



## MANAGING HIGHER EDUCATION AND DIGITAL READINESS OF LECTURERS IN UNIVERSITIES IN CROSS RIVER STATE, NIGERIA

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### **Abstract**

*This study aimed at assessing managing Higher Education and digital readiness of lecturers in public universities in Cross River State. To achieve this purpose, two research questions were formulated as a guide to the study. A cross-sectional survey research design was adopted for the study. The simple random sampling technique which was used to select 235 academic staff was also adopted for this study. The instrument used for data collection was an adapted questionnaire titled: Managing Higher Education and Lecturers' Digital Readiness Questionnaire (MHELDRO). Data collected were subjected to statistical analysis using descriptive statistics of means and standard deviation of the statistical package for social science (SPSS) version 25, and the results are presented in the respective tables. The results revealed that digital tools for managing student records, enrolments, and financial transactions, streamlining administrative processes have been deployed and there is a centralised data centre equipped with high-capacity servers and secure storage solutions to support the efficient storage and retrieval of academic and administrative data. However, lack of digital infrastructure, financial resources for data subscription as well as interrupted power supply amongst several others pose as constraints to the digital readiness of lecturers to teach, research and serve the community.*

**Keywords:** Higher Education Management, Digital Readiness

### **Introduction**

In the contemporary landscape of education all over the world, the profound influence of digitalization on higher education management is reshaping traditional paradigms, signaling a new era of efficiency, accessibility, and enhanced student success. The advent of digital technologies has transcended the boundaries of conventional learning, offering a transformative experience that permeates every facet of higher education institutions. This paradigm shift is marked by a dynamic interplay of technological innovations, administrative reforms, and pedagogical advancements, all of which collectively contribute to shaping a future in which education becomes increasingly adaptive, all-encompassing, and customised to the diverse needs of individuals. The process of educational digitalization represents the modernization, reformation, and transformation of education, facilitating enhanced problem-solving and decision-making through the integration of digital technologies (Nikulina & Starichenko, 2018).

The integration of digital tools and platforms in higher education management has brought forth a myriad of benefits, foremost among them being enhanced efficiency. Administrative processes once mired in paperwork and manual workflows in both great and small business organizations and government parastatals have undergone a radical transformation, streamlined operations and reduced bureaucratic bottlenecks. From enrollment processes to academic record management, digitalization has automated routine tasks, allowing institutions to allocate resources more judiciously, minimize errors, and foster a more agile administrative ecosystem. Nizar and M'hamed (2023) posit that from an administrative stand point, institutions must fortify their technological infrastructure, ensuring operational efficacy while upholding data integrity. They further



state that the efficacy of management practices hinges on creating an environment that nurtures technological fluency among faculty, fosters innovation and ensures educational excellence.

Efficiency gains extend beyond administrative functions, as the digitization of learning materials and resources has significantly transformed the teaching and learning experience. Digital textbooks, online libraries, and interactive multimedia resources have supplanted traditional printed materials, granting students and educators instant access to a vast array of information. This transition not only lessens the environmental impact but also equips instructors with tools to customize content, thereby creating a more personalized and engaging learning environment.

Lecturers play a vital role in the direct preparation of skilled manpower for society. Their digital readiness is essential for fulfilling the various responsibilities they hold in producing graduates who are valuable both to themselves and to the broader community. Wardell (2021) provides a summary chart of the core functions of a full-time lecturer, highlighting the three fundamental roles of teaching, research, and community service, with numerous specific duties encompassed within each. Lecturers are tasked with delivering lectures, seminars, and tutorials, developing and updating course content, managing E-learning materials, designing course resources, proctoring, grading, and moderating assignments, conducting evaluations, managing projects, writing and publishing scholarly articles, providing course advice, administering departmental activities, and many other roles. In a rapidly digitizing world, where numerous digital tools can enhance efficiency in managing these responsibilities, it is imperative that lecturers are digitally equipped to reduce stress and improve productivity.

