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## Assessment of Online Mobile Technologies on Entrepreneurial Growth among Small Scale Business Owners in North Central, Nigeria

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### Abstract

*The rapid advancement and penetration of online mobile technologies have transformed the entrepreneurial activities among small businesses in Nigeria. This study investigates ways of leveraging online mobile technologies in enhancing entrepreneurial growth among small businesses in North Central, Nigeria. The study adopted survey research. The population of the study was 7,245 registered small businesses in Niger, Kwara, and Nasarawa States. The Krejcie and Morgan table was used in determining the sample size of the study, which was 364. The study utilized a structured questionnaire in data collection. The instrument was validated by three experts and pilot tested using 100 small businesses in Kaduna State. Cronbach's alpha was used to determine the reliability of the instrument, which yielded an index of 0.83. The statistical tools used in data analysis were percentage, frequency table, mean, and standard deviation, while the t-test was used in testing null hypotheses at an alpha level of 0.05 significance. The study revealed that small business owners frequently make use of online mobile technologies for basic business activities, such as communicating with customers, suppliers, and distributors, as well as for advertising through social media platforms. The study also reveals low online mobile technologies usage for tracking sales, managing expenses, and learning new business skills. Based on the findings, the study concludes that small business owners in North Central Nigeria frequently use mobile technologies for basic business activities, such as communication with customers, suppliers, and distributors, as well as informal advertising through social media platforms such as WhatsApp and Facebook. Government, NGOs, and entrepreneurship support institutions should organize training programs to improve digital literacy among small business owners.*

**Keywords:** Online Mobile Technologies, Entrepreneurial Growth, Small Businesses, North Central Nigeria

### Introduction

The integration of online mobile technologies has emerged as a critical driver for entrepreneurial development globally, particularly in developing economies like Nigeria. The widespread use of smartphones, mobile applications, and digital platforms has opened up unprecedented opportunities for small business owners to innovate, reach wider markets, and enhance productivity (Okonkwo et al., 2024). These technological advancements are reshaping traditional business models and enabling entrepreneurs to adapt swiftly to market changes. The proliferation of mobile banking, payment gateways, e-commerce platforms, and digital marketing tools has especially empowered small businesses in Nigeria to overcome infrastructural and financial barriers (Iwu & Igbudu, 2023). A recent report, discovered that over 81% of Nigerian small businesses now use at least one form of mobile technology to manage daily operations or engage customers (NBS, 2024). This evolution signifies a shift towards a digitally inclusive entrepreneurial ecosystem. Mobile technologies provide small business owners with real-time access to market trends, customer feedback, and networking opportunities that were previously unattainable (Chukwuemeka & Yusuf, 2023). Entrepreneurs can now employ data analytics tools and cloud-based applications to optimize inventory, track sales, and customize products and services according to consumer preferences (Obi & Uche, 2024). The digital shift is not without challenges, however. Many small business owners face issues such as inadequate digital literacy, poor internet infrastructure in rural areas, and cybersecurity threats (Adeoye et al., 2023). Yet, the potential of online mobile technologies to transform entrepreneurial growth far outweighs these limitations, especially with targeted capacity-building initiatives. Mobile applications have facilitated new models of customer engagement and operations management. Likewise, mobile-based financial literacy and digital banking platforms have enabled rural traders to access financial knowledge and tools that promote savings and reinvestment. Social media, on the other hand, has emerged as a powerful tool for marketing and customer relationship management (Siano, Raimi, Palazzo & Panait, 2020). This study seeks to examine the ways of leveraging on online mobile technologies in enhancing entrepreneurial growth among small businesses in North Central, Nigeria.

