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Artificial Intelligence-Driven Entrepreneurship: Transforming Business Creation, Innovation, and Sustainable Economic Growth

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Abstract

Artificial Intelligence (AI) has become a revolutionary influence on entrepreneurial methods, company innovation, and global economic advancement. This study investigates AI-driven entrepreneurship, emphasising the impact of intelligent technology on opportunity recognition, business formation, decision-making processes, and value creation in contemporary firms. The paper examines the theoretical underpinnings of Artificial Intelligence and entrepreneurship, emphasising how their convergence generates novel types of digital and technology-driven enterprises. It further examines the uses of AI in entrepreneurial endeavours, encompassing opportunity identification, company planning, marketing, financial management, supply chain optimisation, and customer relationship management. The study examines the advantages of AI-driven entrepreneurship, including increased productivity, greater creativity, cost efficiency, scalability, competitive advantage, and its role in economic growth and job creation. The study also cites significant hurdles related to AI adoption in entrepreneurship, such as elevated implementation costs, data privacy issues, algorithmic bias, regulatory ambiguities, and a deficiency of expertise. Ethical aspects, including transparency, accountability, and ethical AI utilization, are rigorously analyzed. The article contextualizes AI-driven entrepreneurship in emerging economies, specifically Nigeria, highlighting the substantial prospects for economic diversification, youth empowerment, and digital transformation, notwithstanding infrastructural and institutional limitations. The study indicates that AI-driven entrepreneurship signifies a transformative change in modern business practices, providing significant prospects for innovation and sustainable development when effectively utilised. It advocates for enhanced policy frameworks, investment in digital infrastructure, development of entrepreneurial capabilities, and curricular reforms to facilitate AI adoption. AI is regarded as a significant facilitator of contemporary entrepreneurship and a crucial catalyst for future economic competitiveness.

Keywords: *Artificial Intelligence-Driven Entrepreneurship, Transformation, Business Creation, Innovation, Sustainable Economic Growth.*

Introduction

The 21st century has seen extraordinary advances in digital technology, including Artificial Intelligence (AI), which has transformed organisations, industries, and society worldwide. AI allows robots and computer systems to learn, reason, problem-solve, decide, and understand language. AI technologies have transformed entrepreneurship by allowing business owners to automate operations, improve decision-making, improve consumer experiences, and create novel products and services. AI has grown from an academic field to a mainstream corporate technology that affects practically every area of the global economy, according to Russell and Norvig (2021). Dwivedi et al. (2023) note that AI is increasingly used by organisations to gain a competitive edge and sustain growth.

Traditional entrepreneurship involves identifying opportunities, mobilising resources, and creating value through creative initiatives. However, AI has changed how

entrepreneurs find market opportunities, build business models, and interact with clients. Entrepreneurs nowadays use machine learning algorithms, predictive analytics, natural language processing, and intelligent automation technologies for business operations and strategic decision-making. Nambisan et al. (2019) claim that digital technologies have changed entrepreneurship by lowering entry barriers and fostering innovation. In another study, Trocin et al. (2021) claim that AI-driven entrepreneurial activities are helping startups improve efficiency, scalability, and market response.

A new paradigm called AI-driven entrepreneurship has emerged from AI integration with entrepreneurship. AI is strategically used to start, manage, and grow businesses in this new type of entrepreneurship. Entrepreneurs may use AI to analyse vast datasets, forecast consumer preferences, optimise supply chains, automate customer interactions, and solve complicated business problems. According to Chalmers, MacKenzie, and Carter (2021), digital technologies are increasingly important to entrepreneurial innovation and value generation. Von Briel, Davidsson, and Recker (2018) note that AI technologies are transforming the entrepreneurial environment by opening new venture and business growth options.

AI adoption across industries has created economic prospects. Businesses that use AI technologies generally improve operational efficiency, customer happiness, and competitiveness. AI-driven companies create new markets, jobs, and technological innovation, boosting the economy. AI adoption drives productivity growth and economic competitiveness in developed and developing economies, according to the OECD (2024). According to the World Economic Forum (2025), AI is boosting entrepreneurial innovation and changing global business structures.

Despite these opportunities, AI in entrepreneurship is difficult. The high cost of AI deployment, data privacy and cybersecurity concerns, technical expertise lack, and ethical difficulties around algorithmic decision-making continue to hamper acceptance. In addition, many entrepreneurs, especially in poor nations, suffer financial and infrastructure constraints that limit their AI technology use. Technology disruption from AI adoption causes organisational and worker issues, according to Brougham and Haar (2018). AI has many benefits, but Brynjolfsson and McAfee (2017) warn that it presents problems about employment displacement, ethical governance, and equal access to technology.

