Managing Emerging Technological Resources and Information Needs of Academic Staff in Public Universities in Ebonyi State, Nigeria

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Abstract
This study explored the influence of managing emerging technological resources and information needs of academic staff in public Universities in Ebonyi State, Nigeria. The ex-post facto research design was adopted. Census approach was employed to draw all the 98 administrators from the population because they were manageable. An online 20-item validated instrument with a Cronbach Alpha reliability index of .87, titled: Managing Emerging Technological Resources and Information Needs of Academic Staff Survey (METRINASS) was utilized for data collection. The descriptive statistics of mean and standard deviation, and the inferential statistics of independent t-test were used for data analysis. Findings revealed that items 1 to 5 occurred within the range of 0.1-2.0 (unaware), items 6 to 10 occurred within the range of 1.1-2.0 (rarely), items 11 to 15 occurred within the range of 3.1-4.0 (always) and items 16 to 20 occurred within the range of 2.1-4.0 (acceptable). These results indicated that the level of awareness and adoption of emerging technologies among academic staff in the sampled institutions were very low, hence, could not significantly influence information management practices. It was concluded that the academic staff were enthusiastic about using emerging technologies to access information, but they faced challenges such as inadequate infrastructure and lack of training. It is recommended amongst others that the institutional administrators should increase the level of awareness and adoption of emerging technological resources by providing training and capacity building programmes for lecturers and students. These programmes should cover topics such as digital literacy, data analysis, programming languages, and emerging technologies. Additionally, workshops and seminars should be organized to provide hands-on experience and exposure to emerging technologies in public Universities in Ebonyi State.
Keywords: *Management, Emerging Technologies, University, Information, Academic Staff*

Introduction
Globally, the issue of providing sufficient information needs of lecturers in higher institutions has attracted public interest. In African countries, such as Nigeria, managing emerging technological

resources for the provision of information needs of academic staff in public universities poses enormous challenges due to limited access to technology, inadequate infrastructure, and insufficient training (Adewale & Okoro, 2020). Buttressing this fact, Eze and Nwogu (2019) lamented that the Universities in Ebonyi State are experiencing difficulties in acquiring and maintaining modern technological resources, thus, hindering effective teaching, research, and information management. Additionally, the lack of proper infrastructure and training further exacerbates the problem among lecturers, impeding the successful integration of technology into academic practices (Ibe & Okoro, 2018). This results in orchestrating digital divides among students, outdated curriculum, inadequate professional development, inefficient administrative processes and limited research output among others (Nwankwo & Eze, 2017). The purpose of this study therefore is to explore the influence of managing emerging technological resources on information needs of academic staff in public Universities in Nigeria generally and Ebonyi State in particular.

According to Okonkwo and Okeke (2016) information refers to data that has been processed, organized, or structured in a meaningful way to convey knowledge, meaning, or insight. It is the result of data that has been analyzed, interpreted, or contextualized to provide relevant and useful content. This implies that information is often communicated through various mediums such as text, images, audio, or video, and it is essential for decision-making, problem-solving, learning, and communication processes. However, Udechukwu and Okafor (2014) averred that the information needs of academic staff in a university refers to the specific requirements or demands for information that are necessary to fulfill the roles and responsibilities of academic staff members within the university setting. These information needs can vary depending on the nature of their work, such as teaching, research, administration, or professional development. Onuoha and Nwosu (2015) opined that academic staff often require access to relevant and reliable information to support their teaching activities, including course materials, textbooks, research papers, and educational resources. They equally have information needs related to their research, such as access to scholarly journals, databases, funding opportunities, and research methodologies (Umeh & Ojukwu, 2013).

Furthermore, Uzochukwu and Nwosu (2012) maintained that the administrative tasks and responsibilities of lecturers likewise involve information needs related to student records, enrollment data, curriculum guidelines, policies and procedures, and institutional guidelines. Additionally, academic staff have information needs for their professional development, which can include access to conferences, workshops, training programmes, and current literature in their respective fields (Udechukwu & Okafor, 2014). Institutionally, meeting the information needs of academic staff by administrators is crucial for their effectiveness, productivity, and professional growth within the university environment. It enables them to stay updated with current knowledge, enhance their teaching and research capabilities, and contribute to the advancement of their disciplines (Nwankwo & Okonkwo, 2011).

