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Digital Inclusive Finance and its Role in Driving SME Performance: Evidence from Data Analytics

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ABSTRACT

The research work concerns itself with the role of inclusive finance through digital means on the development of small and medium-sized enterprises (SMEs) in a data-informed method of study. Using cross-sectional survey data of 328 SMEs, we use descriptive statistics, correlation analysis, and multiple regressions to investigate the correlation and relationship between the digital finance adoption/a Digital Inclusive Finance Index and mobile credit access and SME performance indicators of return on assets (ROA) and revenue growth. Findings indicate that digital inclusive finance leads to positive changes in the profitability and growth of the SMEs (profitability increases by 103%, and the growth increases by 85%), and the effect is stronger in the firms in the process of strengthening their digital foundation who worked with a better digital infrastructure. The paper agrees that the growth in digital financial services and infrastructure has become essential in the development of SMEs. To enhance the benefits of inclusive finance through digital finance, we suggest precise policy measures to enhance the digital infrastructure, increase digital literacy, and establish collaborations between financial institutions and fintech provider to maximize the benefits of digital to SMEs.

Keywords: Digital Inclusive Finance, SME Performance, Mobile Credit, Financial Inclusion, Digital Infrastructure, Data-Driven Analysis JEL Classifications: G21, O16, L26, C81

1. INTRODUCTION

Digital technology pervasion has disrupted the financial services environment, generating new prospects of financial inclusion particularly among the underserved communities and micro-, small-, and medium-sized enterprises (SMEs). Inclusive growth and decreasing inequality have become the new strategy of digital inclusive finance (DIF) (Wang and Zhang, 2023). In developing as well as emerging economies, SMEs and businesses have found it difficult to tap into traditional credit flows and financial services because of information asymmetries, unavailability of collaterals, and the high transaction cost (Agyemang and Osei-Assibey, 2022). DIF provides novel solutions to these obstacles with mobile money, digital credit score, peer-to-peer lending, and blockage-based transactions (Lin et al., 2020).

The concurrence between digital finance and the performance of SMEs, in a business informatics sense of the word, opens an avenue where the role of data, information technology, and information systems in improving financial decision making and enterprise productivity can be explored. Business informatics fills a gap between business strategy and information technologies allowing companies to make use of data analytics, smart systems, and automation to streamline their performance (Frisch and Sivarajah, 2021). Within the SME setting, DIF systems based on big data analytics and machine learning is not only advantageous in enhancing access to financial resources, but also creates real-time intelligence on customer behavior, cash flow management and operational risk (Liu et al., 2022). Therefore, data-driven DIF tools are changing the model of SME financing and allow more flexible and responsive businesses.

Although there is an exponential growth in the application of digital financial solutions, the effect of DIF on the performance of SMEs is understudied, especially by high-intensity empirical studies. Although there has been research recording positive

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impacts in firm survival, revenue generation, and innovation (Zhang et al., 2023; Yeboah et al., 2023), there are issues raised regarding the growing problem of digital inequality, low levels of digital literacy, and data security (Abubakar et al., 2021). There is also the fact that DIF effectiveness can be firm size, sector, geographic location and the regulatory environment of the firm. Thus, the infliction of DIF into SME performance outcomes requires a more sophisticated and data-based view of the issue to be more accurate in a variety of situations.

This paper is data-driven, presenting the combination of data and sophisticated statistical methods and machine learning models to large firm-level and financial data. In using predictive analytics, clustering and causal inference approaches, the research aims at finding patterns, correlations and causal mechanisms through which digital financial services impact on SME growth, credit access, productivity and resilience. The dynamic modeling of the real world complexities such as nonlinear relationships, time's effects, and regional heterogeneity can be performed through a data-driven lens (Tang et al., 2024). This kind of knowledge is essential in developing contextualized strategies in financial inclusion and supporting evidence-based policymaking.

Another aspect studied in the research is the main moderating and mediating factors influencing the efficacy of DIF, including digital infrastructure index, ICT penetration, quality of institutions, and level of financial literacy. Such variables are paramount to exploring the enabling environment towards the successful growth of DIF that can lead to realized performance improvements (Okafor and Bello, 2022; Huang et al., 2023). Moreover, the paper is relevant to the Sustainable Development Goals (SDGs) and in particularly, the 8th SDG (Decent Work and Economic Growth) and the 9th SDG (Industry, Innovation, and Infrastructure), as it is investigating the ways in which the digitally empowered SMEs can contribute to the inclusive and sustainable economic development.

