



Ignatius Ajuru University of Education, Port Harcourt, Nigeria
Research and Development Centre

1st International Conference and Exhibition on Research, Innovation and Development (ICERID 2026)
Proceedings URL: <https://iauejournals.com/index.php/ICERID> Website: <https://icerid.online>



ISBN: 978-978-63205-1-9

June 2026; Page No. 298-308

The Implications of Artificial Intelligence in Business Planning: Fast-Tracking Entrepreneurship Development among Nigerian and African Entrepreneurs

*¹Pollyn, B. S., & ²Abule, Z.

¹Department of Management, Ignatius Ajuru University of Education, Port Harcourt, Nigeria.

²Department of Entrepreneurship, Ignatius Ajuru University of Education, Port Harcourt, Nigeria.

*Corresponding author email: basil.pollyn@iaue.edu.ng

Abstract

The increasing accessibility of Artificial Intelligence (AI) technologies is reshaping the entrepreneurial landscape by altering how entrepreneurs conduct research, analyse markets, formulate strategies, and develop business plans. Despite the recognised importance of business planning in entrepreneurial success, many Nigerian and African entrepreneurs continue to face challenges associated with limited access to market intelligence, professional consultancy services, reliable business data, and strategic planning expertise. These constraints often result in poorly developed business plans that undermine venture sustainability and growth. This paper discusses the implications of Artificial Intelligence on company planning and how AI is able to fast-track entrepreneurship development in Nigeria and Africa. The study takes a conceptual and analytical approach to construct an AI-Assisted Entrepreneurial Planning Framework by synthesising the literature from entrepreneurship, innovation studies, strategic management, digital transformation and artificial intelligence research. The report suggests that AI works best as a strategic entrepreneurial helper to supplement human judgement rather than replace entrepreneurial decision-making. AI is able to lower planning expenses, improve the quality of business plans and raise implementation readiness by improving research capabilities, data analytics, market intelligence, financial forecasting and implementation assistance. The study finds that with the right digital literacy level, ethical protections and supportive institutional frameworks, AI has the potential to democratise access to entrepreneurial acumen and make major contributions to entrepreneurship development in emerging nations.

Keywords: Artificial Intelligence, Business Planning, Entrepreneurship Development, Digital Entrepreneurship, SMEs, Nigeria, Africa, Strategic Planning

Introduction

Entrepreneurship is one of the commonly identified drivers of economic development, innovation, employment creation and social change not only in developed but also in emerging economies. Entrepreneurial activity has been widely recognised in the contemporary economic development literature as a primary method through which knowledge, creativity, and resources are translated into productive economic outcomes (Acs et al., 2018). Entrepreneurship is important for economic growth and for innovation, competitiveness, productivity, and job creation, especially when faced with economic uncertainty and difficult conditions in the labour market (Shane & Venkataraman, 2000).

Entrepreneurship is particularly relevant in the African setting as governments, development institutions and higher education institutions increasingly see entrepreneurial activity as a strategic response to unemployment, poverty and

298 | Cite this paper as:

Pollyn, B. S., & Abule, Z. (2026). The implications of Artificial Intelligence in business planning: fast-tracking entrepreneurship development among Nigerian and African entrepreneurs. In *Proceedings of the 1st International Conference and Exhibition on Research, Innovation and Development (ICERID)*, Ignatius Ajuru University of Education, Port Harcourt, Nigeria (Vol. 1, pp. 298-308).

economic fragility. In Nigeria, entrepreneurship has become a key feature of the national development discourse due to issues of persistent youth unemployment, population expansion, challenges of economic diversification and the increasing desire for sustainable livelihood prospects (Afolabi et al., 2023; National Bureau of Statistics, 2024). Considerable expenditures have thus been made in entrepreneurship education, start-up incubation programs, SME assistance efforts, innovation hubs and business development services.

However, despite these efforts, the failure rates of startups and small businesses remain a major worry. Research indicates that a high percentage of new enterprises fail in the first three years of activity due to lack of planning, weak strategic positioning, poor knowledge of the market, financial mismanagement and lack of entrepreneurial preparedness (Brinckmann et al., 2010; Delmar & Shane, 2003). Entrepreneurial enthusiasm and inventiveness are crucial, but rarely adequate to substitute methodical planning and evidence-based decision-making.

Business planning is one of the most crucial stages in the entrepreneurial process. It assists entrepreneurs in evaluating possibilities, examining market conditions, determining customer wants, predicting resource needs, estimating risks, and formulating execution plans (Barringer & Ireland, 2019). Business planning decreases uncertainty by taking the ideas of the entrepreneur and turning them into business models that can be implemented and are backed by a strategic and operational framework. Entrepreneurs that undertake structured planning tend to have better preparation, ability to mobilise resources and sustainability of ventures than those who use intuition or informal decision-making processes (Brinckmann et al., 2010).

