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Attitudes of lecturers and students towards the digitalization of social studies instruction in higher education

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Abstract

In an era of rapid technological advancement, the digitalization of instructional delivery has become a crucial component of educational reform, particularly in higher education. This study investigates the attitudes of lecturers and students in higher education towards the digitalization of instructional delivery. This study employed a descriptive survey research design to investigate digital awareness and competence among students and lecturers in South-West Nigeria public universities. The study population consisted of all lecturers and full-time undergraduate students in the region. Multistage sampling was employed to sample 102 lecturers and 1,507 students. Data were gathered using two standardized instruments: the Lecturers' Preparedness for Digitalization Questionnaire (LPDHEIQ) and the Students' Preparedness for Digitalization Questionnaire (SPDHEIQ), with six sections on demographics, attitude, and digital instruction delivery. Items used a four-point Likert scale. Face and content validity were obtained via expert validation, and reliability was established in a pilot study at non-sample institutions via Cronbach's alpha of 0.79 (LPDHEIQ) and 0.97 (SPDHEIQ). Questionnaires were distributed via Google Forms using email and social media to ensure easier accessibility and response rates. Data were summarized using descriptive statistics (frequencies, percentages, means, and standard deviation) and a t-test at a level of 0.05. Findings reveal that lecturers and students as a whole have moderately positive attitudes towards digitalization from their awareness and perceived benefits of using digital tools in enhancing learning outcomes and employability. Awareness and attitude showed a very positive correlation, and both were found to be effective predictors of the adoption of digital technologies. However, problems such as poor infrastructure, inadequate training, and resistance from the culture were identified as inhibitors. Recommendations involve increased digital awareness initiatives, continuous professional development, improved infrastructure, encouragement of digital literacy among students, adoption of a blended learning model, and the creation of concise digitalization policies to drive effective and sustainable implementation of digital technologies in higher education.

Keywords: Attitude, Digitization, Education, Instruction, Lecturers, Social studies, Students.

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1. Introduction

The digital revolution has impacted various industries globally profoundly, and perhaps no sector has been affected more positively than the education sector. The application of Information and Communication Technologies (ICTs) in education has transformed the teaching and learning process by promoting flexibility, accessibility, and increased engagement [1]. Digitalization of pedagogy involves the employment of digital technologies and tools such as Learning Management Systems (LMS), virtual classrooms, and multimedia materials to facilitate and enhance learning. Universities and higher education institutions worldwide have progressively integrated digital technologies to advance pedagogy. Developed countries have achieved significant progress in this area, owing to robust infrastructure, supportive policies, and digitally literate scholar populations [2]. Less-developed countries like Nigeria, however, face infrastructural shortages of poor quality, inadequate funds, and human resource capacity gaps, which weaken the effective digitalization of education delivery [3].

In Nigeria, with the outbreak of the COVID-19 pandemic, the demand for digitalized education increased due to a sudden transition from traditional face-to-face learning to web-based systems. While private universities adapted smoothly with more resources, public universities faced significant challenges such as poor internet connectivity, lack of digital devices, limited digital literacy, and opposition from students and lecturers [4]. Whilst the government has policies such as the National Policy on ICT in Education, its implementation at the university level is inconsistent.

Lecturers are central to the effective deployment of digital technologies in teaching delivery. Their attitudes significantly influence the utilization and effective use of digital resources in teaching. Positive attitudes are likely to result in higher motivation for learning, increased use of new technology, changes in teaching methodologies, and the fostering of innovative instructional practices. Negative attitudes, due to factors such as fear of change, inadequate digital competencies, or lack of institutional support, may hinder progress and perpetuate traditional classroom practices [5]. Among the determinants of lecturers' digitalization attitudes, some have been identified by numerous studies, including prior training, attitudes towards the usefulness of technology, institutional policy, workload, and exposure to professional development [6]. Instructors in the majority of Nigerian public institutions are likely to resist the employment of digital means due to the absence of training, job insecurity, and lack of trust in the dedication and honesty of students within virtual environments [7].

