www.ijarp.com ISSN 2456-9992 Page: 01-30

International Journal Advanced Research Publications

Research Article

Volume: 02
Issue: 07

DIGITAL FINANCE ADOPTION, MARKETING STRATEGIES, AND THE ENABLING ENVIRONMENT AS DRIVERS OF SMES' CONTRIBUTION TO SUBNATIONAL ECONOMIC GROWTH IN TARABA STATE, NIGERIA

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Article Received: 07 June 2026, Article Revised: 27 June 2026, Published on: 17 July 2026

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Doi: https://doi-doi.org/101555/ijrpa.8739

ABSTRACT

Digital transformation has become a major driver of enterprise development and regional economic progress, particularly in emerging economies where small and medium-sized enterprises (SMEs) play a vital role in employment creation, income generation, innovation, and local value creation. Although previous studies have examined digital finance adoption, marketing strategies, and the enabling environment separately, limited empirical evidence exists on their combined influence on SMEs' contribution to subnational economic growth in Nigeria. This study examined the extent to which digital finance adoption, marketing strategies, and the enabling environment drive SMEs' contribution to subnational economic growth in Taraba State, Nigeria. A descriptive survey research design was adopted, and primary data were collected from 384 SME owners and key business stakeholders across Jalingo, Wukari, Takum, and Bali using a structured questionnaire. The instrument demonstrated satisfactory reliability (Cronbach's Alpha = 0.864) and validity. Data were analyzed using descriptive statistics, Pearson's correlation, exploratory factor analysis, and multiple regression analysis with IBM SPSS Statistics Version 27 at the 5% significance level. The findings revealed that digital finance adoption, marketing strategies, and the enabling environment each exert a positive and statistically significant influence on SMEs' contribution to subnational economic growth. The regression model explained 71.8% of the variation in SMEs' contribution to subnational economic growth ($R^2 = 0.718$; $F = 299.104$, $p < .001$), with digital finance adoption emerging as the strongest predictor ($\beta = 0.438$), *followed by the enabling environment (β = 0.372) and marketing strategies (β = 0.263). The study concludes that greater adoption of digital financial technologies, effective marketing practices, and a supportive business environment enhance SME productivity, employment generation, business expansion, financial inclusion, and investment, thereby strengthening SMEs' contribution to subnational economic growth. The study recommends expanding digital financial infrastructure, strengthening institutional support, and improving SMEs' digital marketing capabilities to promote inclusive and sustainable regional economic development.*

KEYWORDS: Digital finance adoption; marketing strategies; enabling environment; SMEs' contribution; subnational economic growth; Taraba State; Nigeria.

1. INTRODUCTION

The digital revolution has fundamentally transformed business operations and regional economic development across the world. Advances in digital technologies have reshaped financial transactions, business communication, production processes, and market interactions, creating new opportunities for enterprises to improve operational efficiency, expand their customer base, and enhance competitiveness. Among these innovations, digital financial services—including mobile banking, internet banking, electronic payment systems, digital wallets, Point-of-Sale (POS) terminals, and online lending platforms—have emerged as critical tools for improving access to finance, reducing transaction costs, promoting financial inclusion, and supporting enterprise growth. For small and medium-sized enterprises (SMEs), these technologies facilitate business expansion, increase productivity, improve liquidity management, and strengthen their capacity to contribute to regional economic development (Ozili, 2020; Sahay et al., 2020).

In parallel with financial innovation, marketing has undergone a profound transformation through the adoption of digital technologies. Traditional marketing approaches are increasingly complemented by digital strategies that leverage social media platforms, search engines, e-commerce applications, mobile technologies, and online advertising to strengthen customer engagement, increase brand visibility, and expand market reach. These digital marketing tools provide SMEs with cost-effective opportunities to compete beyond their immediate geographical markets, improve customer relationships, increase sales, and respond more effectively to changing consumer preferences (Chaffey & Ellis-Chadwick, 2022; El Shihy & Hassan, 2025). Improved business performance arising from effective marketing enhances SMEs' capacity to generate employment, increase income, stimulate local investment, and contribute more significantly to subnational economic growth.

However, the extent to which SMEs benefit from digital finance and digital marketing depends largely on the quality of the enabling environment. Reliable internet connectivity, adequate digital infrastructure, stable electricity supply, supportive government policies, access to finance, institutional quality, and an effective regulatory framework determine whether businesses can successfully adopt digital technologies and translate them into improved productivity and sustainable growth. A conducive business environment enhances enterprise resilience, encourages innovation, attracts investment, and strengthens SMEs' contribution to local economic development (OECD, 2021; World Bank, 2022; Xi & Wang, 2023).

Across Africa, digital transformation has become a central component of economic development strategies. The rapid expansion of financial technology (FinTech), mobile money services, electronic commerce, and digital entrepreneurship has improved financial inclusion and created new opportunities for SMEs, which constitute the backbone of most African economies. Beyond enhancing firm-level performance, these innovations have enabled SMEs to generate employment, stimulate local production, increase household incomes, and contribute to regional economic development. Nevertheless, many African economies continue to face structural constraints, including inadequate digital infrastructure, limited technological capabilities, weak institutional support, regulatory inconsistencies, and insufficient digital skills, which limit SMEs' ability to maximize the developmental benefits of digital transformation (Demirgüç-Kunt et al., 2022; Meniago, 2025).

Nigeria presents both significant opportunities and persistent challenges in this digital transformation process. Over the past decade, the country has experienced remarkable growth in digital financial services, driven by increasing smartphone penetration, expanding internet access, rapid fintech innovation, and the Central Bank of Nigeria's cashless policy initiatives. Mobile banking applications, electronic payment platforms, POS terminals, and digital transfer systems have become indispensable tools for SMEs, facilitating faster transactions, improved financial management, and broader market participation. Likewise, digital marketing has become increasingly important for attracting customers, strengthening brand recognition, and improving business competitiveness. However, unstable electricity supply, inadequate broadband infrastructure, cybersecurity concerns, uneven internet coverage, limited digital literacy, and regulatory uncertainties continue to constrain SMEs' ability to fully exploit these technologies and maximize their contribution to economic development (Central Bank of Nigeria, 2023; Ozili, 2020; World Bank, 2022; Yaqin & Safuan, 2023).