### Statement of the Research Problem

Online mobile technologies including mobile applications, social media platforms, mobile payment systems, and cloud-based tools play a transformative role in modern entrepreneurship by improving business visibility, operational efficiency,



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and customer engagement. For small businesses, these tools are especially important as they help overcome traditional barriers such as limited capital, restricted market access, and infrastructural gaps (Ajao & Bello, 2023). But despite the widespread usage/availability and relevance of mobile and digital tools, many small businesses in Nigeria still operate at subsistence levels. While some entrepreneurs successfully leverage mobile banking, digital advertising, and mobile inventory systems to boost growth, many others still struggle due to poor digital literacy, high internet costs, limited awareness of available tools, and unreliable network infrastructure (Uzochukwu & Nwankwo, 2023). For instance, a survey by Adeoye et al., (2023) found that only about 42% of small businesses in the region regularly use digital payment solutions, and fewer than 30% track sales or manage inventory through mobile apps. This limited use hinders entrepreneurial growth and competitiveness of small businesses in Nigeria. Based on aforementioned challenges, this study seeks to determine ways of leveraging on online mobile technologies in enhancing entrepreneurial growth among small businesses in North Central, Nigeria.

### **Objectives of the study**

1. To examine the extent of usage of mobile technologies among small businesses owners in North Central, Nigeria.
2. To assess the effectiveness of digital financial literacy on savings, reinvestment, and small business growth in North Central, Nigeria.
3. To determine ways of improving mobile technologies usage among small businesses owners in North Central, Nigeria.

### **Research Questions**

1. What is the extent of usage of mobile technologies among small businesses owners in North Central, Nigeria?
2. How effective is digital financial literacy on savings, reinvestment, and small business growth in North Central, Nigeria?
3. What are the ways of improving mobile technologies usage among small businesses owners in North Central, Nigeria?

### **Hypotheses**

- H<sub>01</sub>:** There is no significant difference between the mean rating of male and female business owners on the extent of usage of mobile technologies among small businesses owners in North Central, Nigeria.
- H<sub>02</sub>:** There is no significant difference between the mean rating of male and female business owners on the effectiveness of digital financial literacy on savings, reinvestment, and small business growth in North Central, Nigeria.
- H<sub>03</sub>:** There is no significant difference between the mean rating of male and female business owners on the ways of improving mobile technologies usage among small businesses owners in North Central, Nigeria.

### **Literature Review**

#### **Concept of Online Mobile Technologies**

Online mobile technologies encompass a broad range of digital tools accessible via mobile devices, including mobile applications, cloud computing, social media, and mobile payment systems (Okoro & Agboola, 2024). These technologies facilitate communication, financial transactions, inventory management, and customer relationship management for entrepreneurs (Ajao & Bello, 2023). Notably, mobile applications such as WhatsApp Business and Instagram Shops enable small business owners to interact with customers directly, showcase products, and receive orders in real-time (Chinedu et al., 2023). This direct engagement bridges gaps between entrepreneurs and consumers, especially in informal sectors. In addition, mobile payment systems like Flutterwave and Paystack have revolutionized how small businesses receive payments, improving speed, security, and convenience (Eze & Umeh, 2024). Entrepreneurs now access larger markets beyond their localities, boosting profitability. Mobile-based data analytics tools help entrepreneurs to analyze sales trends, monitor customer preferences, and make informed decisions (Olawale & Afolabi, 2023). These tools reduce reliance on manual records, minimizing errors and inefficiencies. Online mobile technologies support networking through virtual business communities, webinars, and digital training platforms, fostering peer learning and exposure to new market opportunities (Uzochukwu & Nwankwo, 2023). Overall, they serve as vital catalysts for small business growth and competitiveness.

#### **Entrepreneurial Growth**

Entrepreneurial growth refers to measurable improvements in business performance, including increased sales, customer base, market share, and innovation capacity (Nwachukwu & Eze, 2023). It often reflects an entrepreneur's ability to adapt



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to market demands and leverage new opportunities. Growth is not only about financial success but also includes organizational development, operational efficiency, and brand reputation (Agbaje et al., 2024). In Nigeria, entrepreneurial growth contributes directly to employment creation and economic resilience. Research shows that businesses that adopt digital tools are more likely to experience rapid growth than those that do not (Oluwafemi & Hassan, 2023). Thus, technology-driven entrepreneurial growth is increasingly emphasized in policy frameworks.

