

APPLICATION OF ARTIFICIAL INTELLIGENCE IN BUSINESS EDUCATION AND ENTREPRENEURSHIP PRACTICE

IGOMU INALEGWU

Department of Business Technology and Entrepreneurship Education
Faculty of Technology and Industrial Studies
Benue State University, Makurdi, Benue State, Nigeria
E-mail: igomuinarsoyale@gmail.com Tel: +2347039871264

KWAGHBO, MOSES TERVER (Ph.D)

Department of Business Technology and Entrepreneurship Education
Faculty of Technology and Industrial Studies
Benue State University, Makurdi, Benue State, Nigeria
Email: tkwaghbo62@gmail.com Tel: +2348066034535

NAYELA, SAGARGA NUVALGA

Department of Arts Education
Faculty of Education
Taraba State University, Jalingo, Taraba State, Nigeria
Tel: +2348102639800

&

ELUJEKWUTE, EDWIN CHUKWUAGUZIE (Ph.D)

Department of Business Technology and Entrepreneurship Education
Faculty of Technology and Industrial Studies,
Benue State University, Makurdi, Benue State, Nigeria
E-mail: elujekwuteddy@gmail.com Tel: +2348037530328

Abstract

The evolution of Artificial Intelligence (AI) has positively impacted on the socio-economic and political space of our dynamic society as its pronounced presence is seen in education, skills acquisition and technology which are primal to the socio-economic expensiveness of our society. The thrust of this paper thus is to x-ray the application of AI in Business Education and Entrepreneurship practice. The paper has underscored the impactful roles of Artificial Intelligence in Business Education to include personalized learning, intelligence tutoring system, enhanced accessibility, career guidance and automated grading; while its salient impacts in Entrepreneurship practice include, idea generation, market research, predictive analytics, automation and efficiency, chat bots, and virtual assistants. The paper further uncovered the challenges of Artificial Intelligence in Business Education to include lack of artificial intelligence literacy, curriculum development, access to artificial intelligence resources, ethical consideration, faculty training, industry partnership, data quality and availability, scalability, regulatory and legal consideration among others. The identified challenges of artificial intelligence in Entrepreneurship practice include, limited access to AI, resource infrastructure, high cost of AI power tools, lack of literacy in AI, ethical concerns bias, reliance

on data quality, navigating regulatory/legal framework for AI in entrepreneurship, among others. Consequently, the paper recommend some possible solutions to the challenges of AI in Business Education to include, development of literacy, update of curricular, students data management, regulatory awareness, amongst others, while the proffering solutions to challenges of AI in Entrepreneurship Practice include, cyber security, data quality, regulatory compliance, job displacement, continuous learning, etc.

Keywords: Application, Artificial Intelligence (AI), Business Education, Entrepreneurship Practice, Challenges, Solutions.

Introduction

The world's constant innovative changes have shown that the future is unpredictable especially as it concerns education, knowledge, skills, competencies and technology which are considered the bedrock of economic, social and political growth. According to Alam (2021), technological development in the world poses many challenges and opportunities, and perhaps the most increased competition among institutions, enterprises, around markets in changing competitive environment, where knowledge, technology, research and development activities have become increasingly important as the dominant advantage of contemporary economics and strength of nations and the institutions are measured by their progress in technology, research and development (Chen, Jane &Wenting, 2023).

Artificial intelligence (AI) and machine learning are poised to revolutionize the educational landscape by providing personalized learning experiences for teachers and students. For teachers, this means access to tools that can adapt to the learning pace and style of individual students in business education that offer real-time feedback and generate an insight into students' performance that can give instructional strategies. Adamopoulou and Moussiades (2020) state that artificial intelligence (AI) is a broad field that encompasses various techniques and approaches used to build intelligent machines capable of performing tasks that typically require human intelligence. It is transforming business education and entrepreneurship education practices in various ways including personalized learning systems and tailors entrepreneurship education to individual student's needs, skills and learning styles. It also has driven virtual mentors, offering guidance support and feedback to teachers, students and simulating real-world entrepreneurial experiences (Surugiu, Gradinaru & Surugiu, 2024).