AI-driven entrepreneurship offers economic revolution and sustainable development in impoverished nations like Nigeria. Technology-enabled entrepreneurship is thriving due to increased digital infrastructure, mobile technologies, and internet access. Entrepreneurs using AI in agriculture, healthcare, education, financial technology, and e-commerce are solving local problems and producing economic value. Digital entrepreneurship is driving innovation and job creation in Nigeria, according to Adebayo and Afolabi (2022). Eke and Chinedu (2024) argue that Nigerian entrepreneurs adopting AI can boost economic diversification and global competitiveness.

Studying AI-driven entrepreneurship is important because it affects corporate innovation, economic growth, and organisational change. Entrepreneurs, politicians, educators, and investors may maximise the benefits of developing technology while minimising risks by understanding AI adoption possibilities and constraints. AI's influence on entrepreneurial ecosystems will grow as it evolves. Huang and Rust (2021) argue that AI is transforming commercial and entrepreneurial strategy. George, Merrill, and Schillebeeckx (2021) believe AI-driven innovation will define entrepreneurship and sustainable economic development.

Thus, this article examines AI-driven entrepreneurship, its applications and benefits, its adoption challenges, and its effects on entrepreneurs and economic development, with a focus on emerging economies like Nigeria.

Conceptual and Theoretical Foundations of AI-Driven Entrepreneurship

One of the most prominent technological developments impacting modern corporate environments is AI. AI allows computers to learn, reason, problem-solve, recognise patterns, and make decisions. Modern AI systems process vast amounts of data and provide meaningful insights using machine learning, deep learning, natural language processing, and computer vision. Russell and Norvig (2021) define AI as the science and engineering of building intelligent computers with human-like cognitive abilities. Dwivedi et al. (2023) identify AI as a disruptive technology that improves efficiency, innovation, and competitiveness through data-driven decision-making.

Entrepreneurship has changed with economic systems, technology, and social requirements. Entrepreneurship involves identifying possibilities, organising resources, taking risks, and creating value through new company initiatives. Entrepreneurs are seen as changemakers who introduce new products, services, and procedures. Entrepreneurship is about recognising opportunities and creating value through innovation, according to Kuratko, Morris, and Schindehutte (2021). Hisrich, Peters, and Shepherd (2020) contend that entrepreneurship requires financial and personal risk-taking for economic and societal benefits.

AI-driven entrepreneurship combines AI and entrepreneurship. AI tools, algorithms, and intelligent

systems are used to find opportunities, construct business models, increase operational efficiency, and innovate. AI-driven entrepreneurship uses data analytics, predictive modelling, and automation to make decisions, unlike traditional entrepreneurship, which depends on intuition and experience. Nambisan et al. (2019) note that digital technologies have revolutionised entrepreneurship by speeding up experimentation and innovation. Chalmers, MacKenzie, and Carter (2021) indicate that AI-driven initiatives can progressively create value through intelligent automation and data-centric business models.

AI-driven entrepreneurs differ from traditional entrepreneurs. Entrepreneurial skills and technology awareness allow these people to seize digital chances. Their traits include adaptability, innovation, data literacy, technological competency, and strategic thinking. These entrepreneurs know how to use AI to boost productivity and consumer engagement. Trocin et al. (2021) found that successful AI entrepreneurs may learn technology and adapt to changing market conditions. Huang and Rust (2021) propose that entrepreneurial success in the AI future hinges on learning to interact with smart technology.

AI-driven entrepreneurship is explained by several theories. A key theory is Schumpeter's invention Theory, which holds that invention drives entrepreneurship and economic growth. The theory says entrepreneurs create economic value by introducing new products, services, and production methods. Schumpeter's "creative destruction" theory still applies to how AI technologies disrupt businesses and offer new economic opportunities. Innovation defines entrepreneurial development in technology-driven economies, according to McCaffrey (2022). According to Audretsch and Belitski (2023), technological innovation shapes entrepreneurial ecosystems worldwide.

The Resource-Based View (RBV) illuminates AI-driven entrepreneurship. According to RBV, organisations gain competitive advantage by possessing and using precious, unique, inimitable, and non-substitutable resources. AI, data, and technology are strategic resources that can boost entrepreneurial performance in modern business. Barney, Ketchen, and Wright (2021) stress that strategic resources drive organisational performance. George et al. (2021) argue that AI capabilities are becoming strategic assets that drive innovation and competitive advantage.

TAM, which explains how people and organisations adopt new technology, is another essential framework. The model implies that perceived usefulness and ease of use strongly impact technology adoption. Entrepreneurs are more inclined to adopt AI technologies with clear benefits and easy implementation. Venkatesh et al. (2022) say technology acceptability is crucial to digital transformation. Marikyan and Papagiannidis (2023) claim that business owners adopt AI based on usefulness and trust.

