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Assessing the Effects of Mobile Money Services on Financial Performance Of SMEs: A Case Study of Retail Businesses in Kamwala Trading Area

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ABSTRACT

Abstract

The study assessed the effects of mobile money services on the financial performance of SMEs in the Kamwala Trading Area. The objectives were to examine the impact of mobile money adoption on monthly revenue growth, evaluate its effect on operational efficiency, and assess associated operational costs. A mixed-method research design was employed, with a sample of 55 SMEs, and data analysis was conducted using Stata. Findings revealed that clothing businesses dominated the area (47.27%), followed by food retail (27.27%), electronics (18.18%), and groceries (7.27%). Regression analysis showed a significant positive relationship between mobile money adoption and SME revenue, with a coefficient of 0.553 ($p < 0.001$) and $R^2 = 0.457$, indicating that adoption contributed substantially to revenue growth. Operational cost analysis demonstrated a positive effect on transactional efficiency, with a coefficient of 0.793 ($p < 0.001$, $R^2 = 0.5488$), suggesting that mobile money reduced time, effort, and risk associated with cash handling despite monetary costs. Cross-tabulation analysis indicated no significant association between pre-adoption revenue levels and specific operational efficiency improvements (Pearson $chi^2 = 38.379$, $p = 0.947$), implying that SMEs of all revenue levels benefited similarly from mobile money adoption. The study concluded that mobile money significantly enhanced both financial performance and operational efficiency of SMEs in Kamwala Trading Area. It recommended broader adoption of mobile money services among SMEs to improve sales, streamline operations, and reduce transactional risks, while encouraging further research on long-term sustainability and sector-specific impacts.

1. Introduction

1.1 Background

Mobile money has become a transformative driver of financial inclusion and SME development in Zambia, particularly as the expansion of mobile network operators has enabled the delivery of financial services in areas underserved by traditional banking. Platforms such as MTN Mobile Money have improved transaction speed, reduced operating costs, enhanced liquidity management, and created digital financial records that can support credit access for SMEs. Studies show that mobile money strengthens business efficiency and financial oversight, helping SMEs overcome challenges such as cash flow constraints, delayed customer payments, and limited access to formal financial services. However, despite supportive policies and promising outcomes, there remains a lack of comprehensive empirical research evaluating the direct impact of mobile money on SME profitability, growth, and sustainability in Zambia, creating a knowledge gap that limits data-driven decision-making for policymakers, financial institutions, and business owners. This study therefore seeks to address this gap by examining how mobile money enhances operational efficiency and financial performance among SMEs in the Kamwala Trading Area.

1.2 Problem Description

Despite increasing adoption of mobile money among SMEs in Zambia, there is still limited empirical evidence on its actual contribution to business performance. Retailers in Kamwala Trading Area continue to face challenges such as high competition, low profit margins, long transaction processing times, and risks linked to handling cash, raising concerns about whether mobile money improves operational efficiency and revenue generation. Although usage is expanding, questions remain regarding its

effectiveness in boosting profits, streamlining operations, and meeting customer payment preferences, and the lack of reliable quantitative data makes it difficult for business owners, policymakers, and financial service providers to make informed decisions about digital payment integration. This study therefore aims to address this gap by examining the real impact of mobile money on SME performance in Kamwala, one of Lusaka's largest and most active commercial centers.

1.3 Research Objectives

1.3.1 General Objective

The main objective of the study is Assessing the Effectiveness of Mobile Money on Revenue Growth and Operational Efficiency of SMEs in Kamwala Trading Area.

1.3.2 Specific objectives

1 To assess the effects of Mobile Money adoption on monthly revenue growth of SMEs in Kamwala Trading Area.
2 To evaluate the effect of Mobile Money on operational efficiency.
3 To evaluate the cost Mobile Money operational.

1.4 Research questions

How does MTN Mobile Money adoption affect monthly revenue growth of SMEs in Kamwala Trading Area?
How does MTN Mobile Money affect operational efficiency of transactions carried out by SMEs in Kamwala Trading Area?
Are the SME owners and customers satisfied with MTN Mobile Money Services?