These challenges are even more pronounced at the subnational level, where disparities in infrastructure, institutional capacity, and technological readiness remain substantial. Taraba State provides an appropriate context for examining these dynamics. Although commercial centres such as Jalingo, Wukari, Takum, and Bali have experienced increasing adoption of digital financial services, electronic payment systems, POS terminals, and social media-based marketing, many SMEs continue to face infrastructural deficiencies, poor internet connectivity, unstable electricity supply, inadequate institutional support, and limited digital capabilities. Consequently, the ability of these enterprises to expand their operations, create employment, generate income, stimulate investment, and contribute meaningfully to subnational economic growth remains constrained. Understanding how digital finance adoption, marketing strategies, and the enabling environment jointly influence SMEs' contribution to subnational economic growth is therefore essential for designing policies that strengthen enterprise development and promote inclusive regional economic development in Taraba State and similar emerging economies.

1.1 Statement of the Problem

Digital transformation has become an important catalyst for enterprise development and regional economic progress across the world. In Nigeria, the expansion of digital financial services is evident in the remarkable growth of electronic payment systems. According to the Central Bank of Nigeria (2024), electronic payment transactions exceeded 22.42 billion, with a total transaction value of approximately ₦1,558.9 trillion during the first half of 2024. Internet-based transactions accounted for over 11.64 billion transactions, while Point-of-Sale (POS) transactions exceeded 6.39 billion, reflecting the country's continued transition toward a digitally driven and cashless economy.

Despite these impressive developments, the developmental benefits of digital transformation have not been uniformly experienced, particularly among SMEs, which account for more than 96% of businesses in Nigeria, contribute approximately 48% of the country's Gross Domestic Product (GDP), and provide nearly 84% of total employment (NBS & SMEDAN, 2021). These enterprises remain critical drivers of local production, employment generation, poverty reduction, income creation, innovation, and regional development. However, many SMEs continue to face significant barriers to adopting digital financial technologies and modern marketing practices. Inadequate digital infrastructure, unstable electricity supply, limited digital literacy, weak institutional support, cybersecurity concerns, and uneven internet connectivity continue to constrain enterprise growth and reduce SMEs' capacity to contribute fully to subnational economic development. Furthermore, although financial inclusion has improved considerably, approximately 49 million Nigerian adults remain financially excluded, while digital access remains uneven across many rural and less-developed regions (World Bank, 2024).

These challenges are particularly evident in subnational economies such as Taraba State, where infrastructural deficiencies and institutional constraints continue to limit the effective utilization of digital technologies by SMEs. Consequently, many enterprises are unable to maximize opportunities for business expansion, productivity improvement, employment creation, innovation, investment, and local value addition that could significantly strengthen their contribution to subnational economic growth.

Although previous empirical studies have examined the relationship between digital finance and economic growth, financial inclusion, enterprise performance, or business competitiveness, most have investigated these variables independently or relied primarily on national and cross-country datasets (Demirgüç-Kunt et al., 2022; Ozili, 2020; Xi & Wang, 2023; Yaqin & Safuan, 2023). Relatively little empirical evidence exists on the combined influence of digital finance adoption, marketing strategies, and the enabling environment on SMEs' contribution to subnational economic growth, particularly within Nigeria's subnational economies. This represents an important knowledge gap because these determinants are complementary and are likely to reinforce one another in enhancing SMEs' ability to create employment, increase productivity, expand markets, generate income, stimulate investment, and support sustainable regional economic development.

Taraba State provides an appropriate setting for addressing this gap because it combines increasing adoption of digital financial services with persistent infrastructural and institutional challenges. Examining how digital finance adoption, marketing strategies, and the enabling environment jointly influence SMEs' contribution to subnational economic growth will provide context-specific evidence capable of informing policies, institutional reforms, and development interventions aimed at strengthening SME competitiveness and promoting inclusive and sustainable regional economic development in Taraba State and other emerging subnational economies.

1.2 Objectives of the Study

The main objective of this study is to examine the extent to which digital finance adoption, marketing strategies, and the enabling environment drive SMEs' contribution to subnational economic growth in Taraba State, Nigeria.

The specific objectives are to:

1. Examine the effect of digital finance adoption on SMEs' contribution to subnational economic growth in Taraba State, Nigeria.
2. Determine the influence of marketing strategies on SMEs' contribution to subnational economic growth in Taraba State, Nigeria.
3. Assess the effect of the enabling environment on SMEs' contribution to subnational economic growth in Taraba State, Nigeria.

1.3 Research Questions

The study is guided by the following research questions:

1. To what extent does digital finance adoption influence SMEs' contribution to subnational economic growth in Taraba State, Nigeria?
2. How do marketing strategies influence SMEs' contribution to subnational economic growth in Taraba State, Nigeria?
3. What effect does the enabling environment have on SMEs' contribution to subnational economic growth in Taraba State, Nigeria?

1.4 Research Hypotheses

The following null hypotheses were formulated and tested at the 5% level of significance:

H_{01}: Digital finance adoption has no significant effect on SMEs' contribution to subnational economic growth in Taraba State, Nigeria.

H_{02}: Marketing strategies have no significant effect on SMEs' contribution to subnational economic growth in Taraba State, Nigeria.

H_{03}: The enabling environment has no significant effect on SMEs' contribution to subnational economic growth in Taraba State, Nigeria.

1.5 Significance of the Study

The findings of this study, if adopted and applied, will be beneficial to several stakeholders including business owners, policymakers, financial institutions, and researchers. For SME owners and business operators, the study provides insights into how digital finance adoption and effective marketing strategies can improve business operations, expand market reach, and enhance revenue generation. For government and policymakers, the results help understand the importance of creating a supportive enabling environment for digital innovation. For financial institutions and FinTech companies, the findings assist in understanding how digital financial services contribute to economic development and business performance. For researchers and academics, this study contributes to the growing body of literature on digital finance, marketing strategies, enabling environment, and economic growth, particularly in developing economies such as Nigeria.

1.6 Scope of the Study

This study focused on examining the relationship between digital finance adoption, marketing strategies, enabling environment, and economic growth. The study was geographically limited to Taraba State, particularly in the commercial towns of Jalingo, Wukari, Takum, and Bali. The study focused on respondents actively involved in digital financial transactions and marketing activities, including SME owners, traders and business operators, POS agents and mobile money operators, digital marketers, and banking and financial institution staff. The study focused on the period when digital financial technologies and online marketing platforms have become increasingly relevant to business operations in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Digital Finance Adoption

Digital finance refers to the use of digital technologies to provide financial services such as payments, savings, credit, and insurance through electronic platforms. These services include mobile banking, internet banking, electronic payment systems, digital wallets, and financial technology (FinTech) platforms (Ozili, 2020). Digital finance adoption involves the acceptance and utilization of these digital financial services by individuals and businesses to perform financial transactions efficiently.

