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## Effect of financial technologies on small and medium sized businesses performance in Nsukka urban in Enugu state

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### Abstract

Driven by the various operational difficulties faced by SMEs in Nigeria and other developing economies, as well as the growing importance of financial technologies in modern business operations, and the necessity for businesses to embrace digital financial tools, this study explored the impact of financial technologies on the performance of small and medium-sized enterprises (SMEs) in Nsukka Urban, Enugu State, located in South East Nigeria. Utilizing a logistic regression model, the study analysed data collected from approximately 301 SMEs within the study area to determine the effect of financial technologies on business performance, specifically in terms of profitability, overall business success, and sales growth. The findings of the analysis showed a high and significant adoption of financial technologies among SMEs in Nsukka Urban. Additionally, the logistic regression results indicated that the integration of financial technologies into business operations had a notable positive impact on profitability, overall financial performance, and sales. Specifically, SMEs that frequently utilized financial technologies were more likely to experience increased profits, improved financial outcomes—including revenue and net profit—and higher sales volumes. These findings highlight the essential role of financial technologies in enhancing the performance of SMEs in developing economies. By leveraging digital financial tools, businesses can overcome common operational challenges, improve financial stability, and achieve better market competitiveness. The study highlights the need for further promotion and integration of financial technologies within the SME sector to drive sustainable growth and economic development.

**Keyword:** Fintech, SMEs, business performance, Nsukka

### Introduction

Financial Technology (FinTech) refers to the use of digital technologies in financial services. It continues to revolutionize the financial sector, industries, and businesses. FinTech combines finance and information technology, and is now a popular term for innovative technologies adopted by financial service institutions (Sangwan, Prakash, and Singh, 2020) [27]. FinTech innovations, such as digital wallets, mobile banking, and financial apps, are disrupting traditional financial markets worldwide (Lee and Shin, 2018) [16]. They have brought fundamental changes to banking, capital raising, and money itself (Magnuson, 2018) [20]. The usage and scope of FinTech are expected to increase dramatically, potentially increasing consumer welfare and reducing the likelihood of financial crises (Gomber *et al.*, 2018) [11]. The FinTech revolution is expected to significantly change financial services operations by increasing efficiency, customer centricity, and transparency. The Fintech ecosystem consists of innovations in core services, business infrastructure, and components, creating value addition through competition and redesigning financial services among key stakeholders (Sangwan, Prakash, and Singh, 2020) [27].

Fintech has rapidly revolutionized the financial services sector, specifically benefiting small and medium-sized firms (SMEs). In Nigeria, where traditional banking services have historically had limited availability, fintech provides a groundbreaking option that improves financial inclusion and boosts corporate success (Perez-Saiz & Sharma, 2019) [24]. Small and medium-sized firms (SMEs) are vital to Nigeria's economic fabric, promoting job creation, innovation, and Macroeconomic development. However, these firms often experience major challenges in obtaining traditional financial services, including stringent lending

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requirements, high transaction costs, and geographical limits (Ezeagba, 2017) <sup>[9]</sup>. These difficulties have limited the growth and sustainability of SMEs, particularly in locations like Nsukka Urban in Enugu State, where the financial infrastructure is less developed. Fintech has arisen as a potential answer to these difficulties, delivering novel financial services that could increase SME performance. However, the extent to which fintech can meet the special demands of SMEs in Nsukka Urban remains underexplored. Hence this study delves into critical relating to the effects of financial technologies on the performance of SMEs in Nsukka Urban, Enugu State, South East Nigeria. Specifically, this study ascertains the effect of financial technologies on the performance (profitability, overall performance, and sales) of SMEs.

The study is motivated by the numerous operational challenges which small SMEs face in the region and developing countries, the importance of financial technologies in the current landscape of business, as well as the need for the adoption of financial technologies by businesses. Despite the development of fintech solutions in Nigeria, there remains a gap in knowing how these technologies impact the operational efficiency and financial performance of SMEs in specific local contexts. The literature has generally concentrated on bigger urban centers like Lagos and Abuja, overlooking smaller urban locations where SMEs play a crucial role in local economy (Effiom & Edet, 2022) <sup>[8]</sup>. The lack of regional research creates a major knowledge gap that this study tries to fill. Furthermore, integrating fintech into the financial services ecosystem in Nsukka Urban has the potential to bring about significant economic benefits. For example, mobile money platforms enable small and medium-sized enterprises (SMEs) to carry out transactions quickly and securely, reducing the risks associated with cash-based operations. Moreover, online lending platforms offer SMEs easier access to credit, often with more favourable terms compared to traditional banks (Nneli & Frederick, 2024) <sup>[22]</sup>. These fintech solutions not only enhance operational efficiency but also contribute to improved business performance, as SMEs can reinvest their savings in expanding their operations, enhancing product quality, and accessing new markets.