1.5 Conceptual Framework

A conceptual framework serves as a critical analytical structure in academic research, guiding the systematic investigation of variables and illustrating the assumed relationships between them. According to Polit and Tatano (2004), the conceptual framework emerges from a researcher's comprehensive understanding of the research problem and the theoretical constructs that underpin it. Similarly, Ravitch and Carl (2016) argue that the conceptual framework reflects the researcher's worldview and outlines how different elements of a study interrelate. For this study, the conceptual framework links Mobile Money usage the independent variable to three dependent variables: revenue growth, operational efficiency, and SME owner and customer. The summary of this is as shown in the figure below.

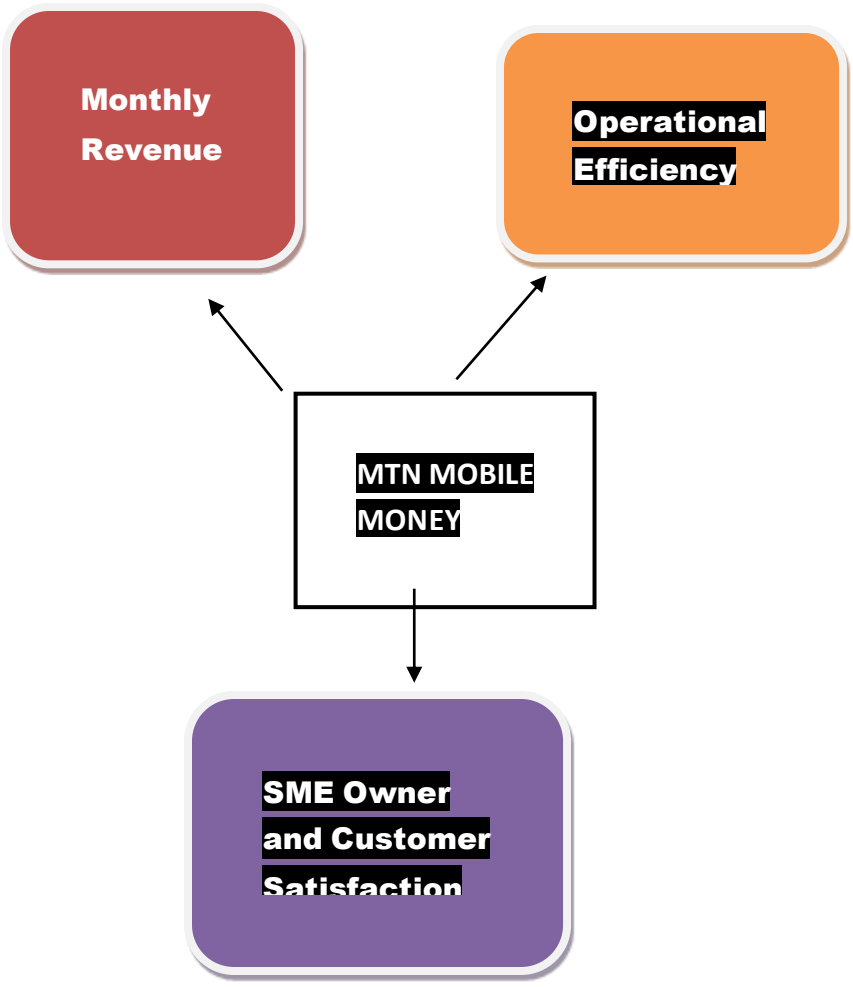


Figure 1. Conceptual Framework

1.6 Significance of the Study

This study is significant as it will offer valuable insights for scholars, researchers, and students in business, finance, and entrepreneurship, contributing to the literature on digital financial services and SME performance while enhancing research methodology, academic writing, and data analysis skills. SMEs in the Kamwala Trading Area will benefit directly by understanding how mobile money services, particularly Mobile Money, affect revenue growth and operational efficiency, with practical recommendations on optimizing usage to improve transactions, reduce costs, and enhance overall business performance. Furthermore, the research will provide evidence-based insights for small business owners, the Ministry of Small and Medium Enterprise Development, financial institutions, and policymakers, guiding the development of supportive policies, programs, and digital financial infrastructure that strengthen SME resilience, promote financial inclusion, and foster sustainable economic growth in Zambia.

2. Literature Review

2.1 Effects of Mobile Money adoption on monthly revenue growth of SMEs in Kamwala Trading Area.

Talom and Tengeh (2020) found that mobile money adoption explains substantial variation in SME turnover in Cameroon, a finding supported by Islam, Muzi, and Meza (2018) in East Africa, who linked mobile money usage to increased investment and reduced transaction costs. Similarly, Abbasi and Weigand (2017) showed globally that digital financial services enhance firm profitability, while Centellegher et al. (2018) highlighted demand-side adoption effects. In contrast, Konte and Tetteh (2022) noted that mobile money alone does not always boost productivity, with gains amplified when combined with formal banking access, suggesting complementarity rather than standalone benefits.