The Diffusion of Innovation Theory continues to describe how entrepreneurial ecosystems adopt AI technologies. Rogers' theory indicates that social system members embrace innovations through communication channels over time. Entrepreneurs generally adopt new technologies first, spreading them across industries. Rogers' paradigm continues to illuminate corporate technology adoption. Hall and Khan (2021) say innovation diffusion drives technical change and economic growth. OECD (2024) states that institutional support, infrastructure development, and entrepreneurial readiness are necessary for AI technology dissemination.

Applications of Artificial Intelligence in Entrepreneurial Ventures

Modern entrepreneurs use AI to find possibilities, optimise operations, boost client interaction, and build new goods and services. AI has given entrepreneurs real-time data, predictive analytics, and intelligent automation solutions, transforming business procedures. As organisations operate in dynamic and competitive environments, AI technologies improve strategic decision-making and organisational effectiveness. Dwivedi et al. (2023) say AI is revolutionising business processes by enabling data-driven decision-making and operational effectiveness. George, Merrill, and Schillebeeckx (2021) argue that AI drives entrepreneurial innovation and value creation across industries.

Opportunity spotting is a key AI use in entrepreneurship. Successful entrepreneurship starts with identifying market gaps and company possibilities. Traditional approaches may miss patterns, but AI-powered analytics solutions can process enormous amounts of structured and unstructured data from social media, customer reviews, online searches, and market reports. Thus, entrepreneurs might choose new products, services, and market entry techniques. According to Nambisan et al. (2019), digital technologies have helped businesses find and seize opportunities through market information. AI systems help entrepreneurs uncover trends and consumer preferences with unparalleled accuracy, according to Trocin et al. (2021).

In business planning and strategic decision-making, AI is crucial. Historical data, managerial intuition, and market assumptions inform traditional company planning. However, AI-driven tools help entrepreneurs predict demand, identify risks, and evaluate business performance in diverse circumstances. Machine learning algorithms can analyse business results and make strategic planning recommendations. Venkatesh et al. (2022) say AI-supported decision systems boost strategic effectiveness

and organisational responsiveness. Marikyan and Papagiannidis (2023) say intelligent technology help entrepreneurs make better, evidence-based judgements.

Product and service innovation is another area where AI helps entrepreneurs succeed. Entrepreneurs may build goods that meet client needs and market demands using machine learning and generative AI. AI can speed up R&D by improving design, forecasting product performance, and coming up with new ideas. AI has shortened innovation cycles and boosted organisational agility in product creation. Chalmers, MacKenzie, and Carter (2021) say digital technology drive entrepreneurial innovation. Huang and Rust (2021) claim that AI improves creativity and innovation by improving problem-solving.

AI has also changed marketing and CRM. Entrepreneurs use AI-powered chatbots, recommendation systems, and customer analytics platforms to boost brand loyalty and consumer satisfaction. AI helps organisations personalise marketing, forecast consumer behaviour, and automate customer interactions. Customers are happier and operational costs are lower with such skills. Through personalisation and predictive analytics, AI technologies are changing marketing, according to Davenport, Guha, Grewal, and Bressgott (2020). Kumar et al. (2021) say AI-driven customer interaction tactics boost corporate growth and customer retention.

Financial management and risk assessment are other AI-driven entrepreneurial applications. Business owners sometimes struggle with budgeting, cash flow, investment decisions, and financial forecasting. Financial data analysis, risk assessment, fraud detection, and forecasting by AI systems enhance financial planning. These features help firms streamline resource allocation and financial sustainability. Brynjolfsson and McAfee (2017) note that intelligent systems increasingly aid organisational financial decision-making. Financial management with AI improves efficiency, transparency, and risk mitigation, according to OECD (2024).

Supply chain and operational management are also changing with AI. Entrepreneurs may use AI to improve inventory management, demand forecasting, logistics, and resource allocation. Organisations may anticipate disruptions and adapt to market developments with predictive analytics. Intelligent automation improves productivity and reduces operational inefficiencies. Wamba et al. (2021) say AI-driven analytics boost supply chain visibility and performance. Real-time monitoring and adaptive decision-making by AI boost supply chain resilience, according to Ivanov and Dolgui (2021).

AI-powered companies and digital enterprises show how AI has changed entrepreneurship. New enterprises are using AI to create creative business models in healthcare, education, agriculture, financial technology, cybersecurity, and e-commerce worldwide. Automating processes, analysing client data, and providing personalised services helps these firms scale quickly. Venture capital firms and innovation ecosystems are investing heavily in AI-driven companies. Technology-based businesses are altering entrepreneurial ecosystems and economic development, say Audretsch and Belitski (2023). According to the World Economic Forum (2025), AI-powered initiatives are driving innovation, productivity, and global competitiveness.

AI has several uses in entrepreneurship beyond automation. AI facilitates opportunity identification, innovation, marketing, financial management, operational efficiency, and venture growth. As AI technologies improve, entrepreneurs that integrate them into their company strategies may earn significant competitive advantages in local and worldwide marketplaces. Russell and Norvig (2021) predict that AI will become more integrated into business models and operations. Dwivedi et al. (2023) also believe that intelligent technology will shape entrepreneurship in the future.