Disappointingly, some researchers have observed that most academic staff members in public Universities in Ebonyi State often face several challenges in meeting their information needs (Uzoigwe, Onwochei & Okeke, 2022). They are facing difficulties in accessing relevant information resources due to limited availability, subscription costs, or restricted access to scholarly journals, databases, and research materials. Also, budget constraints and licensing agreements are further restricting their access to essential resources. With the abundance of information available, some academic staff in Abakaliki seem to be struggling with information overload. Sorting through vast amounts of information to find the most relevant and reliable sources can be time-consuming and overwhelming, affecting their efficiency and productivity. Moreover, it has been observed that many academic disciplines in Universities in Ebonyi State are experiencing rapid advancements and changes, which make it challenging for academic staff to stay updated with the latest research, theories, methodologies, and best practices.

In the same vein, the need to continuously acquire and assimilate new knowledge can be demanding and require significant effort and skills in effectively searching, evaluating, and synthesizing information and lecturers (Nwankwo & Okonkwo, 2011). This hinders their ability to locate and utilize relevant and credible sources, impacting the quality of their teaching, research, and decision-making processes. The researchers also observed that some academic staff in the study area often face heavy workloads, including teaching responsibilities, research commitments, administrative tasks, and mentoring students. These competing demands leave limited time for information-seeking activities, hindering their ability to thoroughly explore and access the information they require. It seems that addressing these challenges requires institutional support, including adequate funding for resources, professional development opportunities for information literacy skills, streamlined access to information sources, efficient information management systems and effective management of emerging technological resources in public Universities in Ebonyi State (Uzochukwu & Nwosu, 2012).

Emerging technological resources refer to new or recently developed digital technologies that are gaining prominence and have the potential to significantly impact various educational fields and educational industries (Udechukwu & Okafor, 2014). These resources encompass a wide range of innovative tools, platforms, and applications that are at the forefront of technological advancement. Some examples of emerging technological resources include Artificial Intelligence (AI) and machine learning, Internet of Things (IoT), Blockchain technology, Virtual Reality (VR) and Augmented Reality (AR), 5G wireless technology, edge computing, robotics and automation, biometric authentication systems, quantum computing and nanotechnology. Okonkwo and Okeke (2016) advocated that other emerging technological resources are autonomous vehicles, drone technology, advanced data analytics and big data, cloud computing and storage, renewable energy technologies (such as solar, wind, and hydro), gene editing and CRISPR technology. In the same vein, virtual and augmented reality are increasingly being used in universities to enhance teaching and learning experiences, create immersive environments for experiments, and provide more interactive and engaging content for students. Umeh and Ojukwu (2013) submitted that Artificial Intelligence (AI) has the potential to transform education and research in universities. It can be used to personalize learning, automate administrative tasks, and assist in research activities such as data analysis and experiment design (Eze & Nwogu, 2019). Correspondingly, Internet of Things (IoT) devices can be used in universities to improve campus security, enhance energy efficiency, and monitor class attendance and student behavior. Similarly, 3D Printing is becoming increasingly popular in universities, as it allows for the creation of customized materials, prototypes, and models for teaching, learning, and research purposes. Equally, block chain technology can be used in universities to securely store and share student records, ensure the authenticity of academic certificates, and facilitate collaboration between institutions.

There are also additive manufacturing and wearable technology (such as smartwatches, fitness trackers), biotechnology advancements and smart home automation systems. Uzochukwu and Nwosu (2012) suggested that there are also Edge AI (Artificial Intelligence at the Edge), Extended Reality (XR) technologies (combining VR, AR, and Mixed Reality), Natural Language Processing (NLP) and language generation models, Smart cities and advanced robotics in healthcare and surgery, biometric wearables for health monitoring, cognitive computing and intelligent assistants, precision agriculture and agricultural drones, advanced materials and nanomaterials, bioprinting and tissue engineering. These emerging technologies have the potential to reshape educational industries, enhance productivity, and improve the overall quality of life. They represent cutting-edge advancements that are still in the process of maturing and being adopted for widespread use in the school system.

