

ISRG Journal of Multidisciplinary Studies (ISRGJMS)



ISRG PUBLISHERS

Abbreviated Key Title: isrg j. multidiscip. Stud.

ISSN: 2584-0452 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjms/>

Volume – I Issue-IV (December) 2023

Frequency: Monthly



Knowledge and Perception of the Use of Artificial Intelligence Among Undergraduate Students of Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

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| Received: 16.12.2023 | Accepted: 25.12.2023 | Published: 29.12.2023

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Abstract

Artificial intelligence (AI) has expeditiously emerged, and greatly impacted our society in many ways. It increasingly influences more and more aspects of our daily lives in society, from our personal lives to business, medicine, education, and governmental tasks. While AI can improve the quality of life, it has also raised important questions about whether undergraduate students know how to use Artificial Intelligence. This study explored knowledge and perception of using AI among undergraduate students of Nnamdi Azikiwe University, Awka, Anambra State, Nigeria. The researchers utilised Technology Adoption Model (TAM) in the study. The researchers used the survey research method. It was discovered that most of the respondents have a low level of knowledge in the use of artificial intelligence, and the respondents do not have access to the use of artificial intelligence. Further findings revealed that most of the respondents are not competent in the use of artificial intelligence. The researchers conclude that competency in technological innovation is dependent on the knowledge of, availability, and access to the technological innovations. It was recommended that efforts should be made by the management of Nnamdi Azikiwe University, Awka, to organise seminars and programmes to teach students on the use of artificial intelligence.

Keywords: Artificial Intelligence, Knowledge, Perception, Students, Undergraduate

Introduction

Artificial Intelligence (AI) can be described as the simulation of the human mind to make computers think and act like humans by

performing tasks like learning and problem-solving (Zhang & Lu, 2021). Machine Learning (ML) builds systems that improve through data and experience, and has been used in the

advancement of various fields such as autonomous systems, Natural language processing, computer vision, and medical fields (Jordan & Mitchell, 2015). AI and ML are still being researched to achieve better performance.

AI has emerged as a transformative technology with the potential to revolutionise various industries, including education. In recent years, there has been a growing interest in understanding the impact of AI on students' learning experiences. AI technologies, such as machine learning, natural language processing, and data analytics, are being leveraged to develop innovative educational tools and platforms that can enhance the way students learn, engage, and succeed in their educational pursuits (Robert, Potter & Frank, 2023). The traditional education system has typically followed a one-size-fits-all approach, where students receive the same content and instruction, regardless of their individual needs and learning styles.

However, with the integration of AI, education can become more personalised and adaptive, catering to the unique requirements of each student. AI-powered educational platforms can collect and analyse vast amounts of data, enabling them to gain insights into students' strengths, weaknesses, and learning preferences. This data-driven approach allows for the delivery of customised content, recommendations, and feedback, providing students with a tailored learning experience that maximises their potential for success (Gupta & Sakshi, 2021).

One of the significant advantages of AI in education is its ability to provide immediate and constructive feedback to students. Traditionally, students had to wait for their assignments to be graded by teachers, which often resulted in delayed feedback. With AI-powered automated grading systems, students can receive timely feedback on their work, enabling them to understand their mistakes, make corrections, and improve their learning outcomes. This real-time feedback fosters a sense of self-reflection and empowers students to take an active role in their learning process (Ahmadi, 2023).

Nonetheless, students are the future of a country. In the age of AI, students have two roles: AI users and developers. Today, AI technology can be applied to all aspects of our learning, and integrates more closely with education. For example, students from different departments use AI techniques to varying degrees. Geographically specialised students use Python for positioning; financial students can use AI for data analysis, etc. From these examples, we can see that AI technology is not just for computer science students. Therefore, we should pay more attention to AI ethical learning while developing information literacy for college students (Sijing & Lan, 2018).

Education is an essential element in a student's skill development, and AI has already begun to effectively guide students in transforming the way they learn. However, the question is: "do students know the use of AI?" It is in that foreground this study examined knowledge and perception of the use of AI among undergraduate students of Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

Statement of the Problem

Currently, artificial intelligence is progressing at an accelerated rate, affecting the deep nature of higher education. Access to artificial Intelligence (AI) among students is one of the long-term consequences of increasing the emergence of AI technological devices for educational purposes, which is perhaps the evolution of

what is termed 'smart classrooms.' This kind of classroom is a departure from the traditional classroom.