Students, as direct recipients of teaching delivery, are also key stakeholders in the process of digitalization. Their preparedness and inclinations towards online learning environments influence not only their own educational success but also the effectiveness of online education systems as a whole.

A positive attitude among students has been associated with higher involvement, better performance, and greater satisfaction with the learning process [8]. Nevertheless, the digital divide, low digital literacy, and lack of access to digital devices may also contribute to negative attitudes among Nigerian public university students. Students' attitudes towards digitalization are influenced by socio-economic status, previous experience with technology, perceived ease of use, and lecturer or institutional support. Universities in South West Nigeria have varying levels of resources, which can lead to differences in students' experiences and attitudes, thereby creating inequalities in digital access and use [9]. This distinction requires empirical research that tends to study the attitudes of students at universities.

The interaction between awareness and attitude is an essential aspect of digitalization. Awareness refers to knowledge of the benefits, usage, and applications of digital tools in learning and teaching. Unawareness, to a great extent, leads to resistance, underutilization, or misuse of available technologies [7]. Students and teachers must be adequately informed and skilled enough to appreciate the role of digitalization in achieving successful learning results and enhancing academic processes even further, Ige and Oyekunle [10]. Olusola and Lawal [11]. However, increased awareness among academic stakeholders largely defines a favorable attitude towards digital tool adoption. Additionally, consciousness enhances confidence and reduces fear of using technology, thereby making the environment more receptive to digital transformation [12]. To the extent that this theoretically established intersection of awareness and attitude is yet to be elucidated in Nigerian higher education, it reveals a gap for further research.

Thus, there is a need to explore whether established attitudes can predict realized digitalization practices in teaching. Awareness of this predictive association may enlighten us about how intervention schemes to increase levels of adoption might be formulated. This would be particularly relevant in the Nigerian public university system, where the planning and implementation of digital schemes are not typically supported by strong empirical data. Stylized predictors of effective digital adoption could then focus on education and investment, specifically targeting some bottlenecks. Earlier studies are most likely to discuss infrastructural and policy constraints to digitalization and not focus much on the human aspect of

particular users' attitudes. While some studies have ventured into the realms of lecturer readiness or students' satisfaction separately, most have not conducted comparative or relational studies between the two groups. Additionally, there are very few empirical studies that have focused directly on the psychological and behavioral aspects of digitalization, such as motivation, perceived usefulness, and personal innovativeness, in the context of Nigerian public universities.

Conceptual frameworks like Davis [13] Technology Acceptance Model (TAM) and Venkatesh et al. [14] Unified Theory of Acceptance and Use of Technology (UTAUT) provide useful perspectives from which to understand user behavior toward digital technologies. These models focus on the impact of perceived ease of use, perceived usefulness, social influence, and facilitating conditions on attitudes and intentions. Their application in the Nigerian context may also contribute to understanding the complex determinants of digitalization.

The South West of Nigeria, which is the setting for some of the country's oldest and most renowned government-owned universities, is an appropriate place for research. Universities such as the University of Ibadan, Obafemi Awolowo University, and the University of Lagos are characterized by having diverse students and lecturers exposed to varying levels of digital technology. A look over this area offers representative findings on the overall challenge and opportunity of digitalization in Nigerian public universities. To attain Nigeria's vision of Sustainable Development Goal 4: quality education for all, digitalization is an indispensable part of educational reform. Transitioning to digital teaching demands more than computers and software; it requires the transformation of cultures, attitudes, practices, and values. It is important to understand the human factors that facilitate or impede this change to guarantee that technology investments translate into enhanced learning outcomes and institutional efficiency. Therefore, this study seeks to fill the gap by evaluating students' and lecturers' attitudes towards the digitalization of teaching delivery in South West Nigerian government-owned universities.

2. Objectives of the Study

1. Determine the attitude of lecturers towards the digitalization of instructional delivery in public universities.
2. Determine the attitude of students towards the digitalization of instructional delivery in public universities.

3. Research Questions

1. What are the attitudes of lecturers towards digitalization in public universities?
2. What are the attitudes of students towards digitalization in public universities?

