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Analysis of Digital Financial Inclusion and Financial Performance of Small and Medium Enterprises in West Pokot County, Kenya

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ABSTRACT: Small and medium enterprises (SMEs) play a critical role in Kenya's economy through employment creation, poverty reduction and economic growth. However, their performance is constrained by inadequate digital financial inclusion, particularly in marginalized areas. This study examined the influence of digital financial inclusion on the financial performance of SMEs in West Pokot County, Kenya. Specifically, it assessed the effects of digital credit, digital saving culture and digital payments on SME financial performance and investigated the moderating effect of digital financial literacy on the relationship between digital financial inclusion and financial performance. The study was anchored on the Vulnerable Group Theory of Financial Inclusion, Financial Literacy Theory and Resource-Based View Theory. A descriptive research design was adopted. The target population comprised 804 licensed SMEs in West Pokot County, from which a sample of 267 respondents was determined using Yamane's formula and selected through simple random sampling. Data were collected using questionnaires pre-tested on 27 SME owners. Data were analyzed using descriptive and inferential statistics, including multiple and hierarchical regression analysis. Diagnostic tests for normality, multicollinearity and heteroscedasticity were conducted, while hypotheses were tested at the 5% significance level. The findings established that digital credit had a positive and statistically significant effect on SME financial performance ($\beta = 0.539$, $p < 0.001$). Digital saving culture also had a positive and significant effect ($\beta = 0.400$, $p < 0.001$), while digital payments positively and significantly influenced financial performance ($\beta = 0.426$, $p < 0.001$). The moderation analysis showed that digital financial inclusion and digital financial literacy jointly explained 46.7% of the variation in SME financial performance. Introducing the interaction term increased R^2 from 0.467 to 0.501, representing a significant additional 3.4% explanatory power. The interaction between digital financial inclusion and digital financial literacy was negative and statistically significant ($\beta = -1.361$, $p < 0.001$), confirming a significant moderating effect. The study concludes that digital credit, digital savings and digital payments are important determinants of SME financial performance, while the benefits associated with digital financial inclusion vary with the level of digital financial literacy. The study recommends expanding affordable digital financial services, improving digital infrastructure and strengthening practical digital financial literacy programmes to enable SME owners to use digital products effectively and securely, thereby enhancing profitability, sales growth and long-term sustainability in rural settings.

KEYWORDS: Digital Financial Inclusion; Digital Credit; Digital Savings; Digital Payments; SME Financial Performance.

INTRODUCTION

Background of the Study

Digital financial inclusion has emerged as an important driver of economic development as advances in financial technology and mobile connectivity continue to expand access to formal financial services. It involves the use of digital platforms to provide accessible, affordable, convenient and secure financial services, particularly to individuals and enterprises traditionally underserved by conventional financial institutions. Digital services such as mobile payments, digital credit and online savings platforms have improved financial accessibility for small and medium enterprises (SMEs), enabling them to reduce transaction costs, improve operational efficiency, access credit and expand their markets. However, the adoption and effective utilization of these services remain uneven, especially in developing economies where inadequate digital infrastructure, low digital literacy and regulatory constraints persist.

Globally, digital financial inclusion has become increasingly important to SME development because it provides businesses with affordable and convenient financial solutions. Digital payments, mobile banking, digital savings and digital credit enable SMEs to improve cash-flow management, access working capital and enhance operational efficiency. Consequently, digital financial services have been associated with improvements in profitability, productivity, resilience and business growth. Nevertheless, disparities in digital infrastructure, financial literacy,

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regulatory environments and technology adoption continue to constrain the potential benefits of digital finance, particularly among SMEs in low- and middle-income countries.

Digital credit is particularly important because SMEs frequently experience difficulties accessing conventional credit due to collateral requirements and information asymmetry. Digital lending platforms can utilize alternative information, including transaction histories, mobile usage and e-commerce records, to assess creditworthiness. This can reduce borrowing costs and processing time and enable SMEs to respond more rapidly to emerging market opportunities. Similarly, digital savings enhance financial planning, financial discipline and resilience against economic shocks while providing resources that can be reinvested in business activities. Digital payment systems reduce cash-handling risks and transaction delays while improving financial record-keeping, customer convenience and market reach. These benefits can ultimately translate into higher sales and greater business competitiveness.

Across Africa, digital financial inclusion has transformed the operating environment of SMEs, particularly through the widespread adoption of mobile financial services. Digital finance has enabled enterprises to overcome some traditional financial barriers by lowering transaction costs, improving liquidity management and facilitating access to working capital. These benefits are particularly important for SMEs operating in rural and underserved areas. However, inadequate digital infrastructure, poor internet connectivity, cybersecurity concerns, low digital and financial literacy and regulatory constraints continue to prevent many African SMEs from fully exploiting digital financial services. Strengthening digital financial ecosystems and enhancing the capabilities of SME operators are therefore important for improving enterprise competitiveness and financial resilience.

Evidence from African countries further demonstrates the relevance of the different dimensions of digital financial inclusion. In Nigeria, digital financial technologies such as mobile money have positively influenced SME performance, although financial exclusion remains a challenge among enterprises perceived as low-income and risky. Evidence from East Africa indicates that mobile-based credit facilities have enabled SMEs to finance inventory, manage financial shocks and improve business continuity. Studies from Uganda and Tanzania similarly associate digital savings and access to digital information with improved enterprise sustainability. Financial literacy has also been identified as an important capability enabling SMEs to utilize digital financial services effectively.