By researching the effects of fintech on SMEs in Nsukka Urban, this study attempts to give empirical data on the usefulness of fintech in increasing SME performance in under-researched places. Understanding the impact of fintech on SMEs in Nsukka Urban is vital for various reasons. First, it will enlighten policymakers on the essential legislative frameworks to enable fintech adoption. Secondly, it will guide fintech companies in personalizing their services to fit the specific needs of SMEs, and third, findings in this study will help in enlightening SMEs on the need for the adoption of fintechs for profit, performance, and increased sales, ultimately contribute to the economic development of the region. Moreover, the findings of this study shows that SMEs who used fintechs had better profit, performance, and increased sales compared to those who did not. Finally, although there are potential opportunities, the implementation of fintech among small and medium-sized enterprises (SMEs) in Nsukka Urban is not without difficulties. Issues like as digital literacy, cybersecurity concerns, and the regulatory environment pose significant

impediments to wider adoption (Damilola, 2022) <sup>[7]</sup>. Thus, the findings of this study provide a strong case for overcoming these challenges, in order to increase the adoption of fintechs in developing contexts. Therefore, this study is not only timely but also vital for establishing a more equitable and sustainable financial ecosystem in Nsukka Urban. The remainder of this study is divided into four sections; the literature review, methodology, results and discussions, and the conclusion.

## Literature Review

The impact of fintech on the performance of SMEs is well documented in literature. Paraphrased Literature Review Lontchi, Yang, and Shuaib (2023) <sup>[19]</sup> explored the influence of financial technology (FinTech) on the performance of small and medium-sized enterprises (SMEs) in Cameroon during the COVID-19 recovery phase. Their study, based on survey responses from 381 SMEs in Yaoundé and Douala, utilized the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique. Findings indicated that FinTech adoption had a significantly positive effect on SME performance. Similarly, research by Akanbi, Oladejo, and Oyeleye (2022) <sup>[2]</sup> assessed the impact of FinTech on both financial and non-financial aspects of SME performance in Oyo State, Nigeria. By selecting 381 SMEs from 33 Local Government Areas and applying a one-way ANOVA analysis, they discovered that FinTech adoption had a strong relationship with customer satisfaction, customer retention, profitability, and turnover, ultimately enhancing SME performance.

In Indonesia, Hamidah, Prihatni, and Ulupui (2020) <sup>[13]</sup> investigated the role of FinTech in boosting the performance of micro, small, and medium enterprises (MSMEs) in Depok City. Their study, which employed multiple linear regression on 286 samples, found that FinTech significantly improved business outcomes. Likewise, Akande *et al.* (2023) <sup>[3]</sup> analyzed the effect of FinTech, specifically point-of-sale technology, on SME performance in Ekiti State, Nigeria. Findings from their study, which used a sample of 282 businesses, revealed a notable impact of FinTech on customer satisfaction and profitability. Meanwhile, Li *et al.* (2024) <sup>[18]</sup> examined the effect of FinTech on SMEs in China, using data from NEEQ-listed companies between 2011 and 2020. The study revealed that FinTech enhanced SME performance by expanding access to finance and reducing borrowing costs. Additionally, heterogeneity analysis indicated that the effect was more pronounced for smaller and high-growth firms.

Sumani and Prasetya (2022) <sup>[29]</sup> analyzed FinTech adoption among MSMEs in Jakarta, Bogor, Depok, Tangerang, and Bekasi, Indonesia. Their study, based on survey data from 130 entrepreneurs, found no significant relationship between FinTech usage and MSME performance. Agboola, Adelugba, and Eze (2023) <sup>[1]</sup> examined how FinTech lending influenced the survival and revenue growth of micro-enterprises in Nigeria. Using regression analysis on data from 303 micro-enterprises, their findings suggested that FinTech lending played a crucial role in sustaining businesses and boosting revenue. Another study, conducted by Popović-Pantić, Semenčenko, and Vasilčić (2020) <sup>[25]</sup>, explored the financial performance of women-led companies in relation to digital technology adoption. The

study, based on 46 companies, revealed that digital technology did not directly impact financial performance. However, product innovation served as a mediating factor, strengthening the indirect link between digital adoption and financial performance.