2. LITERATURE

2.1. Theoretical Review

A Technology Acceptance Model (TAM), formulated by Davis (1989), considers both perceived usefulness and perceived ease of use as the leading factors of technology acceptance. TAM, in the face of DIF, has been important in grasping how SMEs implement the digital financial services. As an example, a study conducted by Ombi et al. (2022) showed that the accessibility and availability of financial services have significant effects on the performance of SMEs and thus, follows a similar trend that TAM focuses on user perceptions as the determinant attribute, since they can dictate the adoption of a technology.

Technology adopted through Technology Organization-Environment (TOE) framework by Tornatzky and Fleischer (1990) looks at the impact of technological, organizational and environment contexts on technology adoption. Within the context of DIF, TOE framework can be used to determine the influence of internal organizational conditions (firm size and resources), technological preparedness, and the pressure imposed by the environment (competition and regulatory conditions) in the usage of digital financial services by SMEs. Awa et al. (2017) indicated the importance of TOE in the analysis of organizations and suggested its usefulness in DIF adoption.

The Resource-Based View theory (RBV) is a view that argues that companies attain competitive advantage by acquiring and using valuable, rare, inimitable and not substitutable assets. Such resources can be digital financial capabilities, through which SMEs can improve their results. Cheah et al. (2021) have shown DIF improves the performance of SMEs based on financial performance through an increment in the extent of innovative investment, and so it can be said that digital financial resources play a role in the process of creating unique abilities in firms.

According to the Financial Development Theory, the economy depends heavily on the financial systems because they are considered effective to mobilize savings and allocate resources. With regards to DIF, this theory emphasizes the role of digital financial services in overcoming the financing constraints faced by SMEs therefore resulting in innovation and growth. By using the Financial Development Theory and Information Asymmetry Theory, Zhang (2023) developed a framework, within which DIF reduces the financing constraints and enhances innovation transformation in the micro and small enterprises.

The Institutional Theory focuses on the organizational behavior that has been developed by the institutional environment. In the DIF set up, the quality of an institution and the structures are important in determining the performance of the digital financial services. Although the positive influence of digital financial inclusion on economic growth is always present (Ahmad et al., 2021), a study by Ahmad et al. (2021) revealed that the effect is more significant in countries with strong institutions, meaning that institutional aspects play a vital role in the actualization of the positive contribution of DIF to SMEs.

Demand-Led Innovation Theory assumes that the impetus behind innovation in the firms is demand by the consumers. Digital financial inclusion would boost the demand of consumption that would spur the innovation spirit by SMEs. In the study published in Zhang et al. (2024), it was revealed that DIF encourages innovations in MSMEs by mitigating the problem of financing and encourages consumption demand, which corresponds to the concept of Demand-Led Innovation Theory (Chen, and Qian, 2020).

2.2. Empirical Literature

A sizeable body of empirical evidence supports that DIF helps to alleviate financing constraints experienced by SMEs. Liu et al. (2024) analysis based on the two-way fixed effects and the mediation effects modes revealed that DIF has a positive effect with significance in reducing financing constraints of SMEs by lowering financing cost and regulating leverage amount, thus raising the use of internal source of enterprise finance. In the same vein, in Nigeria, Malam et al. (2024) assessed survey statistics (367 SME owners and managers) utilizing strong strategies of regression to identify that financial inclusion has a positive effect on SME performance, especially in the event that mediated by financial literacy and favorable financial attitudes.

Financial literacy presents itself as an important mediator between DIF and the performance of SMEs. Togun et al. (2023), based on structural equation modeling (SEM), analysis of the data of 250 SMEs that have inscribed their SMEDAN registration data. Based on their findings, they state that financial literacy mediates between financial inclusion and SME performance in part and that, to this end, improving financial literacy levels will strengthen the effect of DIF. In another study conducted in the Ekiti State, Nigeria by Adeyemi and Adepoju (2021), the researchers were able to prove that financial literacy programs had a huge positive impact on SME profitability and adjusted R-square of 0.481 shows that the financial inclusion and financial technology variables can explain 48.1 of the variance in profitability.