Within Kenya, digital financial inclusion has advanced considerably because of widespread mobile money, digital banking, agency banking and financial technology innovations. These platforms have expanded SMEs' access to formal financial services, enabling them to conduct cashless transactions, mobilize savings, access digital credit and improve financial management. Digital financial services have consequently contributed to reduced transaction costs, improved liquidity management, enhanced operational efficiency and expanded market opportunities. Despite this progress, many Kenyan SMEs continue to experience low profitability, restricted access to affordable financing, limited growth and high failure rates. The benefits of digital finance are also unevenly distributed because of cybersecurity risks, transaction costs, inadequate digital financial literacy and disparities between rural and urban areas.

Digital financial literacy is particularly relevant because access to digital financial products does not necessarily guarantee their effective utilization. SME owners require appropriate knowledge and skills to understand digital credit conditions, manage digital savings, select appropriate payment platforms and protect themselves against cybersecurity and fraud risks. The study therefore conceptualizes digital financial literacy through digital financial skills, awareness, knowledge, and cybersecurity and fraud awareness. It is expected to shape the strength and direction of the relationship between digital financial inclusion and SME financial performance.

The situation is particularly important in West Pokot County, where SMEs constitute a significant component of the local economy across trade, agribusiness, manufacturing, transport and service sectors. Despite their socioeconomic importance, many SMEs record relatively low profitability, limited business growth, restricted market expansion and challenges to long-term survival. Digital transformation remains constrained by inadequate infrastructure, limited smartphone ownership, low awareness of digital financial products and continued dependence on informal lending. Cash transactions also remain prevalent because of inadequate network coverage and limited digital awareness. Moreover, digital financial literacy is relatively low because of limited training opportunities, educational constraints and insufficient exposure to digital platforms.

These conditions provide the basis for examining whether digital financial inclusion can enhance SME financial performance in West Pokot County. Although existing studies generally demonstrate positive relationships between digital finance and enterprise performance, evidence remains inconclusive regarding the specific contribution of digital credit, digital saving culture and digital payments, particularly within rural and resource-constrained environments. Moreover, the extent to which digital financial literacy alters the relationship between digital financial inclusion and SME financial performance requires further examination. Consequently, the study focuses on digital credit, digital saving culture and digital payments as dimensions of digital financial inclusion and incorporates digital financial literacy as a moderating variable to provide context-specific evidence on how digital finance contributes to SME financial performance in West Pokot County, Kenya.

Statement of the Problem

Small and medium enterprises (SMEs) constitute a critical component of Kenya's economy, contributing approximately 30% of annual Gross Domestic Product and supporting the economic aspirations of Kenya Vision 2030. SMEs also contribute substantially to employment creation, poverty reduction and improvement of household living standards. Despite their economic importance and Kenya's considerable progress in digital financial inclusion, access to and utilization of digital financial services remain uneven across geographical regions and economic sectors. Rural and marginalized counties such as West Pokot continue to experience comparatively high levels of financial exclusion. According to the FinAccess Survey (2024), approximately 47% of adults in West Pokot County engage with formal financial services, while about 27% remain completely financially excluded.

Digital financial inclusion offers SMEs opportunities to access credit, mobilize savings and undertake transactions through digital platforms. Although previous empirical studies generally indicate a positive relationship between digital financial inclusion and SME performance, the evidence remains inconclusive regarding which specific dimensions of digital financial inclusion contribute most significantly to enterprise financial performance, particularly within resource-constrained environments. Previous studies have frequently conceptualized digital financial

inclusion as a single construct rather than separately examining digital credit, digital saving culture and digital payments. This creates a conceptual gap concerning the individual contribution of these dimensions to SME financial performance.

A contextual gap is also evident. Much of the existing Kenyan research has concentrated on relatively urban and economically developed counties, including Nairobi, Kiambu, Nakuru and Mombasa. These areas possess business environments, financial ecosystems and digital infrastructure that differ substantially from conditions prevailing in marginalized and predominantly rural counties such as West Pokot. Consequently, findings generated from urban settings may not adequately explain the experiences of SMEs operating in West Pokot County.

Methodologically, previous studies have predominantly employed cross-sectional designs, descriptive statistics and bivariate analytical approaches, which may limit understanding of the simultaneous effects of multiple dimensions of digital financial inclusion on SME performance. Furthermore, limited empirical evidence exists specifically on licensed SMEs in West Pokot County. The role of digital financial literacy in shaping the relationship between digital financial inclusion and SME financial performance also requires empirical examination. Accordingly, the study examined the influence of digital financial inclusion on the financial performance of SMEs in West Pokot County by focusing on digital credit, digital saving culture and digital payments while assessing the moderating effect of digital financial literacy. In doing so, the study sought to address conceptual, contextual and methodological gaps and generate evidence useful for policy, practice and future research on inclusive digital financial ecosystems and SME performance.

Objective of the Study

The study was guided by the following objectives:

- i). To establish the effect of digital credit on the financial performance of small and medium enterprises in West Pokot County, Kenya.
- ii). To determine the impact of digital saving culture on the financial performance of small and medium enterprises in West Pokot County, Kenya.
- iii). To examine the influence of digital payment on financial performance of small and medium enterprises in West Pokot County, Kenya.
- iv). To investigate the moderating effect of digital financial literacy on the relationship between digital financial inclusion and financial performance of small and medium enterprises in West Pokot County, Kenya.