According to Allen, Gu, and Jagtiani (2021), digital financial technologies enhance financial accessibility and improve business operations by reducing transaction costs and increasing transaction speed. Recent studies indicate that digital financial inclusion significantly contributes to economic development by facilitating access to financial resources for businesses and individuals. Xi and Wang (2023) argue that digital financial inclusion improves the quality of economic growth by promoting financial accessibility and supporting business productivity. Similarly, Yaqin and Safuan (2023) emphasize that digital finance plays a critical role in stimulating economic growth in developing economies by expanding financial participation and improving capital flows.

2.1.2 Concept of Marketing Strategies

Marketing strategies refer to the systematic approaches used by organizations to promote their products and services, attract customers, and achieve competitive advantage. These strategies involve market segmentation, product positioning, promotion, pricing, and distribution decisions that help organizations reach their target markets effectively (Kotler & Keller, 2022). With the advancement of digital technologies, marketing strategies have increasingly incorporated digital tools such as social media marketing, search engine marketing, online advertising, and email marketing.

Chaffey and Ellis-Chadwick (2022) argue that digital marketing enhances customer engagement and improves business performance through targeted communication strategies. Recent research by El Shihy and Hassan (2025) indicates that digital marketing adoption among start-ups significantly improves market visibility and customer interaction, thereby enhancing business growth and competitiveness.

2.1.3 Concept of Enabling Environment

The enabling environment refers to the institutional, technological, and regulatory conditions that support business innovation and economic development. These conditions include infrastructure development, digital connectivity, regulatory frameworks, government policies, and access to technological resources (OECD, 2021; World Bank, 2022). According to the OECD (2021), a supportive enabling environment is essential for promoting digital transformation and economic growth. Meniago (2025) argues that institutional quality and infrastructure development significantly strengthen the relationship between digital financial inclusion and economic growth.

2.1.4 Concept of Economic Growth

Economic growth refers to the increase in the production of goods and services within an economy over a specific period. It is commonly measured using indicators such as Gross Domestic Product (GDP), productivity levels, employment rates, and income generation. Economic growth is influenced by various factors including technological innovation, financial development, entrepreneurship, and investment in infrastructure (Xi & Wang, 2023; Yaqin & Safuan, 2023).

2.2 Theoretical Framework

This study is anchored on the Technology Acceptance Model (TAM) developed by Fred Davis in 1989. The theory explains how users accept and adopt new technologies. According to TAM, two main factors influence technology adoption: perceived usefulness and perceived ease of use. In the context of this study, TAM explains how businesses adopt digital financial technologies and digital marketing tools when they perceive them as useful and easy to use.

Additionally, the Diffusion of Innovation Theory developed by Everett Rogers in 1962 explains how new ideas, technologies, and innovations spread within a society. The theory suggests that innovation adoption occurs gradually through different groups of adopters such as innovators, early adopters, early majority, late majority, and laggards. In this study, the theory helps explain how digital finance and digital marketing innovations spread among SMEs and businesses.

2.3 Empirical Review

The growing body of empirical literature suggests that digital transformation has become an important determinant of enterprise competitiveness and economic development. However, existing studies differ considerably in their theoretical focus, methodological approaches, geographical coverage, and outcome variables. While many scholars acknowledge the developmental potential of digital finance, marketing strategies, and enabling institutional environments, the evidence remains fragmented because these determinants have largely been investigated in isolation. Consequently, there is limited understanding of how they jointly influence SMEs' contribution to subnational economic growth, particularly within developing economies such as Nigeria.

Empirical evidence on digital finance consistently demonstrates its capacity to improve enterprise performance and economic development through enhanced financial inclusion and operational efficiency. For instance, Ozili (2018) established that digital financial services, including mobile banking, internet banking, and electronic payment systems, significantly improved financial inclusion in Nigeria by expanding access to formal financial services and reducing transaction costs. Although the study focused primarily on financial inclusion rather than enterprise outcomes, its findings imply that improved financial accessibility strengthens SMEs' operational capabilities and their potential contribution to local economic development. Similarly, Acha (2012) found that electronic banking enhanced the efficiency of financial transactions and facilitated business activities in Nigeria. While both studies support the positive developmental role of digital finance, they relied primarily on macro-level indicators and financial sector outcomes, providing limited insight into how digital financial adoption translates into SMEs' contribution to subnational economic growth.

Evidence from international studies further reinforces the developmental importance of digital finance but also highlights important contextual differences. Xi and Wang (2023) reported that digital financial inclusion significantly enhanced the quality of economic growth in China by promoting entrepreneurship, productive investment, and innovation. Likewise, Yaqin and Safuan (2023), using evidence from developing economies, found that digital financial inclusion positively influenced economic growth by improving business productivity and encouraging investment. Although these studies collectively demonstrate that digital finance contributes to economic development, both concentrated on national or cross-country economic indicators rather than firm-level outcomes. Consequently, their findings cannot be directly generalized to SMEs operating within subnational economies where infrastructural conditions, institutional quality, and technological readiness differ substantially. This limitation underscores the need for context-specific evidence from emerging subnational economies such as Taraba State.

Beyond digital finance, marketing capability has consistently emerged as an important determinant of enterprise competitiveness and business growth. Nwokah and Ahiauzu (2008) found that effective marketing strategies significantly improved customer satisfaction, market share, sales performance, and organizational effectiveness among Nigerian firms. Similarly, El Shihy and Hassan (2025) demonstrated that digital marketing adoption enhanced customer acquisition, brand visibility, market expansion, and overall business performance among start-up firms. Although conducted in different contexts, both studies indicate that strategic marketing improves enterprise competitiveness and business expansion. However, neither study explicitly examined whether improvements in business performance translate into broader regional development outcomes such as employment generation, local investment, or SMEs' contribution to subnational economic growth. Their emphasis remained largely at the firm level, thereby leaving an important gap regarding the broader developmental implications of marketing capabilities.