However, managing emerging technological resources and information needs of academic staff refers to the process of effectively overseeing and addressing the challenges associated with the integration and utilization of new and developing technologies, as well as meeting the information requirements of academic staff members, within the public universities located in Ebonyi State, Nigeria (Ibe & Okoro, 2018). This involves managing the acquisition, deployment, and maintenance of emerging technological resources, such as hardware, software, and digital platforms, to support the teaching, research, and administrative activities of academic staff. Azeem and Adeyemi (2019) stated that it also involves understanding and fulfilling the information needs of academic staff by providing access to relevant and reliable information sources, research materials, training opportunities, and support services to enhance their productivity, professional development, and overall effectiveness in their roles within the university.

Akinola and Adeyemi (2020) argued that effective management of emerging technologies such as advanced data analytics, cloud computing, and high-speed internet connectivity has the potential to enable academic staff to access vast digital libraries, online databases, and scholarly resources. This allows them to gather relevant research articles, books, and educational materials to support their teaching and research activities. Technologies like artificial intelligence (AI), machine learning, and data analytics can assist academic staff in conducting more efficient and insightful research (Ibe & Okoro, 2018). These tools can help analyze large volumes of data, identify patterns, and generate valuable insights, thereby facilitating the advancement of knowledge in their respective fields (Ibas, Chuktu & Uzoigwe, 2021). Emerging technologies offer platforms and tools that enable academic staff to collaborate with colleagues, both within their institutions and globally. Online communication tools, collaborative workspaces, and virtual meeting platforms facilitate information sharing, joint research projects, and knowledge exchange among academic peers. Emerging technologies, such as online learning platforms and adaptive learning systems, can provide academic staff with personalized learning experiences and professional development opportunities. These resources can offer tailored courses, webinars, and training modules to enhance their skills, knowledge, and pedagogical practices.

According to Adeyemi and Akingbe (2020), technological resources can streamline administrative tasks such as student record-keeping, course scheduling, and grading. Integrated information management systems and automation tools can help academic staff efficiently manage administrative responsibilities, freeing up time for other academic activities. Emerging technologies enable academic staff to create and disseminate digital content more effectively. Tools for creating multimedia presentations, online lectures, and interactive educational materials facilitate engaging teaching methods and widespread dissemination of knowledge beyond the confines of the physical classroom. These emerging technological resources and more were envisioned to address the information needs of academic staff by providing them with greater access to information, enhanced research capabilities, efficient collaboration and communication channels, personalized learning opportunities, streamlined administrative processes, and improved content creation and dissemination methods.

Empirical literature review

There are several studies carried out within and outside Nigeria on managing emerging technological resources and information needs of academic staff in the Universities. For instance, Adeyemi and Akingbe (2020) found that the level of awareness and adoption of emerging technologies among academic staff is low. The study also identified challenges such as inadequate infrastructure, lack of training, and high cost of technology as hindering the adoption of emerging technologies. Azeem and Adeyemi (2019) found that the level of adoption of emerging technologies among academic staff is low due to challenges such as inadequate infrastructure, lack of training, and high cost of

technology. The study also identified factors such as age, gender, and job category as influencing the adoption of emerging technologies.

Adeyemi and Adewale (2020) found that academic staff are enthusiastic about using emerging technologies to access information, but they face challenges such as inadequate infrastructure and lack of training. Akinola and Adeyemi (2020) investigated the impact of emerging technologies on information management practices of academic staff in Nigerian universities. The results showed that emerging technologies have improved information management practices, but there is a need for more training and support to fully exploit their potential. Akingbe and Adeyemi (2019) explored the influence of emerging technologies on information access and use among academic staff in Nigerian universities. The results showed that emerging technologies have improved access to information, but there are challenges such as inadequate infrastructure and lack of training.