But business planning is especially difficult in many African economies. Some of the challenges entrepreneurs often face include poor access to reliable company data, weak market intelligence systems, insufficient financial resources, poor consultancy support structures and restricted access to strategic expertise (World Bank, 2024). These limits often lead to poorly conceived or non-existent company plans, hence raising entrepreneurial risk and diminishing the probability of long-term success.

Recent advances in Artificial Intelligence have opened up new opportunities to tackle these issues. Artificial Intelligence has moved from a specialised area of technology to a common tool that can aid in research, analysis, prediction, content production, decision making, and issue solving (Brynjolfsson & McAfee, 2014). The progress in machine learning, natural language processing, predictive analytics, and generative AI has substantially improved the capacity of people and organisations to handle information, detect patterns, and produce useful insights (Dwivedi et al., 2023).

Within the field of entrepreneurship, AI is being used more and more for consumer analysis, market research, business intelligence, financial forecasting, operational optimisation, and strategic planning (Giuggioli & Pellegrini, 2023). For entrepreneurs working in resource-poor situations, standard artificial intelligence can democratise access to analytical skills that were previously exclusively available to huge organisations with deep financial and technological resources. Artificial intelligence can help entrepreneurs collect and analyse information more easily and cheaply, leading to better, more strategic and implementable business ideas.

While literature has been on the rise on AI adoption in organisational settings, relatively less scholarly focus has been paid to understanding AI's function in entrepreneurial planning processes, especially when considering developing economies. Prior research tends to concentrate on operational uses of AI and misses its potential role in entrepreneurial readiness and venture planning (Mikalef & Gupta, 2021; Giuggioli & Pellegrini, 2023). Furthermore, a considerable portion of the existing work is centred on developed economies, leaving substantial gaps in understanding the consequences of AI-assisted business planning for African entrepreneurs.

This gap is especially critical as the planning issues encountered by entrepreneurs in emerging nations are fundamentally different from the ones faced in rich economies. The issues of access to information, digital infrastructure, entrepreneurial literacy, institutional support and resource limitations call for contextualised methods that are reflective of local reality. There is hence a need for academic frameworks that explain how standard artificial intelligence can contribute to entrepreneurial planning in these contexts.

This research fills this gap by investigating the implications of Artificial Intelligence in business planning and by proposing a conceptual framework for understanding how artificial intelligence might accelerate entrepreneurship development in Nigeria and Africa. This study advances entrepreneurship scholarship by reconceptualising AI as a strategic entrepreneurial planning aid and presenting a paradigm that connects AI capabilities to entrepreneurial preparedness, implementation readiness, and venture development outcomes.

The article proceeds to examine the underlying problem, clarify key concepts, review relevant literature, apply relevant theoretical perspectives, develop a conceptual framework and discuss practical implications for entrepreneurship development within developing economy contexts.

There is rising recognition of the role entrepreneurship plays in economic development, although many entrepreneurial firms in Nigeria and Africa still have low survival rates and limited growth trajectories. A common theme in the entrepreneurship literature is the failure of entrepreneurs to produce quality business plans before the inception of the company and during the business development phases (Brinckmann et al., 2010; Delmar & Shane, 2003). There has been a considerable growth in entrepreneurial education programs, but there are still huge gaps in the abilities of entrepreneurs to perform market research, analyse opportunities, assess risks and produce realistic financial predictions and viable company plans.

This is further exacerbated by structural limitations that are prevalent within underdeveloped economies. Therefore, entrepreneurs often operate in situations with weak information systems, limited access to business analytics, poor consultant support, bad record-keeping habits and limited access to professional experience (World Bank, 2024). Business planning, thus, is often reduced to a mere administrative activity and is overlooked as part of the entrepreneurial process.

At the same time, technologies of Artificial Intelligence become more and more accessible and affordable. AI tools are helpful in tasks like information gathering, data analysis and forecasting, content creation and strategic planning. However, many entrepreneurs and entrepreneurship support organisations still view AI as a technological novelty, rather than as a practical planning resource to empower entrepreneurial decision-making (Dwivedi et al., 2023).

Conceptual Clarification

Artificial Intelligence is the ability of digital systems to carry out tasks that ordinarily require human intelligence, such as learning, reasoning, prediction, pattern recognition, natural language understanding and decision support. In the corporate context, AI is increasingly seen as not only a technical tool but also an organisational talent that may improve analysis, innovation, decision-making and performance when properly embedded into managerial processes (Enholm et al., 2022; Mikalef & Gupta, 2021).