Business education is the type of education that assists individual to acquire skills, which they can apply to solve problems in business and office occupation. According to Nwaigburu and Eneogwe (2019), business education has a definite role in preparing and equipping students with skills that increase their chances of finding jobs across territorial boundaries after schooling. Nwaigburu and Eneogwe further observe that business education equips students with knowledge and skills they need to create their own employment. Business education involves teaching students the fundamental theories and processes of business. Anyaeneh and Nzegwu (2017) affirm that it typically prepares students for an occupation in business or a business related field or a teaching career in academics. Business education is offered in both secondary and tertiary educational institutions as its courses are taught in Management,

Office Technology, Marketing and Accounting. Students are expected to have relevant skills; knowledge and attitude to enable them perform effectively in their private business and public offices.

Entrepreneurship practice is the process of creating, managing and growing a new business venture or enterprise. It involves identifying opportunities, mobilizing resources, and taking calculated risks to innovate, produce and deliver products or services that meet customer needs. Alqahtani (2023) states that by understanding the concept of entrepreneurship practice, individuals can develop the skills and mindset necessary to succeed in creating and growing innovative and sustainable business.

Concept of Artificial Intelligence (AI)

Artificial Intelligent (AI) refers to the development of computer system that can perform tasks that typically require human intelligence; and the system can learn from data experiences and interactions, enabling them to improve their performance and adapt to new situations. It can also draw conclusions, make decisions and solve problems using logic, rules and patterns. Artificial Intelligence system can identify and resolve problems often using creative and innovative approaches. The system can interpret and understand data from sensors, images, speech and text, enabling them to understand the world around them. According to Berglund, Bousfiha and Mansoori (2020), artificial intelligence system can also comprehend and generate human language, enabling them to communicate with humans; it is an Artificial Intelligence system that uses algorithms to process data, learn from experiences and the system rely on high-quality data to learn, improve and make accurate decisions. Berglund, Bousfiha and Mansoori further state that the system requires significant computing power to process large amounts of data and perform complex tasks. The artificial intelligence systems use sensors to perceive the environment and actuators to interact with the physical world. The types of Artificial Intelligence include narrow or weak, general or strong and super intelligence. It is a machine that can be made to simulate aspect of learning.

Business Education

Business education is a programme of study which aims at creating awareness for business occupation and preparing youths for work and people to become better citizens and intelligent consumers of goods and services (Gidado and Akaze, 2014). It is an educational programme that provides its learners with competent skills to perform several tasks in the world of business and education comes in different specialties. According to Edokpolor and Owenvbiugie (2017), business education is an essential element in vocational and general education that concerned with the impartation of business orientation and knowledge for personal and national development. Edokpolor and Owenvbiugie further affirm that business education involves teaching students the fundamental concepts, theories and processes of business. Business education in its dynamic nature and operation is designed to prepare young people for self employment career and economic literacy in the marketplace (Amaewhule, 2017). According to Elujekwute, Nwaokwa, Aja & Oigoche, (2021), by understanding the concept of business education, students can be better prepared to succeed in the dynamic and complex business world. Anyaeneh and Nzegwu (2017) define business education as a program of study which offers students who wish to pursue a career in business

an opportunity to develop those skills and understanding that will enable them to enter, perform and progress in business occupation after graduating from high school or university. Thus, the primary goal of business education is to produce competent, skillful and to dynamic business teachers, office administrators and businessmen and women that will effectively compete in the job market. Business education is the type of education that assists individual to acquire skills, which they can apply to solve problems in business and office occupations. Students are expected to have relevant skills and knowledge, attitude to enable them performs effectively in their private business and public offices.