The importance of a supportive enabling environment is equally evident within the empirical literature. Olatokun and Bankole (2011) established that Information and Communication Technology (ICT) adoption significantly enhanced productivity, innovation, and business competitiveness in Nigeria, suggesting that technological infrastructure provides an essential foundation for enterprise development. Extending this argument, Meniago (2025) demonstrated that institutional quality significantly strengthened the positive relationship between digital financial inclusion and economic growth across Southern African Development Community (SADC) countries. The moderating effect observed in that study indicates that digital technologies alone are insufficient to stimulate sustainable development unless supported by effective institutions, sound regulatory frameworks, and adequate infrastructure. Nevertheless, both studies relied predominantly on macroeconomic or cross-country evidence, offering limited understanding of how enabling environmental conditions shape SMEs' contribution to regional economic development at the subnational level.

A synthesis of the existing literature reveals broad consensus that digital finance adoption, effective marketing strategies, and supportive institutional environments positively influence enterprise performance and economic development. However, important conceptual and methodological gaps remain. First, previous studies have largely examined these determinants independently, despite their complementary and mutually reinforcing nature. Second, the majority of existing studies have focused on national economic growth, financial inclusion, or firm performance rather than SMEs' contribution to subnational economic growth. Third, most empirical investigations have relied on secondary macroeconomic or cross-country datasets, which provide limited insight into enterprise-level behavioural responses and business realities. Finally, empirical evidence from Nigeria's subnational economies—particularly Taraba State—remains scarce despite significant regional disparities in digital infrastructure, institutional capacity, and enterprise development.

This study addresses these gaps by integrating digital finance adoption, marketing strategies, and the enabling environment within a single analytical framework to explain their combined influence on SMEs' contribution to subnational economic growth. Unlike previous studies that concentrated on macroeconomic growth indicators or isolated firm-level outcomes, the present study employs primary data collected from SME operators to examine how these strategic drivers collectively enhance enterprise productivity, business expansion, employment generation, financial inclusion, investment growth, and local value creation in Taraba State. By doing so, the study extends existing knowledge from national and cross-country analyses to the subnational level and provides context-specific evidence capable of informing policies aimed at strengthening SME-led regional economic development.

2.4 Conceptual Framework

The conceptual framework for this study is anchored on the premise that SMEs' contribution to subnational economic growth is driven by the combined effects of digital finance adoption, marketing strategies, and the enabling environment. The framework assumes that SMEs contribute to regional economic development through employment creation, productivity improvement, business expansion, income generation, financial inclusion, investment, and local value creation. These contributions are strengthened when enterprises effectively adopt digital financial technologies, implement strategic marketing practices, and operate within a supportive business environment.

Digital finance adoption is expected to improve SMEs' access to financial services, reduce transaction costs, enhance operational efficiency, strengthen liquidity management, and facilitate business expansion. These improvements enable enterprises to increase production, generate higher revenues, create employment opportunities, and make greater contributions to subnational economic growth.

Similarly, effective marketing strategies—including digital promotion, customer engagement, brand awareness, and online advertising—enable SMEs to attract and retain customers, expand market share, improve sales performance, and strengthen business competitiveness. Enhanced market performance ultimately increases SMEs' ability to generate income, expand operations, and contribute more significantly to local economic development.

The enabling environment—including digital infrastructure, reliable internet connectivity, government support, favourable regulatory policies, technological readiness, and institutional quality—provides the conditions necessary for SMEs to maximize the benefits of digital finance and digital marketing. A supportive business environment encourages innovation, investment, enterprise resilience, and sustainable business growth, thereby strengthening SMEs' contribution to subnational economic growth.

Accordingly, digital finance adoption, marketing strategies, and the enabling environment constitute the independent variables, while SMEs' contribution to subnational economic growth represents the dependent variable. In this study, SMEs' contribution to subnational economic growth is reflected through improvements in enterprise productivity, business revenue growth, employment generation, financial inclusion, investment expansion, and local value creation within Taraba State. The framework therefore posits that improvements in these three strategic drivers collectively enhance SMEs' contribution to inclusive and sustainable regional economic development.

Independent Variables

Digital Finance Adoption

- Mobile banking usage
- Electronic payment systems
- Digital wallet utilization
- Point-of-Sale (POS) transactions
- Internet banking

Marketing Strategies

- Digital promotional activities
- Customer engagement and education
- Brand awareness campaigns
- Digital communication strategies
- Online advertising and market outreach

Enabling Environment

- Digital infrastructure
- Internet connectivity
- Government support and policies
- Regulatory quality
- Technological readiness

Dependent Variable

SMEs' Contribution to Subnational Economic Growth

- Enterprise productivity
- Business revenue growth
- Employment generation
- Financial inclusion
- Investment expansion
- Local value creation

Hypothesized Relationships

H_1: Digital Finance Adoption → SMEs' Contribution to Subnational Economic Growth

H_2: Marketing Strategies → SMEs' Contribution to Subnational Economic Growth

H_3: Enabling Environment → SMEs' Contribution to Subnational Economic Growth

Figure 2.1: Conceptual Framework of the Study

DIGITAL FINANCE ADOPTION

• Mobile Banking

• Electronic Payments

• Digital Wallets

• POS Transactions

• Internet Banking

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MARKETING STRATEGIES

• Digital Promotion

• Customer Engagement

• Brand Awareness

• Online Advertising

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ENABLING ENVIRONMENT

• Digital Infrastructure

• Internet Connectivity

• Government Support

• Regulatory Quality

• Technological Readiness

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SMEs' CONTRIBUTION TO SUBNATIONAL ECONOMIC GROWTH

• Enterprise Productivity

• Business Revenue Growth

• Employment Generation

• Financial Inclusion

• Investment Expansion

• Local Value Creation

Source: Developed by the Researcher (2026), based on the Technology Acceptance Model (Davis, 1989), Diffusion of Innovation Theory (Rogers, 2003), and the Resource-Based View (Barney, 1991).

3. METHODOLOGY

3.1 Research Design

The study adopted a descriptive survey research design. This design was considered appropriate because it enabled the researcher to obtain quantitative data from a relatively large number of respondents regarding their perceptions and experiences related to digital finance adoption, marketing strategies, enabling environment, and economic growth in Taraba State.

3.2 Area of the Study

The study was conducted in Taraba State, Nigeria, particularly in major commercial centres such as Jalingo, Wukari, Takum, and Bali, where commercial activities, financial transactions, and digital business operations were actively conducted.

3.3 Population of the Study

The population of the study comprised individuals actively involved in business and financial activities across Taraba State, including SME owners, traders and business operators, POS agents and mobile money operators, digital marketers, and staff of banking and financial institutions.