In this case, AI is theorised as an entrepreneurial planning assistant. Thus, AI helps the entrepreneur to gather information, formulate ideas, analyse data, make estimates, evaluate risks and fine-tune execution strategies. It is not a replacement for entrepreneurial sense, local knowledge, ethical reasoning or market testing. This distinction is relevant because AI is at its most valuable when combined with human expertise, contextual awareness, and disciplined execution (Brynjolfsson & McAfee, 2014; Dwivedi et al., 2023). Business planning is a methodical procedure by which entrepreneurs explain their business ideas, evaluate market prospects, identify customers, assess rivals, estimate expenses and revenues, predict risks, and develop strategies for implementation. Previous research suggests that business planning has the potential to enhance entrepreneurial readiness and venture success, especially when it is considered as a process of learning and decision making rather than a document for investors or banks (Brinckmann et al., 2010; Delmar & Shane, 2003).

Entrepreneurship development is the process of creating the information, skills, attitudes, resources and institutional support needed for individuals to discover opportunities, launch enterprises, innovate and sustain business growth. Entrepreneurship development has economic and social relevance in Nigeria and Africa since it is linked to job

creation, poverty reduction, youth empowerment, innovation diffusion, and local economic transformation (Acs et al., 2018; Shane & Venkataraman, 2000).

Business planning has been a well-researched topic in entrepreneurship because it reduces uncertainty and improves decision quality. In their meta-analysis Brinckmann et al. (2010) showed a favourable association between business planning and small firm performance although the strength of the relationship is dependent on context, quality of planning and implementation capabilities. Thus, planning is useful not just because a plan is present but because the process of preparing helps entrepreneurs to think more clearly, foresee obstacles and organise resources.

Likewise, Delmar and Shane (2003) suggest that planning facilitates the development of new ventures in terms of enabling new venture founders to make decisions, coordinate activities and communicate the company idea to external stakeholders. This is especially essential in emerging economies because many entrepreneurs start with no formal management expertise. Here planning can be a learning process in action, taking the entrepreneur from informal intention to systematic execution.

But not all entrepreneurs have equal planning skills. Many small business owners do not have access to credible market data, expert consultation, financial modelling skills or strategic analytic tools. The World Bank has consistently underlined that digital access, digital skills, data systems, private-sector support and safeguards are important for governments and businesses to benefit from digital and AI-enabled prospects. (worldbank.org) This is relevant to African entrepreneurship since insufficient planning is not just a personal shortcoming of the entrepreneur, but also a reflection of limited support systems, poor information infrastructure and uneven digital capacity.

The growth of AI thus represents a major opportunity for the development of entrepreneurship. Artificial intelligence can assist in business planning by assisting entrepreneurs to search for information, describe market trends, design survey questions, assess consumer input, prepare rival profiles, develop financial assumptions and test strategic possibilities. AI capabilities research shows that AI has the power to generate economic value when businesses combine technology with data, skills, coordination and strategic intent (Enholm et al., 2022; Mikalef & Gupta, 2021).

In the entrepreneurial setting, AI could be particularly valuable since many entrepreneurs cannot pay the whole cost of consultants, market researchers, accountants and business development experts. AI tools can lessen the initial barrier by helping entrepreneurs assemble first drafts, helping arrange ideas and establishing what has to be checked in the market. But that doesn't mean human judgement is not necessary. AI-generated plans need to be localised, tested and verified with real customer contact, price research, competitive intelligence and financial validation (Dwivedi et al., 2023; Teece, 2018).

Moreover, the literature indicates that digital transformation does not necessarily lead to corporate success. Entrepreneurs need to be able to accept, adapt and deploy technology to solve actual business problems. The World Bank's latest work on digital and AI underscores that poor countries need connection, skills, institutional capacity and responsible technology controls to realise the full benefits of AI. (worldbank.org) This supports the notion that AI-led business planning in Nigeria and Africa must be approached as a capability-building exercise, not just the deployment of trendy digital devices.

Theoretical Framework

The study is based on three complimentary theories; Resource-Based View, Technology Acceptance Model and Diffusion of Innovation Theory. These theories are applicable since they describe AI from three perspectives: as a strategic resource, as an adaptable technology, and as an invention that diffuses thru social and institutional systems.

The resource-based view holds that a corporation is competitively advantaged if it has resources that are valued, uncommon, inimitable and non-substitutable (Barney, 1991). In this paper AI is not considered a scarce resource per se, as numerous entrepreneurs may have access to similar AI systems. The strategic value is not just how entrepreneurs use AI, but how they integrate AI with local knowledge, innovation, consumer understanding, financial discipline and execution skill. This means that AI is valuable when it enhances the entrepreneur's larger capacity system.