Smart classrooms are largely technologically enhanced settings that are believed to have the capacity to increase learners' opportunities to actively engage and participate in teaching and learning through the use of technological tools and devices such as Specific software tools, high-speed computers, assertive listing systems, audience response technologies, networking devices, and audio-visual capabilities (Ikedinachi, Misra, Assibong, Olu-Owolabi, Maskeliūnas & Damasevicius, 2019).

AI systems are finding ever wider applications across companies. Artificial Intelligence is part of our normal lives now. Through automatic parking systems, smart sensors for taking amazing pictures, and personal assistance, we are overwhelmed by this technology. However, there is a dearth of literature on students' knowledge and perception of the use of artificial intelligence, especially in Nigeria, where we have a large number of undergraduate students. To fill this literature gap, this study examined knowledge and perception of using Artificial intelligence among undergraduate students of Nnamdi Azikiwe University, Awka, Anambra State.

Research Questions

1. What is the level of knowledge of Nnamdi Azikiwe University (NAU) undergraduate students on the use of Artificial Intelligence?
2. Do NAU undergraduate students have access to Artificial Intelligence?
3. What is the level of NAU undergraduate students' competency in the use of Artificial Intelligence?
4. What is the perception of NAU undergraduate students on the use of artificial intelligence?

Literature Review

Theoretical Framework

This work was anchored on the Technology Acceptance Model (TAM). TAM is one of the most influential extensions of Ajzen and Fishbein's (1980) theory of reasoned action (TRA) in the literature. According to Venkatesh (2000, as cited in Guanah & Akumabor, 2022), Davis's technology acceptance model, as espoused in Davis (1989) and Davis, Bagozzi & Warshaw (1989), is the most widely applied model of users' acceptance and usage of technology. It was developed by Fred Davis & Richard Bagozzi (Davis 1989, Bagozzi, Davis & Warshaw 1992, as cited in Guanah & Akumabor, 2022). TAM is said to have replaced many of TRA's attitude measures with the two technology acceptance measures, which are: ease of use and usefulness. TRA and TAM, both of which have strong behavioural elements, assume that when someone forms an intention to act, they will be free to act without limitation. Albeit, in the real world, there will be many restraints, such as limited freedom to act (Bagozzi, Davis & Warshaw, 1992, as cited in Guanah & Akumabor, 2022).

The Technology Acceptance Model (TAM), version 1, according to Davis, Bagozzi & Warshaw (1989), is an information systems theory that models how users come to accept and use a technology. This theory proposes that when users are presented with a new technology, several factors influence their decision about how and when they will use it, that is, Perceived Usefulness (PU) and Perceived ease-of-use (PEOU). Davis (1989) describes PU as the degree to which a person believes that using a particular system would enhance his or her job performance. He also terms and

defines PEOU as the degree to which a person believes that using a particular system would be free from effort.

Venkatesh and Davis (2000) and Venkatesh (2000) observe that with further studies, the TAM was expanded and upgraded to TAM 2 while Venkatesh, Morris, Davis & Davis (2003, as cited in Guanah & Akumabor, 2022) note it was extended and elevated to the Unified Theory of Acceptance and Use of Technology (UTAUT). According to Venkatesh & Bala (2008), a TAM 3 is in the offing in the milieu of e-commerce with an inclusion of the effects of trust and perceived risk on system use. This theory perfectly fits with this work because its two tenets, perceived usefulness (PU), and Perceived ease of use suitably support artificial intelligence and its usage among Nnamdi Azikiwe University, Awka, undergraduate students.

Understanding the Meaning of Artificial Intelligence

Artificial Intelligence (AI) has been studied for decades, and is still one of the most challenging subjects in digital computer. However, it is taking the world by storm, considering the application of its innovative uses across all industry segments. Indeed, the world is decades away from replacing every human intelligence with AI robots. AI technology ranges from machines truly capable of thinking to search algorithms used to solve societal problems. In fact, intelligent robots are slowly and gradually in demand, and can be considered as an emerging technology in the field of surgery (Robinson, 2018).

According to Makridakis (2017), Artificial Intelligence or machine intelligence is the process of making machines intelligent, and intelligence can be seen as the quality that enables an entity to function appropriately and with foresight in its environment. Artificial Intelligence Research defines AI as “the study of intelligent agents, an agent that can perceive its environment and takes an action that maximizes the outcome or goal” (World Economic Forum, as cited in Hussein, 2019, p. 46).

