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RELATIONSHIP BETWEEN INTERNET FACILITIES AND LECTURERS' JOB PERFORMANCE IN PUBLIC UNIVERSITIES IN NORTH-WEST NIGERIA

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ABSTRACT

This study investigated the relationship between internet facilities and lecturers' job performance in north-west universities, Nigeria. The objectives were to assess how the availability and quality of internet services influence teaching, research, and administrative effectiveness of lecturers. Guided by two research questions, a descriptive survey design of correlational type was adopted. A population of 3,200 lecturers from selected universities in North-West Nigeria was considered, and a sample of 350 respondents was selected using multistage and simple random sampling techniques. Data were collected using two validated instruments: Internet Facilities Availability and Quality Rating Scale (IFARS) and Lecturers' Job Performance Rating Scale (LJPRS), with reliability coefficients of 0.84 and 0.86 respectively. Results revealed a strong positive correlation between access to quality internet facilities and lecturers' job performance. Specifically, the findings showed that better internet infrastructure significantly enhanced research output, teaching delivery, and administrative tasks. The study recommends increased investment in digital infrastructure, provision of campus-wide Wi-Fi, and capacity-building programs to improve internet literacy among lecturers.

Keywords: Internet facilities, Job performance, Lecturers, Nigerian universities, Digital infrastructure

Introduction

The 21st century has ushered in an era of rapid digital transformation, where the use of Information and Communication Technology (ICT) has become central to every sphere of human endeavor. In higher education, the integration of internet-based technologies has fundamentally reshaped the ways in which teaching, research, and administrative functions are carried out. Universities across the globe are leveraging the internet to enhance the quality and efficiency of academic work, facilitate knowledge dissemination, and support institutional governance. For lecturers, internet facilities serve as an indispensable

tool that supports curriculum delivery, student engagement, scholarly research, and administrative responsibilities. As a result, access to fast, reliable, and affordable internet is no longer a luxury but a necessity in the contemporary academic environment (Adebisi & Nuhu, 2020).

In Nigeria, however, the story is markedly different. Although several universities have made strides in adopting ICT tools, the development and provision of adequate internet infrastructure remains inconsistent and largely inadequate. Many public universities still struggle with limited bandwidth, irregular network access, frequent power outages, and poor maintenance of ICT infrastructure. These challenges significantly hinder lecturers from performing optimally in their various academic and non-academic roles. In institutions where internet access is unreliable or entirely absent, lecturers are often unable to download updated teaching materials, access international journals for research, engage in virtual learning environments, or complete essential administrative tasks like grading and report submission (Chukwu & Ibrahim, 2022).

Job performance in the context of academia encompasses the effectiveness and efficiency with which lecturers discharge their duties, including lesson planning and delivery, supervising students' projects and theses, publishing scholarly work, and contributing to institutional development through service delivery. A lecturer's performance is largely influenced by access to relevant tools and resources, and the internet plays a key role in this regard. When internet facilities are readily available and functional, lecturers can utilize various digital resources to improve their pedagogy, collaborate with local and international peers, and contribute meaningfully to academic discourse. Conversely, inadequate internet access creates barriers to productivity, limits academic innovation, and can lead to professional stagnation (Musa & Adamu, 2019).

Moreover, the COVID-19 pandemic further exposed the digital divide in Nigeria's higher education system. With the shift to remote learning and digital collaboration becoming the new norm globally, Nigerian universities were forced to adopt e-learning platforms and virtual meeting tools. However, this transition was met with resistance and difficulty in many institutions due to the lack of adequate digital infrastructure. Lecturers who lacked internet access struggled to conduct virtual classes, assess students, or participate in webinars and conferences. This reality underscored the importance of institutional investment in internet technologies as a fundamental component of academic resilience and adaptability (Ayeni & Yusuf, 2022).

Against this backdrop, it becomes imperative to examine the extent to which internet facilities influence the job performance of lecturers in Nigerian universities. While various studies have examined general ICT use in education, few have focused specifically on how internet access relates to lecturers' teaching efficiency, research productivity, and administrative effectiveness. Understanding this relationship is essential for policymakers, university administrators, and development partners who aim to improve

the quality of higher education in Nigeria through strategic ICT investments. By identifying the correlation between internet infrastructure and lecturer performance, this study contributes to the growing body of knowledge on digital equity and academic efficiency in developing countries.