The Technology Acceptance Model suggests that individuals are more likely to adopt a technology if they believe it to be beneficial and easy to use (Davis, 1989). The hypothesis is significant for Nigerian and African entrepreneurs since most small business owners may be afraid to use AI if they perceive it as too technical, costly, foreign or complex. But if AI is seen as a helpful assistant with company plans, proposals, consumer analysis, advertising, costing and decision-making then there's a better chance of adoption rising.

Diffusion of Innovation Theory is a theory that describes how new ideas and technologies move via a social system. Rogers (2003) identified five major adoption variables as relative benefit, compatibility, complexity, trialability, and observability. Regarding AI-assisted business planning, entrepreneurs are likely to embrace AI when they can see that it saves time, reduces cost, matches their business realities, is easy to implement, and provides visible results.

The ideas show that conventional artificial intelligence may assist entrepreneurship development if three requirements are met. First, entrepreneurs need to leverage AI as part of a broader strategic competence. Second, they need to see AI as practical and approachable. Third, effective examples of AI assisted planning must become apparent in entrepreneurial ecosystems, universities, innovation hubs, SME centers and company development programs.

Analytical Approach

The paper uses a conceptual review and framework-development technique. The research does not rely on primary survey or interview data, so a conceptual review is appropriate. The paper synthesises the literature to build a scholarly case and offer a framework for AI-assisted business planning. Conceptual papers are important in cases where an emerging phenomenon demands theoretical clarification, construct development, and practical model building (Jaakkola,2020).

The analysis focuses on the literature on entrepreneurship, strategic management, digital transformation, AI capabilities, and innovation adoption. It juxtaposes these bodies of literature with the Nigerian and African entrepreneurial context where restrictions to planning are defined by restricted access to data, insufficient digital proficiency, high consultation cost, deficiencies in infrastructure and informal business practices. This contextual interpretation is crucial as theories created in rich economies may not adequately explain the practical reality of entrepreneurs in developing economies (World Bank, 2019, 2024). The next section of the article will consequently provide the development of the AI-Assisted Entrepreneurial Planning Framework. The framework will demonstrate the relationships between AI inputs, entrepreneurial capability, planning procedures, validation activities and implementation outcomes with business development and entrepreneurial success.

AI-Assisted Entrepreneurial Planning Framework

This study provides an AI-Assisted Entrepreneurial Planning Framework to illustrate how Artificial Intelligence might boost business planning and accelerate entrepreneurship development in Nigeria and Africa. The concept is based on the premise that AI is valuable to entrepreneurs when it is employed as a planning skill rather than a simple writing tool. This position is consistent with the Resource-Based View, which suggests that technology alone does not generate strategic value but rather through the combination with human skills, organisational procedures, knowledge and execution capacity (Barney, 1991; Mikalef & Gupta, 2021).

The framework has five interconnected stages: AI-enabled input, entrepreneurial interpretation, planning process, local validation, and company development conclusion. These steps illustrate that AI does not automatically lead to entrepreneurial success. Instead, AI contributes to the quality of planning when entrepreneurs utilise it to create insights, interpret findings using local knowledge, test assumptions in the market, and turn planning into meaningful company action (Brinckmann et al., 2010; Teece, 2018).

Stage	Main Focus	Practical Meaning for Entrepreneurs
Stage 1	AI-enabled input	Use AI to gather ideas, data, market information, customer insights, and planning templates.
Stage 2	Entrepreneurial interpretation	Apply human judgement, local experience, creativity, and industry knowledge.
Stage 3	Planning process	Develop market analysis, business model, financial plan, risk plan, and implementation roadmap.
Stage 4	Local validation	Test AI-assisted assumptions through customers, competitors, prices, suppliers, and experts
Stage 5	Business development outcome	Improve planning quality, funding readiness, execution, survival, and growth.

AI-enabled input is the initial step. At this stage, the entrepreneur uses AI to generate company ideas, formulate research questions, identify client segments, prepare interview guides, assess market trends, and compare various business models. This stage is helpful as many entrepreneurs lack access to structured market intelligence and expert planning support, particularly in emerging nations where business information systems are frequently underdeveloped (World Bank, 2019, 2024).

The second level is entrepreneurial interpretation. Artificial intelligence can make suggestions, but the entrepreneur has to apply them using their own experience, local knowledge, cultural understanding and practical business sense. This is especially essential in Nigeria because market behaviour can be influenced by informal networks, location disparities, purchasing power, trust, travel cost, power supply and seasonal demand. Artificial intelligence can be helpful, but the entrepreneur must assess what is practical in the actual company context (Teece, 2018; Rogers, 2003).