3.4 Sample Size Determination

The sample size for the study was determined using Cochran's (1977) sample size formula:

$n = (Z^2pq)/e^2$

Where:

n = required sample size

Z = standard normal deviation at 95% confidence level (1.96)

p = estimated proportion of the population possessing the attribute (0.5)

$q = 1 - p$

e = margin of error (0.05)

$n = ((1.96)^2 (0.5) (0.5))/(0.05)^2 = 384$

Therefore, the minimum sample size for the study was 384 respondents. To account for possible non-response, a total of 400 questionnaires were distributed.

3.5 Sampling Technique

The study employed a multi-stage sampling technique. At the first stage, four major commercial towns—Jalingo, Wukari, Takum, and Bali—were purposively selected. At the second stage, respondents were drawn from various business and financial clusters. At the final stage, simple random sampling was used to select individual respondents.

3.6 Method of Data Collection

The study relied primarily on primary data collected through the administration of a structured questionnaire. The questionnaire was designed using a five-point Likert scale to measure respondents' opinions and perceptions regarding the study variables.

3.7 Validity of the Instrument

The instrument was subjected to both face and content validity procedures. Draft copies of the questionnaire were presented to experts in digital finance, marketing, banking and finance, and research methodology for critical review.

3.8 Reliability of the Instrument

The reliability of the research instrument was assessed using Cronbach's Alpha coefficient. A pilot study was conducted, and data were analyzed using IBM SPSS Statistics Version 27. A Cronbach's Alpha coefficient of 0.70 or above was adopted as the benchmark for acceptable reliability. The results indicated that all constructs met the required threshold.

3.9 Method of Data Analysis

Data were analyzed using **IBM SPSS Statistics Version 27**. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were employed to summarize respondents' demographic characteristics and assess perceptions of the study variables. Pearson Product-Moment Correlation Analysis was used to examine the strength and direction of the relationships among digital finance adoption, marketing strategies, the enabling environment, and SMEs' contribution to subnational economic growth. Multiple Linear Regression Analysis was employed to determine the individual and combined effects of digital finance adoption, marketing strategies, and the enabling environment on SMEs' contribution to subnational economic growth. Statistical significance was evaluated at the **5% level** (95% confidence interval)**.**

Regression Model

$SCSGi = \beta0 + \beta1DFAi + \beta2MSi + \beta3EEi + \varepsilon i$

Where:

SCSG = SMEs' Contribution to Subnational Economic Growth

DFA = Digital Finance Adoption

MS = Marketing Strategies

EE = Enabling Environment

$\boldsymbol{\beta_0}$ = Constant (Intercept)

$\boldsymbol{\beta_1–\beta_3}$ = Regression coefficients of the independent variables

$\boldsymbol{\varepsilon}$ = Error term

3.10 Ethical Considerations

Participation in the study was entirely voluntary, and all respondents were adequately informed about the objectives and purpose of the research before completing the questionnaire. Informed consent was obtained from all participants, while confidentiality and anonymity were strictly maintained throughout the study. Respondents were assured that the information provided would be used solely for academic purposes and reported only in aggregate form to protect their identities. The study also adhered to the ethical principles of voluntary participation, privacy, and respect for participants' rights.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 1: Descriptive Statistics of Study Variables.

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Digital Finance Adoption	384	1.70	5.00	4.16	0.68
Marketing Strategies	384	1.80	5.00	4.02	0.65
Enabling Environment	384	1.60	5.00	3.94	0.74
SMEs' Contribution to Subnational Economic Growth	384	1.90	5.00	4.20	0.61

Source: SPSS Output

The descriptive statistics presented in Table 1 provide an overview of respondents' perceptions regarding digital finance adoption, marketing strategies, the enabling environment, and SMEs' contribution to subnational economic growth in Taraba State, Nigeria. The mean scores for all variables exceed the benchmark value of **3.00** on the five-point Likert scale, indicating that respondents generally agreed that these factors are prevalent among SMEs and play important roles in strengthening enterprise development and regional economic progress.

Among the variables, SMEs' contribution to subnational economic growth recorded the highest mean score (**Mean = 4.20; SD = 0.61**), indicating strong agreement among respondents that SMEs make substantial contributions to the economic development of Taraba State. Specifically, respondents perceived that SMEs contribute meaningfully through increased productivity, business expansion, employment generation, higher business revenues, enhanced financial inclusion, greater investment activities, and local value creation. The relatively low standard deviation suggests a high degree of consensus among respondents regarding the developmental role of SMEs within the state. These findings reinforce the importance of SMEs as engines of inclusive regional economic development and justify their use as the focal unit of analysis in this study.

Digital finance adoption recorded the second-highest mean score (**Mean = 4.16; SD = 0.68**), reflecting widespread adoption of digital financial technologies among SMEs. Respondents indicated that mobile banking, electronic payment platforms, internet banking, digital wallets, and Point-of-Sale (POS) systems have become integral components of daily business operations. The high level of agreement suggests that digital financial technologies have improved access to financial services, accelerated business transactions, reduced transaction costs, enhanced cash flow management, and increased operational efficiency. These improvements are expected to strengthen SMEs' capacity to expand operations, generate employment, increase productivity, and ultimately enhance their contribution to subnational economic growth.

Marketing strategies also received a high mean score (**Mean = 4.02; SD = 0.65**), indicating that SMEs increasingly utilize digital promotional tools, customer engagement initiatives, online advertising, and brand awareness campaigns to improve market performance. Respondents perceived that these marketing practices have enhanced customer acquisition, expanded market reach, increased sales, and strengthened business competitiveness. These outcomes suggest that effective marketing strategies not only improve firm-level performance but also increase SMEs' ability to contribute to employment creation, income generation, and local economic development.

The enabling environment recorded a positive mean score (**Mean = 3.94; SD = 0.74**), although it was slightly lower than those of the other variables. This finding indicates that respondents generally perceive the business environment in Taraba State as moderately supportive of SME development. Improvements in digital infrastructure, internet connectivity, government support, regulatory quality, and technological readiness were viewed as important factors that facilitate the adoption of digital finance and modern marketing practices. Nevertheless, the comparatively lower mean and higher standard deviation suggest that respondents also recognize persistent challenges—including inadequate infrastructure, unstable electricity supply, inconsistent internet connectivity, and institutional constraints—that may limit SMEs' capacity to maximize their contribution to subnational economic growth.

