obafemi Awolowo University, University of Ibadan and University of Lagos. Multiple stage sampling technique was used to arrive at 595 sampling size for the study. Data was analyzed using frequency distribution tables; percentage, mean scores and standard deviation on Statistical Package for the Social Sciences (SPSS). Finding of the study revealed that majority of the students admitted that they are confident on their level of information literacy skills.

Odu (2017) proposed a work that discussed the importance of digital literacy in digital libraries. The author discussed the consequence of not being digital literate as well as techniques that contemporary libraries can use to promote digital literacy. The study employed qualitative approach as research design by searching online journal articles, databases and looked at various studies carried on digital literacy, the importance, digital libraries, implication of digital literacy in libraries and ways libraries can promote digital literacies in their libraries with focus on Nigeria and proffered solutions for tackling the menace of digital divide to digital libraries and to the society generally.

Spires and Bartlett (2012) have divided the various intellectual processes associated with digital literacy into three categories. The categories include locating and consuming digital content, creating digital content, and communicating digital content. As pointed out by World Bank Group (2019), Nigeria accounts for 47% of West Africa's population, and half of the country's 200 million people are under the age of 30. Moreso, Nigeria has the largest mobile market in Sub-Saharan Africa, supported by strong mobile broadband infrastructure and improved international connectivity. However, it was argued that minimal fixed broadband infrastructure and connectivity in rural areas is leaving a significant number of the most marginalized segments of the population without Internet access. This statement further indicated that internet penetration that will drive digital economy is still low in Nigeria. A study surveyed further revealed that internet penetration that will drive digital economy is still low in Nigeria.

Survey Discussion

Some of the papers surveyed in this work emphasized the essence of digital literacy skills in education, businesses and many other sectors. Thus, Nigerian citizens have to be ready to be more digitally aware with a view to promoting digital economy in the country. It was equally observed that all levels of education in Nigeria, it is evident that digital learning platforms are gaining popularity. Gleason (2021) pointed out that in this era, primary, secondary and tertiary education need to shift their focus to how to learn, not what to learn. The author further mentioned

that Lifelong learning is the new normal. Three major shifts in education are identified as follows: changes in the funding of education; changes in the duration of learning; and changes in how we learn. This study emphasised that once adequate training and exposures are provided to a large population of Nigerians, digital literacy skills will become more widespread and digital economy will be more adopted.

Conclusion

This study introduced digital literacy as a concept that can help drive digital economy. The study emphasised the need to shift attention from acquiring digital devices to training people massively on how to use those devices. Then, the work provided some of the overview of prospects of promoting digital literacy skills among Nigerians as a way to boost the adoption of digital economy in the country. The surveyed papers emphasized various areas where the digital literacy skills have been of great importance. Specifically, digital literacy skills have greatly improved how digital platforms are embraced among the citizens of the country, in different sectors of the economy. Some of the articles in this work equally pointed out the various investigations on the use of digital literacy skills among different users and sectors. Insights that can guide further research were provided. Then, it is argued that once digital literacy skills are improved upon among citizens in the country, digital economy will be more promoted.

References

- Adeoye A.A., Adeoye J.A. (2017). Digital Literacy Skills of Undergraduate Students in Nigeria Universities Library Philosophy and Practice (e-journal) retrieved from <https://digitalcommons.unl.edu/libphilprac/1665/>
- Bukht, R., Heeks, R. (2018). Development Implications of Digital Economies. *Centre for Development Informatics*, 2(6), 1-23.
- Danbatta Umar Garba (2018). The Role of NCC in Nigeria's Emerging Digital Economy and its Impact on Financial Technology Ecosystem, Vanguard Financial Technology conference 2018, Civic Centre, Victoria Island - Lagos.
- Dahlman, C., Mealy, S., Wermelinger, M. (2016). Harnessing the Digital Economy for Developing Countries. OECD, Paris. Retrieved from [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DEV/DOC/WKP\(2016\)6&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DEV/DOC/WKP(2016)6&docLanguage=En)
- Dele-ajayi, O., Taddese, A. (2020). EdTech in Nigeria: A Rapid Scan, available at <https://doi.org/10.5281/zenodo.3911651>, retrieved on 3rd January, 2021
- Federal Ministry of Communication and Digital Economy (2019). National Digital Economy Policy and Strategy (2020-2030), retrieved from <https://www.ncc.gov.ng/docman-main/industry-statistics/policies-reports/883-national-digital-economy-policy-and-strategy/file>
- Forenbacher, I., Husnjak, S., Cvitić, I., & Jovović, I. (2019). Determinants of mobile phone ownership in Nigeria. *Telecommunications Policy*, 43(7), 101812.
- Gleason Nancy W. (2021). The Digital Economy and Learning | OpenMind (bbvaopenmind.com), New York University Abu Dhabi, retrieved from <https://www.bbvaopenmind.com/en/articles/the-digital-economy-and-learning/> on 3rd February, 2021.

- G20 Insights (2017). Bridging the Digital Divide: Measuring Digital Literacy, retrieved from https://www.g20-insights.org/wp-content/uploads/2017/05/Digital_Bridging-the-Digital-Divide-Measuring-Digital-LiteracyII.pdf on 12th January, 2020
- Ifijeh, Goodluck, Iwu-James, Juliana and Adebayo, Oyeronke (2016) Digital Inclusion and Sustainable Development in Nigeria: The Role of Libraries. In: 3rd International Conference on African Development Issues (CU-ICADI), May 9- May 11 2016, Covenant University, Ota, Nigeria.
- Semyachkov, K.A. (2019). Digital economy in developing countries: problems and prospects. 81(Mtde), 102–106.
- Spires, H., & Bartlett, M. (2012). Digital literacies and learning: Designing a path forward. Friday Institute White Paper Series. NC State University.
- Stephen M. Mutula (2010). Digital Economies: SMEs and E-Readiness, DOI: 10.4018/978-1-60566-420-0.ch003
- UNESCO Institute for Information Technology in Education (2011). Digital Literacy: Content, Structure and Development of a Life Skill
- UNICEF Nigeria. (2020). Situation of Women and Children in Nigeria, available at, retrieved on 12 February 2021
- World Bank Group. (2019). Nigeria Digital Economy Diagnostic Report retrieved from <http://documents1.worldbank.org/curated/en/387871574812599817/pdf/Nigeria-Digital-Economy-Diagnostic-Report.pdf>
- Zubairu H.A., Oyefolahan I.O., Babakano F.J., Etuk S.O., Mohammed I.K. (2020). Assessing the E-readiness of Nigeria for Digital Economy, *American Journal of Computer Science and Information Technology*, 8(2), 23-36.

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