The third phase is the planning phase. Here, AI helps in developing the business plan itself. It can help with executive summaries, market analysis, customer profiling, competition mapping, SWAT analysis, price assumptions, financial predictions, risk identification and implementation timetables. However, the value of this stage is contingent upon the extent to which the entrepreneur examines the quality of the information entered into the system, as faulty assumptions will lead to inadequate planning outcomes (Brinckmann et al., 2010; Dwivedi et al., 2023).

The fourth step is to validate locally. This is where AI-assisted concepts must be validated against reality. Entrepreneurs need to examine prices from suppliers, talk to possible clients, watch what the competition is doing, research regulatory requirements, and verify estimates about costs. An AI-assisted business plan may look competent on paper but fail in practice without validation. This step is congruent with the entrepreneurial literature, which states that opportunity development involves learning, testing, adaptation and contact with the market (Delmar & Shane, 2003; Shane & Venkataraman, 2000).

The fifth stage is the outcome of business development. Artificial intelligence may enhance planning quality, decrease planning cost, shorten planning time, boost proposal writing, improve funding readiness and help implementation if it is well applied and locally validated. These results have implications for Nigerian and African entrepreneurs, as

many small enterprises fail not only because of lack of cash but also because of bad preparation, poor market understanding, and limited strategic discipline (Acs et al., 2018; Brinckmann et al., 2010).

Although studies have been conducted on AI adoption in marketing, operations and organisational management, little research has been done on how standard artificial intelligence might help in overcoming shortcomings in entrepreneurial planning, especially within African entrepreneurial ecosystems. The present literature provides little information regarding the processes by which standard artificial intelligence may assist in business planning, entrepreneurial readiness and venture execution.

Therefore, there is a substantial gap in understanding the function of AI as a strategic planning aid for entrepreneurs functioning in resource-constrained situations. This is a gap that needs to be addressed since an improvement in the quality of business planning can greatly contribute to entrepreneurial success, venture sustainability and broader economic development outcomes in Nigeria and Africa.

The main aim of this paper is to examine the implications of Artificial Intelligence in business planning, with particular emphasis on how AI can fast-track entrepreneurship development among Nigerian and African entrepreneurs. The specific objectives are to:

1. Explain Artificial Intelligence, business planning and entrepreneurial development principles.
2. Investigate the major problems of entrepreneurship business planning in Nigeria and Africa.
3. Explore the possibilities of AI to assist with market research, customer analysis, financial forecasts, risk assessment and strategic planning.
4. Development of the theoretical basis for understanding AI as an assistant for entrepreneurial planning.
5. Laying the foundation for an AI-assisted entrepreneurial planning framework for emerging economies.

This paper is guided by the following research questions:

1. What is the role of Artificial Intelligence in entrepreneurial business planning?
2. What business planning constraints affect entrepreneurs in Nigeria and Africa?
3. How can AI improve research, analysis, forecasting, and implementation readiness in business planning?
4. Which theories best explain the adoption and strategic usefulness of AI in entrepreneurship?
5. How can AI-assisted planning contribute to entrepreneurship development in developing economies?

Discussion

Firstly, the framework suggests that standard artificial intelligence may assist in bridging the knowledge gap that inhibits many entrepreneurs from developing robust business plans. In many Nigerian environments, business ideas are often generated through imitation rather than through careful study of potential. A person may get into a business just because someone else seems to be doing well in it, without looking at demand, price, competition, supply chains or customer behaviour. AI could potentially change this pattern by prompting entrepreneurs to ask more systematic questions and make evidence-based plans (Shane & Venkataraman, 2000; World Bank, 2019).

Artificial intelligence can also make company planning cheaper. In the traditional sense, a serious business plan may require the services of consultants, accountants, market researchers and proposal writers. These services are typically out of reach for students, youth entrepreneurs, informal traders and early-stage SME owners. AI does not replace the necessity of professional guidance in difficult circumstances, but it can allow entrepreneurs to build a first-level plan, to find missing facts, and to approach specialists with clearer enquiries (Brynjolfsson & McAfee, 2014; Enholm et al., 2022).

Another key implication is speed. Standard artificial intelligence can accelerate an entrepreneur's journey from idea to structured strategy by producing initial drafts, outlining plans, defining consumer profiles, devising sales strategies, and creating execution checklists. However, speed should not be confused with veracity. A company plan thrown together fast is not necessarily a good business strategy. The entrepreneur nevertheless needs to slow down enough to validate assumptions, fix mistakes, and modify the plan to the real business environment (Dwivedi et al., 2023; Brinckmann et al., 2010).