In Cameroon, Talom and Tengeh (2019) [30] investigated the influence of mobile money payment and receipt services on SMEs' financial performance. Using a mixed-method approach, they gathered responses from 285 SMEs and conducted in-depth interviews with 12 business owners. Their results suggested that mobile money services contributed to approximately 73% of the variance in SMEs' revenue post-adoption.

Meanwhile, research by Purnasalam and Suryani (2025) [26] explored FinTech's impact on SMEs in the creative economy sector in Indonesia. Using survey data from 130 SMEs on Lombok Island and analyzing it through structural equation modeling (SEM-PLS), they found no significant relationship between FinTech, risk perception, and SME performance. Alamsyah and Islami (2023) [4] examined the impact of three FinTech components-capital loans, digital payment services, and financial regulatory services-on MSME performance in Gorontalo City, Indonesia. Their path analysis, conducted using SPSS 23, showed that these three elements significantly improved financial performance. Kurniawan and Iskandar (2023) [15] studied Indonesian MSMEs during the COVID-19 pandemic, focusing on technology adaptation, financial innovation, and policy impacts on financial sustainability. By employing SEM-PLS on a dataset of 1,026 MSMEs, their findings demonstrated that technology adaptation and innovative financial practices significantly influenced financial sustainability, with the latter acting as a moderating variable. Lastly, Jamilah and Mardiana [14] investigated the role of financial literacy in mediating the effect of FinTech on MSME performance. Using survey data from 100 food and beverage MSMEs in Surabaya, their path analysis revealed that financial literacy strengthened the positive relationship between FinTech and SME performance.

The review of empirical studies across different regions indicated that FinTech adoption positively influences SME growth by enhancing financial accessibility, improving customer satisfaction, and increasing revenue. Studies conducted in Cameroon, Nigeria, China, and Indonesia generally support the argument that FinTech contributes significantly to SME financial performance, particularly in terms of customer retention, sales turnover, and access to credit. However, some studies found no significant effect, suggesting that FinTech's impact may vary depending on regional factors, firm size, and sector-specific characteristics. A key theme emerging from the review is that FinTech improves SME performance by reducing financing constraints and facilitating technological adaptation. Additionally, studies highlight the role of financial literacy, innovation, and regulatory frameworks in mediating the effectiveness of FinTech adoption. While FinTech enhances business performance in many cases, its effectiveness is not uniform across all SMEs, as seen in studies from Indonesia, where FinTech adoption had no measurable impact. Hence, this study contributes to literature, particularly as the effect of Fintech of on performance remains mixed.

## Methodology

**Data and Sample:** This study utilizes a quantitative research design to build its methodology. This is due to the fact that the utilization of quantitative approaches in data collection and analysis offer high accuracy and objectivity, reducing subjectivity and bias (Zyoud, Bsharat, & Dweikat, 2024) [31]. They enable researchers to extrapolate results to larger populations, advancing our understanding of the subject. Quantitative methods also enable rigorous statistical analysis and hypothesis testing, allowing for the identification of patterns, trends, and significant differences within data sets (Martin & Bridgmon, 2012) [21]. This analytical rigor supports evidence-based decision-making and strengthens the validity of research findings. Data used for analysis was primary in nature. A survey was carried out from 15<sup>th</sup> October, 2024 to 1<sup>st</sup> December, 2024 in urban centres in Nsukka, Enugu State. Data were collected using structured questionnaires. Responses to questions are done with respect to the last year (365days) prior to the date of interview. All responses to questions are subjective.

The population of the study were all SMEs in the study area. All SMEs were qualified irrespective of their kind of trade, number of employees, or size of business. Due to the limitation of not having an accurate and actual number of SMEs in the study as a result of the unavailability of a database containing complete and up-to-date information on SMEs, in the spirit of Hair *et al.*, (2017) [12], the study ensures a number of 10 respondents to at least a single question. Thus, there were 10 questions of relevance to the analysis, giving a sample total of 100. However, over 300 SMEs were interviewed, in order to have sufficient observation for a deeper and robust analysis. As suggested by Gall, Borg and Gall (1996) [10] the greater the sample, the more accurate the results. A simple random technique was utilized in order to arrive at the final sample for the study. The technique was employed due to the fact that it ensures that every member of the population has an equal chance of being selected, minimizing bias and providing a representative sample of the larger group (Levy & Lemeshow, 2013) [17].