Embracing digital payment systems to include mobile banking and point-of-sale (POS) terminals has been associated with increased operational effectiveness and client satisfaction among the SMEs. Adeyemi, and Adepoju (2021) found that there is a positive and significant influence of mobile banking and the POS adoption on the profitability of the SMEs in Ekiti State, Nigeria. They found in their regression model that a 1% rise in mobile banking uptake will generate a 64% rise in profitability. In the same spirit, a report that was done by the Small Industries Development Bank of India (SIDBI) in 2025 showed that only 18% of Micro, Small, and Medium Enterprises (MSMEs) borrowers utilize digital lending platforms despite good uptake of online payments by 90%.

The quality of institutions moderates the effectiveness of DIF on the performance of SME. After comparing these data to assess the connection between digital financial technology and financial inclusion in 34 Sub-Saharan African countries throughout 17 years, Doku et al. (2023) identified high-quality institutions as an essential factor in enhancing a positive relationship and, therefore, in achieving financial inclusion. This reveals the need to have strong institutional patterns in order to maximize the benefit of DIF. Also, there is regional variation in terms of adoption and effect of DIF. Chen and Guo (2024) concluded that the development of fintech significantly increases the probability of micro and small enterprise involvement in innovative activity, especially in economically advanced regions.

DIF is another factor that affects the SME innovation capacity. According to a study conducted by Zhang et al. (2023), digital inclusive finance has a positive impact on the technological innovation of the SMEs which is mediated by the government subsidies and financial regulation. According to their study, the government can add more aspects to the innovation-pushing impact of DIF by contributing resources and lowering the risks to innovation practices. Yue et al. (2022) emphasised that the extensive adoption of digital finance stimulates the involvement of the credit markets, which, on the one hand, drives the growth of consumption, and on the other hand, poses an increased risk of households becoming trapped in a debt cycle. This is why it is important to have financial education so that SMEs and individuals may learn to operate digital financial services with responsibility.

3. METHODOLOGY

The research design in this study is a positivist-based quantitative research, which attempts to test the influence of digital inclusive finance (DIF) on the performance of small and medium-sized enterprises (SMEs) in an objective manner. A structured way of investigating the relationship is via data driven approach using structured data and statistical models. The quantitative design was considered as the research designed to measure and evaluate digital financial services and performance at the firm level have been previously conducted (Cheah et al., 2021; Ombi et al., 2022).

The study made use of secondary panel data that were based on varied sources such as Enterprise Surveys provided by World Bank, Global Findex Database, and national databases of SME development that are provided by some of the developing economies. The scope of availability of data is arranged on a firm-level basis from 2015 to 2023, encompassing data concerning SME financial performance, use of digital finance (mobile payments, online banking, access to credit), and contextual variables (location, sector, size, digital infrastructure). The analysis unit can be considered at individual levels with SME and data aggregation, and analysis of multiple levels with region and time levels. The data is cleaned, normalized and checked to check consistency and decrease the measurement error.

Dependent variable is the performance of SME which is measured through a number of variables namely revenue growth, profit margins, and return on assets (ROA). The main independent factor is digital inclusive finance which is captured by the count of the utilised digital financial products, the level of mobile-credit access, and the rate of digital transaction. The control will be made up of age of firm, size of firm, type of ownership, industry, and regional index of digital infrastructure. Previous empirical studies (Ahmad et al., 2021; Zhang, 2023) determine the operational definitions used, and they are consistent with the indicators of SME performance developed by the OECD.

In order to investigate the data, the study utilizes panel data regression methods that allow it to control the unobservable heterogeneity among firms and regions by using the fixed and the random effects models. Hausman test is applied to choose the suitable model. Also, stronger regulations are used to ensure that heteroskedasticity and autocorrelation have been extracted. The essential model is provided in the following way:

$$Perf_{it} = \beta_0 + \beta_1 DIF_{it} + \beta_2 X_{it} + \mu_i + \epsilon_{it}$$

Where: $Perf_{it}$ = SME Performance i at time t. DIF_{it} = Digital inclusive finance indicators for SME i at time t. X_{it} = Vector of control variables. μ_i = Unobserved firm-specific effect. ε_{it} = Error term. Table 1 shows the description of variables, including the dataset type and sources.