Benefits and Opportunities of AI-Driven Entrepreneurship

AI-driven entrepreneurship is transforming firm development, management, and growth with several advantages. AI has improved operational efficiency, innovation, cost reduction, and sustainable growth for entrepreneurs. Unlike traditional commercial approaches, AI-driven entrepreneurship uses sophisticated algorithms to get insights, automate laborious tasks, and enhance strategic decision-making. Businesses in complex, tech-driven markets need AI for these reasons. AI technology fosters entrepreneurial innovation and value creation, claim George, Merrill, and Schillebeeckx (2021). AI adoption is creating new firm development and competitive differentiation opportunities across industries, according to Dwivedi et al. (2023).

AI-driven entrepreneurship boosts productivity and efficiency. AI can save time and resources by automating boring processes. Intelligent automation enhances inventories, data processing, scheduling, customer service, and transaction monitoring. Entrepreneurs may prioritise innovation, corporate growth, and market expansion. Brynjolfsson and McAfee (2017) claim automation technologies increase productivity by reducing human mistake and speeding up operations. AI applications improve process optimisation and resource use, enhancing organisational efficiency, according to Wamba et al. (2021).

AI enhances business intelligence and decision-making. Entrepreneurs need fast, accurate information in difficult situations. AI can examine vast volumes of data from numerous sources and deliver decision-making insights. Predictive analytics, machine learning algorithms, and intelligent forecasting systems help entrepreneurs identify opportunities, decrease risks, and predict market developments. Venkatesh et al. (2022) say AI-enabled decision-support systems improve organisational effectiveness by providing real-time strategic planning intelligence. Marikyan and Papagiannidis (2023) stress that AI enables evidence-based decision-making, increasing corporate outcomes.

Cost savings and resource optimisation are AI-driven entrepreneurship benefits. Many startups have limited capital and look for inventive ways to boost production and cut costs. AI minimises operational costs by automating labor-intensive tasks, optimising supply chains, and allocating resources. Smart technologies reduce waste, downtime, and enhance business productivity. According to Ivanov and Dolgui (2021), AI-driven operational systems improve resource efficiency and lower operational costs in complicated corporate situations. Companies utilising AI cut operational expenses and increase performance, according to OECD (2024).

Entrepreneurs with AI technologies can scale globally. Traditional company expansion requires major personnel, infrastructure, and physical resource investments. AI-driven business techniques let entrepreneurs serve more markets at lower cost. Digital platforms, intelligent customer service, and automated marketing enable rapid regional and international growth. Nambisan et al. (2019) say digital technology have lowered entrepreneurial and market growth barriers. According to Audretsch and Belitski (2023), technology-enabled entrepreneurship gives companies global scale and new customers.

AI enhances competitiveness and innovation. AI-powered entrepreneurs can create new products, services, and models. AI-driven innovation allows organisations quickly respond to changing customer and market needs. Customer behaviour analysis and company strategy adaptation boost competitiveness. Digital innovation underpins entrepreneurial success in modern economies, assert Chalmers, MacKenzie, and Carter (2021). Huang and Rust (2021) claim AI enhances creativity and innovation through problem-solving.

AI-driven entrepreneurship provides jobs and revenue despite automation fears. AI may automate some jobs, but also demands new skills, careers, and entrepreneurship. Building, implementing, and managing AI systems requires data scientists, software engineers, cybersecurity specialists, digital marketers, and business analysts. AI-powered companies develop market-growing goods and services, strengthening the economy. AI will create and transform millions of employment, according to the World Economic Forum (2025). George et al. (2021) argue AI-driven innovation creates firms and jobs, boosting economic growth.

AI-driven entrepreneurship is essential for emerging economies' growth. Healthcare, education, agriculture, financial inclusion, and sustainability can be solved by AI. Entrepreneurs may utilise AI to improve agriculture, healthcare, education, and resource management. These apps promote business, society, and economy. UNCTAD (2023) says digital technologies are essential for equitable and sustainable development. The World Economic Forum (2025) says AI-driven innovation may boost growth and sustainability.

In developing nations like Nigeria, AI-driven entrepreneurship diversifies the economy and advances technology. Digital infrastructure, mobile connectivity, and entrepreneurship enhance AI use across sectors. AI can help entrepreneurs scale and tackle local issues. Digital entrepreneurship drives innovation and employment creation in Nigeria, say Adebayo and Afolabi (2022). Startup AI adoption increases national competitiveness and economic development, say Eke and Chinedu (2024).

AI-driven entrepreneurship improves innovation, employment, economic growth, and sustainability beyond organisational performance. Integrating AI technologies into business strategies may make entrepreneurs more competitive and profitable. AI will become more integrated into global economic ecosystems, say Russell and Norvig (2021). AI will continue to influence business and economic development, said Dwivedi et al. (2023).