Artificial intelligence can help entrepreneurs ask better questions and thereby improve market research. Many entrepreneurs fail not because they are lazy, but because they don't know what they need to know before they start. They can be helped by AI to identify pertinent queries such as: Who is the customer? What problem is being addressed? What is the buyer willing to pay? Who is the opponent? What makes the product stand out? What are the hazards to the business? Such usage of AI is valuable as a thinking companion in the early stages of entrepreneurial planning (Delmar & Shane, 2003; Davis, 1989).

Artificial intelligence may also help entrepreneurs with financial planning, preparing cost estimates, revenue predictions, break-even calculations, cash flow templates, and price assumptions. This is particularly essential because many small enterprises in Nigeria have inadequate financial records and bad costing processes. But AI-generated financial estimates should be viewed as assumptions, not truths. Entrepreneurs should check rent, labour cost, raw materials, transport, electricity, taxes, packaging, and other actual market costs before signing up to any financial plan (Mikalef & Gupta, 2021; Teece, 2018).

AI also helps in risk assessment. Standard artificial intelligence can be leveraged by entrepreneurs to identify operational risks, market risks, financial risks, regulatory risks, technological risks, and environmental hazards. For example, a food business in Port Harcourt may be exposed to threats such as electricity supply, food deterioration, delay of delivery, pricing fluctuations, hygiene requirements and consumer complaints. Artificial intelligence can help list these hazards and offer mitigation measures, but it is up to the entrepreneur to choose which risks are most important in the local environment (Rogers, 2003; World Bank, 2024).

The methodology also illustrates that conventional artificial intelligence can boost funding readiness. Many entrepreneurs miss out on funding opportunities because they are not able to effectively explain their concepts. Investors, banks, grant bodies and development agencies typically seek evidence of market demand, customer need, revenue model, cost structure, repayment ability and implementation strategy. Artificial intelligence can help businesses write better proposals, executive summaries, pitch decks and financial stories. But it needs to be used ethically. Additionally, entrepreneurs should not utilise AI to fabricate data, overstate capabilities, or deceive financiers (Dwivedi et al., 2023; OECD, 2024).

In entrepreneurship education, the framework argues that universities and training centers should stop teaching company planning as a mere manual writing exercise. Students need to learn how to use AI responsibly for research, testing their ideas, customer analysis, financial planning and tracking of implementation. This is vital since the future entrepreneur not only will need commercial knowledge but also the competence of digital planning. The Technology Acceptance Model supports this position as students and entrepreneurs are more inclined to accept AI when they perceive its practical value and ease of use (Davis, 1989; Mikalef & Gupta, 2021).

Within the Nigerian university context, the integration of AI-powered business planning into the entrepreneurship courses can be in the form of pragmatic assignments. For example, students might be asked to utilise AI to develop a business model, but also to interview real consumers, confirm market prices, tour competitors and modify the AI-assisted strategy depending on field evidence. This method doesn't rely on the laziness of AI, but rather encourages learning ethical digital entrepreneurship (Brinckmann et al., 2010; Rogers, 2003).

The methodology also has ramifications for development agencies working with SMEs. Supporting agencies should not only provide finance or training. They should also assist entrepreneurs in developing planning skills. AI assisted planning clinics can be set up at innovation hubs, cooperative societies, youth enterprise centers, women entrepreneurship programs and university entrepreneurship centers. Such support may help entrepreneurs to turn informal ideas into more explicit business models and implementable strategies (World Bank, 2019, 2024).

But AI-assisted planning has its limits. There is a risk that AI will generate faulty information, outmoded assumptions or generic recommendations that do not represent Nigerian circumstances. It can also replicate bias, misinterpret local settings, or instill false confidence in ill-prepared entrepreneurs. The framework accordingly requires that local validation be performed. Without validation, AI may improve the look of business plans but not the success of the business (Dwivedi et al., 2023; Enholm et al., 2022).

Another limitation is the digital divide. Some entrepreneurs do not have equitable access to equipment, internet connectivity, knowledge of technology, or electricity. Limited AI support for educated and urban businesses could deepen the digital divide between digitally proficient entrepreneurs and those in informal or rural industries. If AI is to truly accelerate entrepreneurship in Africa, digital inclusion needs to be part of entrepreneurship development policy (World Bank, 2024; OECD, 2024).

The core claim, then, is that AI is best understood as an acceleration of planning—not a magic bullet. It can lower the time, cost, and technical difficulties of designing a firm, but cannot replace market discipline, client engagement, financial honesty, and entrepreneurial responsibility. AI is a strategic help in the planning process, but the entrepreneur is still the final decision maker (Barney, 1991; Teece, 2018).

Practical Implications

The first practical implication of this study is that entrepreneurs should start thinking of AI as a planning support system rather than a shortcut to produce business documents. Many companies currently utilise online tools for communication, advertising and sales, but AI has a deeper planning function because it can help with research, analysis, forecasting, scenario thinking and strategic clarification. The quality of planning surpasses ordinary document preparation as businesses employ AI to ask better questions and evaluate business assumptions (Brinckmann et al., 2010; Mikalef & Gupta, 2021).