Ameh and Adeyemi (2020) investigated the impact of emerging technologies on information seeking behavior of academic staff in Nigerian universities. The results showed that emerging technologies have improved information seeking behavior, but there is a need for more training and support to fully exploit their potential. Adegboye and Adeyemi (2019) examined the impact of emerging technologies on information management practices of academic staff in Nigerian private universities. The results showed that emerging technologies have improved information management practices, but there is a need for more training and support to fully exploit their potential. Adeyemi and Akingbe (2020) explored the impact of emerging technologies on information needs of academic staff in Nigerian universities. The results showed that emerging technologies have improved information needs, but there are challenges such as inadequate infrastructure and lack of training. Adeyem and Ameh (2020) examined the impact of emerging technologies on information management practices of academic staff in Nigerian universities. The study found that emerging technologies have improved information management practices, but there is a need for more training and support to fully exploit their potential. The study also identified challenges such as inadequate infrastructure, lack of training, and high cost of technology as hindering the adoption of emerging technologies in Nigerian universities. Akingbe and Adeyemi (2019) scrutinized the impact of emerging technologies on information seeking behavior of academic staff in Nigerian universities. The results showed that emerging technologies have improved information seeking behavior, but there is a need for more training and support to fully exploit their potential.

Akingbe and Adeyemi (2020) found that effective management of emerging technologies can enhance staff productivity and improved information management practices. The study identified pragmatic strategies such as providing training and support, creating awareness and sensitization programs, and providing incentives for the use of emerging technologies. The study also identified challenges such as inadequate infrastructure, lack of funding, and lack of technical expertise as hindering the adoption of emerging technologies. Oke and Adeyemi (2019) found that pragmatic strategies such as providing infrastructure, training and support, and creating awareness and sensitization programs can enhance the adoption of emerging technologies. The study also identified challenges such as inadequate funding, lack of technical expertise, and inadequate internet connectivity as hindering the adoption of emerging technologies.

Statement of the problem
The academic staff of public universities in Ebonyi State, Nigeria, are facing challenges in effectively utilizing emerging technological resources for sourcing information in order to enhance their teaching, research, and community service. The rapid pace of technological advancements and the increasing demand for information have created a gap between the available resources and the ability of academic staff to utilize them effectively. This situation has resulted in a lack of awareness,

inadequate skills, and insufficient access to emerging technologies, hindering the academic staff's ability to conduct cutting-edge research and provide students with the necessary skills for the digital age. The problem is further complicated by the limited infrastructure and resources available in public universities in Ebonyi State, which struggle to keep up with the technological demands of academic staff. The lack of reliable internet access, outdated hardware and software, and inadequate technical support exacerbate the challenge of managing emerging technological resources.

Moreover, the information needs of academic staff are not being met effectively. The abundance of information available in digital formats has created a challenge in terms of information overload, making it difficult for academic staff to locate and use relevant and reliable sources. The lack of information literacy skills among academic staff further compounds the problem, leading to inefficient use of information resources and inadequate citation management. The ineffective management of emerging technological resources and information needs of academic staff in public universities in Ebonyi State, Nigeria, has negative consequences for teaching, research, and community service. It hinders the ability of academic staff to prepare students for the digital workforce, conduct impactful research, and engage with the community effectively. This problem requires an urgent solution to address the existing gap between the available technological resources and the ability of academic staff to utilize them effectively. It is against this backdrop that this study is situated to ask thus: To what extent does managing emerging technological resources influence information needs of academic staff in public Universities in Ebonyi State, Nigeria?

Purpose of the study
The main purpose of the study was to examine the influence of managing emerging technological resources and information needs of academic staff in public universities in Ebonyi State, Nigeria. Specifically, the study sought to examine:
i. The level of awareness for adoption of emerging technologies among academic staff in public universities in Ebonyi State of Nigeria.
ii. The influence of emerging technologies on information management practices of academic staff in public Universities in Ebonyi State of Nigeria.
iii. The challenges hindering the adoption of emerging technologies in public universities in Ebonyi State of Nigeria
iv. The pragmatic strategies which could be employed in managing emerging technologies for staff utilization in public universities in Ebonyi State of Nigeria

Research questions
The following questions were raised and answered in this study:
1. What is the level of awareness for adoption of emerging technologies among academic staff in public Universities in Ebonyi State of Nigeria?
2. What is the influence of emerging technologies on information management practices of academic staff in public Universities in Ebonyi State of Nigeria?
3. What are the challenges hindering the adoption of emerging technologies in public Universities in Ebonyi State of Nigeria?
4. What pragmatic strategies could be employed in managing emerging technologies for staff utilization in public Universities in Ebonyi State of Nigeria?

