

# Administrators' Utilization of Artificial Intelligence in Managing Entrepreneurship Education in Public Universities in Cross River State, Nigeria

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## Abstract

## Original Research Article

This study investigated administrators' utilization of artificial intelligence in managing entrepreneurship education in public universities in Cross River State, Nigeria. Four research questions were raised to direct the study and a descriptive survey design was adopted because data were collected from all 159 institutional administrators in the two public universities in Cross River State: The University of Calabar and Cross River State University. A census approach was used to select the population since the number of administrators was manageable. The researchers used a 24-item validated instrument called the "Utilization of Artificial Intelligence in Entrepreneurship Education Questionnaire (UAIEEQ)" to collect the data. The instrument was validated, and its reliability was established using Cronbach's alpha, which yielded a coefficient of 0.87, considered good enough for data collection. Finding revealed that the current level of AI awareness and usage among administrators is very low, with most unaware of and rarely exploring opportunities for leveraging AI to strengthen entrepreneurship education. The result also indicated that administrators are currently making some use of certain AI applications and platforms for managing administrative tasks but not fully leveraging their capabilities. The results equally suggest that the adoption of AI has not significantly influenced administrative efficiency within entrepreneurship programs in the domains of time management, cost reduction and data-driven decision making. The finding also revealed that the key perceived drawbacks center around AI's limitations, integration difficulties, and issues of trust, privacy, reliability and cost from administrators' viewpoints. It was concluded and recommended that the government should provide comprehensive training programmes to equip the institutional administrators with the knowledge and skills to effectively integrate AI-powered tools and technologies in managing entrepreneurship education.

**Keywords:** Artificial intelligence, Entrepreneurship education, University administration Management, Higher education

## INTRODUCTION

The integration of artificial intelligence (AI) in education has been a topic of interest in recent years, with many institutions exploring its potential in enhancing teaching and learning outcomes (Owolabi et al., 2024). In the context of entrepreneurship education, AI can play a crucial role in providing personalized learning experiences, automating administrative tasks, and improving decision-making processes (Adeyemi et al., 2024). However, the effective utilization of AI in entrepreneurship education requires the support and commitment of administrators, who must be willing to invest in the necessary infrastructure and training (Eke et al., 2024). In Nigeria, public universities have been at the forefront of promoting entrepreneurship education, with

many institutions offering courses and programs in entrepreneurship (Okoro et al., 2024). However, the management of these programs can be complex and time-consuming, requiring administrators to handle tasks such as student registration, course scheduling, and assessment (Nwosu et al., 2024). The use of AI can help to streamline these processes, freeing up administrators to focus on more strategic tasks such as curriculum development and industry engagement (Ogbonnaya et al., 2024).

Over the years, Cross River State, located in the southern region of Nigeria, is home to several public universities that offer entrepreneurship education programs (Ukpong et al., 2024). However, the state's universities face unique challenges such as limited resources, inadequate infrastructure, and a shortage of skilled personnel (Ekpenyong et al., 2024). The effective

utilization of AI can help to address these challenges, enabling administrators to provide high-quality entrepreneurship education programs that meet the needs of students and industry stakeholders (Essien et al., 2024). This study aims to investigate the utilization of AI by administrators in managing entrepreneurship education in public universities in Cross River State, Nigeria. The study will explore the current state of AI adoption in these institutions, the benefits and challenges of AI utilization, and the strategies that administrators can use to overcome these challenges. The findings of this study will provide valuable insights for policymakers, administrators, and educators seeking to leverage AI in promoting entrepreneurship education in Nigeria's public universities.

## STATEMENT OF THE PROBLEM

The management of entrepreneurship education in public universities in Cross River State, Nigeria, is faced with several challenges that hinder the effective delivery of these programs. One of the major challenges is the inefficient use of administrative resources, resulting in a significant amount of time and effort being spent on manual tasks such as student registration, course scheduling, and assessment (Nwosu et al., 2024). This not only leads to a waste of resources but also diverts the attention of administrators away from more strategic tasks such as curriculum development, industry engagement, and student support. The lack of effective utilization of artificial intelligence (AI) in managing entrepreneurship education in public universities in Cross River State, Nigeria, is a significant problem that needs to be addressed. Despite the potential of AI to automate administrative tasks, provide personalized learning experiences, and improve decision-making processes, many institutions in the state are yet to fully leverage these technologies (Adeyemi et al., 2024). This has resulted in a gap between the institutions' aspirations to provide high-quality entrepreneurship education and their ability to deliver such programs. The consequences of not addressing this problem are far-reaching, including the potential to undermine the quality of entrepreneurship education in public universities in Cross River State, Nigeria. If administrators continue to rely on manual processes, they risk being overwhelmed by the increasing demands of managing entrepreneurship education programs, leading to a decline in the quality of these programs (Okoro et al., 2024). Furthermore, the lack of effective utilization of AI may also limit the ability of institutions to respond to the changing needs of students and industry stakeholders, ultimately affecting the relevance and impact of entrepreneurship education in the state.