Entrepreneurship Practice

Entrepreneurship practice is the process of creating, managing and growing a new business venture or enterprise. It involves identifying opportunities, mobilizing resources and taking calculated risks to innovate, produces and deliver products or services that meet customer needs. According to Bell and Bell (2023, p13), the key aspects of entrepreneurship practice include: Idea Generation: Identifying innovative business idea and opportunities; Feasibility Analysis: Evaluating the potential of an idea through market research, financial projections and risk assessment; Business planning: creating a comprehensive business plan outlining goals, strategies and tactics; Start-up; launching the new venture, securing funding and establishing operations; Growth and Scaling: Expanding the business, entering new markets and increasing revenue. Innovation and Risk-taking: Continuously innovating and taking calculated risks to stay competitive. Leadership and Team Building: Building and managing a team and developing leadership skills. Networking and Partnerships: Establishing strategic partnerships and networks to access resources and markets. Adaptability and Resilience: Adapting to changing circumstances and bouncing back from setbacks and failures. Continuous Learning: Staying up-to-date with industry trends, best practice and new technologies. By understanding the concept of entrepreneurship practice, individuals can develop the skills and mindset necessary to succeed in creating and growing innovative and sustainable business.

Application of Artificial Intelligence in Business Education

Artificial Intelligence can be applied in business education through the following ways:

Intelligence Tutoring System; an Intelligent Tutoring System (ITS) is a computer-based system that provides personalized guidance and feedback to students, mimicking the role of human tutor. It aims to adapt to individual learning needs, offering tailored support and instruction. Assessing students' knowledge, skills and learning style. Also, organizing and storing content expertise. It adapts to individual pace and needs of the students. According to Tuomi (2018), intelligent tutoring offers effective and efficient learning experiences, making education more accessible and engaging and it supplements traditional teaching method and preparing students for standardized tests as well as providing tailored support for diverse learners.

Personalized Learning; Personalized learning is an educational approach that tailors learning experiences to individual students' needs abilities, and learning styles. It aims to provide each student with a unique learning pathway, allowing them to learn at their own pace and focus on their strengths and weaknesses. It is student centered thereby focuses on individual

students' needs and materials and also allows students to learn at their own speed, adjust difficulty and content to match student progress, offers various routes to achieve learning goals. Regularly evaluates students' progress and adjusts instruction. Teachers guide and support students rather than lecturing. More so, artificial intelligence in business education helps to leverage digital tools and resources to enhance learning through technology integration. Chen, Jane and Wenting (2023) state that the application of artificial intelligence in business education increases student's motivation and interest and enhances comprehension and retention among students, it also reduces time spent on reviewing materials; it provides a clearer picture of students' knowledge, foster strong bonds and trust that enhances teacher-student relationship. By tailoring education to each students' unique needs, personalized learning aims to maximize academic potential and foster a lifelong interest of learning.

Enhanced Accessibility: By leveraging artificial intelligence to enhance accessibility, business education can become more inclusive, providing equal opportunities for all students to succeed and reach their full potential. Enhance accessibility in the application of Artificial Intelligence (AI) in business education is the use of AI technologies to make learning more inclusive and accessible for all students, particularly those with disabilities or limitations.

Career Guidance: Career guidance in the application of Artificial Intelligence (AI) in business education is to the use of Artificial intelligence technologies to support students in exploring and navigating their career paths; it can assess students' interest, skills and values to suggest relevance career options. Also it offers tailored career guidance based on individual student strengths, weaknesses and aspirations. Artificial intelligence driven analytics can forecast career trajectories, helping students make informed decisions. It can pinpoint areas where students need skill development, enabling targeted learning. AI can assist students in setting and achieving career goals and creating personalized plans. Artificial intelligence powered career guidance can revolutionize the way students approach their professional futures, making business education more effective and impactful (Banfield, Lombard &Wax, 2015).

Automated Grading: Automated grading in the application of Artificial Intelligence in business education is the use of AI algorithms to evaluate and grade students' assignments, exams and other assessments. Artificial intelligence-powered automated grading can accurately score objective questions and instantly grade multiple-choice, true/false and numerical answers questions. It can also access subjective answers and evaluate essay-type questions, using natural language processing (NLP) to analyze content, structure and language use. According to Berglund, Bousfiha and Mansoor (2020), artificial intelligence can generate feedback reports, highlighting strength, weaknesses and areas for improvement. The provided feedback can help students identify knowledge gaps and improve their understanding. Supporting adaptive learning through adjust assessment difficulty and content based on student performance. Facilitating data analysis by providing insights into student performance, helping instructors refines their teaching methods. It can automate much faster than human teachers, freeing up time for teaching and mentoring and increasing grading consistency, apply grading criteria consistently reducing bias and errors. It enhances

student learning, providing feedback that can help students identify knowledge gaps and improve their understanding.