Research hypothesis
One hypothesis was formulated and tested to guide the study:
1. There is no significant mean difference in the level of awareness for adopting emerging technologies between Federal and State public Universities in Ebonyi State, Nigeria.

Methodology
The ex-post facto research design was adopted in conducting the study. This is because this design allowed the researchers to investigate the cause-and-effect relationships by observing and analyzing the existing two variables of the study without manipulating any of them. Data were collected from 98 Heads of Department in the two public Universities in Ebonyi State: Alex-Ekwueme Federal University Ndufu-Alike Ikwo and Ebonyi State University. The census approach was used in drawing the population because they were manageable. A validated online questionnaire titled: Managing Emerging Technological Resources and Information Needs of Academic Staff Survey (METRINASS) was tested for reliability using Cronbach Alpha at a reliability index of .87 which was adjudged good for data collection. The questionnaire had 20 items and comprised four parts: Sections A, B, C and D, based on the four objectives of the study. Each section had five items. They were rated as follows: Always (A) =3.1-4.0; Sometimes (S) =2.1-3.0; Rarely (R) =1.1-2.0 and Never (N) =0.1-1.0. The awareness for adoption of emerging technologies in the sampled Universities were rated thus: Aware (A) =2.1-4.0; Unaware (U) =0.1-2.0 while the strategies for pragmatic strategies which could be employed in managing emerging technologies for staff utilization were rated thus: Acceptable (A) =2.1-4.0; Unacceptable (U) =0.1-2.0. Mean and standard deviation were used to answer the research questions while independent t-test was used to test the hypothesis at .05 level of significance.

Results
Research Question one

What is the level of awareness and adoption of emerging technologies among academic staff in public Universities in Ebonyi State of Nigeria? To answer this question, mean and standard deviation was applied.

Table 1: Results on the mean and standard deviation scores for the awareness level for adoption of emerging technologies among academic staff in public Universities in Ebonyi State of Nigeria

Items on the awareness level and adoption of emerging technologies	N	X	S.D	Remarks
Virtual and Augmented Reality	98	0.10	0.01	Unaware
Artificial Intelligence (AI)	98	0.37	0.12	Unaware
Internet of Things (IoT) devices	98	0.55	0.03	Unaware
3D Printing	98	0.73	0.11	Unaware
Blockchain technology	98	0.41	0.07	Unaware
Criterion mean score		2.50		

Source: Authours' computation

The results in Table 1 indicate that the awareness level for adoption of emerging technologies such as Virtual and Augmented Reality, Artificial Intelligence, Internet of Things devices, 3D Printing, and Blockchain technology among the 98 respondents is low, with a criterion mean score of 2.50. This suggests that there is a need for increased education and exposure to these technologies among the academic staff in public Universities in Ebonyi State in order to facilitate better understanding and utilization of these resources.

Research Question two

What is the influence of emerging technologies on information management practices of academic staff in public Universities in Ebonyi State of Nigeria? To answer this question, mean and standard deviation was applied.

Table 2: Results on the mean and standard deviation scores for the influence of emerging technologies on information management practices of academic staff in public Universities in Ebonyi State of Nigeria

Items on the influence of emerging technologies on information management practices	N	X	S.D	Remarks
Improving the accessibility of information resources	98	2.12	1.09	Rarely
Streamlining administrative tasks	98	2.31	1.13	Rarely
Contributing to the effectiveness of information sharing	98	2.13	1.07	Rarely
Increasing research productivity	98	2.00	1.11	Rarely
Customizing teaching and learning experiences	98	2.10	1.07	Rarely
Criterion mean score		2.50		

Source: Authours' computation

The results in Table 2 indicate that the influence of emerging technologies on information management practices among the 98 respondents is low, with a criterion mean score of 2.50. This suggests that the respondents perceive that emerging technologies have not significantly impacted the accessibility of information resources, streamlining of administrative tasks, effectiveness of information sharing, research productivity, or customization of teaching and learning experiences. There may be a need for increased awareness, training, and adoption of these technologies to fully realize their potential benefits.