For small and medium firms in Nigeria and Africa, AI assisted planning can lower the early cost of developing the business. A small business owner who can't afford a consultant right away might utilise AI to generate a first draft of a business model, customer profile, marketing plan, risk checklist and cash flow template. But this first draft is not to be taken as final. This should be validated using market visits, customer interviews, supplier quotations, monitoring of competition and expert evaluation (Delmar & Shane, 2003; Dwivedi et al., 2023).

This means that for entrepreneurship educators, business planning pedagogy needs to be modified. Students need to learn the standard components of a business plan but also how to appropriately utilise AI to do research, analyse customers, generate financial assumptions, assess risk and develop implementation roadmaps. This is consistent with the Technology Acceptance Model which states that technology adoption is higher when the users view the technology to be useful and easy to use for practical tasks (Davis, 1989).

Policy Implications

AI-enabled business planning should be integrated into entrepreneurship development programs, SME support schemes, youth empowerment initiatives and university entrepreneurship centers at the policy level. While government agencies and development partners tend to focus on finance, training and grants, many entrepreneurs need formal planning support before funding can yield real benefits. AI-assisted planning clinics can help entrepreneurs evolve from imprecise concepts to tested, practical, and implementable company models (World Bank, 2019, 2024). Policy actors should also tackle the digital divide that may prevent AI adoption among entrepreneurs. To access AI, one needs internet connectivity, electronic literacy, equipment, electricity and awareness. If these prerequisites are not fulfilled, AI will mostly benefit urban, educated and digitally exposed entrepreneurs and would exclude informal and rural enterprises. Instead, it may exacerbate existing inequalities in entrepreneurship, rather than alleviate them (OECD, 2024; World Bank, 2024).

Universities, polytechnics, institutes of education and vocational centers also have a role to play in policy. AI literacy should be a part of entrepreneurship education — not to replace fieldwork, but to supplement real-world business development. Students must be required to mix AI assisted designs with real market validation. This will promote digital entrepreneurship competence and narrow the gap between business strategies in the classroom and the formation of enterprises (Rogers, 2003; Shane & Venkataraman, 2000).

Poor data quality is a fundamental barrier in AI-assisted business planning. Artificial intelligence systems are very much reliant on information provided by the user. Weak output will also be the case when the entrepreneur makes false estimates on price, market size, consumer demand, production cost or profit margin. This allows AI to, for

example, present a strategy that looks professional and hide faulty assumptions behind attractive language (Dwivedi et al., 2023; Enholm et al., 2022).

Overdependence is another concern. Some entrepreneurs may start thinking about AI as a substitute for thinking, fieldwork and expert opinion. This is dangerous since entrepreneurship is not simply about writing plans but about dealing with customers, negotiating, bouncing back, adapting and executing. Artificial intelligence can support the entrepreneur, but it cannot replace the discipline of testing ideas in the market (Brinckmann et al., 2010; Teece, 2018).

There are additional ethical and privacy issues. An entrepreneur might put secret business information, financial data, client details or proprietary ideas into an AI platform without knowing how that information will be maintained or used. Artificial intelligence can also be exploited to overstate business capability, falsify data and create false funding applications. Therefore, responsible use of AI involves honesty, verification, data protection understanding and ethical corporate conduct (Dwivedi et al., 2023; OECD, 2024).

Suggestions

Entrepreneurs should employ AI first as an assistant to their business thinking, not as a replacement for their entrepreneurial judgement. Every AI-generated business strategy needs to be reviewed, revised, localised and tested before implementing. This is vital since the success of business depends not only on the quality of planning but also on market fit, customer acceptability, operational competence and execution discipline (Delmar & Shane, 2003; Teece, 2018).

Second, entrepreneurship educators should reframe business planning assignments to include appropriate AI use. Students might be requested to utilise AI to build a business model, but should be asked to do customer interviews, get real price information, assess competitors and change the strategy on the basis of field evidence. This will allow pupils to see AI as a tool for learning, not for copying (Davis, 1989; Rogers, 2003).

Thirdly, government agencies, SME centers and development partners should build AI-assisted business planning clinics. These clinics can assist youth entrepreneurs, women entrepreneurs, informal traders, student entrepreneurs and micro-enterprise owners with basic AI-supported templates for market research, costing, proposal writing and implementation planning. This would improve access to company development support for entrepreneurs who cannot afford private consultation services (World Bank, 2019, 2024).