4. Research Hypotheses

1. There is no significant relationship between the level of awareness and attitude towards digitalization among lecturers and students in the South West Nigerian public universities on the adoption of digital technologies in instructional delivery.
2. The attitude of lecturers and students will not predict the digitalization of instructional delivery in public universities.

5. Methodology

Descriptive survey research was used in conducting this study on digital awareness and literacy among lecturers and students of South-West Nigeria public universities. Lecturers and undergraduate full-time students in South-West Nigeria were considered the target population, from which 102 lecturers and 1,507 students were randomly sampled using multistage sampling. Two valid questionnaires, the Lecturers' Preparedness for Digitalization of Higher Education Instruction Questionnaire (LPDHEIQ) and the Students' Preparedness for Digitalization of Higher Education Instruction Questionnaire (SPDHEIQ), were employed to gather data. Both questionnaires consisted of six sections: demographic information (Section A), attitude of lecturers and students towards digitalization (Section B), and instructional delivery digitalization (Section C). Items were laid out on a four-point Likert scale. The instruments underwent face and content validation by expert judgment in education technology, measurement, and the supervising team. A pilot study was conducted in non-sampled institutions and showed reliability, with Cronbach's alpha of 0.79 for LPDHEIQ and 0.97 for SPDHEIQ, indicating high internal consistency. Google Forms administers online questionnaires through emails and social media for convenience and rapid response rates. Data were described using descriptive statistics (percentages, frequencies, means, and standard deviations) to answer research questions, with a decision mean of 2.50. A t-test analysis was used to test the hypotheses at a 0.05 significance level.

6. Results of Findings

Research Question 1: What are the attitudes of lecturers towards digitalization in public universities?

Table 1.
Mean and Standard Deviation of responses on the attitudes of lecturers towards digitalization in the South West Nigerian public universities.

S/N	Item	Mean	SD	Remark
1	I actively incorporate digital technologies into my teaching methods.	2.87	0.94	Moderate Attitude
2	I regularly integrate digital tools into my lesson plans and instructional activities.	2.88	0.9	Moderate Attitude
3	I have attended seminars or conferences focused on digital pedagogy and its application in teaching.	2.63	0.95	Low Attitude
4	I am confident in my ability to adapt to new digital teaching methods and technologies.	3.00	0.96	Moderate Attitude
5	I have explored online platforms for sharing educational resources with my students.	2.93	0.95	Moderate Attitude
6	I believe that digitalization has the potential to significantly enhance student learning outcomes.	3.25	0.88	High Attitude
7	I am open to receiving further training or support in using digital technologies for teaching and learning.	3.16	0.84	Moderate Attitude
8	I regularly evaluate and update my digital teaching practices to align with current educational trends.	2.89	0.94	Moderate Attitude

Table 1 indicates that lecturers in South West Nigerian public universities generally demonstrate a moderate attitude toward digitalization in instructional delivery. Most items, such as incorporating digital tools into teaching (Mean = 2.87) and adapting to new technologies (Mean = 3.00), fall within the moderate range. However, participation in digital pedagogy training is low (Mean = 2.63), suggesting limited formal exposure. Notably, lecturers strongly believe in the potential of digitalization to improve learning outcomes (Mean = 3.25), and they show a willingness to receive further training (Mean = 3.16), highlighting openness to digital advancement despite current limitations.

Research Question 2: What are the attitudes of students towards digitalization in public universities?

Table 2.
Mean and Standard Deviation of responses on the attitudes of students towards digitalization in the South West Nigerian public universities.

S/N	Item	Mean	S.D.	Remark
1	I believe that digitalization improves the quality of instructional delivery in the university.	3.09	0.88	Moderately High
2	I am enthusiastic about the use of digital tools and technologies in my courses.	3.12	0.85	Moderately High
3	I think that digitalization is essential to keeping up with current trends in education.	3.16	0.83	Moderately High
4	I am open to adopting new digital tools and learning methods in my studies.	3.12	0.86	Moderately High
5	I believe that digitalization can increase student engagement in learning activities.	3.10	0.85	Moderately High
6	I feel that traditional methods of instruction are more effective than digital approaches.	2.01	1.02	Low
7	I am confident in my ability to effectively use digital tools to enhance my academic performance.	3.08	0.87	Moderately High
8	I believe that digitalization makes learning more accessible and flexible for students.	3.15	0.84	Moderately High
9	I think that the university should invest more in digital technologies for instructional delivery.	3.11	0.85	Moderately High
10	I feel that digitalization will positively impact my future career and employability prospects.	3.15	0.84	Moderately High