Research Hypotheses

The study sought to test the following research hypotheses:

- i). H01: Digital credit has no significant effect on the financial performance of small and medium enterprises in West Pokot County, Kenya.
- ii). H02: Digital saving culture has no significant impact on the financial performance of small and medium enterprises in West Pokot County, Kenya.
- iii). H03: Digital payment has no significant influence on the financial performance of small and medium enterprises in West Pokot County, Kenya.
- iv). H04: Digital financial literacy has no moderating effect on the relationship between digital financial inclusion and financial performance of small and medium enterprises in West Pokot County, Kenya.

REVIEW OF LITERATURE

The study was underpinned by the Vulnerable Group Theory of Financial Inclusion, Financial Literacy Theory and Resource-Based View (RBV) Theory. The Vulnerable Group Theory of Financial Inclusion, advanced by Ozili (2024), served as the study's principal theoretical foundation. The theory argues that certain groups face systematic financial exclusion because of structural, technological and institutional barriers. SMEs may be considered financially vulnerable because they often encounter limited access to formal banking services, high transaction costs, information asymmetry and inadequate financial capabilities. Digital financial inclusion can reduce these vulnerabilities by expanding access to digital credit, savings and payment services. Digital credit provides flexible capital for working capital, expansion and asset acquisition, while digital savings facilitate financial discipline, liquidity management and reinvestment. Digital payments can reduce transaction costs, improve cash-flow efficiency and expand market reach. However, the theory gives limited attention to effective utilization of financial services, firm-specific capabilities and rapidly evolving financial technologies, necessitating complementary theoretical perspectives.

The Financial Literacy Theory, proposed by Gallery, Newton and Palm (2011), holds that financial knowledge and competencies influence saving, investment, consumption and other financial decisions. Financially literate SME operators are better positioned to evaluate financial opportunities, manage risks and allocate resources efficiently. In this study, the theory explains the moderating role of digital financial literacy because SME owners possessing adequate financial knowledge should be better able to understand and utilize digital credit, digital savings and digital payment services. Nevertheless, financial literacy does not automatically translate into better decisions because behavioural factors, infrastructure, regulation and socioeconomic conditions can constrain the application of financial knowledge.

The Resource-Based View Theory, originating from Penrose (1959) and developed by Barney (1991), explains organizational performance through the possession and effective utilization of valuable, rare, inimitable and non-substitutable resources. From this perspective, digital financial services represent strategic technological and financial resources capable of enhancing SME competitiveness and performance. Digital credit improves liquidity and investment capacity, while digital savings strengthen capital accumulation, financial resilience and the capacity to self-finance growth. The RBV therefore complements the other theories by explaining how digital credit, savings and payments constitute strategic resources, while digital financial literacy represents a complementary capability enabling SMEs to deploy these resources effectively toward profitability, revenue growth and business sustainability.

The conceptual framework depicted financial performance of SMEs as the dependent variable, measured through profitability and sales growth. Digital financial inclusion constituted the independent variable and comprised three dimensions: digital credit, digital saving culture and digital payment practices. Digital financial literacy served as the moderating variable and was represented by digital financial skills, awareness, knowledge, and cybersecurity and fraud awareness. The framework proposed that digital financial inclusion influences SME financial performance, while digital financial literacy alters the strength and direction of this relationship.

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Empirical literature generally demonstrates that digital financial services influence SME performance, although findings vary across contexts and dimensions. Regarding digital credit, Ibosiola and Dada (2024) found that digital financial service quality and accessibility significantly improved profitability among SMEs in Nigeria, although service usage negatively affected performance and accessibility had an insignificant influence on sales growth. Thalib and Zulkarnain (2024) similarly established that digital loans positively influenced MSME performance, while Zhang (2022) reported a positive relationship between digital finance adoption and manufacturing SME performance in China. In Kenya, Chebet and Ombaba (2023) established that access to digital loans positively and significantly influenced micro and small enterprise performance.

For digital saving culture, Wanjiru et al. (2024) found a positive and significant relationship between digital savings platforms and financial performance among enterprises in Nairobi. Bakashaba et al. (2024) similarly established that digital saving culture enhanced SME performance through improved cash-flow management, financial discipline and reduced business failure. However, these studies were largely undertaken in urban settings, creating contextual differences from rural West Pokot County.

Evidence concerning digital payments is mixed. Yanti and Suryani (2025) found that digital payment adoption significantly improved MSME financial performance, whereas Musa and Njeru (2023) reported no statistically significant effect of digital payment platforms on SME financial performance in Nairobi. Fatmawati and Azis (2024), however, established a significant positive relationship between digital payments and SME growth in Indonesia.

Regarding moderation, Angeles (2022) established that digital financial literacy significantly shaped MSMEs' utilization of financial services and financial behaviour. Chibesa and Mwange (2025) reported a significant positive association between digital financial literacy and financial inclusion, whereas Tulcanaza-Prieto et al. (2025) found that digital literacy did not significantly moderate financial literacy–financial inclusion relationships. These mixed findings reinforced the need to examine digital financial literacy as a moderator among SMEs in West Pokot County.

Conceptual Framework

The conceptual framework shows the relationship amongst variables of digital financial inclusion, digital financial literacy and SME financial performance shown in figure below.