Applications of Artificial Intelligence in Entrepreneurship Practice

Artificial Intelligence can be applied in entrepreneurship practice through the following ways:

Idea generation: Idea generation in the application of Artificial Intelligence (AI) in entrepreneurship practice is the use of AI techniques to generate innovative business ideas, solutions or products. Artificial Intelligence can identify patterns and trends in market data, inspiring ideas for new products or services. It can also merge seemingly unrelated ideas or technologies to create novel solutions. According to Kabiru Mohammed (2024), artificial intelligence driven analytics can forecast customer preference, guiding entrepreneurs to develop targeted products or services. Artificial intelligence for idea generation entrepreneurs can unlock new possibilities-driven innovation and build successful businesses that meet real customer needs. Artificial Intelligence can create digital prototypes or mockups, streamlining the ideation process and assist entrepreneurs in brainstorming sessions, offering suggestions and building upon human ideas. More so, it can assess the potential success of an idea providing entrepreneurs with data-driven insights and iterate on initial ideas, refining them based on feedback and performance metrics.

Market Research: Marketing research in the application of Artificial Intelligence in entrepreneurship practice is the use of artificial techniques to gather, analyze, and interpret data about target markets, customers and competitors. By leveraging artificial intelligence for market research, entrepreneurs can gain a deeper understanding of their market, make informed decisions, and drive business success. Artificial intelligence powered market research can process vast amount of data, providing insight on market trends, customer behavior and competitor activity. It can also detect relationship between data points, revealing hidden market dynamics and opportunities and the driven analytics can create precise customers profile, predicting purchasing decisions and loyalty. Radulov (2019) states that artificial intelligence also track brand mentions, sentiments analysis and trends, enabling entrepreneurs to respond promptly. Furthermore, it can analyze open-ended responses, sentiment and preference, providing actionable insights and also can pinpoint unmet needs, untapped markets and potential disruptions. It can monitor competitors' strategies, market positioning and performance. According to Elujekwute, Nwaokwa, Aja and Oigoch (2021), Artificial Intelligence enhanced market research in entrepreneurship practice can: Enhance market understanding; inform data-driven decision-making; Improve product development; Optimize marketing strategies; Identify new business opportunities; Support competitive advantage and Foster sustainable business growth.

Predictive Analytics: Predictive analytics in the application of Artificial Intelligence (AI) in entrepreneurship practice is the use of artificial intelligence algorithms to forecast future business outcomes, trends and customer behaviors. Artificial Intelligence can predict future sales patterns, enabling entrepreneurs to make informed decision on inventory, pricing and resource on allocation, more so, predict customer churn, allowing entrepreneurs to proactively retain valuable customers. It predicts market shifts, enabling, and entrepreneurs to adjust their strategies and stay competitive. By leveraging artificial intelligence for

predictive analytics, entrepreneurs can gain a competitive edge, drive business success and navigate uncertain market with confidence. It can predict potential risk and challenges, allowing entrepreneurs to proactively develop contingency plans. Artificial intelligence can predict emerging markets and opportunities, enabling entrepreneurs to innovate and expand. According to Elia, Margherita and Passiante (2020), artificial intelligence powered predictive analytics in entrepreneurship practice can: Improve decision-making; Enhance business agility; Optimize resources allocation; Increase revenue and profitability; Foster innovation and competitiveness; Support sustainable business growth and Reduce uncertainty and risk.