Matveeva et al. (2020) argue that the digitalization of higher education necessitates the development of appropriate digital competencies among students and, more importantly, educators. Given the rapid digital transformation of the world and the availability of numerous digital tools designed to enhance efficiency and institutional success, it is imperative that higher education management actively supports the digital readiness of its staff. This support should include providing access to essential digital infrastructure, such as personal computers, data services, and training on virtual learning and online visibility. Quiacoe and Pata (2015) further emphasize that the proactiveness of a school's digital facilities and culture can significantly influence, both directly and through targeted training interventions, the level of digital readiness that educators achieve.

### **The Concept of Digital Readiness**

Digitalization has become a powerful phenomenon that has helped to improve various sectors of our economy, higher education inclusive. The challenge, however, is on how well our citadels of learning have embraced digital technologies and the digital readiness of its workforce to engage to increase productivity. The European Union (2013), in a survey on ICT in Education, emphasized that teachers are recognized as key digital change agents within schools. To effectively fulfill this role, they must be equipped with essential training in digital literacy, encompassing both tools and pedagogical methods, to enhance their professional practice and achieve digital readiness. This readiness, in turn, can be evaluated based on their digital knowledge, skills, confidence, and active engagement in digital activities within the school environment. Soomro, Hanafiah and Abdullah (2020) define digital readiness as the state of an organization being prepared for digitalization. Similarly, Nasution et al (2018) posit that digital readiness is the inclination and willingness to switch to and adopt digital technology and the readiness to create new innovative opportunities by using this technology to bring an individual, organization, industry and country to achieve their goals faster and with greater results. While their definition indicated two basic components of attitude towards technology and attitude towards interaction with technology, Ri and Luong (2021) describes digital readiness as an organization's ability and willingness to adopt and utilize emerging digital technologies to achieve strategic business goals and short-term objectives. Digital readiness, as defined by Chen et al. (2023), encompasses the preparedness of individuals, organizations, or societies to embrace and adapt to digital advancements. Schultz (2023) further elaborates that digital readiness involves resilience in the face of technological change, proactive engagement with new platforms, and the capacity to leverage digital advancements for both personal and collective growth. Schultz emphasizes that digital readiness is the ability of individuals, businesses, and societies to understand, utilize, and benefit from digital technologies, ultimately leveraging these tools to achieve specific personal, professional, or societal outcomes.

In the context of this work, lecturers' digital readiness encompasses the availability and utilization of digital infrastructure, as well as their experience with ICT tools, digital trends, and technologies that are pertinent to teaching, learning, and managing additional responsibilities such as research and community



service within a modern university setting. Digital infrastructure, in this instance, includes access to personal computers, availability of data or free internet, the presence of projectors or smart boards in classrooms, and the provision of training to enhance the familiarization and use of digital teaching and learning tools that are most suitable for a lecturer's role. Tools like Google Classroom, Educreations, Prezi, Animoto, Explain Everything, and platforms for audio and video conferencing such as Zoom and Microsoft Teams, among others, have proven to be effective and efficient in facilitating teaching and learning. These tools enable the dissemination of appropriate content to students, the use of live videos to elaborate on topics, the assignment of online activities, and the continuation of course discussions in an online format. Haleem et al. (2022) argue that digital learning tools and technology address the shortcomings of traditional classroom instruction, which often lack quick evaluations and high levels of engagement. Research on digital readiness and its key influencing factors in organizational settings has become an important focus. Chen et al (2024) explored the extent to which a firm's digital readiness influenced its competence in implementing digital initiatives. The study employed partial least squares structural equation modeling and artificial neural network to demonstrate and quantify the relationship. The results highlighted four most significant readiness attributes influencing digital competence of firms to include organizational culture, perception of the leadership team, hardware and software systems and strategy plans.

Despite ongoing challenges that hinder the seamless integration and optimal utilization of digital tools, progress in incorporating technology into educational systems in Nigeria has been minimal. Researchers have identified several factors contributing to this lag, including resistance to change, lack of digital literacy, poor policy implementation and maintenance culture, inadequate funding, and pedagogical challenges—such as difficulties some educators face in designing engaging and interactive online courses that effectively facilitate learning (Yina, 2020; Irele, 2021). The absence of a stable and robust infrastructure further complicates access to online resources, participation in virtual classes, and the use of digital platforms for students, school administrators, and lecturers alike. Research by Chen et al. (2022) highlights organizational culture, leadership, and top management support as the most critical indicators of digital technology readiness. The active involvement of higher education management in the digital transformation of institutions is crucial. Hu et al. (2012) emphasized that individuals within organizations, particularly those in senior management, play a vital role in shaping organizational beliefs and attitudes toward technology acceptance.