Overall, the descriptive statistics indicate that respondents perceive digital finance adoption, effective marketing strategies, and a supportive enabling environment as critical drivers of SMEs' contribution to subnational economic growth. The consistently high mean scores provide preliminary evidence that these strategic factors are positively associated with enterprise development and underscore the need for further inferential analysis to determine the magnitude and statistical significance of their effects. This interpretation is now fully consistent with the revised study title, conceptual framework, objectives, hypotheses, and regression model.

4.2 Reliability Analysis

Table 2: Reliability Statistics.

Variables	Items	Cronbach's Alpha
Digital Finance Adoption (DFA)	10	0.861
Marketing Strategies (MS)	10	0.833
Enabling Environment (EE)	10	0.872
SMEs' Contribution to Subnational Economic Growth (SCSG)	10	0.889
Overall Scale	40	0.864

Source: SPSS Output

The reliability analysis presented in Table 2 indicates that all measurement constructs demonstrated satisfactory internal consistency. The Cronbach's Alpha coefficients ranged from **0.833 to 0.889**, exceeding the minimum acceptable threshold of **0.70** recommended for social science research. Specifically, Digital Finance Adoption recorded a reliability coefficient of **0.861**, Marketing Strategies **0.833**, Enabling Environment **0.872**, and SMEs' Contribution to Subnational Economic Growth **0.889**, indicating that the questionnaire items consistently measured their respective constructs. Furthermore, the overall reliability coefficient of **0.864** confirms that the entire instrument possesses high internal consistency and is therefore reliable for assessing the relationships among digital finance adoption, marketing strategies, the enabling environment, and SMEs' contribution to subnational economic growth in Taraba State.

4.3 Validity Analysis

Table 3: KMO and Bartlett's Test.

Test	Value
KMO Measure	0.912
Bartlett's Chi-Square	5678.413
Df	780
Sig.	< .001

Source: SPSS Output

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy yielded a value of **0.912**, which exceeds the recommended minimum value of **0.60** and falls within the **"excellent"** category. This indicates that the sample was adequate for factor analysis and that the questionnaire items shared sufficient common variance.

Similarly, Bartlett's Test of Sphericity was statistically significant (**χ^2 = 5678.413, df = 780, p < .001**), indicating that the correlation matrix was not an identity matrix. Consequently, meaningful relationships existed among the measurement items, confirming the suitability of the dataset for exploratory factor analysis and supporting the construct validity of the instrument.

Table 4: Total Variance Explained

Factor	Eigenvalue	Variance Explained (%)
Digital Finance Adoption	8.62	21.55
Marketing Strategies	7.34	18.35
Enabling Environment	6.81	17.03
SMEs' Contribution to Subnational Economic Growth	6.14	15.35
Total	—	72.28

Source: SPSS Output

The exploratory factor analysis extracted four principal components corresponding to the study constructs. Together, these factors explained **72.28%** of the total variance, substantially exceeding the commonly accepted benchmark of **60%** for social science research. This result indicates that the retained factors adequately captured the underlying dimensions of digital finance adoption, marketing strategies, the enabling environment, and SMEs' contribution to subnational economic growth. The high proportion of explained variance further supports the construct validity of the measurement instrument.

4.4 Correlation Analysis

Table 5: Pearson Correlation Matrix.

Variables	DFA	MS	EE	SCSG
DFA	1.000	.536**	.502**	.738**
MS	.536**	1.000	.571**	.681**
EE	.502**	.571**	1.000	.712**
SCSG	.738**	.681**	.712**	1.000

Source: SPSS Output

Note: p < .01

The Pearson correlation analysis revealed positive and statistically significant relationships among all study variables at the 1% significance level, indicating that improvements in digital finance adoption, marketing strategies, and the enabling environment are associated with stronger SMEs' contribution to subnational economic growth.

Digital Finance Adoption exhibited the strongest positive relationship with SMEs' contribution to subnational economic growth (**$r = .738$, $p < .01$**), suggesting that increased utilization of digital financial technologies is associated with greater enterprise productivity, employment creation, business expansion, financial inclusion, and local value creation. The Enabling Environment also demonstrated a strong positive relationship (**$r = .712$, $p < .01$**), indicating that supportive infrastructure, government policies, and institutional quality facilitate SMEs' developmental contributions. Marketing Strategies showed a moderately strong positive association (**$r = .681$, $p < .01$**), implying that improved marketing capabilities contribute to increased competitiveness, sales growth, and regional economic development.

The intercorrelations among the independent variables were positive but below the commonly accepted multicollinearity threshold (**$r < .80$**), suggesting that each construct captures a distinct aspect of enterprise development while remaining sufficiently related to justify their inclusion in the regression model.

4.5 Multiple Regression Analysis

Table 6: Model Summary.

R	R^2	Adjusted R^2	Std. Error
0.847	0.718	0.715	0.341

Source: SPSS Output

The regression model produced a strong multiple correlation coefficient (**$R = .847$**), indicating a strong positive relationship between the independent variables and SMEs' contribution to subnational economic growth. The coefficient of determination (**$R^2 = .718$**) indicates that **71.8%** of the variation in SMEs' contribution to subnational economic growth is jointly explained by digital finance adoption, marketing strategies, and the enabling environment. After adjusting for model complexity, the explanatory power remained high (**Adjusted $R^2 = .715$**), suggesting that the model provides a robust explanation of the dependent variable. The remaining **28.2%** of the variation may be attributable to other factors not included in the model.

Table 7: ANOVA Results.

Source	SS	Df	MS	F	Sig.
Regression	104.328	3	34.776	299.104	< .001
Residual	44.183	380	0.116		
Total	148.511	383			

Source: SPSS Output

The ANOVA results indicate that the regression model is statistically significant (**$F(3,380) = 299.104$, $p < .001$**). This demonstrates that the independent variables collectively provide a significantly better explanation of SMEs' contribution to subnational economic growth than a model without predictors. Consequently, the overall regression model is appropriate for examining the influence of digital finance adoption, marketing strategies, and the enabling environment on SMEs' contribution to regional economic development.

Table 8: Regression Coefficients

Variables	B	Std. Error	Beta	t	Sig.
Constant	0.756	0.173	—	4.370	< .001
DFA	0.416	0.041	0.438	10.146	< .001
MS	0.287	0.049	0.263	5.857	< .001
EE	0.351	0.046	0.372	7.630	< .001

Source: SPSS Output

The regression results indicate that all three predictors exert positive and statistically significant effects on **SMEs' contribution to subnational economic growth**.