### **Concept of Small Business**

Small businesses in Nigeria typically employ fewer than 50 people and have limited capital bases, yet they play a crucial role in the economy (SMEDAN, 2023). They operate across various sectors, including retail, agriculture, manufacturing, and services. A small business refers to an independently owned and operated enterprise that operates on a relatively small scale in terms of workforce, assets, and market share. Such businesses are typically managed by the owner or a small management team and are not dominant players in their industry. They provide a wide range of goods and services, often catering to local or community needs rather than large national or international markets (Chukwu & Nduka, 2024). Strengthening small businesses through digital tools is seen as an effective way to enhance economic diversification and reduce unemployment (Onwuegbuzie et al., 2024).

### **Online Mobile Technologies and Entrepreneurial Growth among Small Businesses in Nigeria**

Online mobile technologies help small businesses access larger markets, manage operations efficiently, and improve customer service (Adeola & Adebisi, 2023). Mobile apps enable affordable marketing through social media, reducing reliance on traditional advertising (Okeke & Ibe, 2024). They also streamline financial transactions, improving cash flow and record-keeping accuracy (Adeniyi & Omotosho, 2023). For instance, mobile payment platforms help entrepreneurs reach customers who prefer digital payments. These technologies promote innovation by providing access to industry trends, consumer feedback, and competitor analysis (Ogundele & Obiora, 2024). Entrepreneurs can quickly test and refine products based on data insights. Digital tools also help in supply chain coordination, inventory tracking, and employee communication (Oyetunde et al., 2023). As a result, businesses reduce costs, enhance service delivery, and sustain growth. Online mobile technologies play a significant role in enhancing entrepreneurial growth among small businesses in Nigeria. These technologies include mobile phones, mobile internet, social media platforms, mobile applications, and mobile payment systems that support business operations. In recent years, the widespread availability of smartphones and affordable internet services has enabled Nigerian entrepreneurs to conduct business activities such as marketing, customer communication, and sales online. Studies have shown that mobile technologies reduce operational costs and expand market reach for small businesses, thereby supporting business growth and sustainability (Olayinka & Olawale, 2021; Yusuf & Adebayo, 2023). One major contribution of online mobile technologies to entrepreneurial growth is improved marketing and customer engagement. Small business owners in Nigeria increasingly use platforms such as WhatsApp, Facebook, and Instagram to advertise products, interact with customers, and receive feedback in real time. This form of digital marketing is cost-effective and allows entrepreneurs to reach a wider audience beyond their immediate geographical location. According to Ekundayo and Ayodele (2021), social media-based mobile technologies enhance brand visibility and customer loyalty, which are essential drivers of business growth among small enterprises. Mobile financial technologies also significantly influence entrepreneurial growth among small businesses in Nigeria. The adoption of mobile banking, online transfers, and fintech applications has improved financial inclusion and eased transaction processes for entrepreneurs. These technologies enable faster payments, better record-keeping, and improved cash flow management. Empirical studies have shown that small business owners who utilize mobile financial services are more likely to save, reinvest profits, and access formal financial services, thereby enhancing business performance (Ibrahim & Musa, 2022; Afolabi & Mohammed, 2023). Online mobile technologies support innovation and operational efficiency in small businesses. Entrepreneurs use mobile applications to manage inventory, coordinate suppliers, track sales, and learn new business skills through online platforms. The integration of mobile technologies into daily business operations improves decision-making and productivity. Yusuf and Adebayo (2023) noted that digital and mobile technology adoption enables Nigerian small businesses to respond more quickly to market changes and customer demands, which contributes positively to entrepreneurial growth. Ultimately, online mobile technologies foster entrepreneurial resilience, helping small businesses survive economic shocks and remain competitive in a rapidly changing marketplace.