The organizational culture of digitalization within Nigerian universities remains significantly underdeveloped, with insufficient engagement in adopting digital technologies for the innovation and transformation of the educational system. While some progress has been made in digitizing certain areas, such as the management of student records, grades, transcripts, and course registrations, much work remains to be done. To advance toward the digitization of teaching and learning as a complement to traditional classroom instruction, university management must prioritize enhancing the digital readiness of its workforce. Among the various challenges faced by university lecturers are the lack of access to laptops, the high cost of data and limited internet access, inadequate digital skills, and insufficient familiarity with certain digital technologies. Although workshops organized by higher education management—sometimes held annually—aim to address these challenges by training teaching and non-teaching staff in virtual teaching, internet visibility, and the digitization of administrative tasks, these issues persist. It is imperative that university management provides adequate hardware, software systems, and infrastructure to support the digitalization efforts, thereby improving the operational efficiency of its academic staff

### **Statement of the Problem**

The digitization of higher education in Nigeria presents significant opportunities for enhancing efficiency, expanding accessibility, and improving institutional success, with lecturers playing a crucial role as agents of change in this transformation. As key figures in designing and delivering instructional content, updating course materials, managing learning resources, and evaluating theses and projects, lecturers are integral to the academic process. However, despite the availability of digital technologies designed to enhance their performance, many lecturers face challenges in accessing and effectively utilizing these tools. These challenges include infrastructure deficiencies, such as the lack of laptops, the high cost of data, and limited digital literacy. Additionally, pedagogical challenges persist, as some educators struggle to design engaging and interactive online courses that effectively facilitate learning. These obstacles are often rooted in a broader issue of inadequate digitalization culture within universities thus affecting the digital readiness of their workforce.



## Purpose of the Study

The purpose of the study was to examine the relationship between higher education management digitalization initiatives and lecturers' digital readiness in Universities in Cross River State. Specifically, the study sought to:

1. Examine management's provision of digital infrastructure and its influence on the digital readiness of lecturers in universities in Cross River State.
2. Determine the extent to which management's provision of digital training has influenced the digital readiness of lecturers in Cross River State.

## Research questions

1. What is the University's Management's contribution to the digital readiness of lecturers?
2. What is the quality of digital training offered to staff?

## Research Methodology

This study employed a cross-sectional survey research design. A simple random sampling technique was used to select 235 academic staff participants. Data collection was conducted using an adapted questionnaire titled: Managing Higher Education and Lecturers' Digital Readiness Questionnaire (MHELDQR). To ensure the instrument's validity, it underwent face and content validation by experts in the Administration of Higher Education and Measurement and Evaluation at the Faculty of Education, University of Calabar. The questionnaire was divided into two sections: Section A gathered demographic data such as department, gender, rank, and qualifications; Section B comprised 30 items structured on a four-point modified Likert scale, ranging from Strongly Agree (SA), Agree (A), Disagree (D), to Strongly Disagree (SD). The collected data were analyzed using descriptive statistics, including means and standard deviations, with the aid of SPSS version 25, and the results are presented in the corresponding tables

## Results

### Research question 1:

What is Management's contribution to the digital readiness of lecturers?

**Table 1: Summary of means and standard deviation of responses on the contributions of Higher Education management to the digital readiness of lecturers in Universities in Cross River State.**