The advent of Artificial Intelligence (AI) has brought about the automation of many tasks, and visionary governments worldwide are now exploring various means to utilise them in governance to better the lives of their citizens. Kande and Sönmez (2020) cite PwC’s Annual Global CEO Survey and PwC’s Global Artificial Intelligence Study as affirming that sixty-three percent of CEOs believe AI will have a larger impact than the Internet, and that by 2030, AI will lead to an estimated \$15.7 trillion, or 26% increase, in global GDP.

Vinuesa, Azizpour and Nerini (2020) define AI as any software technology with at least one of the following capabilities: perception, including audio, visual, textual and tactile (e.g., face recognition), decision-making (e.g., medical diagnosis systems), prediction (e.g., weather forecast), automatic knowledge extraction and pattern recognition from data (e.g., the discovery of fake news circles in social media), interactive communication (e.g., social robots or chatbots), and logical reasoning (e.g., theory development from premises).

They submit that it encompasses a large variety of subfields, including machine learning. Drawing from some of the foregoing definitions of AI, it can be concluded that machines can be empowered with intelligence to perform some acts maximally, even better and faster than humans, with little or no human input.

Benefits of AI in Education

The integration of artificial intelligence (AI) in education brings forth numerous benefits that positively impact students' learning

experiences. According to Robert, Potter and Frank (2023) they include:

- 1. Personalised Learning:** AI-powered educational platforms have the capability to analyse vast amounts of data to understand students' learning styles, preferences, and knowledge gaps. With this information, AI can provide personalised learning experiences by delivering tailored content, resources, and assessments to each student. Personalised learning allows students to progress at their own pace, focus on areas where they need improvement, and explore advanced concepts when ready. This individualised approach enhances student engagement, motivation, and overall learning outcomes.
- 2. Immediate and Constructive Feedback:** AI enables the provision of timely and constructive feedback to students. Automated grading systems powered by AI algorithms can assess assignments, quizzes, and exams quickly, providing students with immediate feedback on their performance. This prompt feedback allows students to understand their strengths and weaknesses, identify areas for improvement, and make necessary adjustments in real-time. By addressing gaps in understanding promptly, students can enhance their learning and make progress more effectively.
- 3. Enhanced Collaboration and Interaction:** AI technologies facilitate collaborative learning environments. Intelligent tutoring systems and virtual learning assistants can support group discussions, provide guidance, and encourage collaboration among students. These AI-powered tools can simulate real-world scenarios, and promote active participation, critical thinking, and problem-solving skills. By fostering collaboration and interaction, AI empowers students to learn from each other, exchange ideas, and develop essential teamwork skills.
- 4. Access to a Wealth of Educational Resources:** AI can efficiently curate and organise vast amounts of educational content, making it easily accessible to students. AI-powered educational platforms can recommend relevant resources, such as textbooks, articles, videos, and interactive learning materials, based on students' individual needs and preferences. This access to a wide range of educational resources empowers students to explore diverse topics, deepen their understanding, and engage with various learning materials beyond traditional classroom resources.
- 5. Intelligent Learning Analytics:** AI enables advanced data analytics that can provide valuable insights into students' learning progress, patterns, and areas of improvement. By analysing data on student performance, AI algorithms can identify trends and patterns, allowing educators to make data-informed decisions. Intelligent learning analytics can help educators identify struggling students, personalize interventions, and develop targeted instructional strategies. This data-driven approach supports evidence-based teaching practices and enhances the overall effectiveness of educational interventions.
- 6. Students' Attendance Tracking:** With intelligent sensors at the entrance and exit of the school, the days of the students' attendance can be easily entered into the system. Absenteeism can be easily tracked without the need for teachers to take attendance.

Students' Perceptions of Artificial Intelligence

In several investigations, artificial intelligence was analysed in the context of students. Among them are those in which the emphasis was on students' perceptions of AI, including their attitudes, beliefs, and/or fears. Such was the research of Gherheş and Obrad (2018), which involved undergraduate students. According to the results obtained, the majority of them believed that they had a below-average level of information about AI. A significant number of respondents had a positive attitude towards the development of artificial intelligence, and more than half of them believed that it would positively affect society.