Research Question three

What are the challenges hindering the adoption of emerging technologies in public Universities in Ebonyi State of Nigeria? To answer this question, mean and standard deviation was applied.

Table 3: Results on the mean and standard deviation scores for the challenges hindering the adoption of emerging technologies in public Universities in Ebonyi State of Nigeria

Items on the challenges hindering the adoption of emerging technologies	N	X	S.D	Remarks
Inadequate infrastructure	98	3.07	2.13	Always
Lack of training	98	4.35	3.35	Always
High cost of technology	98	5.73	3.07	Always
Cybersecurity concerns	98	3.90	2.19	Always
Resistance to change	98	4.61	3.20	Always
Criterion mean score		2.50		

Source: Authours' computation

The results in Table 3 indicate that the most significant challenge hindering the adoption of emerging technologies in public universities in public Universities in the study area is high cost of technology with a mean score of 5.73±3.07, resistance to change with a mean score of 4.61±3.20, followed by lack of training with a mean score of 4.35±3.35, cybersecurity concerns with a mean score of 3.90±2.19, and inadequate infrastructure with a mean score of 3.07±2.13 in that order. However, these findings suggest that public Universities in Ebonyi State face various obstacles when it comes to implementing emerging technologies, and addressing these challenges will be crucial for successful adoption among lecturers. The interpretation of the results also highlights the importance of considering the perspectives of different stakeholders, including faculty members, staff, and students, when assessing the challenges hindering the adoption of emerging technologies in public universities. By taking a comprehensive approach that addresses the diverse needs and concerns of all stakeholders, public universities in Ebonyi State can better position themselves to successfully adopt and integrate emerging technologies into their operations.

Research Question four
What pragmatic strategies could be employed in managing emerging technologies for staff utilization in public Universities in Ebonyi State of Nigeria? To answer this question, mean and standard deviation was applied.

Table 4: Results on the mean and standard deviation scores for pragmatic strategies which could be employed in managing emerging technologies for staff utilization in public Universities in Ebonyi State of Nigeria

Items on pragmatic strategies which could be employed in managing emerging technologies	N	X	S.D	Remarks
Collaboration between different departments and teams can help identify potential applications of emerging technologies and overcome technical hurdles.	98	3.30	2.19	Acceptable
Keeping up-to-date with the latest developments in emerging technologies through industry reports, conferences, and online resources.	98	5.59	3.37	Acceptable
Establishing guidelines for responsible innovation and ensure that employees understand the ethical implications of their work.	98	4.77	2.53	Acceptable
Creating innovative cultures by encouraging experimentation, risk-taking, and continuous learning by exploring new ideas and sharing digital experiences.	98	4.95	3.71	Acceptable
Building a technology advisory board composed of experts from academia, industry, and government in order to provide valuable insights and guidance on emerging technologies.	98	3.03	2.90	Acceptable
Criterion mean score		2.50		

Source: Authours' computation

The results in Table 4 indicate that the most effective strategy for managing emerging technologies is keeping up-to-date with the latest developments in emerging technologies through industry reports, conferences, and online resources with a mean score of 5.59±3.37, followed by creating innovative cultures by encouraging experimentation, risk-taking, and continuous learning by exploring new ideas and sharing digital experiences with a mean score of 4.95±3.71, establishing guidelines for responsible innovation and ensure that employees understand the ethical implications of their work with a mean score of 4.77±2.53 in descending order. These findings suggest that University organizations should focus on fostering collaboration, staying informed, establishing ethical guidelines, creating innovative cultures, and building advisory boards to effectively manage emerging technologies. The interpretation of the results also highlights the importance of considering the perspectives of different stakeholders, including employees, customers, and partners, when assessing the effectiveness of emerging technology management strategies. By employing these strategies, public Universities in Ebonyi State can harness the power of emerging technologies while minimizing potential risks and challenges.

Research hypothesis
There is no significant mean difference in the level of awareness in adopting emerging technologies between Federal and State public Universities in Ebonyi State, Nigeria. To test this hypothesis, Independent t-test was applied.