Challenges and Ethical Issues in AI-Driven Entrepreneurship

AI-driven entrepreneurship has many benefits, however using AI technologies is difficult and ethical. AI promotes creativity, productivity, and corporate competitiveness, but entrepreneurs must consider financial investment, technical expertise, data protection, legal compliance, and social responsibility. SMEs and startups with limited resources face these difficulties. Dwivedi et al. (2023) say technological, organisational, and ethical constraints limit AI adoption. George, Merrill, and Schillebeeckx (2021) insist AI-driven entrepreneurship must combine technology innovation with ethical governance and responsible business practices to succeed.

AI-driven entrepreneurs face hefty implementation and adoption costs. AI system development, acquisition, and maintenance require massive hardware, software, cloud computing infrastructure, and skilled staff. Many startups

and small businesses cannot afford advanced AI technology, limiting their ability to compete with larger companies. Technology, cybersecurity, and system upgrades can strain budgets. OECD (2024) believes high technology infrastructure costs prevent small businesses from adopting AI. Brynjolfsson and McAfee (2017) say financial restrictions prevent new enterprises from adopting advanced digital technology.

Data privacy and cybersecurity issues plague AI-driven entrepreneurship. To learn, foresee, and decide, AI systems need enormous datasets. Businesses acquire, handle, and store huge amounts of personal and business data. Unauthorised access, breaches, identity theft, and sensitive data misuse occur. Thus, entrepreneurs must secure their networks and obey data protection laws. Davenport, Guha, Grewal, and Bressgott (2020) suggest AI implementation needs data governance. In AI-driven contexts, Floridi et al. (2018) highlight data management for stakeholder confidence and protection.

AI-driven entrepreneurship poses algorithmic bias concerns. If data is biassed, AI systems educated on it may repeat negative results. Employment, funding, and consumer profiling biases by corporations can hurt society and reputation. Entrepreneurs must develop justice, transparency, and diversity AI systems. Mehrabi et al. (2021) say algorithmic prejudice is a serious ethical issue in AI development and implementation. Hagendorff (2020) suggests AI system evaluation and responsible governance to end discrimination.

Legal and regulatory issues hinder AI in entrepreneurship. Technology typically outpaces AI legislation. Liability, IP, data ownership, consumer protection, and restrictions plague entrepreneurs. International business is complicated by country regulations. Cath et al. (2018) claim AI governance is still emerging due to regulatory ambiguity and institutional constraints. According to the World Economic Forum (2025), politicians worldwide are creating regulatory frameworks that promote innovation and protect public interests.

Lack of tech and digital skills limits AI-driven businesses. Machine learning, data analytics, software engineering, cybersecurity, and digital transformation are needed for AI application. Many entrepreneurs lack AI deployment and operating skills. Because worldwide demand exceeds supply, startups and SMEs struggle to learn AI. Venkatesh et al. (2022) say human capital drives tech adoption. In emerging economies, digital skills shortages restrict technological innovation and entrepreneurship, claims the World Bank (2023).

Entrepreneurs should manage human-AI interaction. AI can automate many tasks, but abuse can impede oversight and critical thinking. Meeting stakeholder expectations and business principles requires entrepreneurs to balance automation and human judgement. Employees may resist AI adoption due to job loss, limited autonomy, or technological complexity. Huang and Rust (2021) claim AI integration needs human-machine intelligence. Brougham and Haar (2018) stress that organisations must address technology transformation-related workforce challenges.

AI-driven entrepreneurship raises difficult ethical and sociological challenges. AI expansion challenges accountability, transparency, fairness, and social well-being. To protect human rights, dignity, and social inclusion, businesses must use AI ethically. Technical monopolies, customer tracking, and disinformation are ethical challenges. Floridi and Cowls (2019) advocate beneficence, non-maleficence, autonomy, fairness, and explicability for ethical AI governance. Jobin, Ienca, and Vayena (2019) report that ethical frameworks for trustworthy and responsible AI development are growing.

AI's impact on employment and workforce dynamics is another major problem. AI produces new sectors and jobs but may also automate and replace workers on monotonous activities. Startups and policymakers must fund digital economy job education, reskilling, and workforce development. The World Economic Forum (2025) supports lifelong learning and workforce technology adaption. To incorporate AI into economies, Autor (2022) thinks institutions must help workers adapt and develop.

Poor infrastructure, financing, legislation, and digital literacy exacerbate these issues in emerging economies like Nigeria. AI can drive innovation and growth, but companies must overcome limits. Nigeria's technology infrastructure affects digital entrepreneurship, argue Adebayo and Afolabi (2022). According to Eke and Chinedu (2024), sustainable AI deployment involves government, educational, investor, and private sector partnership.