Automation and Efficiency: Automation and efficiency in the application of Artificial Intelligence (AI) in entrepreneurship practice is the use of AI to streamline and optimize business processes, leading to increased productivity, reduced cost and improved decision-making. AI-powered automation and efficiency can take over tasks such as data entry, bookkeeping and customer service, freeing up the time for strategic activities. Also, it can analyze and optimize processes, identifying bottlenecks and opportunities for improvement. Artificial intelligence can predict equipment failures, reducing downtime and increasing overall efficiency. It can manage workflows, assigning tasks and resources optimally as well as predict demand, manage inventory and optimize logistics. Guglielmo and Massimilino (2022) maintain that artificial intelligence can make data-driven decisions, reducing the needed for human intervention and enhanced customer experiences through chatbots and virtual assistants which can provide personalized support, improving customer satisfaction. According to Chen, Chen and Pandlin (2020), artificial intelligence powered automation and efficiency in entrepreneurship practice can: Increase productivity; Reduce costs; Improve accuracy; Foster scalability; Enhance decision-making; Support sustainable growth and Enable competitive advantage.

By leveraging artificial intelligence for automation and efficiency, entrepreneurs can transform their business thus achieving greater agility, innovation and success.

Chatbots and Virtual Assistants: Chatbots and virtual assistants in the application of artificial intelligence (AI) in entrepreneurship practice is the use of artificial intelligence powered computer programs that simulate human conversation and provide customer support, answer frequently asked questions and assist with tasks. By leveraging artificial intelligence powered chatbots and virtual assistants, entrepreneurs can revolutionize customer interaction, streamline business processes, and drive innovation. According to Guglielmo and Massimiliano (2022), artificial intelligence powered chatbots and virtual assistants can provide 24/7 customer support, answer frequently asked questions, help with order placement and tracking as well assist with product recommendations and offer personalized support. Furthermore, it routes complex issues to human representatives, integrate with other business systems and analyze customer interactions to improve services, chatbots and virtual assistants can be used in various entrepreneurship application, such as E-Commerce, customer service, marketing, sales, human resources, finance, healthcare and education among others.

Challenges of Artificial Intelligence in Business Education

The challenges of artificial intelligence in business education are briefly discussed below:

Lack of Artificial Intelligence Literacy: Teachers and students may not have the necessary knowledge and skills to effectively integrate artificial intelligence into business education. The limited understanding and knowledge of artificial intelligence concepts, technologies and applications among business education students and professionals is a challenge. This literacy gap hinders the effective integration of Artificial Intelligence in business education leading to limited AI adoption, inadequate AI education, misconceptions and fear, ineffective AI integration and widening skills gap, among others.

Curriculum Development: Developing curricula that incorporate Artificial Intelligence (AI) and its application in business education is a significant challenge, because artificial intelligence is a rapidly changing field, making it challenging to develop curricula that keep pace with the latest advancement. Again many business teachers may not have the necessary AI knowledge or experience to develop effective AI related curricula due to lack of AI expertise, integration with existing courses: AI concepts must be integrated into existing business education courses, requiring significant curriculum redesign. The curricula must balance technical AI skills with business education acumen and soft skills. Addressing ethical and social implication; AI curricula must include ethical and social implications such as data privacy, bias and job displacement. The curricula must provide hands-on-experience with AI tools and technologies to prepare students for real world application thereby developing practical skills. Curricula development may require partnership with industry experts and AI professionals to ensure relevance and practicality. More so, developing AI-related curricula may require significant resources, including funding, infrastructure, and personnel.

Access to Artificial Intelligence (AI) Resources: Access to artificial intelligence resources is a challenge in integrating artificial intelligence in business education because the cost of purchasing artificial software, hardware, and tools can be expensive, making it difficult for educational institutions to afford. As the result, the institutions may lack the necessary infrastructure, such as high performance computing, data storage and internet bandwidth. Access to relevant high-quality data for artificial intelligence projects and research may be limited. Institutions may thus rely on cloud services, which can be vulnerable to outage and data privacy concerns (Nwosu, 2019).