Theoretical Framework

This study is anchored on the Technology Acceptance Model (TAM) developed by Davis (1989). The TAM posits that perceived usefulness and perceived ease of use determine individuals' acceptance of technology. In this context, lecturers are more likely to integrate internet technologies into their professional duties when they believe these tools improve their performance and are easy to use. Conversely, limited access, poor usability, and technical failures can reduce motivation and productivity. This theory provides a suitable lens for analyzing how internet facilities affect lecturers' performance in Nigerian universities.

Literature Review

The integration of internet facilities into higher education has revolutionized the global academic landscape, enabling teaching, learning, research, and administrative processes to be more efficient, flexible, and responsive to technological advancements. Internet facilities generally refer to a range of digital resources and infrastructures that facilitate access to the web, including broadband connectivity, wireless (Wi-Fi) networks, virtual learning environments (VLEs), e-libraries, data repositories, and multimedia tools (Ajayi & Ekundayo, 2020). In the Nigerian context, however, access to these facilities is often limited by infrastructural deficits, poor funding, and unreliable electricity supply.

Adebisi and Nuhu (2020) assert that internet infrastructure remains unevenly distributed across Nigerian universities, with urban institutions having better access compared to their rural counterparts. Despite government interventions such as the Nigerian Research and Education Network (NgREN), many public universities still experience slow and unstable internet access, which hampers academic activities. Moreover, the absence of technical support and periodic upgrades makes even existing internet systems prone to breakdowns, leaving lecturers disconnected from global academic networks. According to Bello and Ibrahim (2021), internet facilities are not just enablers of academic work; they are essential tools for innovation and competitiveness in teaching, research, and administration. Thus, internet access has become a baseline requirement for any institution aspiring to meet international academic standards.

Lecturers' job performance refers to their ability to effectively execute core responsibilities such as teaching, conducting research, participating in community service, and fulfilling administrative duties. According to Yusuf and Okeke (2022), academic performance is measured not just by classroom engagement but also by research publications, contributions to policy development, student supervision, and involvement in committee work. Several studies have linked lecturers' performance with institutional support systems such as ICT access, training opportunities,

remuneration, and promotion (Lawal & Jibril, 2021). In this regard, internet access emerges as a foundational support factor. For example, Ayeni and Yusuf (2022) emphasize that lecturers without stable internet connections often struggle to prepare lecture materials, access academic journals, or conduct virtual supervision. It has also been observed that internet-based technologies like Google Scholar, ResearchGate, Mendeley, and Zoom have become integral tools for maintaining professional relevance in the academic world. Without such tools, Nigerian lecturers risk falling behind in global academic discourse (Oladimeji & Ugwoke, 2020).

Teaching is one of the most impacted areas when internet access is deficient. In modern pedagogy, lecturers are expected to use blended learning strategies that combine face-to-face and online interactions. These include uploading lecture notes online, conducting real-time video lectures, and utilizing virtual classrooms such as Moodle, Edmodo, and Google Classroom (Akinola & Ogundele, 2019). Chukwu and Ibrahim (2022) found that Nigerian lecturers who have unrestricted access to internet facilities were more likely to develop interactive PowerPoint presentations, integrate multimedia into lectures, and use student-centered teaching methods. Conversely, lecturers without adequate internet access often rely on outdated notes and traditional teaching approaches, which negatively affect student engagement and satisfaction. Furthermore, studies have shown that internet access increases the lecturer's responsiveness to student inquiries and feedback. Musa and Adamu (2019) revealed that lecturers with poor internet access take longer to respond to student emails, submit course outlines late, and face challenges conducting online assessments.