At the regional level, Masocha and Dzomonda (2018) in Zimbabwe and Nyaga (2014) in Kenya found statistically significant positive effects of mobile money on SME sales growth, corroborated by Kazaara (2025) and UCU (2019) in Uganda. Kimathi, Mwangi, and Mutiso (2025) and Strategic Journals (2020) also observed enhanced cash flow and reduced transaction costs among SMEs using mobile money. However, Tembo and Okoro (2021) noted that productivity gains are context-dependent, with mobile money benefiting firms primarily when combined with traditional financial services. Mothobi and Kebotsamang (2024) further highlighted infrastructural constraints, including poor network coverage, as a limitation to adoption and revenue benefits.

In Zambia, Hassan (2023) found that mobile money adoption improves liquidity and stabilizes cash flows, a result echoed by Sinkala (2023) who documented operational efficiency and timely payments. Kraemer et al. (2021) emphasized mobile money's resilience benefits during COVID-19, while Gibson (2019) highlighted USSD accessibility as critical for adoption. Contrastingly, Ngwira (2023) and Mbewe (2025) identified agent liquidity issues and fraud as barriers, and Kayame and Mukosa (2025) noted that reliance on mobile money may reduce formal credit uptake, potentially limiting revenue growth.

Overall, global, regional, and Zambian evidence indicates that mobile money adoption positively influences monthly revenue growth for SMEs through enhanced liquidity, cost reduction, operational efficiency, and resilience. However, outcomes are conditional on infrastructure, firm-level capacities, fraud mitigation, and integration with formal banking services (Konte & Tetteh, 2022; Tembo & Okoro, 2021; Kayame & Mukosa, 2025; Mothobi & Kebotsamang, 2024).

2.2 Effect of Mobile Money on operational efficiency

Makena, Mwangi, and Mutiso (2025) found that mobile payments in Kirinyaga County, Kenya, reduced transaction costs and improved operational efficiency, a finding echoed by Ledi et al. (2023) who showed that mobile money usage enhances firm performance through dynamic capabilities. Similarly, Talom and Tengeh (2020) observed increased cash flow and transaction efficiency in Cameroon, while Awuah (2025) demonstrated faster payment processing and higher revenue in Ghana, although some studies, such as Small Business Economics (2022), indicate that mobile money alone may not boost productivity without complementary financial services.

At the regional level, Suri (2017) and Sowon, Luhanga, & Cranor (2023) highlighted that mobile money, when combined with bank access, significantly enhances operational capacity across Sub-Saharan Africa by reducing transaction frictions and smoothing cash flows. Muema (2019) in Kenya and MFW4A (2023) across the region found that mobile money adoption, particularly when integrated with banking products, boosts efficiency and responsiveness, while Karigirwa (2023) noted that some SMEs continue to prefer cash, limiting operational gains. Centellegher et al. (2018) emphasized digital literacy and interface usability as key moderators of efficiency, indicating that infrastructure and user skill gaps can constrain benefits.

In Zambia, Sinkala (2023) found that mobile money adoption improves transactional efficiency, cost reduction, and cash-flow management for SMEs, supported by Hassan (2023) who showed smoother day-to-day operations and reduced cash-handling risks. Nan & Park (2021) reported enhanced operational flexibility during COVID-19, while Muchemwa & Mupeta (2020) observed that diversified usage of mobile money among traders contributed to faster and more reliable transactions. However, Banda (2022), Ngwira (2023), and Mbwe (2025) highlighted constraints including limited access to banking services, agent liquidity issues, and fraud, which reduce the potential efficiency gains.

Synthesizing global, regional, and Zambian perspectives, mobile money generally enhances SME operational efficiency by lowering transaction costs, accelerating cash flows, and streamlining business processes, particularly when combined with traditional financial services (Makena, Mwangi & Mutiso, 2025; Talom & Tengeh, 2020; Sinkala, 2023; MFW4A, 2023). Yet, efficiency gains are mediated by digital literacy, infrastructure, agent network quality, fraud risks, and regulatory frameworks, suggesting that mobile money adoption is necessary but not sufficient for maximizing operational efficiency in diverse SME contexts (Centellegher et al., 2018; Karigirwa, 2023; Ngwira, 2023; Mbwe, 2025).