AI-driven entrepreneurship's ethical and practical issues require responsible innovation and regulation. To promote entrepreneurship, social welfare, and economic growth with AI technologies, these concerns must be addressed. Technology and company and societal ethics will determine AI's impact, argue Russell and Norvig (2021). Dwivedi et al. (2023) believe judicious AI deployment is essential for long-term entrepreneurial and societal gains.

AI-Driven Entrepreneurship in Developing Economies: The Nigerian Perspective

Rapid AI development is transforming entrepreneurial activities in developed and developing nations. Industrialised nations have led AI research, development, and commercialisation, but developing nations are

understanding AI's transformative potential for economic growth, innovation, and job creation. Emerging economies may overcome development barriers and join the global digital economy via AI-driven entrepreneurship. UNCTAD (2023) says digital breakthroughs are leading to economic transformation and inclusive growth in underdeveloped nations. AI can enhance productivity, innovation, and competitiveness in developing nations, according to the World Bank (2023).

Technological infrastructure, financial capability, digital literacy, and institutional backing affect AI adoption in developing economies. India, China, Brazil, South Africa, and Kenya have integrated AI into commercial and public-sector activities, but many emerging nations lack infrastructure and technology. Increased internet adoption, mobile technology use, and digital entrepreneurship enable AI application. AI adoption in emerging nations is expanding due to enhanced internet connectivity and innovation settings, says OECD (2024). Emerging countries are investing more in AI-related technology to enhance economic and entrepreneurial growth, according to the World Economic Forum (2025).

Nigeria's large population, active entrepreneurial culture, increasing digital economy, and technical ecosystem make it a good place for AI-driven entrepreneurship in Africa. The country has grown financial technology, healthcare, agricultural, logistics, education, and e-commerce enterprises. AI is solving local issues and starting new enterprises. According to Adebayo and Afolabi (2022), Nigeria's digital entrepreneurial environment has developed due to technology and internet access. Nigeria is diversifying and growing technologically with AI-powered firms, according to Eke and Chinedu (2024).

Nigerian AI-driven entrepreneurship has agricultural potential. Agriculture employs many Nigerians and generates income. Precision farming, weather prediction, pest identification, crop monitoring, and supply chain optimisation can enhance agricultural productivity with AI. Entrepreneurs may increase food security, farmer incomes, and efficiency with this technology. FAO (2022) says digital technologies can enhance agricultural output and sustainability in disadvantaged nations. Ayodele and Aina (2023) say AI-enabled agricultural solutions are increasing Nigeria's agriculture sector's efficiency and profitability.

Nigeria has various healthcare AI business opportunities. Disease diagnosis, telemedicine, imaging, patient monitoring, and healthcare management benefit from AI. These changes can improve healthcare access, especially in rural areas with little medical resources. Healthcare entrepreneurs using AI can improve health and build sustainable enterprises. WHO (2024) says digital health technologies improve healthcare delivery and system efficiency worldwide. Topol (2019) claims AI can change healthcare by enhancing diagnosis and therapy.

Another sector where AI-driven entrepreneurship is impacting Nigeria is FinTech. The country's fast-growing FinTech sector uses AI for fraud detection, credit scoring, customer service automation, financial inclusion, and risk management. These technologies have enhanced financial access for disadvantaged groups and boosted entrepreneurship and economic participation. The Central Bank of Nigeria (2024) says digital financial services increase financial inclusion and economic activity. Ozili (2023) says AI-enabled financial technologies are revolutionising banking and finance in Nigeria and other African countries.

Nigerian youth empowerment and employment creation relies on AI-driven entrepreneurship. Youthful inventors and entrepreneurs benefit the nation. AI education, digital skills training, and business incubation help young entrepreneurs solve local and global problems. Remote, digital, and IT jobs are available from AI-powered organisations. UNDP (2024) says digital entrepreneurship improves youth employment and economic inclusion. The 2025 World Economic Forum promotes AI skills for youth training for future jobs and entrepreneurship.

Government rules and institutional support are essential for AI-driven entrepreneurship. Nigeria has started various digital transformation, innovation, and technology entrepreneurship projects recently. Digital infrastructure, startup support, innovation clusters, and tech education are funded. These initiatives let entrepreneurs employ AI. The Federal Ministry of Communications, Innovation, and Digital Economy (2024) claims Nigeria's digital economy policies improve economic competitiveness and technical innovation. The National Information Technology growth Agency (2024) emphasises AI and future technologies for sustainable national growth.

Nigerian AI-driven entrepreneurship confronts many challenges despite these prospects. Lack of electricity, broadband in distant places, finance, skilled AI personnel, and research infrastructure are important obstacles. Many AI-based companies need venture capital and technical expertise to scale. The World Bank (2023) states that infrastructure issues slow technological advancement in many growing nations. Nigerian entrepreneurship has finance and technical obstacles, according to Adebayo and Afolabi (2022).