## Variables

The key variables in the study are profitability, performance, sales, revenues, financial technology, operational years, number of employees, education of owner, gender of owner, and access to credit. Profitability is measured as 1 if the business reported profit and 0 otherwise. Overall performance is captured as 1 if the business is deemed to have performed well in the last business year, and 0 otherwise. Performance here was constructed using profits and significantly higher revenues. Businesses with profits and higher revenues were deemed to have performed better as against those who did not report profits as well as have higher revenues. Sales is also a binary variable with those who witnessed increase sales measured 1 and 0 for those who did not. Financial technology which is the key independent variable of the study is measured as 1 for those business used fintech products regularly and 0 for those who did not. Financial technologies include both payment services such as Mobile wallets, mobile money, Point of Sales, Crypto, and other forms of technologically driven payments, as well as finance

products such as crowd funding, P2P and crowd lending, etcetera.

Number of employees is an ordered categorical variable with those business who have 1-5 employees measured as 1, 6-10 employees measured as 2, 11-20 employees measured as 3, and 21 above employees measured as 4. For average monthly revenue (in Naira), businesses with less than ₦100,000 in revenues are measured as 1, those with ₦100,000-₦500,000 in revenues are measured as 2, those with ₦500,000-₦1,000,000 in revenues are measured as 3, and above ₦1,000,000 in revenues are measured as 4. For operational years, businesses in operation less than 1 year are measured as 1, businesses in operation for 1-5 years are measured as 2, businesses in operation 6-10 years are measured as 3, and businesses in operation More than 10 years are measured as 4. For access to credit which captures whether or not the business accessed to credit via fintech, if the business accessed credit, they are measured as 1, and 0 if they did not access credit. Finally, for the personal characteristics of the business owner or manager, education of owner is measured as 0 for no formal education, 1 for primary education, 2 for secondary education, and 3 for having tertiary education. For the gender of owner, male operated businesses are measured as 1, and 0 for females.

**Model Specifications and Estimation Technique**

All the outcomes of interest in this study; profitability, performance, and sales, are all dichotomous. Hence, to estimate the effect of fintech on each dependent variable, an estimator that suits the dichotomous nature of the variables should be employed. Therefore, to achieve the objective the study, the Logistic regression estimator is employed. Logistic regression analysis examines the relationship between an independent variable and a dependent variable,

contrasting with linear regression analysis which uses a continuous dependent variable. This model can be extended to include multiple independent variables, or hypothesized risk factors. To use the logistic regression estimator, the following models are fitted.

$$L_i = \ln(P_i/1 - P_i) = Profitability = \beta_0 + \beta_1 FINTECH_i + X\delta + \epsilon$$

$$L_i = \ln(P_i/1 - P_i) = Performance = \beta_0 + \beta_1 FINTECH_i + Y\delta + \epsilon$$

$$L_i = \ln(P_i/1 - P_i) = Sales = \beta_0 + \beta_1 FINTECH_i + Z\delta + \epsilon$$

Where:

$L_i$  is the Logit;

$P_i$  is the Probability of success; profitability, performance, or increased sales;

$1 - P_i$  is the Probability of failure; no profits, non-performance, or no increased sales;

$\beta_1, \beta_1$  and  $\delta$  are regression coefficient;

$X, Y$  and  $Z$  are a vector matrices of independent variables including revenues, operational years, number of employees, education of owner, gender of owner, access to credit, and sales;

$\epsilon$  is the unobserved error term.

For robustness purposes, the models are also estimated using the Probit estimator and Least Squares estimator.

**Results of Analysis  
Descriptive Statistics**

**Table 1:** Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Max
Profitability	300	.897	.305	0	1
Performance	301	.9	.3	0	1
Sales	301	.947	.225	0	1
Revenues	301	1.515	.715	1	4
Financial Technology	301	.721	.449	0	1
Operational Years	300	2.267	.635	1	4
Number of Employees	301	4.731	.835	3	10
Education of Owner	300	2.147	.673	0	3
Gender of Owner	301	.465	.5	0	1
Access to Credit	301	.561	.497	0	1

Source: Authors computation

Table 2 shows the result descriptive statistics of the variables employed in this study. For the dependent variables, majority of the respondents reported profitability (90%), good performance (90%), and increased sales (95%) over the study period. Most businesses had revenues within ₦100,000-₦500,000 in the last business year. These statistics suggest that businesses generally thrived in the last business year. In terms of using financial technologies frequently for business operations, the results show that majority of businesses made use of financial technologies frequently. Its mean is 0.72, suggesting that 72% of the business used financial technologies. For operational years or the age of the business, the mean of 2.26 suggest that most business in the sample were about 1-5 years old. For access to credits, most (56%) businesses had access to

credits with the mean of 0.56. For number of employees, the results show that most businesses had an average of 5 employees.