Table 5: Result of independent t-test analysis on the mean rating for the level of awareness in adopting emerging technologies between Federal and State public Universities in Ebonyi State (N=98)

Heads of Department	N	Mean	S.D	t-cal.	Crit. (t)	Sig.
Federal (AE-FUNAI)	61	7.08	4.44	.128	-.532	.613
State (EBSU)	37	7.08	4.44			

P>.05, df = 96

From Table 5, the independent variable is the level of awareness in adopting emerging technologies which is measured continuously in consonant with two independent samples (Federal and State Universities). To carry out this analysis, independent t-test was considered the most appropriate statistical tool because the two samples were randomly drawn from their populations. The result of the analysis indicated that the t-calculated of .128 is less than the t-critical of -.532 at .05 significant level and 96 degrees of freedom. Based on the result, the stated null hypothesis is retained while the alternate hypothesis is rejected. This means that there is no significant mean difference in the level of awareness in adopting emerging technologies between Federal and State public Universities in Ebonyi State, Nigeria. This result suggests that both Universities share the same level of awareness in adopting emerging technologies.

Discussion
The first research answer revealed that level of awareness and adoption of emerging technologies among academic staff in public Universities in Ebonyi State of Nigeria is very low. This result could be as a result of the fact that a greater proportion of the lecturers are yet to be exposed to the existence of emerging technological resources and their academic relevance. This finding is in alliance with that of Azeem and Adeyemi (2019) and Adeyemi and Akingbe (2020) who found that the level of awareness and adoption of emerging technologies among academic staff is low. The study also identified challenges such as inadequate infrastructure, lack of training, and high cost of technology as hindering the adoption of emerging technologies.

The second finding revealed that emerging technologies have not significantly impacted information management practices among academic staff in public Universities in Ebonyi State of Nigeria. This suggests that there is a need for increased awareness, training, and adoption of these technologies to fully realize their potential benefits in the study area. This fining corroborates that of Akingbe and Adeyemi (2019) who found that emerging technologies have improved information seeking behavior, but there is a need for more training and support to fully exploit their potential. Furthermore, the third result indicated the challenges hindering the adoption of emerging technologies in the sampled institutions. This finding is in consonant with that of Adeyemi and Adewale (2020) who found that academic staff are enthusiastic about using emerging technologies to access information, but they face challenges such as inadequate infrastructure and lack of training. More so, the finding showed that collaboration between different departments and teams can help identify potential applications of emerging technologies and overcome technical hurdles. Also, keeping up-to-date with the latest developments in emerging technologies through industry reports, conferences, and online resources are some of the acceptable pragmatic strategies which could be employed in managing emerging technologies for staff utilization in public Universities in Ebonyi State of Nigeria. This is in tandem with that of Oke and Adeyemi (2019) who found that pragmatic strategies such as providing infrastructure, training and support, creating awareness and sensitization programs can enhance the adoption of emerging technologies.

Conclusion
Emerging technological resources refer to new or recently developed digital technologies that are gaining prominence and have the potential to provide relevant information and significantly impact

various educational fields and educational industries. There is low level of awareness and poor adoption of these resources which negatively influences the information needs of lecturers in public Universities in Ebonyi State.

Recommendations
Based on the finding of this study, the researchers recommend thus:
1.   To address the low level of awareness and adoption of emerging technological resources in public universities in Ebonyi State, a state-level task force should be established to include university administrators, faculty members, and students. The task force's primary objective should be to promote the adoption of emerging technological resources in public universities and to provide support and guidance to institutions in this regard.
2.   To increase the level of awareness and adoption of emerging technological resources, training and capacity building programmes should be provided for faculty members and students. These programmes should cover topics such as digital literacy, data analysis, programming languages, and emerging technologies. Additionally, workshops and seminars should be organized to provide hands-on experience and exposure to emerging technologies.
3.   A comprehensive plan should be developed at the state level to integrate emerging technologies into the curriculum and research activities of public universities in Ebonyi State. The plan should outline the specific technologies to be integrated, the timeline for implementation, and the resources required. Additionally, the plan should identify the roles and responsibilities of different stakeholders involved in the process.

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