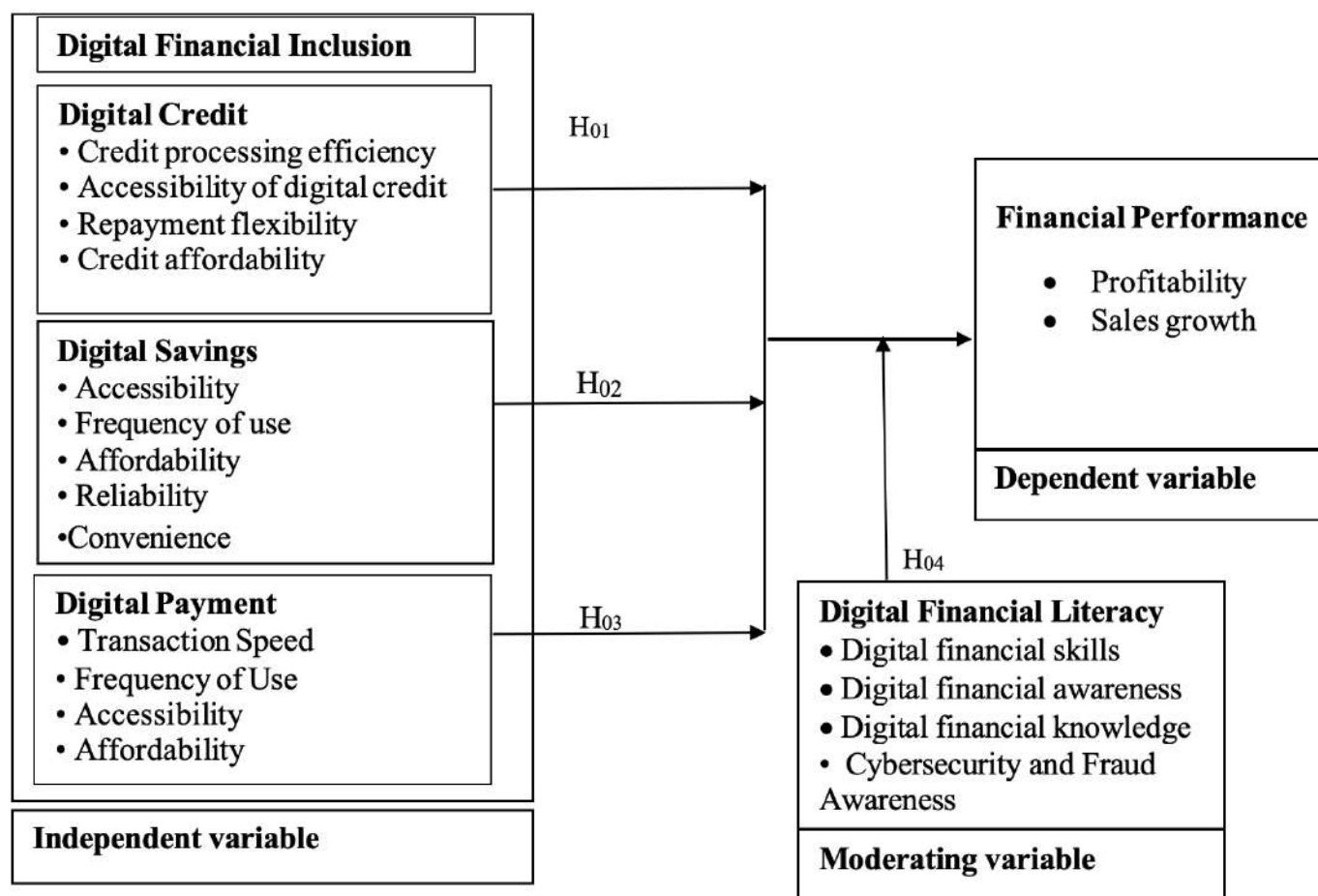


Figure 1: Conceptual Framework

MATERIALS AND METHODS

Research Design

The study adopted a descriptive survey research design to examine the influence of digital financial inclusion on the financial performance of SMEs in West Pokot County. The design was considered appropriate because it enabled the researcher to describe characteristics of the phenomenon under investigation while simultaneously establishing relationships between digital financial inclusion dimensions and SME financial performance.

Target Population and Sampling Technique

The target population comprised 804 registered SMEs operating within the urban townships of West Pokot County, based on records obtained from the West Pokot County Statistics Office. The enterprises operated across sectors including retail trade, agribusiness, manufacturing and services. A sample of 267 SMEs was determined using Yamane's (1967) finite-population sample-size formula at a 5% margin of error. Simple random sampling was subsequently employed to select participating SMEs. Each of the 804 SMEs in the sampling frame was assigned a unique identification number, after which Microsoft Excel's RAND function generated 267 random numbers. This procedure ensured that every registered SME had an equal and independent probability of selection, minimizing selection bias.

Instrumentation and Data Collection Procedure

Primary data were collected using a semi-structured questionnaire administered to SME operators. The instrument comprised three sections covering respondents' demographic and enterprise characteristics, digital financial inclusion dimensions, including digital credit, digital savings, digital payments and digital financial literacy, and SME financial performance measured through profitability and sales growth. Before data collection, authorization was obtained from Taita Taveta University and a research permit acquired from NACOSTI. An introductory letter explained the study's purpose and assured respondents of confidentiality and voluntary participation. The researcher and two trained research assistants administered questionnaires using the drop-and-pick method. Appointments were arranged beforehand, and only fully completed questionnaires were included in the final analysis.

Data analysis

Questionnaire data were cleaned, screened, coded, transformed and analyzed using SPSS Version 25. Both descriptive and inferential statistical techniques were employed. Descriptive statistics comprising frequencies, percentages, means and standard deviations summarized respondent characteristics and the principal study variables. Inferential analysis employed multiple linear regression to establish the effects of digital credit, digital saving culture and digital payment practices on SME financial performance.