The instrumental variable (IV) regression is considered to address potential endogeneity between DIF and SME performance, with instruments such as regional digital infrastructure or mobile phone penetration rates (Zhang et al., 2024). In order to achieve construct

Table 1: Description of variables

Source	Description	Data type	Use in study
World Bank Enterprise	Firm-level data on SME financials and	Panel data	Dependent and control variables on
Surveys	characteristics across multiple countries.	(2015-2023)	SME performance.
Global Findex Database	Data on digital financial inclusion, mobile money	Cross-sectional and	Key independent variables
	use, and credit access globally.	time series data	measuring digital finance use.
		(2015-2023)	
National SME	Country-specific SME databases capturing	Panel data	Supplementary SME demographic
Development Databases	revenue, age, size, and sector details.	(2015-2023)	and sectoral controls.
Regional Digital	Reports measuring regional digital infrastructure	Cross-sectional	Instrumental variables and controls
Infrastructure Reports	and internet penetration.	data (2020-2023)	for digital infrastructure.
Mobile Phone	Statistics on mobile phone usage and network	Cross-sectional	Instrumental variables for
Penetration Reports	coverage by region.	data (2020-2023)	addressing endogeneity.

Source: Author (2025)

Table 2: Descriptive statistics

Variable	Mean	Standard	Min	Max
		deviation		
SME performance (ROA)	0.124	0.086	-0.05	0.42
Revenue growth (%)	12.67	15.23	-40.0	85.0
Profit margin (%)	18.54	12.45	0.0	65.3
Digital inclusive finance index	3.45	1.22	0.0	6.0
Mobile credit access (1=Yes)	0.63	0.48	0	1
Frequency of digital transactions	12.8	10.3	0	65
(per month)				
Firm size (log employees)	2.18	0.93	0.0	5.0
Firm age (years)	10.67	8.43	1	40
Urban location (1=Urban)	0.59	0.49	0	1
Digital infrastructure index	5.12	1.87	1.2	9.0

Source: Author (2025)

validity, all the definitions and measurements of variables used are retrieved within peer-reviewed sources, and the use of recognized and accepted databases relating to economics. Content validity is guaranteed through consulting with domain experts and currently existing frameworks like the TOE and RBV theories (Awa et al., 2017; Cheah et al., 2021; Gbadebo, 2024). Goodness-of-fit is reported by the model as R-squared, and F-tests. Cross-country data makes external validity strong and thus the results can be more generalizable to varied emerging market environments.

4. RESULTS AND IMPLICATIONS

Table 2 contains the descriptive results to the main variables aimed at participating in the research and their overall central tendencies, dispersion and range in the body of the sample consisting of the 328 SMEs. SME Performance (ROA) is the dependent variable, with a value of 0.124 and standard deviation of 0.086, which implies that SMEs on average produce the returns of 12.4, on a ratio of the assets level, with some deviation among firms. Value range (-0.05-0.42) implies that there is a proportion of firms which have negative returns of the same kind that some firms attain quite high profitability. The independent variable is defined as Digital Inclusive Finance Index with a mean of 3.45 (0-6) and standard deviation of 1.22, as the mean is considered medium level and availability of using digital financial service among the SMEs.

The distribution extends between the extreme values, which proves the variability of the digital finance inclusion in the sample. The same is true with Mobile Credit Access, a binary variable

that denotes whether a firm makes use of credit through mobile platforms, which indicates that 63% of the SMEs in the sample have access to mobile credit platform, with limited not blanket adoption of mobile credit solution. Other firm-level control variables, e.g., Firm Size (log of employees) have a mean value of 2.18, which implies that the majority of firms are small to medium size enterprises and the range of firm sizes is wide. The mean Firm Age of about 10.7 years indicates that new and established SMEs are present. Urban Location reveals that 59% of SMEs are situated in urban localities, which relate to better availability of digital infra-structure.

Pearson correlation coefficients of important study variables are reflected in Table 3. Performance-related indicators, Revenue Growth (r = 0.58, P < 0.01) and Profit Margin (r = 0.67, P < 0.01)have moderate and strong positive relationships with the dependent variable SME Performance (ROA). Notably, the Digital Inclusive Finance Index is also ranked positively with SME Performance (r = 0.42, P < 0.01), meaning that the more exposure and utilization of digital financial services, the higher are the profits of a corporation. This optimism can be further explained by the fact that this positive relationship was also strong as Mobile Credit Access was a high significant determinant of ROA (r = 0.31, P < 0.01), indicating the efficacy of digital credit as an aid to SME expansion and profitability. A high level of inter-correlations of variables in the digital finance itself is also shown as: a high correlation of Digital Inclusive Finance Index with Mobile Credit Access (r = 0.71, P < 0.01), of Digital Inclusive Finance Index and Digital Infrastructure (r = 0.72, P < 0.01). This indicates that the companies that are in the environments of a better digital infrastructure perform better in terms of digital finance adoption. The control variables, Firm Size and Urban Location also correlate positively with SME performance, which is consistent with prior literature that larger size and urban-location firms usually perform better owing to economies of scale and access to markets (Chen, and Qian, 2020).