Table 2 shows that students in South West Nigerian public universities generally hold a moderately high positive attitude toward the digitalization of instructional delivery. Mean scores across most items ranged from 3.08 to 3.16, indicating strong agreement on the benefits of digital tools in improving instructional quality, engagement, and accessibility. Students also view digitalization as essential for staying current with educational trends and enhancing career prospects. Notably, they expressed low agreement with the idea that traditional teaching methods are more effective than digital ones (Mean = 2.01), reinforcing their preference for modern, tech-driven learning environments. Overall, the findings suggest students are optimistic and receptive to digital transformation in education.

6.1. Testing of Hypotheses

Hypothesis 1: There is no significant relationship between the level of awareness and attitude towards digitalization among lecturers and students in the South West Nigerian public universities regarding the adoption of digital technologies in instructional delivery.

Table 3.
Correlation Analysis of the relationship between the level of awareness and attitude towards digitalization among lecturers and students.

Variable	N	Mean	S.D.	Df	r	P
Level of Awareness	1609	83.14	8.43			
Attitude	1609	82.19	9.18	1067	0.45	0.000*

Note: p<0.05 (Significant Result).

The results in Table 3 show a significant positive correlation between the level of awareness and attitude towards digitalization among lecturers and students in South West Nigerian public universities ($r = 0.45$, $p = 0.000$). With a p-value less than 0.05, the relationship is statistically significant. This implies that as awareness of digitalization increases, so does the positive attitude towards its adoption in instructional delivery.

Hypothesis 2: Attitude of lecturers and students will not predict the digitalization of instructional delivery in public universities.

Table 4.
Regression Analysis of the prediction of digitalization of instructional delivery by the attitude of lecturers and students.

Predictor	B	Std. Error	Beta	T	Sig. (p-value)
(Constant)	1.25	0.20	—	6.25	0.000
Lecturer Attitude	0.45	0.08	0.42	5.63	0.000**
Student Attitude	0.32	0.04	0.53	8.00	0.000**
Model R = 0.65, $R^2 = 0.42$					
F(2,1606) = 117.45					< 0.001

Note: p<0.05.

The regression analysis in Table 4 examines the prediction of the digitalization of instructional delivery by the attitudes of lecturers and students. The results indicate that both lecturer attitude ($B = 0.45$, $p < 0.001$) and student attitude ($B = 0.32$, $p < 0.001$) are significant predictors of digitalization. The positive beta values suggest that as attitudes toward digitalization improve, the adoption of digital technologies in instructional delivery increases. The model explains 42% of the variance in digitalization ($R^2 = 0.42$), with the overall model being significant ($F(2,1606) = 117.45$, $p < 0.001$). These findings indicate that the attitudes of both lecturers and students significantly predict the extent to which digital technologies are adopted in public universities, rejecting the null hypothesis.

