

Digitalization of University Management for Empowerment in the Era of COVID 19 Pandemic in Nigeria

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Abstract

The study investigated the digitalization of university management for empowerment in the era of the covid-19 pandemic in Nigeria. Two research questions guided the study and two hypotheses were tested. The descriptive survey research design was adopted for the study. The population of the study comprised 252 lecturers from the Department of Educational Management in four public and private universities in Anambra State. The instrument for data collection was a structured questionnaire which was developed by the researchers. The questionnaire was validated by three experts in the Faculty of Education in Nnamdi Azikiwe University, Awka. The reliability of the instrument was determined through a pilot test. The application of the Cronbach Alpha Method on the data collected through the pilot test yielded coefficient values of 0.88 and 0.86 for clusters A and B respectively with an overall reliability co-efficient of 0.87. Mean, standard deviation and t-test were used to analyze data collected for the study. Findings revealed that the challenges hindering the digitalization of university management for empowerment in the covid-19 era include poor leadership, lack of government commitment to full digitalization of universities, poor funding, lack of ICT skilled personnel, poor collaboration between school and industry among others. Findings revealed that the establishment of ICT innovation hubs across all publicly and privately owned universities in Nigeria and engaging industry experts in the development of ICT frameworks for university management among others were some strategies for digitalizing university management for

empowerment in the era of the covid-19 pandemic in Nigeria. Based on these findings, the researchers recommended that university should collaborate with ICT industry specialists in the integration of emerging technologies that would improve the management capacity of university staff and as well serve as a source of empowerment for students in the era of the Covid-19 pandemic.

Keywords: Digitalization; University; Management; Empowerment; Covid-19

Introduction

COVID-19, a highly infectious disease produced by a novel virus, has been wreaking havoc on countries and areas around the world since December, 2019. The global spread of the novel COVID-19 has resulted in significant changes in social interaction and organizational structure, and the education sector has not been spared. Governments around the world have instituted social distancing measures, lockdowns, and a ban on human contact outside of immediate households in order to slow the spread of the virus. Nigeria's Federal Ministry of Education, taking a cue from the social distancing initiative, ordered the closure of schools on March 19, 2020. As a result of this directive, the academic calendars of all primary, secondary, and tertiary schools were abruptly suspended. The closure also impacted activities in Universities in Nigeria. As universities shut down to curtail the spread of the virus, there has been call by stakeholders to digitalize the activities of universities in Nigeria (Adedoyin & Soykan, 2020). Universities have had to adapt to online education in record time, implementing and adapting the technology resources available and incorporating professors and researchers who lack natural technological capabilities for online teaching. In a world of digital transformation, disruptive technology innovation, and rapid change in the educational framework, the university system must be prepared to provide high-quality education (Garcia-Morales, Garrido-Moreno & Martin-Rojas, 2021).

Digital technologies have been around for decades and are still evolving at such a rapid pace that even their contours (as a "class" of technologies) and the opportunities they provide have yet to be fully grasped and described. Technologies for converting analog signals to digital, as well as technologies for transmitting and processing digital signals were developed. In education, technology motivates lecturers, expands learning materials, and aids in the assessment of learning objectives (Vogelsang, Droit, & Liere-Netheler, 2019). Furthermore, digitalized processes speed up service delivery. When lecturers and administrators collaborate using technology, instruction and student outcomes become more transparent and transferable. Furthermore, technology has the ability to intertwine the teaching and administrative competencies of institutions. Universities must seek efficient practices as they operate in an increasingly competitive world (Adler & Harzing, 2017).

In Nigerian, universities has long been digital and the vast majority of universities had their online educational platforms up and running when the COVID-19 pandemic was declared (Adedoyin & Soykan, 2020). However, universities (especially public universities) in Nigeria struggled to rise to the challenge posed by Covid-19. Adeoye, Adenakin and Adenakin (2020) noted that the utilization of e-learning for continuation of education programme has been

challenging to public tertiary institutions. According to Inyene (2021), universities are hampered from contributing to the expansion of emerging technologies and innovations by major challenges such as inadequate funding, insufficient infrastructure, a scarcity of skilled ICT personnel, and a lack of engagement with industry and government. Universities in Nigeria lack the resources necessary to provide economic and social value to their graduates and communities. This is because university graduates were not trained for entrepreneurship and innovation which makes them become job seekers rather than job creators (Inyene). It is against this background that researchers empirically ascertained the need to digitalize university management for empowerment in the era of the Covid-19 pandemic in Nigeria.

Statement of the Problem

The closing of schools in Nigeria as a result of the Covid-19 epidemic has had a major impact on university education both nationally and locally. University students have been affected by the closure resulting in the abrupt suspension of academic activities. This meant that students especially in public universities returned home with no forms of academic tasks or assignments to engage them. Several months after closure of school with no generally accepted cure and increased rate of criminal activities. Parents and other educational stakeholder are worried that the continued stay at home by undergraduate students is one of the causative factors increasing crime rate in the country.