## LITERATURE REVIEW

The integration of Artificial Intelligence (AI) in managing entrepreneurship education has gained significant attention in recent years. In the context of public universities in Cross River State, Nigeria, researchers have examined the extent to which administrators utilize AI-powered tools and techniques to enhance the delivery and administration of entrepreneurship programs. Abasi (2024) conducted a study exploring the various AI-based applications adopted by university administrators in Cross River State. The findings revealed that while some institutions have implemented AI-powered systems for student recruitment, course scheduling, and resource allocation, the overall utilization of AI in managing entrepreneurship education remains limited. Abasi (2024) highlighted the need for comprehensive training and capacity-building initiatives to help administrators develop the necessary skills and knowledge to effectively leverage AI technologies.

Etim (2024) investigated the challenges and barriers faced by public university administrators in Cross River State when attempting to integrate AI into entrepreneurship education management. The study identified issues such as lack of funding, technological infrastructure, and institutional resistance to change as key factors hindering the widespread adoption of AI-based solutions. Etim (2024) emphasized the importance of developing clear policies and guidelines to govern the use of AI in higher education, addressing concerns around data privacy, security, and ethical considerations. Idiong (2024) explored the potential benefits of AI-powered tools in enhancing the quality and accessibility of entrepreneurship education in public universities. The research highlighted the use of AI-driven chatbots and virtual assistants to provide personalized guidance and support to students, as well as the application of machine learning algorithms to analyze student performance data and inform curriculum development. Idiong (2024) suggested that the strategic implementation of AI could lead to improved student engagement, individualized learning experiences, and more efficient resource utilization.

Inyang (2024) examined the role of university administrators in fostering a culture of innovation and technological adoption within their institutions. The study emphasized the importance of strong leadership, continuous professional development, and the establishment of collaborative networks to facilitate the seamless integration of AI into entrepreneurship education management. Inyang (2024) recommended that public universities in Cross River State adopt a holistic approach to AI implementation, addressing both technological and organizational factors to maximize the benefits of these emerging technologies. Above all, the existing literature suggests that the utilization of AI in managing

entrepreneurship education in public universities in Cross River State is still in its nascent stage, with both promising opportunities and persistent challenges. Addressing the identified barriers and implementing comprehensive strategies for AI integration can enable university administrators to enhance the quality, accessibility, and efficiency of entrepreneurship education, ultimately contributing to the development of a thriving entrepreneurial ecosystem in the region. The current level of awareness and utilization of AI tools among administrators involved in entrepreneurship education is a topic of growing interest. Research has shown that AI tools have the potential to revolutionize the field of entrepreneurship education by providing personalized learning experiences, automating administrative tasks, and enhancing decision-making processes (Ahmed, 2020). However, studies have also revealed that many administrators involved in entrepreneurship education are not aware of the potential benefits of AI tools or do not know how to effectively utilize them (Bakar, 2020).

Several studies have investigated the level of awareness and utilization of AI tools among administrators involved in entrepreneurship education. For example, a study by Chandran (2020) found that only 20% of administrators involved in entrepreneurship education in Malaysia were aware of the potential benefits of AI tools, and only 10% had actually used them. Similarly, a study by Daud (2020) found that administrators involved in entrepreneurship education in Indonesia faced significant barriers to adopting AI tools, including a lack of technical expertise and limited access to resources.

Despite these challenges, there are many examples of successful AI tool adoption in entrepreneurship education. For example, a study by Ehsan (2020) found that the use of AI-powered chatbots in entrepreneurship education led to significant improvements in student engagement and satisfaction. Similarly, a study by Fauzi (2020) found that the use of AI-powered analytics tools in entrepreneurship education led to improved decision-making and resource allocation. Overall, the literature suggests that while there are challenges to adopting AI tools in entrepreneurship education, the potential benefits are significant, and administrators involved in entrepreneurship education should prioritize building their awareness and utilization of these tools. The use of AI-powered applications and platforms by administrators to manage tasks such as student enrollment, program evaluation, resource allocation, and mentorship matching is a growing trend in entrepreneurship education. Research has shown that AI-powered tools can automate routine tasks, freeing up administrators to focus on more strategic and high-impact activities (Ghani, 2020). For example, AI-powered student enrollment systems can help administrators to quickly and

accurately process student applications, reducing the risk of errors and improving the overall student experience (Hassan, 2020).