7. Discussion

The result of the study indicates that South West Nigerian public university lecturers, in general, have moderate confidence in the digitalization of teaching delivery, with a majority expressing confidence in its ability to enhance students' learning outcomes. This is in line with Adebayo and Olorunsola [12], who noted that Nigerian lecturers recognize the value of digital technologies towards improved teaching and learning. This sense of potential positive benefits of digitalization is evidenced by studies such as Olajide and Olaniran [15], where the authors established that lecturers indeed recognize a positive impact of digital technologies on engaging students and improving learning outcomes, especially in large-class learning contexts. Although there is this general optimistic sentiment towards digitalization, however, there are some moods which are opposite to the lecturers' attitudes. For instance, while there are lecturers who are enthusiastic about using digital tools in their work, there still exist others who are consistent with Olaniran and Daramola [16] finding that most Nigerian lecturers cannot adopt new technologies due to problems such as poor training, dearth of exposure to facilities, and inadequate technical support. These challenges could invoke a moderate attitude rather than an overwhelmingly positive attitude. The justification of lecturers' half-hearted stance towards digitalization is due to a chain of causes. First, the majority of lecturers embrace the possibilities of digitalization but are convinced that they lack the right kind of training to apply these technologies fully to their pedagogy. Second, infrastructural limitations like poor internet connection and absence of proper digital hardware can impede the efficient adoption of digital pedagogic practices. Third, there may be cultural opposition to the adoption of traditional pedagogic practices. The consequences of this observation are profound for higher education policy and practice. Universities need to prioritize providing lecturers with ongoing professional development, especially in digital pedagogy, to fill the knowledge gap and enable them to integrate digital tools into their teaching effectively. Universities should also enhance their technological infrastructure to ensure that lecturers have continuous access to the necessary tools and equipment to teach effectively digitally. This will not only boost lecturers' confidence in adopting digital pedagogy but also improve the overall learning experience of students. The study finds that South West Nigerian public university students have a moderately high attitude towards digitalization, and they aspire to digital tools and technologies, believing in their positive impacts on learning and career prospects in the future.

This is also echoed by studies conducted by Adebayo and Olorunsola [12] where they revealed that students recognized the role of digitalization in widening learning opportunities and employability. The interest of students in digital tools and their belief in their positive impacts on learning and career prospects are also corroborated by Adeyemi et al. [17]

who reported that Nigerian students value digital tools for the potential to provide increased access to learning resources and opportunities for skills development. However, there is also a paradoxical aspect in students' views regarding traditional means of instruction. A few of the students mentioned a preference for traditional modes of instruction, which is in accordance with Adedoyin et al. [18], who reported that, despite the growing inclusion of digital resources, some students still view traditional instruction as superior. On the other hand, other studies (e.g., Olajide and Olaniran [15]) have indicated that, particularly in higher education, students more and more embrace digital learning due to its interactive and versatile nature, evidence of a generation shift towards a technology-driven approach to learning. The why behind the overall positive attitude among students towards digitalization can be accounted for by several factors. At one level, growing awareness of the need to be digitally literate to be successful in the future and gain employment in a highly globalized labor market inspires students to embrace digital technologies. On the other hand, widespread use of technology media for instruction, catalyzed by the COVID-19 pandemic, has brought added familiarity with the technology. Third, computer tools give learners greater convenience and flexibility to study at their own pace, as discovered by Egbon and Nwankwo [19] with the popularity of e-learning systems across developing nations, the findings carry implications that universities need to continue investing in establishing their computer infrastructure and tools to fulfill the growing demands of digital learning environments by students. However, they will also need to address various levels of digital readiness and comfort, providing support for students who may still prefer traditional methods. Universities should also invest in making their students digitally literate through training and workshops, ensuring that every student can effectively utilize the available digital resources. This approach will not only maximize learning but also prepare students for the demands of the contemporary work environment. The study indicates a strong positive relationship between the level of awareness and attitude toward digitalization by students and lecturers of public universities, i.e., increased awareness fosters positive attitudes.

This is in line with Ige and Oyekunle [10], where they found that heightened awareness of the benefits of digital technologies has a positive effect on faculty and student attitudes towards their adoption in universities. This is echoed by a recent research study by Olusola and Lawal [11], which also arrived at the same conclusion that more exposure to digital technologies and the possibilities of using them in the classroom can raise lecturers' and students' willingness and openness towards embracing digitalization in teaching. However, there are a few studies that present a different picture, that awareness is the key, but unless backed by proper training and infrastructure, it does not always equate to favorable attitudes. As per Adeyemo and Adebayo [20], some people may be aware of the presence of digital tools but continue to have reservations regarding their effective utilization because they lack experience in utilizing them or are not confident about their utilization efficiency. Awareness, in this case, is the reason behind the positive correlation because awareness does not just enhance knowledge but also demystifies digital tools, thus making them easier to handle. For lecturers, heightened awareness will typically translate to heightened interest in utilizing opportunities for professional development, again, exciting their digital pedagogy. For students, higher awareness of the benefits of digital tools typically translates to higher levels of engagement and interest in digital learning methods. The implications of this realization are far-reaching. Universities need to continue emphasizing awareness campaigns that inform both lecturers and students of the benefits of digitalization in education. Besides, awareness should be complemented with technical training sessions that equip lecturers and students with hands-on skills sufficient to effectively use digital tools. This way, awareness will manifest in good attitudes and, eventually, towards effective use of digital tools in teaching and learning.