The moderating effect of digital financial literacy on the relationship between digital financial inclusion and SME financial performance was examined using a hierarchical procedure based on Baron and Kenny (1986). Digital financial literacy was initially entered alongside digital financial inclusion as an explanatory variable. Subsequently, an interaction term between digital financial inclusion and digital financial literacy was introduced to determine whether moderation occurred. The significance of the interaction coefficient provided the basis for determining the moderating effect. Diagnostic tests were also conducted to assess regression assumptions, including normality using Shapiro–Wilk, autocorrelation using Durbin–Watson, multicollinearity using Variance Inflation Factors, and heteroscedasticity using the Glejser test.

Ethical Considerations

Ethical clearance was granted by the Ethics Review Committee of Taita Taveta University. Participation in the study was entirely voluntary, and informed consent was obtained from all respondents. Anonymity was ensured by the use of unique identification codes, while all data were securely stored under restricted access. Additionally, enumerators-maintained professionalism and respect in their interactions with respondents throughout the data collection process.

RESULTS

A total of 267 questionnaires were issued to respondents, with 242 filled and returned. The returned questionnaires formed a response rate of 90.6% as shown in Table 1.

Table 1: Response Rate

Questionnaire	Frequency	Percent
Returned	242	90.6
Non returned	25	9.4
Total	267	100.0

Demographic Information Analysis

Table 2: Demographic Data

	Category	Percent
Gender	Female	42
	Male	58
	Total	100
Age bracket	21- 30 years	43
	31-40 years	44
	41-50 years	11
	Above 50 years	2
	Total	100
Highest level of academic qualification	Certificate	55

	Category	Percent
	Diploma	30
	Undergraduate	9
	Masters	4
	PhD	2
	Total	100
Type of business	Retail	39
	Wholesale	19
	Manufacturing	11
	Agribusiness	7
	Service	24
	Total	100
Number of employees	1–10	67
	11–49	33
	50–99	00
	Total	100
Length of enterprise operation	0–4 years	38
	5–10 years	45
	11–15 years	10
	15–20 years	02
	over 20 years	5
	Total	100

Key Findings

The descriptive findings demonstrate generally favourable perceptions regarding digital financial inclusion and the financial performance of small and medium enterprises (SMEs) in West Pokot County. Based on 242 valid responses, all the study constructs recorded mean scores close to 4.0 on the five-point scale, indicating that respondents generally agreed with the statements measuring the respective variables.

Digital financial literacy recorded the highest mean score ($M = 3.983$, $SD = 0.748$), suggesting that SME owners and managers generally possessed the knowledge and skills necessary to understand and utilise digital financial services and perceived such literacy as important in enhancing enterprise financial performance. Digital saving culture followed with a mean of 3.948 ($SD = 0.705$), indicating widespread agreement that the use of digital platforms for saving contributes to improved financial management and SME performance. Digital payment practices also received a relatively high rating ($M = 3.931$, $SD = 0.796$), demonstrating that respondents perceived digital payments as contributing positively to SME financial performance. However, digital payments exhibited the greatest variability in responses, suggesting comparatively more diverse experiences among SMEs. Digital credit recorded a mean of 3.893 ($SD = 0.708$), showing that respondents generally viewed access to digital credit favourably in supporting enterprise performance.

Financial performance recorded a mean of 3.912 ($SD = 0.742$), indicating that respondents generally considered their SMEs to have achieved satisfactory financial outcomes. Overall, the relatively low standard deviations across all constructs demonstrate considerable consistency in respondents' perceptions and suggest broad acceptance of digital financial services among the surveyed SMEs.

Table 3: Descriptive Statistics results

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Financial Performance	242	1.500	5.000	3.91185	.741969
Digital Credit	242	1.500	5.000	3.89308	.707654
Digital Saving Culture	242	1.500	5.000	3.94760	.704876
Digital Payment	242	1.400	5.000	3.93058	.795511
Digital Financial Literacy	242	1.600	5.000	3.98264	.748462
Valid N (list wise)	242				

Regression Analysis

Test of Hypotheses

Digital financial inclusion effect on performance of SMEs was tested by multiple linear regression analysis. Further the moderating impact of digital financial literacy between digital financial inclusion and SME performance was conducted through regression analysis.

Test of Hypotheses for Direct Relationship

To test the direct relationship hypothesis, multiple linear regression analysis was employed at the 95% confidence level ($\alpha = 0.05$). Financial performance was treated as the dependent variable, whereas digital financial inclusion was entered as the independent variable. The model results summary is shown in Table 4.

Table 4: Model for Direct Relationship

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748 ^a	.560	.554	.495508
a. Predictors: (Constant), Digital Financial Inclusion variables				

Table 4 shows that the model yielded an R value of 0.748 and an R² of 0.560, with an adjusted R² of 0.554. This indicates that approximately 56.0% of the variation in SME financial performance is explained by the digital financial inclusion variables included in the model. The adjusted R² of 0.554 further suggests that, after accounting for the number of predictors, the model explains 55.4% of the variance in SME financial performance. The remaining 44.0% of the variation is attributable to other factors not included in the study, random error, or other external influences affecting SME financial performance. ANOVA results are captured in Table 5 to shed light on models' overall significance.