Ethnical Consideration: Artificial intelligence system can perpetuate existing biases and discrimination, if not designed with fairness and equity in mind. Artificial intelligence system often relies on vast amount of personal data which raises concern about privacy and data protection. It has the potential to automate jobs, potentially displacing workers and exacerbating income inequality. It can be complex and difficult to understand, making it challenging to explain their decisions and actions.

Faculty Training: Many business faculty members may not have the necessary artificial intelligence knowledge or experience to teach artificial intelligence related courses. Faculty may not fully understand how artificial intelligence applies to business disciplines, making it difficult to integrate it into the curricula. Oguejiodor and Ezeabasili (2017) affirm that faculty

members may have limited time and resources to devote to artificial intelligence training and curriculum development. They require need for up skilling is required training to develop skills in artificial intelligence tools, technologies and pedagogies. Artificial intelligence is a rapidly evolving field, making it challenging for faculty to stay current with the latest development and advancement. They may need training on how to effectively integrate artificial intelligence concepts into existing business courses.

Students Preparation: Students preparation is a challenge in integrating Artificial Intelligence (AI) in business education. This is because many students may not have strong understanding of artificial intelligence concepts and technologies. Many students may not possess the necessary technical skills, such as programming and data analysis, to fully understand and work with artificial intelligence. Nwanewezi (2018) states that students may require development of critical thinking and problem – solving skills to effectively apply artificial intelligence in business contexts. Students need to be aware of the ethical implications of artificial intelligence in business such as bias and privacy concerns. Also, students must stay current with the rapidly evolving artificial intelligence landscape.

Industry Partnership: Industry partnership is a challenge in integrating artificial intelligence in business because identifying industry partners with relevant artificial intelligence expertise and interest can be challenging, ensuring industry partners needs align with academic goals and curricular requirement can be difficult. Balancing academic priorities with industry needs and timeliness can be challenging.

Data Quality and Availability: Data quality and availability are challenges in integrating artificial intelligence in business education, this is because artificial intelligence algorithms require high-quality, accurate and reliable data to learn and make decisions. The data must be relevant to the specific business problem and representative of the population or market. Accessing and sharing data across organization and industries can be challenging due to legal and ethical agreement (Nwaigburu and Eneogwe, 2019).

Balancing artificial intelligence: Balancing artificial intelligence with human skills is a challenge in integrating artificial intelligence in business education; this is because artificial intelligence may lead to over-automation, diminishing human skills and judgment. It may neglect essential human skills like communication, empathy and creativity.

Assessment and Evaluation: Assessment and evaluation are challenges in integrating artificial intelligence in business education. This is because creating assessment that accurately measure artificial intelligence related skills and knowledge is difficult. Assessing skills like creativity, critical thinking, and problem-solving which are enhanced by artificial intelligence is challenging. Ensuring that assessments are valid, reliable and free from bias is crucial.

Scalability: Scalability and accessibility are challenges in integrating artificial intelligence in business education; this is because artificial intelligence powered tools may struggle to handle large student's numbers, leading to performance issues. Thus managing and storing large amounts of data for artificial intelligence application can be difficult.

Regulatory and legal Consideration: Regulatory and legal considerations are challenges in integrating artificial intelligence in business education, this is because ensuring compliance with data privacy laws, such as GDPR and CCPA when collecting and processing student data for artificial intelligence applications. In ensuring artificial intelligence meets accreditation standards and regulatory requirement as well ensuring artificial intelligence system complies with cyber security regulations is a challenge.

Challenges of Artificial Intelligence in Entrepreneurship Practice

Acknowledging and addressing these challenges is paramount if we are to harness the potential of artificial intelligence to enhance entrepreneurship practice and foster a more innovative and resilient entrepreneurship ecosystem. The challenges are briefly discussed below:

Limited access to Artificial Intelligence Resources Infrastructure: Limited access to AI resources and infrastructure is a significant challenge in integrating Artificial Intelligence (AI) into entrepreneurship practice. AI requires powerful computational resources, such as high-performance GPU, TPU or cloud computing services. Limited access to these resources hinders entrepreneur's ability to develop and train artificial intelligence models. Also, limited to access to data centers cloud storage, or data management tools make it difficult for entrepreneurs to handle large dataset. According to Abdulkadir (2018), access to AI software, frameworks and tools, such as tensor flow, PYTorch or Scikit-learn, is crucial for developing AI applications as limited access to these resources restricts entrepreneurs' ability to build and deploy AI models effectively. It requires specialized expertise, including data scientists, machine learning engineers and artificial intelligence researchers. Limited access to talent with artificial intelligence hinders entrepreneur's ability to develop and implement artificial intelligence solutions.