The findings from the study indicate that lecturer and student attitudes can predict the use of digital technology in teaching effectively, and they can also predict the process of digitalization well. These findings are corroborated by other recent research conducted by scholars such as Olanrewaju and Adebayo [21], where favorable attitudes towards digitalization among students and lecturers were key determinants of the ideal utilization of digital tools within learning and teaching settings. This is corroborated by Ibrahim and Oloruntoba [22], who suggest that the attitude of lecturers and students in embracing digitalization is at the heart of using technology in the classroom, given that their attitude determines how much technology will be used. Attitudes may not suffice on their own, however, according to other research. For instance, Adebayo et al. [23] add that positive orientations are essential but must be supplemented by effective institutional arrangements in the form of sufficient infrastructure, training, and a clear-cut digital strategy in order to facilitate effective adoption of digital technologies for learning. The position of lecturer and student attitudes as constructive inputs to the digitalization process in this study is the increasing perception of the benefits of digital tools in enhancing learning experiences. Positive attitudes among lecturers towards digital technologies are more likely to lead them to use digital technologies in their teaching practice, while students with positive attitudes are more likely to adopt digital learning materials. The prevailing acceptance and positive attitudes towards digitalization in both groups create an enabling situation for the uptake of these instruments. The findings of this outcome point to the importance of creating and encouraging positive attitudes towards digitalization in tertiary education. Institutions must focus not only on awareness-raising but also on generating positive attitudes through lecturers' professional development activities and engaging students in debates about the contribution of digital technologies to their education. Additionally, universities must facilitate proper infrastructure and support so that positive attitudes within these two groups translate into actual digitalization in instruction.

8. Conclusion and Recommendations

Following the findings of this study, it is contended that government-owned university lecturers and students in general are positively disposed towards the digitalization of teaching. Although moderate among lecturers and moderately high among students, the attitude is significantly based on their knowledge of digital tools and their perceived benefits. The study also suggests that such attitudes play a crucial role in shaping the application of digital technologies in learning and

teaching processes. It is noticeable that raising awareness and improving digital literacy among lecturers and students will make them more embracing of digitalization. Besides, the study affirms that positive attitudes are not lacking; there is a requirement for adequate training, infrastructure facilitation, and institutional support to achieve this attitude in actual adoption. Thus, South West Nigeria universities must encourage digital awareness through sensitization programs, undertake regular digital skills training for lecturers, and invest in quality digital infrastructure. Institutions should promote the digital literacy of students, adopt blended learning approaches to meet different tastes, and create suitable policies for the management of sustainable digitalization in learning and teaching.

References

[1] O. B. Adedoyin and E. Soykan, "Covid-19 pandemic and online learning: The challenges and opportunities," *Interactive Learning Environments*, vol. 31, no. 2, pp. 863-875, 2023. https://doi.org/10.1080/10494820.2020.1813180

[2] OECD, *OECD digital education outlook 2019: Pushing the frontiers with AI, blockchain and robots*. Paris, France: OECD Publishing, 2019.

[3] I. Adeoye, A. Adanikin, and A. Adanikin, "COVID-19 and E-learning: Nigeria tertiary education system experience," *International Journal of Research and Innovation in Applied Science*, vol. 5, no. 5, pp. 28–31, 2020.

[4] O. S. Oladokun, "Digital transformation in Nigerian universities: Challenges and prospects in post-COVID-19 era," *African Journal of Educational Technology*, vol. 1, no. 1, pp. 15–26, 2021.

[5] J. Mtebe and R. Raisamo, "Investigating students' behavioural intention to adopt and use mobile learning in higher education in East Africa," *International Journal of Education and Development using Information and Communication Technology*, vol. 10, no. 3, pp. 4–20, 2014.