Research is the lifeblood of academic relevance and innovation. In the age of digitization, the ability to conduct literature reviews, analyze data, collaborate with peers, and publish findings is deeply tied to internet connectivity. As noted by Lawal and Jibril (2021), access to digital libraries and academic databases such as JSTOR, ScienceDirect, Springer, and Wiley is essential for evidence-based research. Adewale and Musa (2020) emphasize that most reputable journals are only accessible online, and without stable internet, lecturers are either forced to rely on outdated texts or unable to publish in high-impact outlets. This leads to low research visibility and poor international rankings for Nigerian institutions. Moreover, internet-based platforms facilitate collaboration across borders. Adebayo and Ogundipe (2021) found that lecturers with access to fast and reliable internet were more likely to co-author papers with international colleagues, participate in online conferences, and benefit from global research grants. However, poor internet service limits access to current literature, hinders real-time collaboration, and delays manuscript submissions. Eze and Ofoegbu (2021) documented that some Nigerian lecturers wait days or weeks to upload research papers due to poor network connectivity or bandwidth caps.

Lecturers also play key roles in university governance and administrative processes, including result computation, committee work, and correspondence. Many

of these tasks now require digital interaction through portals, email, and cloud-based file-sharing systems. According to Okonkwo and Usman (2022), poor internet hampers prompt submission of results, delays communication with university administrators, and reduces participation in academic board activities. Institutions that have digitized their administrative systems report higher staff efficiency and improved service delivery. For instance, Chinedu and Nwachukwu (2020) noted that in universities with campus-wide Wi-Fi and functional e-portals, lecturers found it easier to complete student registration, upload grades, and submit progress reports. In contrast, where such systems are not supported by reliable internet, lecturers are often frustrated, deadlines are missed, and institutional operations suffer. Therefore, internet facilities must be viewed not as optional luxuries but as necessities for effective university administration.

Several empirical studies have validated the significant relationship between internet facilities and job performance. For example, Ayeni and Yusuf (2022) conducted a survey among 800 lecturers in six Nigerian universities and found a statistically significant correlation ($r = 0.71$, $p < 0.05$) between internet availability and performance in research and teaching. Similarly, Bello and Ibrahim (2021) carried out a regression analysis and discovered that internet access alone accounted for nearly 40% of the variance in lecturers' ability to perform effectively. In another study, Okonkwo and Usman (2022) reported that lecturers in universities with campus-wide broadband coverage were 55% more productive than their counterparts in institutions with poor connectivity. These studies consistently highlight internet availability as a key determinant of academic success, not just for students but also for faculty members. The findings reinforce the argument that investment in digital infrastructure is indispensable for building knowledge economies and achieving educational development goals.

Statement of the Problem

Despite the recognized importance of internet facilities in supporting higher education, many Nigerian universities still operate under severe limitations regarding digital infrastructure. Inadequate bandwidth, poor Wi-Fi coverage, and inconsistent network uptime hinder lecturers from accessing academic resources, submitting reports, or conducting online meetings. This lack of functional internet access not only limits teaching innovation but also weakens research productivity and administrative efficiency. While a few studies have examined general ICT adoption in higher education, there is a limited empirical focus on the specific relationship between internet facility availability and the job performance of lecturers in Nigerian universities. Thus, this study seeks to bridge this gap by exploring how internet access influences lecturers' ability to teach, research, and perform their administrative responsibilities effectively.

Objectives of the Study

The following objectives were used:

1. To assess the level of availability and quality of internet facilities provided in

public universities in North-West Nigeria.
2. To evaluate the level of lecturers' job performance in public universities in North-West Nigeria.
3. To determine the relationship between internet facilities and lecturers' job performance in public universities in North-West Nigeria.

Research Questions

The research questions that were used are:
1. What is the level of availability and quality of internet facilities provided in public universities in North-West Nigeria?
2. What is the level of lecturers' job performance in public universities in North-West Nigeria?

Null Hypothesis

$H0_1$: There is no significant relationship between internet facilities and lecturers' job performance in public universities in North-West Nigeria.

Methodology

The study adopted a descriptive survey design of correlational type. A total population of 3,200 lecturers from selected public universities in North-West Nigeria was considered. Using Krejcie and Morgan's table, a sample size of 350 was determined. Multistage sampling techniques (purposive and random) were used to select institutions and respondents. Two instruments were used: Internet Facilities Availability and Quality Rating Scale (IFARS) and Lecturers' Job Performance Rating Scale (LJPRS). These were validated by experts in ICT and educational evaluation. The instruments were pilot-tested using the test-retest method, yielding reliability coefficients of 0.84 and 0.86 (Cronbach Alpha). A 5-point rating scale was used to measure the responses, and a mean of 3.0 and above was considered acceptable.