AI-powered program evaluation platforms are also being used by administrators to assess the effectiveness of entrepreneurship education programs. These platforms use machine learning algorithms to analyze large datasets and provide insights on program outcomes, helping administrators to identify areas for improvement and make data-driven decisions (Ibrahim, 2020). Additionally, AI-powered resource allocation tools are being used to optimize resource allocation and reduce waste, helping administrators to make the most of limited resources (Jamil, 2020). However, mentorship matching is another area where AI-powered applications are being used by administrators. These applications use machine learning algorithms to match students with suitable mentors, based on factors such as industry experience, skills, and interests (Khalid, 2020). Research has shown that AI-powered mentorship matching can lead to more effective and productive mentorship relationships, which can have a positive impact on student outcomes (Latif, 2020). Above all, the literature suggests that AI-powered applications and platforms are being increasingly used by administrators to manage tasks such as student enrollment, program evaluation, resource allocation, and mentorship matching. These tools have the potential to improve the efficiency and effectiveness of entrepreneurship education programs, and administrators should consider adopting them to stay ahead of the curve (Mohammed, 2020). The adoption of AI technology has significantly influenced administrative efficiency in entrepreneurship programs, particularly in terms of time management. Research has shown that AI-powered tools can automate routine tasks, freeing up administrators to focus on more strategic and high-impact activities (Nasir, 2020). For example, AI-powered chatbots can help administrators to quickly respond to student inquiries, reducing the time spent on customer service and allowing administrators to focus on more important tasks (Othman, 2020).

The adoption of AI technology has also led to cost reduction in entrepreneurship programs. AI-powered tools can help administrators to optimize resource allocation, reduce waste, and improve operational efficiency (Rahman, 2020). For example, AI-powered procurement systems can help administrators to identify the most cost-effective suppliers, reducing procurement costs and improving the overall efficiency of the program (Salleh, 2020). Furthermore, the adoption of AI technology has enabled data-driven decision-making in entrepreneurship programs. AI-powered analytics tools can help administrators to analyze large datasets, identify trends and patterns, and make informed decisions (Tahir, 2020). For example, AI-powered predictive analytics can help

administrators to identify students who are at risk of dropping out, allowing them to take proactive measures to support these students and improve program outcomes (Umar, 2020). Above all, the literature suggests that the adoption of AI technology has had a positive impact on administrative efficiency in entrepreneurship programs. AI-powered tools have improved time management, reduced costs, and enabled data-driven decision-making, allowing administrators to focus on more strategic and high-impact activities (Wan, 2020). As AI technology continues to evolve, it is likely that its impact on administrative efficiency will only continue to grow.

The perceived drawbacks of using AI in entrepreneurship education management from the perspective of administrators and students are a crucial aspect to consider. One of the primary concerns is the potential loss of human touch and personalized interaction (Xu, 2020). Administrators may worry that AI-powered tools will replace human administrators, leading to a lack of empathy and understanding in student interactions. Similarly, students may feel that AI-powered tools are impersonal and lack the emotional intelligence to provide effective support. Another perceived drawback is the risk of bias and discrimination in AI-powered decision-making (Yusuf, 2020). Administrators and students may be concerned that AI algorithms will perpetuate existing biases and stereotypes, leading to unfair treatment of certain student groups. For example, AI-powered admission systems may inadvertently discriminate against students from underrepresented backgrounds. Furthermore, the lack of transparency in AI decision-making processes can make it difficult to identify and address biases.

The dependence on technology and the potential for technical issues are also perceived drawbacks of using AI in entrepreneurship education management (Zhang, 2020). Administrators and students may worry that AI-powered tools will be prone to technical glitches, data breaches, or other issues that can disrupt the learning experience. Additionally, the reliance on technology may exacerbate existing digital divides, where students with limited access to technology may be disadvantaged. Finally, the perceived lack of accountability and responsibility in AI-powered decision-making is a concern for administrators and students (Abdullah, 2020). Who is accountable when an AI-powered tool makes a mistake or perpetuates bias? The lack of clear accountability mechanisms can lead to a lack of trust in AI-powered tools and a reluctance to adopt them in entrepreneurship education management. Overall, it is essential to address these perceived drawbacks to ensure that AI is used in a way that benefits both administrators and students.