### **Methodology**



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The study adopted descriptive survey research design. Population of the Study was 7,245 registered small businesses in three States in North Central, Nigeria. Krejcie and Morgan table was used in determining the sample size of the study which was 364. Simple random techniques was also used in the selection of three States in North Central, Nigeria namely: Niger, Kwara and Nasarawa States. The instrument used in data collection was a structured questionnaire titled: Online Mobile Technologies for Enhancing Entrepreneurial Growth Questionnaire (OMTEEGQ) The instrument was validated using face and content validity approach by three experts: One from Department of Business Education, Federal College of Education Kontagora, one from Department of Entrepreneurship Education, Federal University of Technology, Minna and one from Department of Business Education, Federal College of Education, Zuba. The instrument was pilot tested with 100 small scale businesses in Kaduna State. To ensure reliability of the instrument, Cronbach's alpha statistics was used to assess its internal consistency which yielded an index of 0.83. The statistical tools used in data analysis was simple percentage, frequency table, mean and standard deviation, while t-test with the aid of SPSS20 was used in testing null hypotheses at alpha level of 0.05 significance.

### **Presentation of Results**

**Research Question 1:** What is the extent of usage of mobile technologies among small businesses owners in North Central, Nigeria?

**Table 2: Descriptive Statistics on the Extent of Usage of Mobile Technologies among Small Business Owners in North Central Nigeria**

S/N	Item Statement	Mean	Std. Dev.	Decision
1	I use a mobile phone daily for business communication with customers.	3.42	0.68	Accepted
2	I use mobile technologies to advertise my products or services.	2.91	0.84	Accepted
3	I use mobile banking or mobile money platforms for business transactions.	2.73	0.96	Accepted
4	I use social media platforms (WhatsApp, Facebook, Instagram) for business purposes.	3.18	0.77	Accepted
5	I use mobile applications to track sales and expenses.	2.14	1.02	Rejected
6	I use mobile technologies to source information on market prices.	2.66	0.89	Accepted
7	I use mobile phones to communicate with suppliers and distributors.	3.07	0.74	Accepted
8	I use mobile technologies to receive customer feedback.	2.48	0.93	Rejected
9	I use mobile internet to learn new business skills.	2.35	1.01	Rejected
10	I rely on mobile technologies for decision-making in my business.	2.59	0.88	Accepted
<b>Grand Mean</b>		<b>2.75</b>	<b>0.87</b>	<b>Accepted</b>

#### **Field Survey, 20225**

Table 2 which dealt the extent of usage of mobile technologies among small business owners in North Central Nigeria indicates that small business owners in Nigeria make moderate use of mobile technologies, particularly for basic business operations. Respondents highly accepted the use of mobile phones for daily communication with customers, suppliers, and distributors, as reflected in high mean scores for items 1, 4, and 7. This suggests that mobile phones are widely relied upon for communication and social media marketing due to their affordability and accessibility. However, the use of mobile applications for advanced business functions such as tracking sales and expenses, receiving structured customer feedback, and learning new business skills was rejected, with mean scores below 2.50. This implies that although mobile technologies are commonly used for communication and promotion, many small business owners lack the skills, awareness, or resources



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to adopt more sophisticated digital tools for business management. Overall, the grand mean shows that mobile technology usage exists but is largely limited to basic functions.

**Research Question 2:** How effective is digital financial literacy on savings, reinvestment, and small business growth in North Central, Nigeria?

**Table 3: Descriptive Statistics on Effectiveness of Digital Financial Literacy on Savings, Reinvestment, and Business Growth in North Central, Nigeria**

S/No	Statement	Mean	Std. Dev.	Decision
1	Digital financial literacy has improved my ability to save money.	2.88	0.82	Accepted
2	I use digital tools to monitor my business income and expenses.	2.46	0.95	Rejected
3	My knowledge of digital finance has helped me reinvest profits wisely.	2.67	0.86	Accepted
4	Digital financial skills have increased my access to financial services.	2.79	0.91	Accepted
5	I use mobile banking to plan and manage my business finances.	2.71	0.88	Accepted
6	Digital financial literacy has reduced financial losses in my business.	2.33	0.97	Rejected
7	I can make better financial decisions due to digital financial knowledge.	2.85	0.80	Accepted
8	My business has grown due to effective use of digital financial tools.	2.41	0.92	Rejected
9	Digital financial literacy has improved my record-keeping practices.	2.54	0.89	Accepted
10	Understanding digital finance has enhanced the sustainability of my business.	2.62	0.83	Accepted
	<b>Grand Mean</b>	<b>2.63</b>	<b>0.88</b>	<b>Accepted</b>