Table 5: F-Statistic for Direct Relationship

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	74.239	3	24.746	100.788	.000 ^b
Residual	58.436	238	0.246		
Total	132.675	241			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Digital Payment Practices, Digital Credit, Digital Saving Culture

Table 5 confirms that the regression model produced an F-value of 100.788 with a significance value ($p < 0.001$). Since the p-value is less than 0.05, the model is statistically significant. This means that digital financial inclusion has a significant effect on Small and Medium Enterprises (SMEs) in West Pokot County, Kenya. Table 6 shows the findings of regression coefficients for every variable of digital financial inclusion on SMEs performance

Table 6: Regression Coefficients

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.828	.197		4.202	.000
	Digital Credit	.539	.058	.513	9.293	.000
	Digital Saving Culture	.400	.070	.380	5.690	.000
	Digital Payment Practices	.426	.063	.456	6.810	.000

a. Dependent Variable: Financial Performance

Using the regression results presented in Table 6, the estimated regression equation is expressed as follows:

$$\text{SME Performance} = 0.828 + 0.539 (\text{Digital Credit}) + 0.400 (\text{Digital Saving Culture}) + 0.426 (\text{Digital Payment Practices}) + \dots \dots \dots 4.1$$

Table 6 presents the regression coefficients for the effect of digital financial inclusion on the financial performance of SMEs in West Pokot County. The results indicate that, when all the digital financial inclusion variables are held constant, the model predicts a baseline financial performance of 0.828. Holding the other predictors constant, a one-unit increase in digital credit is associated with a 0.539-unit increase in SME financial performance. Similarly, a one-unit improvement in digital savings is associated with a 0.400-unit increase in financial performance, while a one-unit increase in digital payment is associated with a 0.426-unit improvement in SME financial performance.

The regression coefficients further reveal that all three dimensions of digital financial inclusion have positive and statistically significant effects on SME financial performance. Specifically, digital credit recorded an unstandardized coefficient ($\beta = 0.539$, $p < 0.001$), digital savings had an

unstandardized coefficient of $\beta = 0.400$ ($p < 0.001$), and digital payment recorded an unstandardized coefficient of $\beta = 0.426$ ($p < 0.001$). Since the probability values for all the predictors are below the 0.05 significance level, the findings demonstrate that digital credit, digital savings, and digital payment each make a significant positive contribution to the financial performance of SMEs in West Pokot County. The results concur with Kambi and Onyiego (2022) that digital financial inclusion provide an avenue to save, access credit facilities and other financial services via several digital mediums such as mobile phones, computers, credit and debit cards which in turn improves SMEs performance.

Test of Digital Credit on the SMEs Performance

The study sought to establish the effect of digital credit effect on the financial performance of small and medium enterprises in West Pokot County, Kenya. The null hypothesis was that Digital Credit has no significant effect on the financial performance of small and medium enterprises in West Pokot County, Kenya. Based on Table 4.11, the result shows that regression coefficients for digital credit had a positive and significant effect on SMEs performance ($\beta = .539$, $t = 9.293$, $p < .001$). The findings means that usage of digital credit rises financial performance of SMEs. The null hypothesis was rejected since $p < 0.05$, this implied that digital credit had a positive and significant effect on performance of SMEs in West Pokot County. The findings coincide with Ibosiola and Dada (2024) and Eton *et al.* (2025) that enterprises were found to access digital loans conveniently through digital platforms, with faster approval processes enabling them to address urgent financial needs promptly. The ease of obtaining digital credit has enhanced firms' cash flow management, supported business expansion, and improved profitability

Test of Digital Saving on the SMEs financial performance

The study sought to establish the effect of digital saving on the financial performance of small and medium enterprises in West Pokot County, Kenya. The null hypothesis was that Digital saving has no significant effect on the financial performance of small and medium enterprises in West Pokot County, Kenya. Based on Table 6, the result shows that regression coefficients for digital saving culture had a positive and significant effect on SMEs performance ($\beta = .400$, $t = 5.690$, $p < .001$). The findings signify that usage of digital saving improves performance of SMEs. The p-value of less than 0.05 of regression coefficient leads to rejection of the null hypothesis and conclude that digital saving has a positive and significant effect on performance of SMEs in West Pokot County. The findings are in agreement with Wanjiru *et al.* (2024) indicating that the adoption of digital savings platforms enhances operational efficiency, improves liquidity management, and contributes to better business outcomes. Equally the findings concur with Midamba *et al.* (2024) that a strong digital savings culture significantly improves enterprise performance by promoting effective cash flow management, strengthening financial discipline and reducing the risk of business failure. In addition, the results are in line with Bakashaba *et al.* (2024) that digital savings provide a reliable and convenient mechanism for accumulating funds, thereby encouraging consistent saving behavior and supporting businesses in planning for future expenditures

Test of Digital Payment on the SMEs Performance

The study sought to determine the effect of digital payment on the financial performance of small and medium enterprises in West Pokot County, Kenya. The null hypothesis was that digital payment has no significant effect on the financial performance of small and medium enterprises in West Pokot County, Kenya.

Based on Table 6, the result shows that regression coefficients for digital payment had a positive and significant effect on SMEs performance ($\beta = .426$, $t = 6.810$, $p < .001$). The findings signify that usage of digital payment improves performance of SMEs. The p-value of less than 0.05 of regression coefficient leads to rejection of the null hypothesis and conclude that digital payment has a positive and significant effect on performance of SMEs in West Pokot County. The results are in agreement with Yanti and Suryani (2025) that the use of digital payment systems significantly enhances the financial performance of SMEs by improving operational efficiency and supporting business growth. However, the findings are in disagreement with Musa and Njeru (2023) that digital payment platforms had no statistically significant effect on SMEs' financial performance, whereas online lending services exhibited a positive and significant impact on SMEs' financial performance.