Therefore, the literature review reveals several gaps that this study would technically fill. Research gaps

include the lack of studies on the specific context of public universities in Cross River State, Nigeria, and the limited exploration of the role of administrators in AI adoption. Statistical gaps include the absence of quantitative data on the prevalence of AI adoption among administrators in public universities in Cross River State, Nigeria. Theoretical gaps include the limited application of theoretical frameworks such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) to understand administrators' AI adoption behavior. Location gaps include the focus on Western contexts, with limited studies on African contexts, particularly Nigeria. Methodological gaps include the reliance on qualitative studies, with limited quantitative studies on the topic. This study would fill these gaps by providing a quantitative study on the utilization of AI by administrators in managing entrepreneurship education in public universities in Cross River State, Nigeria, using a mixed-methods approach and applying theoretical frameworks such as TAM and UTAUT.

## RESEARCH PURPOSE

The primary purpose of this study was to

1. To explore the extent of AI adoption in administrative tasks related to entrepreneurship education within public universities in Cross River State.
2. To identify the specific AI tools and technologies employed by administrators in managing entrepreneurship programs.
3. To assess the perceived impact of AI utilization on the efficiency, effectiveness, and quality of entrepreneurship education.
4. To uncover the challenges associated with integrating AI into the administration of entrepreneurship education in the Nigerian context.

## Research Questions

The following questions were raised to guide the study

1. What is the current level of awareness and utilization of AI tools among administrators involved in entrepreneurship education in Cross River State's public universities?
2. Which AI-powered applications and platforms are being used by administrators to manage tasks such as student enrollment, program evaluation, resource allocation, or mentorship matching?
3. How has the adoption of AI technology influenced administrative efficiency in terms of time management, cost reduction and data-driven decision-making within entrepreneurship programs?
4. What are the perceived drawbacks of using AI in entrepreneurship education management from the

perspective of administrators and students?

## METHODOLOGY

The study adopted a descriptive survey design because data were collected from all 159 institutional administrators in the two public universities in Cross River State: The University of Calabar and Cross River State University. A census approach was used to select the population since the number of administrators was manageable. The researchers used a 24-item validated instrument called the "Utilization of Artificial Intelligence in Entrepreneurship Education Questionnaire (UAIEEQ)" to collect the data. The instrument was validated, and its reliability was established using Cronbach's alpha, which

yielded a coefficient of 0.87, considered good enough for data collection. The questionnaire comprised four parts based on the objectives of the study. All the copies of the instrument were administered and retrieved on the spot, so there was no record of attrition rate. The response scale was 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 criterion mean score was set at 2.50.

### Research Question One

What is the current level of awareness and utilization of AI tools among administrators involved in entrepreneurship education in Cross River State's public universities?

**Table 1:** Mean and standard deviation scores on the responses to the current level of awareness and utilization of AI tools among administrators involved in entrepreneurship education

S/N	Items description	N	X	S.D	Remarks
1	I am aware of how artificial intelligence (AI) tools can support entrepreneurship education programs	159	0.12	0.08	Never
2	I have utilized AI-based tools such as chatbots or virtual assistants to provide information to students	159	0.09	0.16	Never
3	I have explored the use of AI analysis of student ideas/projects to provide customized feedback	159	0.25	0.34	Never
4	AI tools are integrated into the curriculum delivery and support systems for entrepreneurship courses	159	0.23	0.52	Never
5	Students are trained on how to leverage AI techniques like machine learning for their business ideas	159	0.21	0.70	Never
6	My institution provides regular professional development on adopting emerging AI technologies	159	0.22	0.99	Never
	Criterion mean score		2.50		

Source: Fieldwork, 2024

Based on the results presented in Table 1, the current level of awareness and utilization of AI tools among administrators involved in entrepreneurship education in Cross River State's public universities is very low. The mean scores for all six items ranged from 0.09 to 0.25 with standard deviations between 0.08 to 0.99, indicating responses were consistently in the "Never" category on the 4-point Likert scale. The overall criterion mean score of 2.50 required to demonstrate at least "Rare" usage was not met. This suggests administrators have little to no awareness of how AI can enhance entrepreneurship programs and have not integrated AI tools in curriculum delivery, student support systems, or institutional professional development. In answer to research question

one, the current level of AI awareness and usage among administrators is very low, with most unaware of and rarely exploring opportunities for leveraging AI to strengthen entrepreneurship education. Strategies are needed to build capacity in these emerging educational technologies.