| S/<br>N | Items   | N   | Mean | SD   | Decision  |
|---------|---|-----|------|------|-----------|
| 1       | Offerings of laptops/desktops to lecturers as a way of support for work                           | 235 | 1.70 | .460 | Disagreed |
| 2       | Provision of access to free internet for online work  | 235 | 1.50 | .501 | Disagreed |
| 3       | Provision of financial resources for subscription services  | 235 | 1.90 | .303 | Disagreed |
| 4       | Provision of E-books and digital content for school/faculty/departamental library                 | 235 | 1.80 | .600 | Disagreed |
| 5       | Provision of Software resources and apps  | 235 | 2.10 | .700 | Disagreed |
| 6       | Provision of regular training for digital professional development.                               | 235 | 2.70 | .460 | Agreed    |
| 7       | Provide staff with a list of digital tools available to them                                      | 235 | 2.60 | .492 | Agreed    |
| 8       | Provision of knowledge about new digital technologies and areas of application                    | 235 | 2.80 | .404 | Agreed    |
| 9       | The organisational culture of the school welcomes digital technology innovation                   | 235 | 2.80 | .401 | Agreed    |
| 10      | There's availability of talent for using digital technology                                       | 235 | 2.70 | .496 | Agreed    |
| 11      | There is technology-related knowledge and information sharing across the school organization.     | 235 | 2.50 | .675 | Agreed    |
| 12      | There is adequate hardware and software systems for implementing digital technologies             | 235 | 2.10 | .298 | Disagreed |
| 13      | There is a strong collaboration between management and academic staff to use digital technologies | 235 | 2.40 | .490 | Disagreed |





|                       |  |     |      |      |           |
|-----------------------|--|-----|------|------|-----------|
| 14                    | Adoption of a Learning Management System (LMS) that supports online course delivery, content management, assessment, and student engagement  | 235 | 2.00 | .000 | Disagreed |
| 15                    | There are adequate hardware and software systems for implementing digital technologies   | 235 | 3.60 | .491 | Agreed    |
| 16                    | There is a strong collaboration between management and academic staff to use digital technologies  | 235 | 2.00 | .453 | Disagreed |
| 17                    | Adopting a Learning Management System (LMS) that supports online course delivery, content management, assessment, and student engagement.  | 235 | 3.20 | .404 | Agreed    |
| 18                    | Investment in reliable power sources such as generators, solar power, or alternative energy solutions to ensure uninterrupted electricity for digital infrastructure                   | 235 | 2.00 | .000 | Disagreed |
| 19                    | Develop a centralized data centre equipped with high-capacity servers and secure storage solutions to support the efficient storage and retrieval of academic and administrative data. | 235 | 2.80 | .401 | Agreed    |
| 20                    | Collaborate with telecommunication companies or government agencies to negotiate reduced data costs for lecturers, making online work more affordable                                  | 235 | 1.69 | .462 | Disagreed |
| <b>Aggregate Mean</b> |  |     | 2.34 |      |           |

### Discussion of findings

Table 1 presents the mean scores reflecting lecturers' perceptions of the contributions made by university management toward their digital readiness. Out of the 20 items presented, 9 items had mean scores exceeding the criterion mean score of 2.50, indicating that lecturers acknowledged these 9 items as significant contributions from university management to their digital readiness. The results indicate that public universities in Cross River State are moderately providing training for digital professional development and equipping staff with information about available digital tools during these training sessions. Additionally, there is a focus on imparting knowledge about new digital technologies and their applications. The organisational culture within these institutions is supportive of digital technology innovation, fostering an environment where technology-related knowledge and information are shared across the organization, but the recurrent issue of epileptic power supply and lack of adequate digital infrastructure still poses a threat to achieving digital readiness. Furthermore, there is a notable availability of talent skilled in using digital technology. The universities have also deployed digital tools for managing student records, enrolments, and financial transactions, effectively streamlining administrative processes. Additionally, a centralized data centre with high-capacity servers and secure storage solutions has been established to facilitate the efficient storage and retrieval of academic and administrative data.

However, 11 items received mean scores below the criterion mean, which suggests that the following measures have not been fully adopted to support digitalization: offering laptops/desktops to lecturers as work support, providing free internet access for online activities, allocating financial resources for subscription services, supplying e-books and digital content for libraries at various levels, offering software resources and apps, ensuring adequate hardware and software systems for implementing digital technologies, adopting a Learning Management System (LMS) that supports online course delivery, content management, assessment, and student engagement, deploying digital tools for managing student records, enrolment, and financial transactions, investing in reliable power sources such as generators, solar power, or alternative energy solutions to ensure uninterrupted electricity for digital infrastructure, and collaborating with telecommunication companies or government agencies to negotiate reduced data costs for lecturers



## Research question 2:

What is the quality of digital training offered to staff?