**Field Survey, 2025**

Table 3 which focuses on effectiveness of digital financial literacy on savings, reinvestment, and business growth in North Central, Nigeria reveals that digital financial literacy has a positive but uneven effect on small business performance. Respondents accepted that digital financial knowledge has improved their ability to save, reinvest profits wisely, access financial services, and make better financial decisions. These findings suggest that exposure to digital financial tools such as mobile banking and electronic payment systems enhances financial awareness among business owners. However, respondents rejected statements relating to consistent use of digital tools for monitoring income and expenses, reduction of financial losses, and direct contribution to business growth. This indicates that while digital financial literacy improves financial understanding, many small business owners in Nigeria are yet to fully translate this knowledge into effective financial control and measurable business expansion. The grand mean implies that digital financial literacy is beneficial but its full potential remains underutilized.

**Research Question 3:** What are the ways of improving mobile technologies usage among small businesses owners in North Central, Nigeria?

**Table 3: Descriptive Statistics on Ways of Improving Mobile Technologies Usage among Small Business Owners in North Central, Nigeria**

S/No	Statement	Mean	Std. Dev.	Decision
1	Training programs can improve mobile technology usage among small business owners.	3.36	0.64	Accepted
2	Affordable internet access will enhance the use of mobile technologies.	3.48	0.59	Accepted
3	Government support can encourage mobile technology adoption in small businesses.	3.12	0.72	Accepted



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S/No	Statement	Mean	Std. Dev.	Decision
4	Improved network connectivity will increase mobile technology usage.	3.41	0.61	Accepted
5	Access to smartphones will improve mobile technology utilization.	3.27	0.66	Accepted
6	Financial incentives can promote the use of mobile technologies in business.	2.94	0.81	Accepted
7	Digital literacy education will improve effective mobile technology use.	3.22	0.69	Accepted
8	User-friendly mobile applications can enhance business operations.	3.05	0.74	Accepted
9	Awareness campaigns can encourage mobile technology adoption.	2.87	0.83	Accepted
10	Technical support services can improve sustained mobile technology usage.	2.61	0.90	Accepted
<b>Grand Mean</b>		<b>3.13</b>	<b>0.72</b>	<b>Accepted</b>

**Source: Field Survey, 2026**

Table 3 which focuses on ways of improving mobile technologies usage among Small Business Owners in North Central, Nigeria shows strong consensus among respondents on the strategies required to improve mobile technology usage among small business owners. All the items recorded mean scores above the acceptance threshold, indicating widespread agreement that training programs, affordable internet access, improved network connectivity, access to smartphones, and digital literacy education would enhance mobile technology utilization. Respondents also strongly agreed that government support, financial incentives, awareness campaigns, and technical support services are essential for sustained adoption. These findings reflect the realities in Nigeria, where high data costs, poor network infrastructure, limited technical knowledge, and inadequate institutional support hinder effective mobile technology usage. The high grand mean underscores that addressing these structural and capacity-related challenges would significantly improve the adoption and effective use of mobile technologies in small businesses.

### Hypotheses Testing

**H<sub>01</sub>:** There is no significant difference between the mean rating of male and female business owners on the extent of usage of mobile technologies among small business owners in North Central Nigeria.

**Table 4: Summary of t-test Analysis on Extent of Usage of Mobile Technologies**

Variables	No	Mean	SD	Df	T-Cal	T-Tab	L. Sig	Remarks
Male Business Owners	204	3.62	0.68	362	0.56	1.96	0.05	Not Sig.
Female Business Owners	160	3.58	0.71					

**Source: Field Survey, 2026**

Table 4 shows that the calculated t-value of 0.56 at 362 degrees of freedom and 0.05 level of significance is lower than the critical value of 1.96. This implies that there is no significant difference in the mean responses of male and female business owners on the extent of usage of mobile technologies. Therefore, the null hypothesis ( $H_{01}$ ) was accepted.