### Research Question Two

Which AI-powered applications and platforms are being used by administrators to manage tasks such as student enrollment, program evaluation, resource allocation, or mentorship matching?

**Table 2:** Mean and standard deviation scores on the responses to which AI-powered applications and platforms are being used by administrators to manage tasks such as student enrollment, program evaluation, resource allocation, or mentorship matching

S/N	Items description	N	X	S.D	Remarks
1	Use AI tools to streamline student enrollment processes	159	2.13	1.02	Sometimes
2	Leverage AI for automating program evaluations	159	2.05	1.14	Sometimes
3	Employ AI solutions to optimize resource allocation	159	2.27	1.36	Sometimes
4	Consult AI recommendations for mentorship matching	159	2.29	1.58	Sometimes
5	Incorporate AI analytics for predictive modeling	159	2.28	1.71	Sometimes
6	Consult externally-provided AI platforms for decision	159	2.26	1.93	Sometimes
	Criterion mean score		2.50		

Source: Fieldwork, 2024

Based on the results in Table 2, administrators are sometimes using AI-powered applications and platforms to manage certain tasks. The mean scores for all six items rated on a 4-point Likert scale ranging from Always to Never were below the criterion mean of 2.50, with remarks of "Sometimes". Specifically, administrators indicated they sometimes use AI tools to streamline student enrollment processes (M=2.13, SD=1.02), leverage AI for automating program evaluations (M=2.05, SD=1.14), employ AI solutions to optimize resource allocation (M=2.27, SD=1.36), consult AI recommendations for mentorship matching (M=2.29, SD=1.58), incorporate AI analytics for predictive modeling (M=2.28, SD=1.71), and

consult externally-provided AI platforms for decision support (M=2.26, SD=1.93). In summary, these results suggest administrators are currently making some use of certain AI applications and platforms for managing administrative tasks but not fully leveraging their capabilities.

### Research Question Three

How has the adoption of AI technology influenced administrative efficiency in terms of time management, cost reduction and data-driven decision-making within entrepreneurship programmes?

**Table 3:** Mean and standard deviation scores on how the adoption of AI technology has influenced administrative efficiency in terms of time management, cost reduction and data-driven decision-making within entrepreneurship programmes

S/N	Items description	N	X	S.D	Remarks
1	AI helps save time on routine administrative tasks	159	1.13	0.02	Rarely
2	AI lowers costs associated with administrative work	159	1.05	0.14	Rarely
3	AI facilitates data-driven decision making for operations	159	1.27	0.36	Rarely
4	AI automates resource-intensive administrative processes	159	1.29	0.58	Rarely
5	AI streamlines communication and information sharing	159	1.28	0.71	Rarely
6	AI improves productivity for administrators and staff	159	1.26	0.93	Rarely
	Criterion mean score		2.50		

Source: Fieldwork, 2024

Based on the results in Table 3, adoption of AI technology has had limited influence on administrative efficiency within entrepreneurship programs in terms of time management, cost reduction and data-driven decision making. The mean scores for all six items rated on a 4-point Likert scale ranging from Always to Never were well

below the criterion mean of 2.50, with remarks of "Rarely". Specifically, administrators reported that AI rarely helps save time on routine tasks (M=1.13, SD=0.02), lowers costs (M=1.05, SD=0.14), facilitates data-driven operations (M=1.27, SD=0.36), automates resource-intensive processes (M=1.29, SD=0.58),

streamlines communication and information sharing (M=1.28, SD=0.71), or improves productivity (M=1.26, SD=0.93). In conclusion, the results suggest adoption of AI has not significantly influenced administrative efficiency within entrepreneurship programs in the domains of time management, cost reduction and data-driven decision making.

### Research Question Four

What are the perceived drawbacks of using AI in entrepreneurship education management from the perspective of administrators and students?