High Cost of Artificial Intelligence Power Tools: The high cost of AI power tools and platforms is a significant challenge in integrating Artificial Intelligence (AI) into entrepreneurship practices this is because artificial intelligence software, platforms and tools such as machine learning frameworks, natural language processing libraries and predictive analytics software can be expensive to purchase or subscribe to it since requires vast amounts of data, which can be expensive to acquire, store and manage.

Lack of Literacy in Artificial Intelligence: Lack of literacy in Artificial Intelligence (AI) is a significant challenge in integrating AI into entrepreneurship practices. This is because the entrepreneurs may lack the technical expertise to understand artificial concepts, tools, and applications, making it difficult to implement AI solution. The inability to collect, analyze and interpret data effectively hinders artificial intelligence adoption of data as the foundation of AI application.

Ethical Concerns/bias: The ethical concerns and bias are significant challenges in integrating artificial intelligence into entrepreneurship practices. Artificial intelligence algorithms can perpetuate and amplify existing biases present in the data used to train them, leading to discriminatory outcomes. Its decision-making processes can be opaque, making it difficult to

identify and address biases. AI system can be vulnerable to cyber attacks, compromising sensitive data and decision-making processes.

Dependence on Data Quality: The dependence on data quality is a significant challenge in integrating Artificial Intelligence (AI) into entrepreneurship practices. Artificial intelligence requires accurate data to produce reliable results as inaccurate data leads to identifying patterns and relationships incomplete data sets which can lead to flawed decision-making. Artificial intelligence application benefits from diverse data sources and formats, but inconsistent data types can create integration challenges.

Need for Continuous Updating: The need for continuous updating is a significant challenge in integrating Artificial Intelligence (AI) into entrepreneurship practices. Artificial intelligence technologies and techniques are constantly evolving, requiring entrepreneurs to stay updated on the latest development. Entrepreneurial businesses are dynamic and their needs change rapidly. Artificial intelligence system must be updated to address these changing needs.

Addressing Potential Job Displacement: Addressing potential job displacement and societal impact is a significant challenge in integrating Artificial Intelligence (AI) into entrepreneurship practices. Artificial intelligence can automate routine and repetitive tasks, potentially displacing jobs in sectors like manufacturing, customer service and data entry. It may require new skills sets, making existing skills obsolete and potentially displacing workers who cannot adapt. It redefines jobs, requiring workers to take on new responsibilities and potentially displacing those who cannot adapt.

Ensuring Inclusivity and Diversity in AI driven: Ensuring inclusivity and diversity in AI driven entrepreneurship is a significant challenge in integrating Artificial Intelligence (AI) into entrepreneurship practices. Underrepresentation of diverse groups in artificial intelligence development teams can result in artificial intelligence systems that neglect diverse needs. Artificial intelligence powered products and services may not be accessible to people with disabilities or those from low-income backgrounds. It may not be compatible with diverse languages, limiting accessibility.

Navigating Regulatory/Legal Framework for AI in Entrepreneurship: Navigating the regulatory and legal framework for AI in entrepreneurship practice is a significant challenge in integrating Artificial Intelligence (AI) into entrepreneurship practices. Lack of clear guidelines, unclear or evolving regulations for artificial intelligence development and determining ownership and intellectual property rights for artificial intelligence generated content and establishing liability and accountability for artificial intelligence- driven decisions and actions is a challenge.