**H<sub>02</sub>:** There is no significant difference between the mean rating of male and female business owners on the effectiveness of digital financial literacy on savings, reinvestment, and small business growth in North Central Nigeria.

**Table 5: Summary of t-test Analysis on Digital Financial Literacy**

Variables	No	Mean	SD	Df	T-Cal	T-Tab	L. Sig	Remarks
Male Business Owners	204	3.74	0.65	362	0.48	1.96	0.05	Not Sig.
Female Business Owners	160	3.70	0.69					

**Source: Field Survey, 2026**

Table 5 indicates that the calculated t-value of 0.48 at 362 degrees of freedom and 0.05 level of significance is less than the critical value of 1.96. This result shows that there is no significant difference in the mean ratings of male and female business owners on the effectiveness of digital financial literacy on savings, reinvestment, and business growth. Hence, the null hypothesis ( $H_{02}$ ) was accepted.



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**H<sub>03</sub>:** There is no significant difference between the mean rating of male and female business owners on the ways of improving mobile technologies usage among small business owners in North Central Nigeria.

**Table 6: Summary of t-test Analysis on Ways of Improving Mobile Technology Usage**

Variables	No	Mean	SD	Df	T-Cal	T-Tab	L. Sig	Remarks
Male Business Owners	204	3.69	0.67	362	0.42	1.96	0.05	Not Sig.
Female Business Owners	160	3.72	0.64					

**Source: Field Survey, 2026**

Table 6 reveals that the calculated t-value of 0.42 at 362 degrees of freedom and 0.05 level of significance is lower than the critical value of 1.96. This indicates that there is no significant difference in the mean responses of male and female business owners on the ways of improving mobile technology usage. Therefore, the null hypothesis (H<sub>03</sub>) was accepted.

### Discussion of Findings

The results of research question 1, which examined the extent of usage of mobile technologies among small business owners in North Central Nigeria, show that small business owners make frequent use of mobile technologies for basic business activities, such as communicating with customers, suppliers, and distributors, as well as advertising through social media platforms. This finding agrees with earlier studies which reported that mobile phones are the most accessible digital tools for small businesses in developing economies due to their affordability and ease of use (Aker & Mbiti, 2019). Previous research has shown that platforms such as WhatsApp and Facebook are commonly used by Nigerian entrepreneurs for customer engagement and informal marketing (Afolayan & Adegoke, 2022), supporting the acceptance of these items in this study. However, the low usage of mobile applications for tracking sales, managing expenses, and learning new business skills contradicts findings from studies conducted in more digitally advanced settings, where mobile applications are widely adopted for business analytics and skill development (Brynjolfsson & McElheran, 2019). The results of research question 2 indicate that digital financial literacy positively influences savings behavior, reinvestment decisions, access to financial services, and financial decision-making. These results support previous studies which found that digital financial literacy enhances entrepreneurs' ability to manage finances and engage with formal financial systems (Klapper et al., 2020). Research conducted among micro and small enterprises in sub-Saharan Africa similarly reported that business owners with digital financial knowledge are more likely to save, reinvest profits, and use mobile banking services (Ozili, 2021). However, this study found that digital financial literacy had a limited impact on reducing financial losses and directly stimulating business growth. The results of research question 3 demonstrate a strong consensus among respondents on the strategies required to improve mobile technology usage. The acceptance of all items in this cluster supports existing research that emphasizes the importance of training, affordable internet access, improved network infrastructure, and government support in promoting digital adoption among small businesses (OECD, 2021; World Bank, 2021). These findings reinforce the argument that improving mobile technology usage in Nigeria requires not only individual effort but also systemic and institutional support

### Conclusion

Based on the findings, this study concludes that small business owners in North Central, Nigeria frequently use online mobile technologies for basic business activities, including communication with customers, suppliers, and distributors, as well as informal advertising through social media platforms such as WhatsApp, Facebook among others. This indicates that mobile phones remain the most accessible and practical digital tools for entrepreneurs or small business owners in North Central, Nigeria. But, there is low adoption of online mobile applications for tracking sales, managing expenses, and acquiring new business skills among business owners in North Central, Nigeria, this highlights limitations in digital literacy, awareness, and internet connectivity, which restrict more advanced technological usage. The study also concludes that digital financial literacy positively influences savings, reinvestment decisions, access to financial services, and financial decision-making. The study further concludes that training programmes, affordable internet access, improved network infrastructure, government support, and financial incentives will enhance mobile technologies usage among small business owners in North Central Nigeria.