Finally, for the socioeconomic characteristics of the business owner, most business owners were females (54%), while most of the business owners had at least a secondary school certificate (mean of 2.1). The results generally indicate that businesses in South East Nigeria generally performed well, with high profitability and increased sales. The frequent use of financial technologies (72%) suggests their positive role in business operations. Most businesses were young, had small workforces, and moderate access to credit. Additionally, female entrepreneurs dominated, and most had at least secondary education.



**Table 3:** Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) profitability	1.00	-	-	-	-	-	-	-	-	-
(2) Performance	0.96	1.00	-	-	-	-	-	-	-	-
(3) Sales	0.62	0.54	1.00	-	-	-	-	-	-	-
(4) Revenues	0.21	0.23	0.12	1.00	-	-	-	-	-	-
(5) Financial Technology	0.27	0.24	0.23	0.10	1.00	-	-	-	-	-
(6) Operational Years	0.10	0.11	0.07	0.46	0.03	1.00	-	-	-	-
(7) Number of Employees	-0.17	-0.10	-0.16	-0.36	-0.18	-0.22	1.00	-	-	-
(8) Education of Owner	0.08	0.12	0.00	0.32	0.32	0.03	-0.12	1.00	-	-
(9) Gender of Owner	0.05	0.03	-0.00	0.15	0.07	0.14	-0.10	0.05	1.00	-
(10) Access to Credit	0.11	0.12	0.04	0.28	0.30	0.23	-0.27	0.32	0.13	1.00

Source: Authors computation

Table 3 shows the correlational analysis amongst the variables in the study, undertaken in order to test for collinearity. When two or more independent variables in a regression model are highly correlated, it can result in unstable and unreliable coefficient estimates, making it difficult to accurately interpret the individual impact of each variable on the dependent variable. This compromises the validity of a model’s analysis, which is why testing for multicollinearity is crucial. Based on the results, among the key independent and control variables; financial technology, operational years, number of employees,

education of owner, gender of owner, and access to credit, there is no substantial correlation.

**Regression Results:** In tables 4, 5 and 6, the results of the models fitted to ascertain the effect of financial technology on the performance of the business sampled are presented. The results of three estimators; logit, probit, and OLS are presented. This is basically done in order to ascertain how robust the findings are to different techniques of analysis. However, as earlier noted, the logistic regression model result is the main result for this study.

**Table 4:** The effect of Financial Technology on Profitability

Variables	Logit	Probit	OLS
	Profits	Profits	Profits
<b>Profits</b>			
Financial Technology	1.093* (0.552)	0.556* (0.287)	0.0809* (0.0340)
Revenues	3.043* (1.485)	1.476* (0.744)	0.0515* (0.0242)
Operational Years	-0.157 (0.510)	-0.0857 (0.249)	-0.00212 (0.0249)
Number of Employees	-1.324 (1.434)	-0.623 (0.683)	-0.00216 (0.0182)
Education of Owner	-0.0154 (0.374)	0.00301 (0.196)	0.000642 (0.0234)
Gender of Owner	0.358 (0.554)	0.168 (0.283)	0.0142 (0.0278)
Access to Credit	0.196 (0.566)	0.0914 (0.284)	0.0118 (0.0312)
Sales	5.086*** (1.201)	2.710*** (0.527)	0.812*** (0.0651)
_cons	0.181 (6.843)	-0.0562 (3.230)	-0.0109 (0.138)
R <sup>2</sup>			0.426
AIC	130.6	130.3	-9.136
BIC	163.9	163.5	24.14
N	298	298	298

Standard errors in parentheses \**p*<0.10, \*\**p*<0.05, \*\*\**p*<0.01

Table 4 presents the results of the effect of financial technology on profitability, showing a significant positive relationship between fintech adoption and business profits. The findings suggest that businesses that frequently use financial technologies are more likely to experience increased profitability. Specifically, fintech adoption significantly enhances profits by improving financial management, increasing efficiency, and driving sales growth. Among the control variables included in the

analysis, revenues and sales emerged as significant predictors of profitability, with both variables positively influencing profit levels. This aligns with the fundamental principle that higher revenues and increased sales contribute directly to business profitability. The role of financial technology in facilitating this growth cannot be overstated. Financial technologies contribute to profit maximization in multiple ways. First, they streamline payment processes, reducing transaction costs and delays, which ultimately

improves cash flow management. Second, fintech solutions, such as mobile money platforms and digital banking, enhance access to financial services, enabling businesses to manage their funds more effectively and invest in growth opportunities.