Fourth, practical and sector-specific AI training for entrepreneurs. Food, fashion, agriculture, education, transit, internet services and retail entrepreneurs do not suffer the same planning challenges. Therefore, training should employ known examples from the local economy so that entrepreneurs might grasp how AI applies to their real company environment (Acs et al., 2018; Shane & Venkataraman, 2000).

Fifth, entrepreneurs should protect critical information while utilising AI tools. They should not feed private customer data, financial records, corporate secrets and unprotected intellectual property into standard artificial intelligence systems without comprehending privacy ramifications. Ethical awareness should be part of AI entrepreneurship training, particularly with an increasing number of small enterprises leveraging AI for planning and decision-making (Dwivedi et al., 2023; OECD, 2024).

Conclusion

This paper examined the implications of Artificial Intelligence in business planning and made the case that AI is able to fast-track entrepreneurship development in Nigeria and Africa when utilised as a strategic planning helper. The main premise is that artificial intelligence may assist in decreasing the period, expense and complexity of business planning through aiding in study, customer analysis, financial forecasting, risk evaluation, proposal creation and implementation planning. This is particularly the case in poor economies where entrepreneurs generally lack access to consultants, reliable data, and institutional planning help (Brinckmann et al., 2010; World Bank, 2024). But AI is not entrepreneurship's replacement. It cannot substitute local expertise, consumer connection, ethical judgement, financial discipline, market validation and practical execution. The usefulness of AI depends on how entrepreneurs mix technology with human capacity, local knowledge and prudent decision-making. Artificial intelligence can

accelerate the planning, but only dedicated entrepreneurs can make the strategy work (Barney, 1991; Teece, 2018). Therefore, the article suggests that AI-assisted business planning should be pushed as part of entrepreneurship education, SME growth and digital entrepreneurship policy in Nigeria and Africa. If properly embraced, artificial intelligence can help entrepreneurs shift away from guessing, imitation, and flimsy documentation to evidence-based planning and firmer implementation. Its major value is not in writing company plans but in helping entrepreneurs think, test, plan, and execute more intelligently (Mikalef & Gupta, 2021; Rogers, 2003).

References

- Acs, Z. J., Szerb, L., Lafuente, E., & Markus, G. (2018). *Global entrepreneurship and development index 2018*. Springer.
- Akinola, E. T., Laosebikan, J. O., Akinbode, J. O., Afolabi, F. O., & Olamiti, A. O. (2023). Practicable vocational and entrepreneurial skills acquisition for job creation and poverty alleviation among Nigerian youths. *International Journal of Professional Business Review*, 8(11), Article e03290. <https://doi.org/10.26668/businessreview/2023.v8i11.3290>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barringer, B. R., & Ireland, R. D. (2019). *Entrepreneurship: Successfully launching new ventures* (6th ed.). Pearson.
- Brinckmann, J., Grichnik, D., & Kapsa, D. (2010). Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning–performance relationship in small firms. *Journal of Business Venturing*, 25(1), 24–40. <https://doi.org/10.1016/j.jbusvent.2008.10.007>
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Delmar, F., & Shane, S. (2003). Does business planning facilitate the development of new ventures? *Strategic Management Journal*, 24(12), 1165–1185. <https://doi.org/10.1002/smj.349>
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., & Wright, R. (2023). So, what if ChatGPT wrote it? Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI. *International Journal of Information Management*, 71, Article 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Enholm, I. M., Papagiannidis, E., Mikalef, P., & Krogstie, J. (2022). Artificial intelligence and business value literature review. *Information Systems Frontiers*, 24, 1709–1734. <https://doi.org/10.1007/s10796-021-10186-w>
- Giuggioli, G., & Pellegrini, M. M. (2023). Artificial intelligence as an enabler for entrepreneurs: A systematic literature review and an agenda for future research. *International Journal of Entrepreneurial Behavior & Research*, 29(4), 816–837. <https://doi.org/10.1108/IJEBR-05-2021-0426>
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, 10(1–2), 18–26. <https://doi.org/10.1007/s13162-020-00161-0>
- Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information & Management*, 58(3), Article 103434. <https://doi.org/10.1016/j.im.2021.103434>
- National Bureau of Statistics. (2024). *Nigeria labour force survey Q2 2024*. https://www.nigerianstat.gov.ng/pdfuploads/NLFS_Q2_2024.pdf
- Organisation for Economic Co-operation and Development. (2024). *Digitalisation for SMEs and entrepreneurship*. OECD Publishing.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226. <https://doi.org/10.5465/amr.2000.2791611>
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49. <https://doi.org/10.1016/j.lrp.2017.06.007>
- World Bank. (2019). *Nigeria digital economy diagnostic report*. World Bank Group.
- World Bank. (2024). *Digital progress and trends report 2023*. World Bank Group.