Moderation Effect Results

The study sought to investigate the moderating effect of digital financial literacy on the relationship between digital financial inclusion and SMEs financial performance in West Pokot County. The null hypothesis was that digital financial literacy has no moderating effect on the relationship between digital financial inclusion and SMEs financial performance in West Pokot County, Kenya. The digital financial literacy moderation effects results are shown in Table 7.

Table 7: Model Summary of Moderation Effect

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.684 ^a	.467	.463	.543764	.467	104.857	2	239	.000
2	.708 ^b	.501	.495	.527232	.034	16.223	1	238	.000

a. Predictors: (Constant), Digital Financial literacy, Digital financial inclusion

b. Predictors: (Constant), Digital Financial Literacy, DFI_DFL

The results in Table 7 and 8 shows a hierarchical multiple regression analysis used to test whether the interaction between Digital financial inclusion and Digital Financial Literacy (DFI_DFL) moderates the relationship with financial performance of Small and Medium Enterprises (SMEs). The results in Table 8, in Model 1, digital financial inclusion and digital financial literacy were entered as predictors of SME performance.

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The model yielded an R value of .684 and an R² of .467, indicating that the two variables jointly explained 46.7% of the variation in SMEs financial performance. The model was statistically significant, $F(2,239) = 104.857, p < .001$.

The findings in Model 2, the interaction term (DFI_DFL) was added to test for moderation. The R² increased from .467 to .501, resulting in an R² change of .034. This means that the interaction term explained an additional 3.4% of the variance in financial performance of SMEs. The increase was statistically significant, $F \text{ Change}(1,238) = 16.223, p < .001$, indicating that the moderating effect is significant.

Table 8: Coefficients of moderation effects

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.813	.222		3.654	.000
	Digital financial inclusion	.269	.057	.256	4.706	.000
	Digital Financial Literacy	.516	.054	.520	9.583	.000
2	(Constant)	-2.065	.746		-2.767	.006
	Digital financial inclusion	1.155	.227	1.098	5.091	.000
	Digital Financial Literacy	1.225	.184	1.236	6.669	.000
	DFI_DFL	-.216	.054	-1.361	-4.028	.000

The findings in Table 8, reveals that model 1 regression coefficients, digital financial inclusion had a positive and significant effect on financial performance SMEs ($\beta = .256, t = 4.706, p < .001$). Digital Financial Literacy also had a positive and significant effect on SMEs performance ($\beta = .520, t = 9.583, p < .001$). This implies that increases in Digital financial inclusion and Digital Financial Literacy are associated with improved SME financial performance.

In model 2 the regression coefficient for a moderation model indicated that digital financial inclusion remained a significant predictor ($\beta = 1.098, t = 5.091, p < .001$). Also, Digital Financial Literacy remained a significant predictor ($\beta = 1.236, t = 6.669, p < .001$). The interaction term (DFI_DFL) was statistically significant and negative ($\beta = -1.361, t = -4.028, p < .001$). The significant interaction term confirms that Digital Financial Literacy significantly moderates the relationship between Digital financial inclusion and SME performance. The negative coefficient suggests that as digital financial literacy increases, the positive effect of digital financial inclusion on SMEs performance decreases slightly, although both variables independently continue to contribute positively to SME financial performance. Since the interaction term (DFI_DFL) is statistically significant ($p < .001$) and the change in R² is significant ($p < .001$), the null hypothesis is rejected.

In conclusion digital financial literacy significantly moderates the relationship between digital financial inclusion and financial performance of small and medium enterprises. Therefore, the effect of digital financial inclusion on SME performance depends on the level of Digital financial literacy among SME operators. The findings are supported by Angeles (2022) that higher levels of digital financial literacy positively affected SMEs' savings, investment activities, and access to credit. This suggests that digital financial literacy plays a significant moderating role in shaping both the utilization of digital financial services and the financial behaviour of SME owners.

Interpretation of Findings

The findings demonstrate that digital financial inclusion is an important determinant of the financial performance of SMEs in West Pokot County. Digital credit, digital saving culture and digital payment practices all had positive and statistically significant effects on financial performance. Digital credit recorded the strongest unstandardized effect ($\beta = 0.539, p < 0.001$), suggesting that timely access to digitally delivered financing enhances working capital availability, supports expansion and enables SMEs to respond to operational financial needs. Digital payment practices ($\beta = 0.426, p < 0.001$) improve transaction efficiency, cash-flow management and financial record keeping, while digital saving culture ($\beta = 0.400, p < 0.001$) strengthens financial discipline and capital accumulation. Collectively, the digital financial inclusion variables explained 56.0% of the variation in SME financial performance. Digital financial literacy also significantly moderated this relationship; however, the interaction effect was negative. This indicates diminishing marginal benefits of digital financial inclusion as financial literacy increases, rather than suggesting that financial literacy adversely affects SME performance.

Practical Implications

The findings have important implications for SME owners, financial institutions, regulators and policymakers. SME owners should integrate digital credit, savings and payment platforms into their financial management practices because these services improve liquidity, financial discipline, transaction efficiency and business growth. Financial institutions and digital service providers should develop affordable, flexible and user-friendly products tailored to the operational requirements of SMEs. Government agencies should strengthen digital infrastructure, particularly mobile connectivity, internet access and reliable electricity in underserved areas of West Pokot. Regulators should promote secure digital financial ecosystems by strengthening consumer protection, cybersecurity, data privacy and transparency in digital lending. Importantly, digital financial literacy programmes should accompany expanded access to digital financial services, enabling entrepreneurs to understand digital products, manage borrowing responsibly, prevent fraud and make informed financial decisions that support sustainable enterprise performance.