Additionally, financial technologies improve sales and revenue generation, thereby increasing overall profitability. Digital payment systems expand market reach by allowing businesses to cater to customers who prefer cashless transactions, leading to higher sales volumes. Moreover, mobile banking and fintech applications offer financial tracking tools that enhance bookkeeping practices, ensuring better financial decision-making. The study by Batista, Sequeira, and Vicente (2022) [6] supports these findings, demonstrating that female microentrepreneurs who utilized mobile money accounts alongside financial training experienced increased profits and financial security. This

improvement was attributed to better bookkeeping, reduced financial obligations to relatives, and increased savings, highlighting the broader impact of fintech on financial discipline and business sustainability. Furthermore, financial technologies reduce operational inefficiencies by automating transactions, minimizing errors, and enhancing transaction security. Mobile money services, for example, decrease the reliance on cash transactions, lowering the risks of theft and fraud while improving customer trust and satisfaction. The integration of financial technologies also allows businesses to adopt dynamic pricing models, offer flexible payment options, and implement digital marketing strategies, all of which contribute to profit growth. By leveraging fintech solutions, businesses not only improve their financial stability but also create long-term economic resilience.

**Table 5:** The effect of Financial Technology on Performance

Variables	Logit	Probit	OLS
	Performance	Performance	Performance
<b>Performance</b>			
Financial Technology	1.343** (0.445)	0.680** (0.231)	0.137*** (0.0406)
Operational Years	0.687* (0.368)	0.328* (0.191)	0.0507* (0.0277)
Number of Employees	-0.0649 (0.300)	-0.0728 (0.154)	-0.00113 (0.0219)
Education of Owner	0.262 (0.289)	0.140 (0.159)	0.0231 (0.0272)
Gender of Owner	0.0375 (0.422)	0.0181 (0.220)	0.00353 (0.0341)
Access to Credit	-0.0549 (0.453)	-0.0202 (0.236)	-0.00912 (0.0383)
Sales	2.458* (1.412)	1.347* (0.803)	0.504** (0.173)
_cons	-2.687 (2.593)	-1.100 (1.411)	0.146 (0.243)
<i>R</i> <sup>2</sup>			0.099
<i>AIC</i>	186.9	187.0	114.4
<i>BIC</i>	216.5	216.6	144.0
<i>N</i>	299	299	299

Standard errors in parentheses \**p*<0.10, \*\**p*<0.05, \*\*\**p*<0.01

The effect of financial technologies on overall business performance is summarized in Table 5, where performance is measured using profits and higher revenues. Businesses that reported profits and increased revenues were considered to have performed better than those that did not. The results indicate that financial technologies positively and significantly impact overall performance. These technologies enhance efficiency, financial access, and market connectivity, contributing to business growth. Mobile technology reduces inefficiencies by providing reminders, peer references, and data-sharing capabilities (Sharma, Ilavarasan, & Karanasios, 2023) [28]. It also

alleviates financial constraints, enabling businesses to access funding more easily (Asamoah, Takeddine, & Amedofu, 2020) [5]. Moreover, mobile payment services improve transaction convenience and security by reducing dependence on cash and minimizing theft risks (Pal, De', & Herath, 2020) [23]. The adoption of financial technologies fosters better financial management, streamlines transactions, and enhances customer engagement. Consequently, businesses leveraging these innovations are better positioned for sustainable growth and competitive advantage.

**Table 6:** The effect of Financial Technology on Sales

Variables	Logit Sales	Probit Sales	OLS Sales
<b>Sales</b>			
Financial Technology	1.869** (0.608)	0.911** (0.289)	0.115*** (0.0308)
Operational Years	0.706 (0.493)	0.349 (0.246)	0.0200 (0.0210)
Number of Employees	-0.554* (0.290)	-0.326* (0.168)	-0.0378* (0.0162)
Education of Owner	-0.171 (0.392)	-0.0820 (0.202)	-0.0215 (0.0206)
Gender of Owner	-0.197 (0.561)	-0.0877 (0.271)	-0.00730 (0.0259)
Access to Credit	-0.518 (0.583)	-0.281 (0.294)	-0.0311 (0.0290)
_cons	3.821* (1.660)	2.320* (0.966)	1.064*** (0.111)
R <sup>2</sup>			0.074
AIC	119.9	119.3	-52.39
BIC	145.8	145.3	-26.49
N	299	299	299

Standard errors in parentheses \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$