On the other hand, the probability of humankind being destroyed by intelligent devices and the disappearance of workplaces were the greatest fears associated with the emergence of AI. A general positive perception of college students regarding artificial intelligence was also found in the study by Jeffrey (2020). When it comes to the level of understanding of the meaning of AI by students, and information about its current development, the largest number of respondents fell in the moderately high and moderately low range, respectively.

Furthermore, the research findings indicated the existence of both affirmative beliefs related to the positive impacts of AI on society and well-being, and concerns related to the rapid developments in AI, replacing human jobs and surpassing human intelligence. Thus, it was proven that those perceptions were affected by the students' level of information about AI.

The focus of some studies were students' AI learning intention. Wang, Wei, Lin, Wang and Wang (2022) examined this variable in the context of AI anxieties (learning and job replacement), learning motivations (intrinsic and extrinsic), and learning self-efficacy, taking university students as participants. In addition to the positive impacts of learning self-efficacy and learning motivations on AI learning intention, this research highlighted the importance of AI anxieties, especially the learning one, which negatively influenced the two motivation variables. Besides university students, the intention or readiness to learn AI was analysed among secondary school students (Chai, Wang & Xu, 2020) and elementary school students (Dai, Chai, Lin, Jong, Guo & Qin, 2020).

Some studies examined artificial intelligence from the point of view of students, with special reference to the educational process. Students' perception regarding the use of artificial intelligence in education was examined in the research of Idroes, Noviandy, Maulana, Irvanizam, Jalil, Lensoni, Lala, Abas, Tallei and Idroes (2023). The results of their survey conducted among undergraduate students pointed to the existence of a generally positive perception of the usefulness of artificial intelligence in education. Moreover, the perceived advantages and disadvantages of AI in education were analysed. In terms of the teaching process, the main advantage perceived by the students was the virtual assistant. In the case of learning, the most important advantage was universal access, while when considering the evaluation process, most students identified constant feedback as the main benefit.

Kuleto, Ilić, Dumangiu, Ranković, Martins, Păun and Mihoreanu (2021) paid attention to artificial intelligence and machine learning (ML), taking into account their opportunities and challenges in higher education institutions (HEI). In addition to content analysis, they implemented the survey among students; the results of the regression model have shown that the enhancement of personalised learning driven by AI and ML can be performed through the development of student skills, the provision of a collaborative

learning environment in the HEI, and the development of an accessible research environment (Djokic, Milicevic, Djokic, Malic & Kalas, 2023).

Empirical Reviews of Literature

Okiyi and Nsude (2020) carried out a study titled "Adopting Artificial Intelligence to Journalistic Practices in Nigeria: challenges and Way Forward." This study is conceptual, and uses qualitative methods to seek results. Expert views and opinions were used to provide the information required for the study. The broad objective of the study was to find out the challenges that can hinder the successful application of AI to journalism practice in Nigeria. The study employed Media Richness and Technological Determinism theories, as they dealt with the influence of communication technologies on production and their impact on societies. The study found that AI is pertinent to journalism for newsrooms to remain competitive and facilitate job opportunities. Despite its advantages, AI poses different kinds of challenges that affect the newsroom. While some of these may be technical, others are structural and deal with governance.

Likewise, the finding revealed that there are professional and fundamental issues, including basic knowledge and practice, which hinder the growth and spread of the application of AI to journalism in Nigeria and other sub-Saharan African countries. The study recommends that there is a need for a re-orientation of perceptions on the importance of AI by Governments and journalists themselves to ensure its use to engender productivity in the sector.

The reviewed study and the present study are related. Both studies have an interest in the adoption/use of artificial intelligence. The reviewed study centered on Adopting Artificial intelligence to journalistic practices in Nigeria: challenges and way forward, and did not include journalists practicing in Ebonyi State Nigeria. The difference is that the current study looked at the knowledge and perception of the use of Artificial intelligence among undergraduate students of Nnamdi Azikiwe University, Awka, Anambra State. In terms of differences, the reviewed work used two theories while the current work used one theory.

A content analysis research on artificial intelligence and its coverage in a few Nigerian media was conducted by Guanah, Obi and Ginikachukwu (2020). The agenda-setting theory served as the study's foundation. In order to determine the story types that the newspapers covered about AI, and to determine if the media gave emphasis to AI stories, the authors looked at three newspapers: *The Punch*, *The Guardian*, and *Vanguard*. Only 64 AI stories were published in the chosen newspapers in 2019, according to the analysis. It also found that the majority of the stories were represented by photographs and that the newspapers did not give AI stories much attention. It was determined that since automation might be the way of the future, media outlets needed to step up their efforts to inform readers about artificial intelligence.