Theoretical Implications

The findings provide support for the theoretical perspectives underpinning the study. Consistent with the Vulnerable Group Theory of Financial Inclusion, access to digital credit, savings and payments can reduce financial exclusion among SMEs operating in underserved environments and consequently enhance their financial performance. The findings also support the Resource-Based View by demonstrating that digital financial services can function as valuable financial and technological resources that strengthen enterprise capabilities and performance. Furthermore, the

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significant moderating role of digital financial literacy provides empirical support for Financial Literacy Theory, demonstrating that financial knowledge and digital competencies influence how SMEs translate access to digital financial services into performance outcomes. However, the negative interaction effect extends existing theoretical understanding by showing that the marginal contribution of digital financial inclusion may diminish as SME operators become increasingly financially literate.

Limitations of the Descriptive Analysis

The descriptive analysis provides useful evidence regarding respondents' perceptions of digital financial inclusion and SME financial performance, but it has several limitations. First, means and standard deviations summarize respondents' views but cannot establish causal relationships between digital financial services and financial performance. Second, the analysis relies on self-reported questionnaire responses and may therefore be affected by response bias, social desirability and inaccurate recall. Third, the relatively similar and high mean scores across the constructs may conceal important variations among individual SMEs, sectors or respondent categories. Additionally, the cross-sectional nature of the data captures perceptions at only one point in time. Consequently, descriptive statistics should be interpreted alongside the regression and moderation analyses rather than independently as evidence of causal influence.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that digital financial inclusion plays a significant role in enhancing the financial performance of SMEs in West Pokot County. Digital credit, digital saving culture and digital payment practices were all found to exert positive and statistically significant effects on financial performance, confirming that increased access to and utilization of digital financial services can strengthen enterprise profitability, growth and sustainability. Digital credit enables SMEs to obtain financing conveniently and promptly, thereby supporting working capital requirements, business expansion and the management of urgent financial needs. Consequently, improved access to affordable and appropriately structured digital credit can strengthen SME financial performance.

The study further concludes that digital saving culture contributes significantly to SME financial performance. Digital savings encourage systematic accumulation of funds, improve liquidity management and strengthen financial discipline. They also enhance SMEs' capacity to meet future expenditures, repay obligations and withstand financial uncertainties. Similarly, digital payment practices improve operational efficiency by facilitating faster and more convenient transactions, strengthening financial record keeping, reducing financial leakages and improving cash-flow management. Digital payment platforms also provide businesses with opportunities to improve customer accessibility and broaden their market reach.

Digital financial literacy significantly moderates the relationship between digital financial inclusion and SME financial performance. Although digital financial literacy independently contributes positively to performance, its interaction with digital financial inclusion is negative and statistically significant. The result implies a diminishing marginal effect: financially literate SME operators may already possess broader financial management capabilities and therefore derive relatively smaller additional performance gains from increased digital financial inclusion. Accordingly, the result should not be interpreted as implying that digital financial literacy harms SME performance.

Based on these conclusions, the national and West Pokot County governments should expand mobile network coverage, internet connectivity and reliable electricity infrastructure, particularly in underserved areas. Digital business support centres should also be established to provide technical assistance and mentorship to SMEs. The Central Bank of Kenya and other regulators should strengthen frameworks governing transaction costs, consumer protection, data privacy, cybersecurity and transparency in digital lending. Financial institutions and digital financial service providers should develop affordable, flexible and user-friendly credit, savings and payment products tailored to SMEs.

Telecommunication providers should improve network accessibility and collaborate with financial institutions to enhance the reliability and affordability of digital financial platforms. Training institutions and development partners should provide continuous digital financial literacy programmes covering digital credit management, mobile banking, savings, payments, cybersecurity, fraud prevention and financial decision-making. Finally, stronger public-private partnerships should coordinate infrastructure development, digital literacy, innovation, technology adoption and funding initiatives to create an inclusive digital financial ecosystem that supports SME resilience and sustainable financial performance.

Future Research Directions

Future studies should extend this research beyond West Pokot County to other counties and developing economies to determine whether the relationships identified are consistent across different geographical, socioeconomic and business environments. Comparative studies would improve the generalizability of the findings. Researchers should also broaden digital financial inclusion beyond digital credit, digital savings and digital payments by examining emerging services such as digital insurance, digital investments and fintech-based financial advisory services. Further research could investigate additional moderators or mediators, including technological readiness, entrepreneurial orientation, business innovation, organizational culture, government support and market competitiveness. Longitudinal studies are particularly recommended to establish how sustained adoption of digital financial services influences SME profitability, resilience and growth over time, overcoming the limitations associated with cross-sectional data. Finally, mixed-methods and qualitative studies could provide deeper insights into SME owners' experiences, motivations and challenges in adopting digital financial technologies and complement the predominantly quantitative evidence generated by the present study.

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Research Ethics: Ethical approval for the study was obtained from the relevant Ethics Review Committee of Taita Taveta University. All participants provided informed consent prior to their participation in the study.

RECOGNITIONS OF THE AUTHOR CONTRIBUTION

Toroitich Maxwell Poghisio - Conceptualization, methodology, data collection, data analysis, writing.

Monica Wanjiru - Supervision, refining methodology, reviewing and editing.

Kiringa Simiyu - Supervision, validation, editing and reviewing.

DATA AVAILABILITY

To safeguard participant confidentiality and privacy, the complete dataset generated and analyzed during this study is not publicly accessible. However, anonymized data and relevant supporting materials may be obtained from the corresponding author upon reasonable request, subject to applicable ethical and confidentiality requirements.

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