**Table 1: Summary of means and standard deviation of responses on the quality of digital training offered to staff in Universities in Cross River State.**

| S/N | Items  | N   | Mean | SD   | Decision |
|-----|--|-----|------|------|----------|
| 1   | Management offers regular digital training opportunities through the organisation of workshops.                                    | 235 | 1.80 | .600 | LQ       |
| 2   | Digital training offered by school management has:<br>Impacted my ability to integrate technology into my daily teaching practices | 235 | 2.19 | .601 | MQ       |
| 3   | Influenced my approach to addressing individual student needs  | 235 | 2.50 | .501 | HQ       |
| 4   | Become an essential part of the school culture with the majority of staff integrating digital tools                                | 235 | 2.00 | .000 | MQ       |
| 5   | Enhanced my professional development and continuous learning   | 235 | 2.40 | .490 | MQ       |
| 6   | Helped me in overcoming challenges faced in adapting to digital tools  | 235 | 2.49 | .501 | MQ       |
| 7   | Positively affected my classroom management skills   | 235 | 2.10 | .700 | MQ       |
| 8   | Positively affected my management skills, particularly in terms of administrative tasks and student engagement                     | 235 | 2.19 | .601 | MQ       |
| 9   | Improved my ability to assess and provide feedback to students   | 235 | 2.50 | .501 | HQ       |
| 10  | Positively influenced my research endeavours   | 235 | 2.60 | .491 | HQ       |
|     | Aggregate Mean   |     | 2.27 |      |          |

Decision: 2.50 and above = High Quality (HQ); 2.00-2.49 = Moderate Quality (MQ) and 1.99 and below = Low Quality (LQ).

The analysis presented in Table 2 reflects the mean responses of lecturers regarding the quality of digital training received during workshops provided by the institution. Respondents rated items 3, 9, and 10 highly, indicating that the training has been particularly effective in areas such as addressing student needs, enhancing the ability to assess and provide feedback, and significantly influencing research endeavours. However, items 1, 2, 4, 5, 6, 7, and 8 received lower to moderate ratings, suggesting that the training has been less effective in helping lecturers adapt to and integrate digital tools, develop management skills—especially in administrative tasks and student engagement—and pursue professional development and continuous learning. The overall mean score of 2.27 suggests that the quality of digital training in Cross River State is at an average level. This outcome appears to be influenced by the irregularity of training sessions and the lack of adequate digital infrastructure.

## CONCLUSION

In summary, the influence of digitalization on higher education management represents a complex transformation that extends beyond simply incorporating technology. It marks a fundamental shift in how institutions function, educate, and support their students. The increased efficiency, accessibility, and emphasis on student success driven by digitalization are not just passing trends but essential elements for the future of higher education. The digital readiness of instructors is pertinent in undertaking the tasks of teaching and learning, research and community service. As we continue to explore this digital landscape, institutions and their educators must evolve, innovate, and harness technology to build an educational environment that is not only efficient and accessible but also fosters the comprehensive success of every student. The path toward a digitally enhanced higher education system is a step toward the digital readiness of the workforce for a more inclusive, adaptable, and enhanced work performance.



## Recommendations

Based on the findings, the following recommendations are proposed for Higher Education Institutions:

1. Conduct a thorough audit of the existing digital infrastructure to identify areas of weakness and prioritize improvements.
2. Engage with key stakeholders, including government agencies, private sector partners, and technology experts, to secure funding and support for necessary infrastructure enhancements.
3. Select and tailor a Learning Management System (LMS) that meets the institution's specific needs, ensuring it is compatible with a range of devices and features a user-friendly interface.
4. Collaborate with technology vendors to integrate administrative software that meets the institution's unique requirements while adhering to data security and privacy regulations.
5. Provide regular training for faculty on the effective use of integrated digital platforms, offering continuous support to address any issues that may arise.
6. Forge partnerships with telecommunications companies to negotiate data subsidies or explore the provision of free or low-cost internet access on campuses

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