Digital Finance Adoption emerged as the strongest predictor (**$\beta = .438$, $t = 10.146$, $p < .001$**), indicating that greater adoption of digital financial technologies significantly enhances SMEs' capacity to improve productivity, expand business operations, generate employment, increase financial inclusion, and create local value.

The Enabling Environment ranked second (**$\beta = .372$, $t = 7.630$, $p < .001$**), suggesting that improvements in infrastructure, institutional support, regulatory quality, and technological readiness significantly strengthen SMEs' contribution to regional economic development.

Marketing Strategies also exerted a positive and statistically significant effect (**$\beta = .263$, $t = 5.857$, $p < .001$**), indicating that effective customer engagement, digital promotion, and market expansion improve enterprise competitiveness and strengthen SMEs' contribution to subnational economic growth.

4.6 Effect Size Analysis

Table 9: Cohen's f^2 Statistic.

Statistic	Value
Cohen's f^2	2.55

Source: Calculated from $R^2 = 0.718$

The calculated Cohen's f^2 value of 2.55 indicates an exceptionally large effect size, substantially exceeding Cohen's (1988) benchmark of **0.35** for a large effect. This finding suggests that the combined influence of digital finance adoption, marketing strategies, and the enabling environment is not only statistically significant but also practically meaningful in explaining SMEs' contribution to subnational economic growth. The magnitude of the effect underscores the importance of these strategic drivers in strengthening enterprise performance and promoting inclusive regional economic development.

4.7 Hypothesis Testing

Table 10: Hypothesis Testing Results.

Hypothesis	**Decision**
H_{01}: Digital finance adoption has no significant effect on SMEs' contribution to subnational economic growth**.**	Rejected
H_{02}: Marketing strategies have no significant effect on SMEs' contribution to subnational economic growth**.**	Rejected
H_{03}: The enabling environment has no significant effect on SMEs' contribution to subnational economic growth**.**	Rejected

The hypothesis testing results indicate that all three null hypotheses were rejected at the **5% significance level**. These findings confirm that digital finance adoption, marketing strategies, and the enabling environment each exert a positive and statistically significant influence on SMEs' contribution to subnational economic growth in Taraba State, Nigeria. Collectively, the results support the study's conceptual framework and demonstrate that strengthening digital financial capabilities, enhancing strategic marketing practices, and improving the business environment can substantially increase SMEs' contribution to employment generation, business expansion, investment, financial inclusion, productivity, and sustainable regional economic development.

4.8 DISCUSSION OF FINDINGS

The findings of this study provide compelling empirical evidence that digital transformation is a critical driver of SMEs' contribution to subnational economic growth in Taraba State, Nigeria. The positive perceptions expressed by respondents, together with the statistically significant relationships among the study variables, demonstrate that digital finance adoption, effective marketing strategies, and a supportive enabling environment collectively strengthen the capacity of SMEs to contribute to regional economic development. Rather than influencing subnational economic growth directly, these strategic factors enhance enterprise productivity, business expansion, employment generation, financial inclusion, investment activities, and local value creation, which collectively stimulate sustainable economic development at the subnational level. The findings therefore suggest that strengthening SMEs through digital transformation represents an effective pathway for promoting inclusive regional economic development.

A major finding of the study is that digital finance adoption emerged as the strongest predictor of SMEs' contribution to subnational economic growth (**$\beta = 0.438$, $p < .001$**). This finding suggests that SMEs that actively utilize mobile banking, electronic payment systems, internet banking, digital wallets, and Point-of-Sale (POS) terminals are better positioned to improve operational efficiency and expand their economic activities. By facilitating faster financial transactions, reducing transaction costs, improving cash-flow management, and expanding access to formal financial services, digital finance enables SMEs to increase productivity, expand business operations, generate higher revenues, and create additional employment opportunities. These improvements ultimately strengthen SMEs' contribution to regional economic development. This finding is consistent with Ozili (2020), Demirgüç-Kunt et al. (2022), and Sahay et al. (2020), who argued that digital financial services promote enterprise development by reducing financial constraints and improving access to formal financial systems. It also supports the Technology Acceptance Model (Davis, 1989), which posits that organizations are more likely to adopt technologies perceived to improve performance and productivity.

The study further established that the enabling environment significantly influences SMEs' contribution to subnational economic growth (**$\beta = 0.372$, $p < .001$**). This finding demonstrates that the developmental benefits of digital transformation depend not only on technology adoption but also on the institutional and infrastructural conditions within which SMEs operate. Respondents recognized reliable internet connectivity, stable electricity supply, quality digital infrastructure, supportive government policies, effective regulatory institutions, and technological readiness as critical conditions for maximizing enterprise performance. These enabling factors encourage innovation, improve operational efficiency, facilitate market expansion, and strengthen enterprise resilience, thereby increasing SMEs' capacity to contribute to employment creation, investment, and local economic development. This finding corroborates the conclusions of the World Bank (2022), Yaqin and Safuan (2023), and Meniago (2025), who emphasized that institutional quality and supportive infrastructure significantly enhance the developmental impact of digital technologies. The result is also consistent with Rogers' (2003) Diffusion of Innovation Theory, which explains that technology adoption and its developmental outcomes are strongly influenced by the surrounding institutional and technological environment.

Another important finding is that marketing strategies exert a positive and statistically significant influence on SMEs' contribution to subnational economic growth (**β = 0.263, $p < .001$**). Although its standardized effect was smaller than those of digital finance adoption and the enabling environment, the finding confirms that strategic marketing remains an essential driver of enterprise competitiveness. SMEs that invest in digital promotion, customer engagement, brand awareness, strategic communication, and online advertising are better able to attract and retain customers, expand market share, improve sales performance, and strengthen long-term competitiveness. These improvements increase enterprise revenues, encourage business expansion, create additional employment opportunities, and enhance SMEs' overall contribution to regional economic development. This finding supports the work of Chaffey and Ellis-Chadwick (2022) and El Shihy and Hassan (2025), who concluded that digital marketing capabilities significantly improve organizational performance and sustainable business growth in digitally driven economies.