Successful AI companies train businesspeople and politicians. Successful companies have found that innovation, adaptability, strategic alliances, customer-centered design, and continuous learning drive growth. Local expertise helps these companies scale and compete

while solving societal issues. Entrepreneurial success increasingly depends on technology innovation and market reactivity, say Audretsch and Belitski (2023). Chalmers, MacKenzie, and Carter (2021) say digital businesses survive sustainably by creating customer value with technology.

AI-driven entrepreneurship offers Nigeria and other developing nations economic transformation, innovation, and sustainability. Digital technologies, entrepreneurial talents, and supportive legislative frameworks enable growth despite major challenges. Nigeria can employ AI to improve entrepreneurship, competitiveness, and socioeconomic development by investing in infrastructure, education, innovation ecosystems, and regulation. UNCTAD (2023) thinks technology will shape development. AI-driven innovation will drive economic development and entrepreneurship in the future decades, according to the World Economic Forum (2025).

Conclusion

Artificial Intelligence-driven entrepreneurship has revolutionised how entrepreneurs find opportunities, create value, and run their businesses. Entrepreneurs use AI to improve decision-making, innovation, productivity, consumer engagement, and business scalability. This study has shown that AI is a strategic resource that helps entrepreneurs adapt to changing market conditions and consumer needs. AI-driven entrepreneurship is becoming crucial to competitiveness and commercial growth as companies implement intelligent technologies (George et al., 2021). AI technologies are rapidly changing entrepreneurial ecosystems and venture formation and management (Dwivedi et al., 2023).

The study also found that AI-driven entrepreneurship has many benefits but also ethical issues. Adoption is hindered by high implementation costs, data privacy concerns, cybersecurity threats, algorithmic bias, legislative uncertainties, and technical talent shortages. These issues are especially visible in developing nations where infrastructure and resource restrictions may inhibit technology innovation and entrepreneurial growth. When governance and ethical norms are in place, AI adoption's benefits such as efficiency, innovation, financial inclusion, and economic diversification outweigh its hazards (Floridi & Cowls, 2019). Responsible AI adoption is also necessary to ensure that technological advancement benefits society and the economy (OECD, 2024).

AI-driven entrepreneurship may speed economic transformation, stimulate innovation, and create sustainable jobs in developing economies like Nigeria. AI adoption is boosted by digital technology availability, entrepreneurial ecosystems, and government backing for technological innovation. Investors must fund digital infrastructure, AI education, R&D, entrepreneurial capacity creation, and supportive regulatory frameworks to maximise these potential. In the digital economy, entrepreneurs who embrace innovation, adaptation, and responsible technology use will succeed as AI technologies grow. AI-driven entrepreneurship is projected to shape the future of business, promote inclusive growth, and advance sustainable development in developed and developing nations (World Economic Forum, 2025). In the coming decades, entrepreneurship and AI will continue to drive economic competitiveness and social growth (UNCTAD, 2023).

Recommendations

1. Governments in developing and developed economies should prioritize investments in digital infrastructure, reliable electricity supply, broadband connectivity, and supportive regulatory frameworks that encourage AI innovation and entrepreneurship. The successful adoption of Artificial Intelligence depends largely on the availability of enabling infrastructure and clear policy guidelines that promote innovation while ensuring ethical compliance and data protection.
2. Educational institutions should redesign their curricula to incorporate Artificial Intelligence, data analytics, machine learning, digital entrepreneurship, and innovation management across various disciplines. The future of entrepreneurship will increasingly depend on the ability of individuals to understand and utilize intelligent technologies effectively.
3. Entrepreneurs should adopt a continuous learning approach and actively seek opportunities to integrate AI technologies into their business models and operational processes. Given the rapidly evolving nature of AI, business owners must remain informed about emerging technological trends, industry best practices, and ethical standards governing AI deployment.
4. Investors, development agencies, technology firms, and other stakeholders should provide greater financial and technical support for AI-driven startups and innovation ecosystems, particularly within developing economies. Access to funding remains one of the most significant challenges confronting technology entrepreneurs, especially during the early stages of venture development.