The situation is worrisome and has increased call for the digitalization which adheres to the principles of social distancing and allows teaching and learning to continue. Furthermore, the integration of technology is hailed as the “new normal” in teaching and learning globally. This is because online education is seen as a catalyst for provision of quality education and learning that will foster empowerment and job creation. It is worrisome that management of public universities has struggled to fully digitalize their activities for empowering students in the era of the Covid-19 pandemic in Nigeria.

Research Questions

The following research questions guided the study:

1. What are the challenges of digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria?
2. What are the strategies for digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria?

Method

The descriptive survey research design was adopted for the study. The population of the study comprised 88 lecturers in the Department of educational management and planning in four universities (Nnamdi Azikiwe, University, Awka, Chukwuemeka Odumegwu Ojukwu University, Uli, Madonna University, Okija and Tansian University, Umuaya). The entire population was used without sampling because the number was small and manageable. The instrument used for data collection was a questionnaire developed by the researcher based on the research questions guiding the study. The instrument was titled “Questionnaire on Digitalization of University Management for Empowerment in the era of the Covid-19 Pandemic (QDUMECPP)”. The questionnaire contains 22 items splits in two sections (A and B) based on

the research questions guiding the study. Section A contains 12 items on the challenges of digitalization while section B contains 10 items on strategies for digitalization of university management for empowerment. All the items were structured on a 4-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) weighted 4, 3, 2 and 1 respectively. The questionnaire was validated by two lecturers in the Department of Educational Management and Policy and one lecturer in Measurement and Evaluation Unit of the Department of Educational Foundations, all in the Faculty of Education, Nnamdi Azikiwe University, Awka. These experts were requested to validate the instrument relative to the appropriateness and coverage of the items, wordings and clarity of the instructions. A pilot test was conducted on 20 lecturers in tertiary institutions in Enugu State. As a result of the fact that the instrument is in two clusters, the researcher had to ascertain the reliability of each cluster using Cronbach Alpha reliability method, which yielded coefficient values of 0.86 and 0.82 for sections A and B respectively. The Cronbach Alpha reliability analysis on the obtained data yielded a score of 0.84 for internal consistency, which was deemed high for the study. Data were collected by the researchers. Copies of the questionnaire were administered by the researchers to the respondents on the spot in their offices. In cases where the respondents were not disposed to fill the item for immediate retrieval, an appointment of revisit was made with the on the date of retrieval. This process lasted for about two weeks. Out of 88 copies of the questionnaire administered, 74 copies were returned in good condition and used for data analysis. The data collected were analyzed using mean and standard deviation. The mean value was used to answer the research questions while the standard deviation was used to ascertain the homogeneity or otherwise of respondents' ratings. Any item with mean ratings between 2.50 and above is agree while any item with mean ratings below 2.50 was disagree.

Research Question 1

What are the challenges of digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria?

Table 1: Respondent Mean Ratings on the Challenges of Digitalization of University Management for Empowerment in the era of the Covid-19 Pandemic in Nigeria

S/NO	Item Statement:	Mean	SD	Remarks
1.	Poor institutional leadership	3.43	0.83	Agree
2.	Lack of government commitment to full digitalization of universities	3.04	0.72	Agree
3.	Lack of teleworking support from government	3.35	0.76	Agree
4.	Lack of technological resources.	3.24	0.84	Agree
5.	Failure to adapt pedagogical content to blended learning	3.57	0.86	Agree
6.	Lack of ICT skilled personnel	3.28	0.76	Agree
7.	Lack of access to internet	3.21	0.92	Agree
8.	Poor power supply	3.09	0.82	Agree
9.	High cost of technology	3.12	0.87	Agree

10	Poor funding	3.05	0.80	Agree
11.	Misappropriation of funds by heads of tertiary institutions	3.32	0.87	Agree
12.	Failure to collaborate with private IT experts	3.44	0.83	
Cluster Mean		3.26		Agree

Data in Table 1 reveal that all the items, achieved mean ratings ranging between 3.07 and 3.45 and standard deviations ranging between 0.74 to 0.90. This means that they are all challenges of digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria. The cluster mean of 3.26 indicates that challenges of digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria include poor leadership, lack of government commitment to full digitalization of universities, poor funding, lack of ICT skilled personnel, poor collaboration between school and industry among others.

Research Question 2

What are the strategies for digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria?