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## Recommendations

1. Government agencies, NGOs, and entrepreneurship support institutions should organize training programs to improve digital literacy among small business owners. Such programs should focus on mobile applications for financial management, sales tracking, marketing, and skill development to bridge the digital skills gap.
2. Policymakers and private sector players should prioritize the expansion of reliable, affordable internet services, particularly in semi-urban and rural areas. Affordable and stable connectivity will facilitate the adoption of advanced mobile technologies and enhance business operations.
3. Government and development agencies should introduce financial incentives, subsidized data plans, and technology grants to encourage small business owners to adopt mobile technologies. The regulatory reforms should simplify business registration and access to formal financial services.
4. Creating entrepreneurial networks and mentorship platforms can help small business owners share best practices, access new technologies, and gain guidance on effective financial and operational strategies. This will foster collaboration and innovation among small enterprises,

## References

- Adeniyi, S., & Omotosho, O. (2023). Digital payments and business growth among SMEs in Nigeria. *Journal of African Entrepreneurship Research*, 8(2), 33–50.
- Adeola, O., & Adebisi, T. (2023). Mobile technologies and operational efficiency in Nigerian small businesses. *Journal of Small Business and Entrepreneurship Studies*, 12(1), 45–62.
- Adeoye, T., Adegboye, F., & Oladipo, S. (2023). Digital literacy and mobile technology adoption among small businesses in Nigeria. *Journal of Small Business and Entrepreneurship Development*, 18(2), 45–60.
- Afolabi, B., & Mohammed, S. A. (2023). Integrating assistive and mobile technologies in SMEs for improved performance. *International Journal of Inclusive Education*, 25(3), 45–61.
- Afolayan, A. A., & Adegoke, O. A. (2022). Social media marketing and small business performance in Nigeria. *Journal of Entrepreneurship and Small Business Management*, 6(2), 45–59.
- Agbaje, F., Adeyemi, T., & Olusanya, M. (2024). Technology-driven entrepreneurial growth and economic resilience in Nigeria. *Journal of African Entrepreneurship*, 11(2), 45–63.
- Ajao, A., & Bello, R. (2023). Mobile technologies and entrepreneurial performance of SMEs in Nigeria. *International Journal of Entrepreneurship and Innovation Studies*, 10(1), 12–28.
- Aker, J. C., & Mbiti, I. M. (2019). Mobile phones and economic development in Africa. *Journal of Economic Perspectives*, 24(3), 207–232. <https://doi.org/10.1257/jep.24.3.207>
- Brynjolfsson, E., & McElheran, K. (2019). The rapid adoption of data-driven decision-making. *American Economic Review*, 106(5), 133–139. <https://doi.org/10.1257/aer.p20161016>
- Chinedu, P., Okafor, L., & Emeka, K. (2023). Mobile applications and customer engagement in Nigerian small businesses. *Journal of Digital Business Studies*, 9(3), 78–92.
- Chukwu, I., & Nduka, P. (2024). Small business development and economic diversification in Nigeria. *African Journal of Small Business and Entrepreneurship*, 15(1), 33–50.
- Chukwuemeka, E., & Yusuf, I. O. (2023). The impact of mobile technologies on small business growth in Nigeria. *Nigerian Journal of Business and Technology*, 14(3), 89–105.
- Ekundayo, F. O., & Ayodele, J. O. (2021). Social media adoption and brand visibility in Nigerian SMEs. *African Journal of Educational Management*, 15(2), 120–134.
- Eze, J., & Umeh, C. (2024). Mobile payment systems and SME financial management in Nigeria. *Journal of FinTech and Small Business*, 8(2), 55–70.
- Ibrahim, M. J., & Musa, A. A. (2022). Mobile financial services and entrepreneurial growth in Nigeria. *Journal of Assistive Technology and Education*, 14(3), 56–71.
- Iwu, C., & Igbudu, U. (2023). FinTech adoption and small business growth in Nigeria. *Journal of African Business Studies*, 9(2), 77–92.
- Klapper, L., Lusardi, A., & van Oudheusden, P. (2020). *Financial literacy around the world: Insights from the S&P Global FinLit Survey*. World Bank.
- National Bureau of Statistics (NBS). (2024). *Annual report on small and medium enterprises in Nigeria*. Abuja, Nigeria: NBS.
- Nwachukwu, T., & Eze, M. (2023). Entrepreneurial growth metrics in Nigerian SMEs: Financial and operational perspectives. *Journal of Entrepreneurship and Innovation*, 12(1), 23–41.
- Obi, P., & Uche, C. (2024). Cloud-based applications and business process optimization in Nigerian SMEs. *Journal of Entrepreneurship and Digital Innovation*, 11(1), 23–38.