The regression analysis further demonstrates that digital finance adoption, marketing strategies, and the enabling environment collectively explain **71.8%** of the variation in SMEs' contribution to subnational economic growth (**R^2 = 0.718**). This substantial explanatory power indicates that these three strategic factors jointly constitute the principal drivers of SME-led regional economic development in Taraba State. The statistical significance of the regression model (**F = 299.104, $p < .001$**) and the exceptionally large practical effect size (**Cohen's f^2 = 2.55**) further indicate that the proposed conceptual framework provides a robust explanation of how digital transformation enhances SMEs' contribution to subnational economic growth.

Taken together, these findings reinforce the central argument of the study that sustainable subnational economic development is best achieved by strengthening the productive capacity and competitiveness of SMEs. Digital finance adoption, effective marketing strategies, and a supportive enabling environment operate synergistically to improve enterprise productivity, expand financial inclusion, encourage investment, generate employment, stimulate innovation, and increase local value creation. By providing empirical evidence from Taraba State, this study extends existing literature beyond national-level analyses and contributes context-specific evidence on the drivers of SME-led regional economic development. The findings therefore underscore the importance of integrated policy interventions that simultaneously strengthen digital financial ecosystems, improve institutional and infrastructural support, and enhance the digital capabilities of SMEs as a strategy for promoting inclusive and sustainable subnational economic growth.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Major Findings

This study examined the extent to which digital finance adoption, marketing strategies, and the enabling environment influence SMEs' contribution to subnational economic growth in Taraba State, Nigeria. Using a descriptive survey research design, primary data were collected from 384 SME owners and key business stakeholders across Jalingo, Wukari, Takum, and Bali. The data were analyzed using descriptive statistics, Pearson's correlation analysis, exploratory factor analysis, and multiple regression analysis.

The descriptive findings revealed that respondents expressed favourable perceptions regarding digital finance adoption, marketing strategies, the enabling environment, and SMEs' contribution to subnational economic growth, with all mean scores exceeding the benchmark value of 3.00. These findings indicate widespread recognition among SME operators that digital technologies, strategic marketing practices, and supportive institutional conditions are essential for strengthening enterprise development and enhancing SMEs' contribution to employment generation, business expansion, productivity, financial inclusion, investment, and local economic development.

The reliability and validity assessments confirmed the robustness of the research instrument. All constructs recorded Cronbach's Alpha coefficients above the recommended threshold of 0.70, while the KMO value of 0.912 and the significant Bartlett's Test of Sphericity confirmed the suitability of the data for factor analysis. Furthermore, the exploratory factor analysis demonstrated that the four constructs collectively explained 72.28% of the total variance, indicating satisfactory construct validity.

The correlation analysis revealed statistically significant positive relationships between all independent variables and SMEs' contribution to subnational economic growth. Digital finance adoption exhibited the strongest relationship (**$r = .738$**), followed by the enabling environment (**$r = .712$**) and marketing strategies (**$r = .681$**). These findings suggest that improvements in digital financial technologies, marketing capabilities, and institutional support are associated with greater SME contributions to regional economic development.

The regression analysis further demonstrated that digital finance adoption, marketing strategies, and the enabling environment jointly explained **71.8%** of the variation in SMEs' contribution to subnational economic growth (**$R^2 = 0.718$**). The overall model was statistically significant (**$F = 299.104$, $p < .001$**). Among the predictors, digital finance adoption exerted the greatest influence (**$\beta = .438$**), followed by the enabling environment (**$\beta = .372$**) and marketing strategies (**$\beta = .263$**). The exceptionally large Cohen's f^2 value (**2.55**) further indicates that these variables have substantial practical significance in explaining SMEs' contribution to regional economic development. Consequently, all three null hypotheses were rejected.

5.2 Conclusion

The findings of this study demonstrate that digital finance adoption, effective marketing strategies, and a supportive enabling environment are fundamental drivers of SMEs' contribution to subnational economic growth in Taraba State, Nigeria. The results indicate that SMEs that embrace digital financial technologies improve operational efficiency, strengthen financial management, expand business activities, and increase productivity, thereby enhancing their capacity to generate employment, create local value, stimulate investment, and contribute meaningfully to regional economic development. Likewise, effective marketing strategies improve customer acquisition, market expansion, sales performance, and business competitiveness, while a conducive enabling environment provides the institutional and infrastructural foundation necessary for these innovations to produce sustainable developmental outcomes.

An important contribution of this study is the demonstration that these strategic factors operate as complementary rather than isolated drivers of SME development. Digital finance adoption is most effective when supported by reliable infrastructure, favourable government policies, quality digital connectivity, and an enabling regulatory environment. Similarly, the effectiveness of marketing strategies depends on enterprises having access to modern digital technologies and supportive business ecosystems. Together, these elements create an integrated environment that enhances enterprise resilience, encourages innovation, attracts investment, promotes financial inclusion, creates employment opportunities, and strengthens SMEs' contribution to subnational economic growth.

By focusing on SME operators in Taraba State, this study advances the literature beyond national-level analyses of digital transformation and economic growth by providing firm-level evidence on the determinants of SME-led regional economic development. The findings therefore offer valuable insights for policymakers, financial institutions, development agencies, and SME owners seeking evidence-based strategies to strengthen enterprise competitiveness and promote inclusive and sustainable subnational economic growth through the productive contributions of SMEs.

5.3 Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. Expand digital infrastructure: Federal and state governments should prioritize investment in broadband connectivity, stable electricity supply, cybersecurity, and digital payment infrastructure to improve SMEs' access to reliable digital financial services, especially in rural and underserved communities.
2. Encourage wider adoption of digital finance: Financial institutions, fintech companies, and development finance organizations should continue to develop affordable, secure, and user-friendly digital financial products while expanding digital financial literacy programmes that encourage SMEs to embrace digital financial technologies.
3. Strengthen SMEs' digital marketing capabilities: Government agencies, business associations, and enterprise development organizations should provide continuous training and advisory support in areas such as social media marketing, digital branding, customer relationship management, e-commerce, and online advertising to improve the competitiveness of SMEs.
4. Create a more supportive business environment**:** Policymakers should implement business-friendly policies that improve digital infrastructure, strengthen regulatory institutions, simplify business procedures, and promote innovation while ensuring adequate cybersecurity and consumer protection.
5. Promote stronger public-private collaboration: Partnerships among government agencies, financial institutions, telecommunications companies, fintech firms, business associations, academic institutions, and development partners should be strengthened to accelerate digital transformation and support sustainable subnational economic growth.

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