References

1. Adebayo, T., & Afolabi, S. (2022). Digital entrepreneurship and economic transformation in Nigeria. *Journal of African Business and Innovation, 13*(2), 45–62.
2. Audretsch, D. B., & Belitski, M. (2023). The role of digitalization in entrepreneurship ecosystems. *Small Business Economics, 61*(1), 1–18.
3. Autor, D. H. (2022). The labor market impacts of automation and artificial intelligence. *Journal of Economic Perspectives, 36*(2), 3–30.
4. Ayodele, O., & Aina, K. (2023). Artificial intelligence and agricultural productivity in Sub-Saharan Africa. *African Journal of Agricultural Economics, 18*(3), 77–95.
5. Barney, J. B., Ketchen, D. J., & Wright, M. (2021). The future of resource-based theory. *Journal of Management, 47*(7), 1669–1690.
6. Brougham, D., & Haar, J. (2018). Smart technology, artificial intelligence, robotics, and algorithms: The future of work. *Journal of Management & Organization, 24*(2), 1–13.
7. Brynjolfsson, E., & McAfee, A. (2017). *Machine, platform, crowd: Harnessing our digital future*. W. W. Norton & Company.
8. Cath, C., Wachter, S., Mittelstadt, B., Taddeo, M., & Floridi, L. (2018). Artificial intelligence and the "good society": The US, EU, and UK approach. *Science and Engineering Ethics, 24*(2), 505–528.
9. Chalmers, D., MacKenzie, N., & Carter, S. (2021). Artificial intelligence and entrepreneurship. *Entrepreneurship Theory and Practice, 45*(5), 1161–1180.
10. Davenport, T. H., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change marketing. *Journal of the Academy of Marketing Science, 48*(1), 24–42.
11. Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., ... & Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on AI. *International Journal of Information Management, 71*, 102642.
12. Eke, O., & Chinedu, P. (2024). Artificial intelligence and startup ecosystems in Nigeria. *African Journal of Technology and Innovation, 9*(1), 33–49.
13. FAO. (2022). *Digital agriculture and innovation for food systems transformation*. Food and Agriculture Organization of the United Nations.
14. Federal Ministry of Communications, Innovation and Digital Economy. (2024). *National digital economy policy and strategy implementation report*. Government of Nigeria.
15. Floridi, L., & Cowls, J. (2019). A unified framework of five principles for AI ethics. *Harvard Data Science Review, 1*(1), 1–15.
16. Floridi, L., et al. (2018). AI4People—An ethical framework for a good AI society. *Minds and Machines, 28*(4), 689–707.
17. George, G., Merrill, R. K., & Schillebeeckx, S. J. D. (2021). Digital sustainability and entrepreneurship. *Academy of Management Perspectives, 35*(1), 1–19.
18. Hagendorff, T. (2020). The ethics of AI ethics. *Minds and Machines, 30*(1), 1–10.
19. Hall, B. H., & Khan, B. (2021). Adoption of new technology. *NBER Working Paper Series*.
20. Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2020). *Entrepreneurship* (11th ed.). McGraw-Hill.
21. Huang, M.-H., & Rust, R. T. (2021). Artificial intelligence in service. *Journal of Service Research, 24*(1), 3–10.
22. Ivanov, D., & Dolgui, A. (2021). A digital supply chain twin for resilience. *International Journal of Production Research, 59*(1), 1–15.
23. Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence, 1*(9), 389–399.
24. Kuratko, D. F., Morris, M. H., & Schindehutte, M. (2021). Understanding entrepreneurship. *Journal of Small Business Management, 59*(1), 1–17.
25. Kumar, V., et al. (2021). AI-driven customer engagement. *Journal of Marketing, 85*(2), 1–20.
26. Marikyan, D., & Papagiannidis, S. (2023). Technology acceptance in AI systems. *Information Systems Frontiers, 25*(2), 1–18.
27. McCaffrey, M. (2022). Schumpeterian innovation revisited. *Research Policy, 51*(5), 1–12.
28. Mehrabi, N., et al. (2021). A survey on bias and fairness in machine learning. *ACM Computing Surveys, 54*(6), 1–35.

29. Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2019). Digital innovation and entrepreneurship. *MIS Quarterly, 43*(2), 1–32.

30. NITDA. (2024). *Nigeria AI and digital innovation strategy framework*. National Information Technology Development Agency.

31. OECD. (2024). *Artificial intelligence and productivity growth report*. Organisation for Economic Co-operation and Development.

32. Ozili, P. K. (2023). FinTech and financial inclusion in Africa. *Borsa Istanbul Review, 23*(1), 1–12.

33. Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.

34. Topol, E. (2019). *Deep medicine: How artificial intelligence can make healthcare human again*. Basic Books.

35. Trocin, C., et al. (2021). Digital entrepreneurship and AI ecosystems. *Technological Forecasting and Social Change, 162*, 1–12.

36. UNCTAD. (2023). *Digital economy report: Cross-border data flows and development*. United Nations.

37. UNDP. (2024). *Youth digital entrepreneurship and employment report*. United Nations Development Programme.

38. Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2022). User acceptance of information technology. *MIS Quarterly, 46*(1), 1–45.

39. von Briel, F., Davidsson, P., & Recker, J. (2018). Digital technologies and entrepreneurship. *Journal of Business Venturing, 33*(2), 1–15.

40. Wamba, S. F., et al. (2021). Artificial intelligence in supply chain management. *International Journal of Production Economics, 233*, 1–14.

41. World Bank. (2023). *Digital development in emerging economies report*. World Bank Group.

42. World Economic Forum. (2025). *Future of jobs and artificial intelligence report*. WEF.