Table 6 presents the effect of financial technology on sales, revealing a significant and positive relationship between fintech adoption and increased sales. Businesses that integrate financial technologies tend to experience higher sales than those that do not. This growth is attributed to several key advantages offered by financial technology. According to Sharma, Ilavarasan, and Karanasios (2023) [28], fintech payment services enhance sales by fostering customer engagement. Mobile wallets provide retailers with strategic opportunities to interact effectively with customers, facilitating smoother and more convenient transactions. The adoption of contactless payments not only streamlines purchases but also allows businesses to cater to a broader customer base, including those who prefer cashless transactions. Additionally, financial technology creates a seamless purchasing experience by enabling even small-value transactions, reducing checkout times, and improving overall transaction efficiency. This, in turn, strengthens the relationship between merchants and customers, allowing businesses to gain deeper insights into consumer preferences and shopping behaviors. Furthermore, mobile payment platforms integrate with loyalty programs, promotions, and personalized marketing strategies, further incentivizing purchases. By leveraging fintech solutions, businesses can establish a unified platform for customer interaction, improving service delivery and fostering brand loyalty. Increased engagement through digital transactions enhances not only sales volume but also profit margins and overall business sustainability. Ultimately, the adoption of financial technology contributes to the long-term economic performance of small and informal businesses by promoting financial inclusion, enhancing operational efficiency, and driving continuous sales growth.

**Conclusion and Policy Implications of Findings**

This study has delved into critical relating to the effects of financial technologies on the performance of SMEs in Nsukka Urban, Enugu State, South East Nigeria. Motivated

by the numerous operational challenges which small SMEs face in the region and developing countries, the importance of financial technologies in the current landscape of business, as well as the need for the adoption of financial technologies by business, the study used the logistic regression technique to estimate data generated from about 301 businesses in the study area, in order to test ascertain the effects of financial technologies on the performance (profitability, overall performance, and sales) of SMEs. Findings generally revealed that the adoption of financial technologies by SMEs in the study area was high and significant. Furthermore, the logistics regression results showed that the use of financial technologies in business operations had significant and positive effects on profitability, performance, and sales. That is, businesses who used financial technologies frequently were more likely to have increased profits, have better financial performance in terms revenues and net profits, and witness increased sales. Thus, these findings suggest that financial technologies are crucial for the performance of SMEs in developing countries. Therefore, these findings have important policy implications for governments, SMEs, and financial institutions. The findings of this study have significant policy implications for governments, SMEs, and financial institutions in developing countries. Given that the adoption of financial technology enhances business performance, profitability, and sales, there is a need for policymakers to promote the, and increase accessibility to these technologies among SMEs by reducing barriers such as high transaction costs and regulatory constraints. Governments should ensure that through policies that support digital payment systems, mobile banking, and financial literacy programs, an enabling environment is created in order to encourage more businesses to integrate financial technology solutions. For SMEs, these findings underscore the necessity for adopting of financial technologies greatly, in order to improve operational efficiency. Business owners should invest in digital payment infrastructure and train employees on

financial technology applications to optimize business transactions. Moreover, financial institutions should design SME-friendly financial technology products, offering affordable digital financial services that address the specific needs of small businesses. Additionally, given the positive effect of financial technology on business performance, profitability, and sales, policies geared towards bridging the digital divide by improving and expanding internet infrastructure in underserved areas should be prioritized. Thus, by implementing these policies, SMEs can leverage financial technological innovations to drive profitability, create jobs, increase economic growth, and foster sustainable business development.