The study recommended that newspapers feature stories on AI prominently. Additionally, all story types using AI should be reported, and these articles should be featured in all of the newspaper's main sections. Although both studies are on artificial intelligence, the Guanah et al. (2020) study differs from the current study in terms of research methods and subject matter. Guanah et al. (2020) used the content analysis method, and the study was conducted in 2020. The current study looked at the knowledge and perception of the use of Artificial intelligence among

undergraduate students of Nnamdi Azikiwe University, Awka, Anambra State, and it used a survey research method.

Guanah, Agbanu and Obi (2020) investigated artificial intelligence and journalism practice in Nigeria: Perception of journalists in Benin City, Edo State. The study was anchored on the metamorphosis theory while Survey and In-depth oral interviews were adopted as the research methods for obtaining data. The 254 registered journalists under the Nigerian Union of Journalists (NUJ), Benin City Chapter, formed the population, and the sample size of 152 was determined using Cozby's Precision of Estimate table. Among other findings, the study revealed the agreement of journalists in Benin City that automated journalism (usage of AI-driven media applications) is an improvement over the current reporting practices which are still done "manually."

The researchers concluded that automation is the future, and Nigerian journalists cannot afford to be left out in the ultimate move to a world of automation, hence they have to prepare themselves, and embrace AI. The researchers recommended that Journalism schools should have curricula that embrace technology that will effectively prepare potential journalists for the future use of AI for their work. The reviewed work is different from the current study in terms of scope and subject matter; the reviewed work looked at journalist perception of the issue of AI, while the current study examined NAU undergraduate students' knowledge and perception of the use of AI. The reviewed work used mixed research methods while the current study used a survey research design.

Gracia-Martinez, Fernandez-Batanero, Fernandez-Cerero and Leon (2023) examined how artificial intelligence (AI) and computational sciences have aroused a growing interest in education. Despite its relatively recent history, AI is increasingly being introduced into the classroom through different modalities, to improve students' achievement. Thus, the purpose of the research is to analyse, quantitatively and qualitatively, the impact of AI components and computational sciences on student performance. For this purpose, a systematic review and meta-analysis have been carried out in WOS and Scopus databases. After applying the inclusion and exclusion criteria, the sample was set at 25 articles.

The results support the positive impact that AI and computational sciences have on student performance, finding a rise in their attitude toward learning and their motivation, especially in the STEM (Science, Technology, Engineering, and Mathematics) areas. Despite the multiple benefits provided, the implementation of these technologies in instructional processes involves a great educational and ethical challenge for teachers concerning their design and implementation, which requires further analysis from educational research.

These findings are consistent at all educational stages. The difference between the reviewed work and the current one is that the reviewed study adopted a mixed research design while the current study used a survey research design. The reviewed study was carried out in Europe (Spain), which is a developed country while the present study was conducted in Nigeria, which is a developing country.

Methodology

The survey research method was utilised for this study with the use of a questionnaire as the instrument for data collection. The population of the study comprises undergraduates of Nnamdi Azikiwe University, with a population of 37,182, in the 2023/2024

academic session, according to the Students Affairs Unit. The study employed Krejcie and Morgan's formula table to select a sample size of 380 respondents.

A simple random sampling technique was adopted to select three Faculties from the University namely: Social Sciences, Environmental Sciences, and Management Sciences, while a Purposive Sampling technique was used to select final-year students from three selected departments namely: Mass Communication, Estate Management, and Accountancy Department from the three selected Faculties. The study made use of proportional allocation to distribute copies of the questionnaire according to the population strength of each department. The details include:

$$\text{Mass Communication} = \frac{134}{392} \times \frac{380}{1} = 130$$

$$\text{Estate Management} = \frac{116}{392} \times \frac{380}{1} = 112$$

$$\text{Accountancy} = \frac{142}{392} \times \frac{380}{1} = 138$$

Data presentation and Analysis

Out of the 380 copies of the questionnaire administered, only 367 copies were returned and found useable. This represented a 97 % return rate which was higher than the 13 copies (3 %) not returned. Details of the data obtained from the survey are presented below:

Table 1: Level of knowledge of NAU Undergraduate Students about the use of AI

Response	Frequency	Percentage
Very high	34	9
High	38	14
Undecided	17	4
Low	151	41
Very low	117	32
Total	382	100

Field Survey: 2023

Table 1 above shows that the level of knowledge of the respondents on the use of AI is low with 41% agreeing to that effect.