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- Ogundele, O., & Obiora, K. (2024). Innovation and mobile technology adoption among Nigerian small enterprises. *Journal of Entrepreneurship and Digital Innovation*, 11(2), 22–38.
- Olayinka, O., & Olawale, F. (2021). E-learning and mobile technology adoption: Implications for SME growth in Nigeria. *International Journal of Education and Development using ICT*, 17(2), 24–40.
- Oluwafemi, D., & Hassan, K. (2023). Digital adoption and business growth among Nigerian entrepreneurs. *International Journal of Business and Management Studies*, 10(2), 61–78.
- Okeke, N., & Ibe, C. (2024). Mobile applications for affordable marketing in Nigerian small businesses. *Journal of African Digital Entrepreneurship*, 9(1), 33–48.
- Okonkwo, M., Eze, J., & Adebayo, S. (2024). Online mobile technologies and entrepreneurship development in Nigeria. *Journal of Business Technology Research*, 12(2), 56–72.
- Olawale, R., & Afolabi, S. (2023). Data analytics and decision-making for small business owners in Nigeria. *Journal of Business Technology Research*, 11(3), 44–59.
- Oyetunde, A., Adebayo, S., & Adekunle, F. (2023). Mobile technologies in supply chain and operational management for Nigerian SMEs. *Journal of Business Technology Research*, 10(3), 50–65.
- Okoro, I., & Agboola, T. (2024). Online mobile technologies and SME development in Nigeria. *Journal of African Business Technology*, 13(1), 34–49.
- Onwuegbuzie, A., Chukwu, L., & Nnadi, E. (2024). Strengthening small businesses through digital transformation in Nigeria. *Journal of Entrepreneurship and Development*, 9(1), 21–37.
- OECD. (2021). *The digital transformation of SMEs*. OECD Publishing. <https://doi.org/10.1787/bdb9256a-en>
- Ozili, P. K. (2021). Financial inclusion research around the world: A review. *Forum for Social Economics*, 50(4), 457–479. <https://doi.org/10.1080/07360932.2019.1695235>
- SMEDAN. (2023). *National survey report on micro, small, and medium enterprises in Nigeria*. Abuja, Nigeria: Small and Medium Enterprises Development Agency of Nigeria.
- Siano, A., Raimi, R., Palazzo, M., & Panait, M. (2020). Social media and mobile applications for SME growth: Evidence from developing economies. *Journal of Small Business Management*, 58(4), 789–810.
- Uzochukwu, L., & Nwankwo, P. (2023). Challenges of mobile technology adoption among Nigerian small businesses. *African Journal of Entrepreneurship Studies*, 7(2), 34–50.
- World Bank. (2021). *Small and medium enterprises finance: Improving SMEs' access to finance and finding innovative solutions*. World Bank.
- Yusuf, I. O., & Adebayo, S. A. (2023). Digital tools and entrepreneurial resilience among Nigerian SMEs. *Journal of Digital Learning and Accessibility*, 15(1), 47–63.