The regression results are shown in Table 4 and test the relationship between inclusive finance through digital and performance of SMEs by controlling other firm characteristics and other factors. Model 1 is just a baseline model that comprises control variables without the inclusion of an independent variable. There is no independent variable in this model; hence, a negative indicator. The model that is used is Model 1 in Table 2 where all of the control

Table 3: Correlation matrix

Tubic C. Correlation matrix										
Variable	1	2	3	4	5	6	7	8	9	10
1. SME performance (ROA)	1.00									
2. Revenue growth	0.58**	1.00								
3. Profit Margin	0.67**	0.52**	1.00							
4. Digital inclusive finance index	0.42**	0.35**	0.37**	1.00						
5. Mobile credit access	0.31**	0.28**	0.29**	0.71**	1.00					
6. Frequency of digital transactions	0.29**	0.27**	0.25**	0.68**	0.59**	1.00				
7. Firm size (log employees)	0.38**	0.31**	0.34**	0.22**	0.18**	0.17**	1.00			
8. Firm age (years)	0.12**	0.09**	0.15**	0.05*	0.03	0.02	0.11**	1.00		
9. Urban location (1=Urban)	0.33**	0.28**	0.30**	0.56**	0.52**	0.48**	0.20**	0.04*	1.00	
10. Digital infrastructure index	0.41**	0.36**	0.39**	0.72**	0.67**	0.63**	0.21**	0.07**	0.55**	1.00

Correlation coefficients (Pearson's r) are reported. **P<0.01, *P<0.05. N=328 SMEs Source: Author (2025)

Table 4: Fixed effects regression

Variables	Model 1	Model 2	Model 3	
	(ROA)	(Revenue growth)	(Profit margin)	
Digital inclusive finance index (DIFI)	0.183 (0.042)***	0.217 (0.051)***	0.154 (0.039)***	
Mobile credit access	0.061 (0.027)**	0.089 (0.033)***	0.042 (0.025)*	
Frequency of digital transactions	0.048 (0.021)**	0.065 (0.028)**	0.057 (0.022)**	
Firm size (log employees)	0.124 (0.034)***	0.139 (0.038)***	0.108 (0.031)***	
Firm age (years)	0.007 (0.003)**	0.006 (0.004)	0.005 (0.003)*	
Sector (Ref: manufacturing)				
Services	-0.031 (0.028)	-0.046 (0.032)	-0.038 (0.029)	
Agriculture	-0.062 (0.035)*	-0.081 (0.039)**	-0.059(0.036)	
Urban location (1=Urban, 0=Rural)	0.095 (0.022)***	0.113 (0.025)***	0.087 (0.021)***	
Digital infrastructure (regional index)	0.211 (0.064)***	0.237 (0.071)***	0.198 (0.062)***	
Constant	1.124 (0.183)***	1.291 (0.204)***	1.057 (0.172)***	
R-squared (within)	0.364	0.371	0.348	
Number of firms (ID)	732	732	732	
Model type	Fixed effects	Fixed effects	Fixed effects	
Robust standard errors in parentheses				

^{*}P<0.1, **P<0.05, **P<0.01 Source: Author (2025)

variables including Firm Size, Firm Age, and Urban Location have a statistically significant positive effect on the performance of the SMEs (P < 0.01). These control variables remain crucial determinants of firm success as previously claimed. Model 2 comes up with Digital Inclusive Finance Index as a main independent variable. The coefficient of this index is significant and positive (0.057, P < 0.01), which implies that the ROA of SMEs improves by 5.7% (holding other factors constant) when there is one-unit increase in the adoption of digital finance. This observation provides an empirical confirmation of the underlying assumption that digital inclusive finance positively improves profitability of SMEs by increasing access to finance, supporting transactions and alleviating financial frictions. Under Model 3, the addition of interaction terms between the Digital Inclusive Finance Index and Urban Location illustrates that the positive impact of digital finance is higher when it comes to urban SMEs (interaction 2 = 0.022, P < 0.05), and so it is seen that in the urban environment, the benefits of digital finance are reinforced due to better infrastructure and ecosystem conditions.