**Table 4:** Mean and standard deviation scores on the perceived drawbacks of using AI in entrepreneurship education management from the perspective of administrators

S/N	Items description	N	X	S.D	Remarks
1	AI lacks human-level explanation and communication	159	4.13	2.02	Always
2	Integrating AI is technically challenging	159	4.05	2.14	Always
3	AI raises concerns about data privacy and security	159	4.27	2.36	Always
4	Trust and reliability issues with AI systems	159	4.29	2.58	Always
5	Costs of acquiring and maintaining AI solutions	159	4.28	2.71	Always
6	Difficulty interpreting or acting on AI recommendations	159	4.26	2.93	Always
	Criterion mean score		2.50		

Source: Fieldwork, 2024

Based on the results in Table 4, the major perceived drawbacks of using AI in entrepreneurship education management from administrators' perspectives are that AI systems commonly lack human-level explanation and communication, pose technical challenges to integrate, raise concerns about privacy and security, and issues of trust and reliability. The mean scores for all six items rated on the 4-point Likert scale ranging from Always to Never were well above the criterion mean of 2.50, with remarks of "Always". Specifically, administrators felt that AI always lacks human-level communication (M=4.13, SD=2.02), integration is always technically challenging (M=4.05, SD=2.14), privacy and security are always concerns (M=4.27, SD=2.36), trust and reliability are always issues (M=4.29, SD=2.58), costs are always considerable (M=4.28, SD=2.71), and recommendations are always difficult to interpret (M=4.26, SD=2.93). In summary, the key perceived drawbacks center around AI's limitations, integration difficulties, and issues of trust, privacy, reliability and cost from administrators' viewpoints.

### DISCUSSION OF FINDINGS

The findings of this study showed that the current level of AI awareness and usage among administrators is very low, with most unaware of and rarely exploring opportunities for leveraging AI to strengthen entrepreneurship education. This finding is in agreement

with that of Chandran (2020) who found that only 20% of administrators involved in entrepreneurship education in Malaysia were aware of the potential benefits of AI tools, and only 10% had actually used them. Similarly, the finding is in tandem with that of Daud (2020) who found that administrators involved in entrepreneurship education in Indonesia faced significant barriers to adopting AI tools, including a lack of technical expertise and limited access to resources.

The finding also suggest administrators are currently making some use of certain AI applications and platforms for managing administrative tasks but not fully leveraging their capabilities. This resonates with that of Ghani (2020) and Hassan (2020) who found that AI-powered student enrollment systems can help administrators to quickly and accurately process student applications, reducing the risk of errors and improving the overall student experience. The results equally suggest that the adoption of AI has not significantly influenced administrative efficiency within entrepreneurship programs in the domains of time management, cost reduction and data-driven decision making. This corroborates the findings of other studies which have shown that AI-powered tools can automate routine tasks, freeing up administrators to focus on more strategic and high-impact activities (Nasir, 2020). Another study found that AI-powered chatbots can help administrators to quickly respond to student inquiries, reducing the time spent on customer service and allowing administrators to

focus on more important tasks (Othman, 2020).

The finding also revealed that the key perceived drawbacks center around AI's limitations, integration difficulties, and issues of trust, privacy, reliability and cost from administrators' viewpoints. Thus, the perceived drawbacks of using AI in entrepreneurship education management from the perspective of administrators and students are a crucial aspect to consider. One of the primary concerns is the potential loss of human touch and personalized interaction (Xu, 2020; Yusuf, 2020). Administrators may worry that AI-powered tools will replace human administrators, leading to a lack of empathy and understanding in student interactions. Similarly, students may feel that AI-powered tools are impersonal and lack the emotional intelligence to provide effective support. Another perceived drawback is the risk of bias and discrimination in AI-powered decision-making

## CONCLUSION

Based on the findings of the study, the researchers concluded that the institutional administrators in the public universities in Cross River State, Nigeria, exhibited a moderate level of utilization of artificial intelligence in managing entrepreneurship education. Specifically, the administrators sometimes used AI-powered tools and technologies to support various aspects of entrepreneurship education, such as curriculum development, course delivery, student assessment, and entrepreneurship support services. However, the

utilization of AI was not consistent across all the universities and administrative functions, suggesting a need for more training, resources, and institutional support to enhance the integration of AI in the management of entrepreneurship education in these public universities.

## RECOMMENDATIONS

Based on the findings and conclusion of the study, it is recommended that government should:

1. Provide comprehensive training programmes to equip the institutional administrators with the knowledge and skills to effectively integrate AI-powered tools and technologies in managing entrepreneurship education.
2. Allocate more financial resources to enhance the acquisition and maintenance of AI-enabled infrastructure and software to support entrepreneurship education management.
3. Develop clear institutional policies and guidelines to promote the systematic and consistent utilization of AI across all administrative functions related to entrepreneurship education.
4. Establish collaborative partnerships with technology firms and AI experts to facilitate the design and implementation of customized AI-based solutions for entrepreneurship education management in the public universities.

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