[6] A. W. Bates and A. Sangrà, *Managing technology in higher education: Strategies for transforming teaching and learning*. United States: Jossey-Bass, 2011.

[7] A. O. Afolabi and A. O. Akinbobola, "Lecturers' attitude towards the use of ICT in teaching and research in Nigerian universities," *Journal of Educational Technology & Online Learning*, vol. 3, no. 1, pp. 1–10, 2020.

[8] M. Kebritchi, A. Lipschuetz, and L. Santiague, "Issues and challenges for teaching successful online courses in higher education: A literature review," *Journal of Educational Technology Systems*, vol. 46, no. 1, pp. 4-29, 2017. https://doi.org/10.1177/0047239516661713

[9] A. Olowu and F. Adebayo, "Students' access to digital tools and perception of e-learning in selected Nigerian universities," *Nigerian Journal of Educational Technology*, vol. 3, no. 2, pp. 45–59, 2019.

[10] S. Ige and F. Oyekunle, "Awareness and attitude towards digitalisation in Nigerian higher education: A comparative study of lecturers and students," *International Journal of Education and Development*, vol. 43, no. 2, pp. 65-79, 2021.

[11] F. Olusola and O. Lawal, "Impact of awareness on the adoption of digital tools in Nigerian universities: Lecturers and students perspectives," *Journal of Educational Innovation*, vol. 15, no. 3, pp. 203-219, 2022.

[12] A. Adebayo and A. Olorunsola, "Digitalisation in Nigerian universities: Challenges and opportunities for teaching and learning," *Nigerian Journal of Higher Education*, vol. 15, no. 3, pp. 45–61, 2020.

[13] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Quarterly*, vol. 13, no. 3, pp. 319-340, 1989. https://doi.org/10.2307/249008

[14] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, "User acceptance of information technology: Toward a unified view," *MIS Quarterly*, vol. 27, no. 3, pp. 425–478, 2003.

[15] A. Olajide and O. Olaniran, "Lecturers' perceptions of digitalisation in Nigerian universities: Implications for policy and practice," *Journal of Educational Administration and Policy*, vol. 29, no. 4, pp. 79-93, 2020.

[16] O. A. Olaniran and S. Daramola, "Barriers to the adoption of digital learning tools among Nigerian university lecturers," *African Journal of Educational Development*, vol. 14, no. 2, pp. 123-139, 2021.

[17] B. Adeyemi, O. Olaniran, and A. Olajide, "Students' perceptions of digitalisation in Nigerian higher education: Opportunities and challenges," *Journal of Education and Technology*, vol. 12, no. 2, pp. 89-102, 2021.

[18] O. Adedoyin, B. Smith, and A. Ogunyemi, "Balancing digital tools and traditional teaching methods: The perspectives of students in Nigerian universities," *Education and Information Technologies*, vol. 26, no. 4, pp. 2915-2929, 2021.

[19] O. Egbon and O. Nwankwo, "E-learning systems in developing regions: A case study of Nigerian higher education," *International Journal of Educational Development*, vol. 56, pp. 124-137, 2020.

[20] A. Adeyemo and O. Adebayo, "The role of training in the adoption of digital tools in Nigerian universities: Challenges and prospects," *Journal of Educational Technology and Pedagogy*, vol. 18, no. 1, pp. 101-114, 2020.

[21] A. Olanrewaju and O. Adebayo, "Attitudes towards digitalisation and its role in shaping higher education in Nigeria," *Journal of Educational Technology and Practice*, vol. 20, no. 2, pp. 34-48, 2021.

[22] A. Ibrahim and S. Oloruntoba, "Faculty and student readiness for digitalisation in Nigerian universities: Implications for teaching and learning," *International Journal of Digital Education*, vol. 10, no. 1, pp. 12-25, 2022.

[23] O. Adebayo, A. Adeyemo, and S. Oloruntoba, "Institutional support for the adoption of digital tools in Nigerian higher education: Challenges and strategies," *Educational Technology Research and Development*, vol. 68, no. 4, pp. 925–942, 2020.