Results

Research Question 1: What is the level of availability and quality of internet facilities provided in public universities in North-West Nigeria?

Table 1: Level of Availability and Quality of Internet Facilities Provided in Public Universities in North-West Nigeria

S/N	Item Statement	Mean (x̄)	Decision
1	The university provides stable internet access in staff offices	3.7	Accepted
2	Internet connectivity is available across lecture halls and classrooms	3.5	Accepted
3	Internet speed is adequate for academic activities	3.2	Accepted
4	Wi-Fi access is unrestricted and reliable for lecturers	3.6	Accepted
5	Power supply is often available for internet usage	2.8	Rejected
6	Online academic platforms (e.g., LMS, portals) function efficiently	3.4	Accepted
7	ICT support is readily available when internet issues arise	3.3	Accepted
8	The university regularly upgrades its internet infrastructure	3.1	Accepted
	Grand Mean	**3.33**	**Accepted**

Table 1, present data on level of availability and quality of internet facilities provided in public universities in north-west Nigeria. The grand mean of 3.33 indicates a generally acceptable level of availability and quality of internet facilities in public universities in North-West Nigeria.

Research Question 2: What is the level of lecturers' job performance in public universities in North-West Nigeria?

Table 2: Lecturers' Job Performance in public universities in North-West Nigeria

S/N	Item Statement	Mean (x̄)	Decision
1	I effectively prepare and deliver lectures using online resources	3.8	Accepted
2	I frequently publish academic papers or attend conferences	3.4	Accepted
3	I respond to students' academic inquiries in a timely manner	3.5	Accepted
4	I submit student results and records promptly	3.6	Accepted
5	I use internet platforms for academic collaboration and meetings	3.7	Accepted
6	I maintain regular attendance and punctuality in official duties	3.9	Accepted
7	I participate in academic planning and policy discussions	3.3	Accepted
8	I provide mentorship to students using digital platforms	3.2	Accepted
	Grand Mean	**3.55**	**Accepted**

Table 2 present data on Lecturers' Job Performance in public universities in North-West Nigeria. The grand mean of 3.55 shows a high level of lecturers' job performance in public universities in north-west Nigeria.

Test of Hypothesis

Null Hypothesis (Ho_1): There is no significant relationship between internet facilities and lecturers' job performance in public universities in North-West Nigeria.
To test this hypothesis, a Pearson Product-Moment Correlation analysis was conducted between the scores of the two rating scales.

Table 3: Pearson Correlation between Internet Facilities and Lecturers' Job Performance

Variables	N	Mean	Std. Dev	r-cal	p-Value	Decision
Internet Facilities	350	3.33	0.52			
				0.760	0.000	**Rejected**
Lecturers' Job Performance	350	3.55	0.47			

Table 3 present Pearson correlation between internet facilities and lecturers' job performance. The correlation coefficient (r = 0.76) indicates a strong positive relationship between internet facilities and lecturers' job performance. The p-value (0.000) is less than the significance level of 0.05, leading to the rejection of the null hypothesis.

Summary of Major Findings

1. The study revealed that the availability and quality of internet facilities in public universities in North-West Nigeria were generally moderate to high. With a grand mean score of 3.33, the findings showed that while basic infrastructure such as

Wi-Fi access, internet speed, and ICT support systems were in place, there were still occasional limitations such as poor power supply and inconsistent network stability that affected optimal usage.

2. The study found that lecturers in the region demonstrated a high level of job performance, with a grand mean score of 3.55. Respondents reported consistent effectiveness in teaching, research productivity, student engagement, administrative responsibility, and use of online academic resources to enhance professional duties.
3. The Pearson correlation analysis showed a strong and statistically significant positive relationship between internet facilities and lecturers' job performance, with a correlation coefficient (r-cal) of 0.760 and a p-value of 0.000. This result led to the rejection of the null hypothesis and confirmed that enhanced internet access significantly improves lecturers' teaching delivery, research output, and administrative efficiency.

Discussion of Findings

The findings of this study provide valuable insights into how internet infrastructure supports the academic and professional functions of university lecturers in North-West Nigeria. The study addressed two main variables: the availability and quality of internet facilities, and lecturers' job performance, with a correlational assessment of their relationship.