Table 2: Respondents' Access to the Use of Artificial Intelligence

Access to AI use	Frequency of Response	Percentage of Response
Yes	61	17
No	284	77
Can't Say	22	6
Total	367	100

Field Survey: 2023

The above data in Table 2 show that the majority (77%) of the respondents do not have access to the use of AI.

Table 3: Level of Respondents' Competency in the Use of Artificial Intelligence

Competency in the	Frequency of	Percentage of
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use of AI	Response	Response
I am Competent	56	15
I am not competent	287	78
Can't Say	24	7
Total	367	100

Field Survey: 2023

It can be deduced from the data in Table 3 that 78% of the respondents are not competent in the use of AI.

Table 4: Respondents' Perception of the Use of Artificial Intelligence

Level of Perception	Frequency of Response	Percentage of Response
Very Good	105	39
Good	133	50
Not good	8	3
Can't Say	21	8
Total	267	100

Field Survey: 2023

In the above Table 4, most of the respondents have good perceptions about the use of AI.

Discussion of Findings

The first finding revealed that most of the respondents have a low level of knowledge in the use of AI. This suggests that most of the respondents do not have much knowledge about the use of artificial intelligence. This finding supports that of Alimi, Buraimoh, Aladesusi and Babalola (2021), that the majority of university students are not aware of the use of AI for learning.

This finding could be premised on the fact that AI is relatively new to the Nigerian learning community. The application of AI in education is largely credited to the developed countries where most of the students are aware, and they have resources to access them (Lazarus, Thurlow, Lail & Christensen, 2009, as cited in Alimi et al., 2021).

It was also discovered that most of the respondents do not have access to the use of AI for learning. In a similar study, Ikedinachi et al. (2019) found that knowledge about and access to AI among students is one of the long-term consequences of increasing the emergence of AI technological devices for educational purposes. The researchers noted that, perhaps, AI is the evolution of what is termed smart classrooms, that is, a departure from the traditional classroom. However, it is largely technologically dependent, with a greater focus on large integration of resources which could be relatively unavailable to the students.

In addition, findings showed that most of the respondents are not competent in the use of AI for learning. This finding aligns with the tenets of the Technology Adoption Model (TAM) as used in this study. TAM is a model that shows how users accept and use technology. According to Nafsaniath (2015), the basis of this theory is built on the premise that when users are presented with a new technology, three major factors are considered determinants of key predictors that influence users' decisions on how to and when

they use it. These are namely: perceived usefulness (PU), perceived ease of use (PEoU), and Attitude towards user (ATU).

This theory agrees with the fact that when users are presented with a new technology, they do not just automatically accept it and get carried away using it. Many factors influence their decision on whether to accept it or not, as well as how and when they will use it. Similarly, the researchers discovered that most of the respondents have a good perception of the use of artificial intelligence.

Conclusion

The integration of AI in education offers a range of benefits that enhance students' learning experiences. Personalised learning, immediate feedback, enhanced collaboration, access to educational resources, intelligent learning analytics, and continuous learning support are some of the advantages that AI brings to education. The study concludes that most of the respondents have a low level of knowledge in the use of AI, and they do not have access to AI. Also, most of the respondents are not competent in the use of AI for learning. It is believed that competency in technological innovation is dependent on the knowledge of, availability, and access to the technological innovations. With the advancement of tools used in computing and information processing, AI opens up new possibilities and chances in educational processes, and can offer crucial insights to everyone at the institutional level in the learning and education industry.

Recommendations

Thus, the following recommendations are hereby given:

1. The management of Nnamdi Azikiwe University should organise periodic seminars and programmes to teach students about the use of AI.
2. The Federal Government of Nigeria should build a fiber optic backbone network to ensure high bandwidth availability, universal funding, and programmes for access to emerging digital technologies such as AI.
3. Also, universities should consider including AI courses in the school's curriculum to encourage students to know and explore more about AI.
4. The undergraduate students should all brace up to be trained and retrained on AI skills acquisition, and to be acquainted with how to collaborate with AI machines to obtain the best result because of the technology.

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