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### References

1. Agboola O, Adelugba IA, Eze BU. Effect of financial technology on the survival of micro-enterprises. *Int J Entrepreneurial Knowl.* 2023;11(1):1-13.
2. Akanbi TA, Oladejo MO, Oyeleye OA. Impact of Fintech (Financial Technologies) usage on the financial and non-financial performance of small and medium scale enterprises in Nigeria. *Int J Acad Res Account Finance Manag Sci.* 2022;12(2):306-316.
3. Akande KM, Igbekoyi OE, Olayisade OA, Abiola BE. Financial inclusion, financial technology and performance of small and medium scale enterprises (SMEs) in Ekiti State. *Int J Res Innov Soc Sci.* 2023;7(7):1826-1842.
4. Alamsyah MF, Islami RN. Influence of financial technology (Fintech) on MSME financial performance in Gorontalo City. *Econ Digit Bus Rev.* 2023;4(1):77-85.
5. Asamoah D, Takiieddine S, Amedofu M. Examining the effect of mobile money transfer (MMT) capabilities on business growth and development impact. *Inf Technol Dev.* 2020;26(1):146-161.
6. Batista C, Sequeira S, Vicente PC. Closing the gender profit gap?. *Manag Sci.* 2022;68(12):8553-8567.
7. Damilola AO. FinTech and financial inclusion in West Africa: Nigeria's SMEs market. *Int J Multidiscip Curr Educ Res.* 2022;4:210-218.
8. Effiom L, Edet SE. Financial innovation and the performance of small and medium scale enterprises in Nigeria. *J Small Bus Entrep.* 2022;34(2):141-174.
9. Ezeagba C. Financial reporting in small and medium enterprises (SMEs) in Nigeria. Challenges and options. *Int J Acad Res Account Finance Manag Sci.* 2017;7(1):1-10.
10. Gall MD, Borg WR, Gall JP. Educational research: An introduction. 6th ed. London, UK: Longman Publishing; 1996.
11. Gomber P, Kauffman RJ, Parker C, Weber BW. On the Fintech revolution: interpreting the forces of innovation, disruption, and transformation in financial services. *J Manag Inf Syst.* 2018;35(1):220-265.
12. Hair J, Hollingsworth CL, Randolph AB, Chong AYL. An updated and expanded assessment of PLS-SEM in information systems research. *Ind Manag Data Syst.* 2017;117(3):442-58. doi:10.1108/IMDS-04-2016-0130.
13. Hamidah N, Prihatni R, Ulupui IGKA. The effect of financial literacy, fintech (financial technology) and intellectual capital on the performance of MSMEs in Depok City, West Java. *J Soc Sci.* 2020;1(4):152-158.
14. Jamilah HM, Mardiana L. The role of fintech and financial literacy on MSME performance: Study on F&B MSMEs in Surabaya. *Utsaha J Entrepreneurship.* 2024;36-46.
15. Kurniawan MA, Iskandar Y. The effect of technology adaptation and government financial support on sustainable performance of MSMEs during the COVID-19 pandemic. *Cogent Bus Manag.* 2023;10(1):2177400.
16. Lee I, Shin YJ. Fintech: Ecosystem, business models, investment decisions, and challenges. *Bus Horiz.* 2018;61(1):35-46.
17. Levy PS, Lemeshow S. Sampling of populations: Methods and applications. 4th ed. John Wiley & Sons; 2013.
18. Li X, Ye Y, Liu Z, Tao Y, Jiang J. FinTech and SME performance: Evidence from China. *Econ Anal Policy.* 2024;81:670-682.
19. Lontchi C.B, Yang B, Shuaib KM. Effect of financial technology on SMEs performance in Cameroon amid COVID-19 recovery: The mediating effect of financial literacy. *Sustainability.* 2023;15(3):2171.
20. Magnuson WJ. Regulating Fintech. *Vanderbilt Law Rev.* 2018;71(4):1167-226.
21. Martin WE, Bridgmon KD. Quantitative and statistical research methods: From hypothesis to results. John Wiley & Sons; 2012.
22. Nneli CA, Frederick O. Role of financial technology platforms in improving access to finance for SMEs in Nigeria. *Int J Innov Stud.* 2024;2(2):89-100.
23. Pal A, De' R, Herath T. The role of mobile payment technology in sustainable and human-centric development: evidence from the post-demonetization period in India. *Inf Syst Front.* 2020;22:607-631.
24. Perez-Saiz H, Sharma P. FinTech in Sub-Saharan African countries: A game changer. *International Monetary Fund. USA: Washington, DC;* 2019.
25. Popović-Pantić S, Semenčenko D, Vasilčić N. Digital technologies and the financial performance of female SMEs in Serbia: The mediating role of innovation. *Econ Ann.* 2020;65(224):53-82.
26. Purnasalam DL, Suryani E. Financial inclusion and financial technology in SMEs: Investigating the mediating role of risk perception on business performance. *J Enterp Dev.* 2025;7(1):14-27.
27. Sangwan V, Prakash P, Singh S. Financial technology: A review of extant literature. *Stud Econ Finance.* 2020;37(1):71-88.



28. Sharma SK, Ilavarasan PV, Karanasios S. Small businesses and FinTech: A systematic review and future directions. *Electron Commer Res.* 2023;1-41. doi: 10.1007/s10660-023-09705-5.
29. Sumani S, Prasetya IB. The effect of financial technology on the performance of micro, small, and medium businesses. *Rev Manag Entrepren.* 2022;6(1):51-72.
30. Talom FSG, Tengeh RK. The impact of mobile money on the financial performance of the SMEs in Douala, Cameroon. *Sustainability.* 2019;12(1):183.
31. Zyoud DM, Bsharat DTR, Dweikat DK. Quantitative research methods: Maximizing benefits, addressing limitations, and advancing methodological frontiers. *ISRG J Multidiscip Stud.* 2024;II(IV):11-14.