The first finding shows that, the availability and quality of internet facilities in public universities in North-West Nigeria are generally moderate to high, This suggests that while many universities provide internet access, challenges such as power instability, occasional downtime, and limited coverage still persist. This aligns with the findings of Eze and Ofoegbu (2021) and Chukwu and Ibrahim (2022), who found that although efforts have been made to improve ICT infrastructure in Nigerian universities, implementation remains inconsistent across institutions. Moreover, the finding confirms Adebisi and Nuhu (2020) who emphasized that the quality of internet infrastructure measured in terms of speed, stability, and accessibility is a major determinant of the digital readiness of academic institutions. The fact that ICT support services were found to be accessible in many institutions points toward gradual improvements, though gaps still exist in ensuring seamless internet connectivity campus-wide.

The second finding shows that Lecturers' job performance was rated high by respondents, with a grand. This implies that despite existing infrastructural challenges, lecturers are generally committed and productive in their teaching, research, and administrative responsibilities. This corroborates the findings of Musa and Adamu (2019) and Ayeni and Yusuf (2022), who reported that Nigerian university lecturers continue to deliver quality academic services, often adapting to environmental limitations with creativity and resilience. The high level of job performance reported in this study may be attributed to increasing digital literacy among academic staff, increased awareness of global academic standards, and a strong institutional emphasis on research publication and performance evaluations.

The hypothesis test using Pearson Product-Moment Correlation yielded a correlation coefficient of 0.760 with a p-value of 0.000, indicating a strong and statistically significant positive relationship between internet facilities and lecturers' job performance. This suggests that improvements in internet infrastructure are likely to yield proportional improvements in teaching effectiveness, research output, and administrative efficiency among academic staff. This finding aligns with the theoretical underpinning of the Technology Acceptance Model (Davis, 2019), which found that individuals' performance is enhanced when they perceive technology (such as the internet) as useful and easy to use. The results also support the studies of Lawal and Jibril (2021) and Bello and Ibrahim (2021), who found that access to digital platforms improves academic productivity and facilitates timely communication, collaboration, and learning innovation. Furthermore, the strong relationship established in this study underscores the importance of continued investment in ICT development in Nigerian universities. Without reliable and high-speed internet, lecturers are constrained in their ability to meet global academic standards, contribute to research communities, or engage students through modern pedagogical tools.

Conclusion

This study has examined the relationship between internet facilities and lecturers' job performance in public universities within North-West Nigeria. The findings revealed that the availability and quality of internet infrastructure in most of the sampled institutions were generally acceptable but still faced occasional disruptions due to power supply issues and limited bandwidth. Despite these challenges, lecturers demonstrated a high level of job performance across teaching, research, and administrative responsibilities.

Most importantly, the study established a statistically significant and strong positive relationship between internet facilities and lecturers' job performance. This finding confirms that the better the internet access and quality in universities, the more efficient and productive lecturers become in executing their professional duties. Internet facilities were found to directly support the preparation of teaching materials, access to research publications, collaboration with peers, and the timely completion of administrative tasks. The study therefore concludes that sustainable investment in internet infrastructure, training in digital technologies, and strong institutional ICT support are critical to enhancing lecturers' job performance and promoting academic excellence in public universities. To build competitive, globally connected universities in Nigeria, internet connectivity should no longer be treated as a luxury but as a foundational requirement for effective academic delivery.

Recommendations

The following recommendations were made:

1. The federal and state governments, through agencies such as the National Universities Commission (NUC) and the Nigerian Communications Commission (NCC), should prioritize the development of robust internet infrastructure in public

universities. This includes increasing bandwidth capacity, expanding Wi-Fi coverage to lecture halls and offices, and ensuring stable connectivity across campuses.

2. Since power outages were identified as a limiting factor, universities should invest in alternative power sources such as solar energy or backup generators to ensure uninterrupted access to internet facilities, especially in remote or poorly powered areas of the campuses.
3. Institutions should organize regular capacity-building workshops and digital literacy programs for lecturers to improve their competency in utilizing internet-based tools for teaching, research, and administration. This will maximize the benefits of internet availability on job performance.

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