Solutions to the Challenges of Artificial Intelligence in Business Education

Addressing the challenges of integrating artificial intelligence in Business education requires a multifaceted approach. By addressing these challenges, business education can effectively integrate artificial intelligence, preparing students for the future of work and fostering

responsible artificial intelligence adoption in business. According to Nwagwu (2020), these approaches are briefly discussed below:

- i. Develop AI literacy: Incorporate artificial intelligence basics into curricula, enabling students to understand AI concepts and applications.
- ii. Update curricula: Regularly review and update curricula to reflect AI's rapid evolution and industry needs.
- iii. Invest in V resources: Provide access to V-related hardware, software, and data, ensuring hands-on experience.
- iv. Ethical considerations: Integrate ethical discussions into AI courses, addressing bias, privacy, and responsibility.
- v. Faculty development: Offer training and support for faculty to develop AI expertise and teaching skills.
- vi. Students support: Provide additional resources and support for students to develop AI-related skills.
- vii. Industry partnerships: Collaborate with industry partners to provide practical experience, case studies, and mentorship.
- viii. Data management: Ensure access to high-quality data and develop data management skills.
- ix. Balance AI with human skills: Emphasize the complementarity of AI and human skills, like creativity and critical thinking.
- x. Assessment innovation: Develop innovative assessment methods to evaluate student learning in AI-related topics.
- xi. Scalability and accessibility: Implement AI-powered education that is scalable, accessible, and inclusive.
- xii. Regulatory awareness: Stay updated on regulatory and legal developments related to AI in business.

Solutions to the Challenges of Artificial Intelligence in Entrepreneurship Practice

Addressing the challenges of artificial intelligence (AI) in entrepreneurship practice involves understanding the impact of AI in business and taking steps to mitigate its negative effects. According to Elujekwute, Umar, Aja and Danburam (2024), these steps are briefly discussed below;

- a. *Job displacement*: AI may automate certain tasks, potentially displacing jobs. Entrepreneurs can up skill and reskill employees to work alongside AI systems.
- b. *Bias and discrimination*: AI systems can perpetuate biases if trained on biased data. Entrepreneurs can ensure diverse datasets and implement fairness and transparency in AI decision-making.
- c. *Dependence on technology*: Over-reliance on AI can lead to decreased human skills and abilities, entrepreneurs can strike a balance between technology and human judgment.
- d. *Ethical considerations*: AI raises ethical concerns, such as privacy and accountability. Entrepreneurs can prioritize transparency, accountability, and ethical AI development.
- e. *Regulatory compliance*: Entrepreneurs can stay updated on evolving regulations and ensure AI systems comply with laws and standards.
- f. *Public Perception*: Negative perceptions of AI can impact business. Entrepreneurs can educate customers and stakeholders about AI benefits and address concerns.

- g. *Data quality*: AI relies on high-quality data. Entrepreneurs can ensure accurate and diverse data collection and management.
- h. *Cyber security*: AI systems can be vulnerable to cyber threats. Entrepreneurs can implement robust security measures to protect AI systems and data.
- i. *Liability and accountability*: Entrepreneurs can establish clear guidelines for AI decision-making and ensure accountability for AI-driven actions.
- j. *Continuous learning*: AI is rapidly evolving. Entrepreneurs can stay updated on AI advancements and continuously develop their skills and knowledge.

Conclusion

Artificial Intelligence (AI) is an elaborate field that harbors various techniques and approaches used in developing intelligent machines capable of performing tasks that typically demand the application of human intelligence. It is fascinating to note that within the shortest span of AI's emergence, it has drastically impacted on virtually every facet of the society ranging from economic, political and social spheres. This paper therefore succinctly highlighted the positive influence that AI has on Business Education and Entrepreneurship Practice in terms of its applicability. And agreeably, the discoveries unveil the fact that AI could be applied in Business Education through intelligence tutoring system, personalized learning, career guidance, automated grading, amongst other while in Entrepreneurship Practice, AI could be applied through idea generation, market research, predictive analytics, automation and efficiency, chat bots and virtual assistants, among others. Thus, despite the challenges identified to impede on the application of AI both in Business Education and Entrepreneurship Practice, its positive impact has been enormous and hence a strong need for its sustenance and advancement.

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