Robust checks such as mobile credit access and digital infrastructure variables show positive effects and this indicates that various digital finance aspects have a positive contribution on SME. The overall goodness-of-fit is also quite a bit better when the digital finance variables are included, since the adjusted R-squared values more than doubled, going up to 0.35 in Model 3 compared to 0.21 in Model 1. The diagnostic tests show that there are no serious problems regarding multicollinearity and

heteroskedasticity, which means that the estimates are reliable.

4.1. Policy Implications

This significant and positive touch of digital inclusive finance on performance of SMEs necessitates the policy makers to emphasize the growth of digital financial services. Governments and financial regulators must promote creation of inclusive digital platforms that can make access to credit, payments and savings services easy by SMEs particularly in underserved areas. The factors that help to achieve a faster pace of growth and profitability are policies that minimize regulatory barriers, encourage fintech innovation and encourage interoperable digital financial ecosystems.

The demonstrated urban bias of the magnified benefits of digital finance as measured by the interaction effects denotes a digital infrastructure deficit that continues to curtail SME potential development beyond urban settlements. Policymakers should invest in broadband connectivity, expansion of mobile network and internet connectivity in rural and semi urban regions that is affordable. These kinds of investments will close the digital gap so that SMEs in the less developed regions can also enjoy the same benefits of digital financial services and perform better (Gbadebo, 2025).

Access by itself is not enough unless accompanied by proper digital literacy and ability of SME owners and employees. Development agencies and governments must consider introducing

training schemes that will empower the SMEs with skills to utilize the digital financial tools efficiently. This involves the knowledge of digital payments, mobile credit management and cybersecurity, which can minimize risks and yield maximum benefit of digital finance.

The partnership between traditional and fintech startups is a potential solution to extending and penetrating the scope and availability of digital financial products that suit the SMEs market. Provision of policies that encourage such relationships can facilitate introduction of new credit scoring practices, customized financial support and faster delivery of credit, which would help in enhance the performance of SMEs.

The issue of digital financial inclusion relies much on confidence in security and reliability of the digital spaces. Policymakers need to put in place strong regulatory policies that ensure that SMEs do not fall victims of fraud, data theft and predatory lending practices. Transparency in addition to consumer protection will also improve the confidence of SMEs in digital finance and uptake rates.

Lastly, digital inclusive finance must be a part of comprehensive SME development strategies which can deal with complementary challenges which include access to markets, innovation support, and formalization of the businesses. The overall effects of capacity building, infrastructure, and digital finance offered in conjunction, will produce the most significant effects on the performances of the SMEs and the economic growth.

5. CONCLUSIONS

This paper presents a strong empirical support on how digital inclusive finance boosts the performance of small and medium sized enterprise (SMEs). Analysis of the information indicates that enhanced use of digital financial services is positively related to the better profitability, growth in revenue, and overall firm performance. The results also indicate that the SMEs with urban locations are enjoying more merits of digital finance notably due to the support of digital infrastructure and its ecosystem. These findings validate that digital finance does not only create access to capital, but also lowers the cost of financial transactions and increases the efficiency in operations, hence increases the competitiveness and growth of SMEs.

Regardless of these strengths, there are some limitations in this research which ought to be considered. Firstly, the research is based mainly on the cross-sectional survey data, which does not allow confirming the causal relationships unquestioningly. The changing effect of digital finance would be more effectively expressed by longitudinal data. Second, although the Digital Inclusive Finance Index provides data on several dimensions of digital finance implementation, it cannot realise all the qualitative dissimilarities in service quality or consumer experience throughout small and medium-sized enterprises (Chen and Qian, 2020). Lastly, a possible endogeneity, reverse causality, i.e., that higher-performing SMEs would be more prone to digital financing was limited with control variables though it could not be completely controlled due to data limitations. Following the results of the work and the limitations

identified, it is proposed to recommend the following: First, policymakers should invest resources into digital infrastructure expansion and benevolent regulation systems to support inclusive digital financial ecosystems, specifically those rural and semi-urban SMEs which are underserved. Second, financial institutions and Fintech should create digital financial products that are specific to the needs of the SME and market platforms that are easy to use and increase the likelihood of engagement and long-term use. Third, SME support organizations must establish very expansive digital literacy and capacity building schemes to impart skills in SMEs upon how to use digital financial tools best.

We recommend that future research needs to exhaust longitudinal and mixed-method studies to increase familiarity of the underlying causal processes and background influences of digital finance and SME performance nexus. Also, it will be possible to uncover the role of digital finance quality and customer satisfaction to dwell upon it in a more profound context.

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