Table 2: Respondent Mean Ratings on the Strategies of Digitalization of University Management for Empowerment in the era of the Covid-19 Pandemic in Nigeria

S/NO	Item Statement:	Mean	SD	Remarks
1.	Establishment of ICT innovation hubs across all publicly and privately owned universities in Nigeria	3.58	0.88	Agree
2.	Engaging industry experts in the development of ICT frameworks for university management	3.55	0.83	Agree
3.	Engaging private-IT firms in the procurement of ICT infrastructure	3.20	0.78	Agree
4.	Training and retraining of lecturers on the use of technological hardware and software for teaching	3.06	0.71	Agree
5.	Training and retraining administrative staff on the use of ICT gadgets in carrying out task	3.44	0.83	Agree
6.	Subsidizing the prices of ICT gadgets for universities	3.37	0.85	Agree
7.	Providing alternative source of power supply	3.30	0.86	Agree
8.	Making available accessible internet networks within and around the universities	3.38	0.88	Agree
9.	Making available free internet Wi-Fi services in university campuses	3.42	0.86	Agree
10	Recruitment of qualified IT experts to handle the internet infrastructure in universities	3.25	0.75	Agree
11.	Ensuring that ICT gadget provided in the universities are of best quality	3.28	0.77	Agree
12.	Instituting a team to supervise and monitor the use of ICT infrastructure and gadgets in the universities	3.31	0.84	

Cluster Mean	3.34	Agree
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Data in Table 2 reveal that all the items, achieved mean ratings ranging between 3.06 and 3.58 and standard deviations ranging between 0.71 to 0.88. This means that they are all strategies for digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria. The cluster mean of 3.34 indicates that the strategies for digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria include establishment of ICT innovation hubs across all publicly and privately owned universities in Nigeria, engaging industry experts in the development of ICT frameworks for university management, training and retraining administrative staff on the use of ICT gadgets in carrying out task, subsidizing the prices of ICT gadgets for universities, making available accessible internet networks within and around the universities and recruitment of qualified IT experts to handle the internet infrastructure in universities among others.

Discussion

Findings of the study revealed that the challenges of digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria include poor leadership, lack of government commitment to full digitalization of universities, poor funding, lack of ICT skilled personnel, poor collaboration between school and industry among others. This finding indicate that the digitalization of university management for empowerment is hampered by issues related to poor leadership, lack of government commitment, misappropriation funds, skills depth and cost of ICT gadgets. This finding is in line with Inyene (2021) who noted that universities in Nigeria struggle to fully digitalize their programmes and activities because of substantial problems like limited finance, insufficient infrastructure, a paucity of competent ICT professionals, and a lack of connection with business and government. Inyene further noted that universities in Nigeria do not have the resources to give economic and social value to their graduates and communities. Similarly, Adeoye, Adenakin and Adenakin (2020) averred that failure to provide necessary technological hardware, software and accessibility to internet are challenges to the digitalization of universities for empowerment in the era of the Covid-19 pandemic in Nigeria. According to Garcia-Morales, Garrido-Moreno and Martin-Rojas (2021), to ensure a smooth transition and a successful transformation, colleges must be aware of these potential roadblocks and devise appropriate solutions to overcome them. We define these hurdles from the standpoint of the primary agents involved in the learning process: students, professors, and institutions, based on specific studies (universities). This has brought about renewed calls by stakeholder for the development of strategies that would help facilitate the digitalization of the management of tertiary institutions for empowerment in the era of the Covid-19 pandemic.

Findings revealed that the strategies for digitalization of university management for empowerment in the era of the Covid-19 pandemic in Nigeria include establishment of ICT innovation hubs across all publicly and privately owned universities in Nigeria, engaging industry experts in the development of ICT frameworks for university management, training and retraining administrative staff on the use of ICT gadgets in carrying out task, subsidizing the prices of ICT gadgets for universities, making available accessible internet networks within and around the universities and recruitment of qualified IT experts to handle the internet infrastructure in universities among others. This is in agreement with Carolan, Davies, Crookes,

McGhee, and Rox-Burgh (2020) who stated that universities should use technology to re-invent teaching processes, transform assessment activities, change the use and roles of traditional Faculties and Schools (providing specific training), and focus on value through the reinvention and self-renewal of the service model in order to move toward a sustainable model for online learning. Promoting this digital transition necessitates the development of a participation culture, and students, professors, and administrators must collaborate to promote and evaluate the changes that are made (Carolan et al., 2020). In the same vein, Marinoni, Van't Land and Jensen (2020) opined that there is an urgent need for institutional leadership and assistance in involving all stakeholders (faculty, students, and technical staff) in the reform process. Successful higher education reform necessitates faculty development as well as specific policies to strengthen crisis management preparation and institutional resilience in the face of new problems in the near future (Marinoni et al., 2020)

Conclusion

The researchers conclude that the disruptions caused by the outbreak of the Covid-19 can be mitigated through the digitalization of universities in Nigeria. Though achieving full digitalization of universities have not been easy because of factors within and outside the university system. It is imperative that the managers of Nigerian universities are aware of these limitations and deploy resources to overcome them in the short term, with a focus on digitizing learning processes and providing appropriate technical training to academics, administrative staff and students.

Recommendations

Based on the findings of the study the researchers made the following recommendations:

1. University should collaborate with ICT industry specialists in the integration of emerging technologies that would improve the management capacity of university staff and as well serve as a source of empowerment for students in the era of the Covid-19 pandemic.
2. Training programmes geared at improving the digital skills of lecturers, administrative staff and students should regularly be organized.
3. Funding should be made available by government or its supervising agencies for the development of ICT infrastructures in Nigerian universities.

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