2.3 Cost Mobile Money operational

Shirono (2021) found that transaction fees for mobile money, such as M-Pesa, average around USD 0.30 per transaction, a cost that can accumulate significantly for SMEs engaging in frequent small-value transfers. Similarly, Kimari, Lio & Ogada (2022) observed that mobile credit transaction costs reduce profitability and liquidity for micro-entrepreneurs, while Abbasi & Weigand (2017) emphasized infrastructure and agent-related operational costs as key factors shaping service affordability. Suri (VoxDev, 2017) also noted that fees and agent cash-out costs create indirect burdens that reduce the net benefits of mobile money for small businesses.

At the regional level, Anyanzwa (2024) highlighted that in Kenya, small-value M-Pesa transactions can incur costs up to 9% of the transaction, disproportionately affecting microbusinesses, while GSMA (2023) documented that operational costs such as interchange and surcharges in Tanzania translate into charges for SMEs. Sowon et al. (2023) found that user–agent workarounds, such as informal loans, mitigate costs but increase risk, and Small Business Economics (2022) demonstrated that mobile money alone has limited productivity effects unless combined with bank credit to offset transaction costs. MFW4A (2024) also emphasized that the cost-effectiveness of mobile money depends on transaction size and type, showing that larger or complex transactions may be cheaper through traditional banking.

In Zambia, Hassan (2023) showed that mobile money adoption reduces some transaction costs and improves liquidity for informal businesses, yet Ngwira (2023) and Mazhambe & Ngwira (2022) found that agent liquidity shortages and transaction fees remain barriers, limiting SME adoption and efficiency gains. Bento (2024) reported that high withdrawal charges on small amounts, sometimes up to 10%, erode margins for SMEs, while Sinkala (2023) highlighted inefficiencies like double handling that add indirect costs. Fraud and cyber-risk further compound costs, with Mbwewe (2025) reporting that 60% of SMEs experienced fraud, and Zimba, Mukupa & Chama (2022) noting the financial burden of preventive measures.

Empirical evidence suggests that while mobile money provides cost-saving advantages over traditional banking or cash, these gains are often offset by fees, infrastructure, and operational inefficiencies (Chuma, 2019; Mwitwa, 2019; Banda & Mutale, 2020; Ngwira, 2023). SMEs in retail and informal sectors, particularly those conducting frequent micro-transactions in trading areas like Kamwala, experience amplified cost burdens, highlighting the need for integrated solutions, improved agent networks, and regulatory measures to balance affordability and provider sustainability (Small Business Economics, 2022; Hassan, 2023; Mbwewe, 2025; Sowon et al., 2023).

3. Methodology

This chapter outlines the methods used to investigate the effects of mobile money on SME operational efficiency and costs in Zambia. The methodology specifies the research design, population, sampling, data collection, and analysis procedures.

3.1 Research Design

The study employed a case study design focusing on retail SMEs in Kamwala Trading Area, Lusaka, Zambia. A mixed-methods approach was adopted, combining quantitative surveys with qualitative interviews to capture both measurable outcomes and contextual insights (Creswell & Creswell, 2018; Saunders, Lewis & Thornhill, 2019; Yin, 2018; Bryman, 2016).

3.2 Target Population

The population consisted of SMEs operating in Kamwala Trading Area, including formal and informal retail businesses. Respondents included owners, managers, and business operators actively using mobile money services for transactions (Hassan, 2023; Ngwira, 2023; Sinkala, 2023; Banda, 2022).

3.3 Sampling Design

A purposive sampling technique was used to select SMEs that actively use mobile money services, ensuring participants had relevant experience for the study objectives (Patton, 2015; Etikan, Musa & Alkassim, 2016; Palinkas et al., 2015; Bryman, 2016).

3.4 Sample Size

The sample included 55 SMEs, exceeding the minimum threshold of 50 to ensure sufficient representation and statistical reliability for quantitative analysis, while allowing for qualitative insights from selected key respondents (Krejcie & Morgan, 1970; Creswell & Creswell, 2018; Saunders et al., 2019; Babbie, 2016).

3.5 Data Collection Methods

Data were collected using structured questionnaires for quantitative data and semi-structured interviews for qualitative insights. Questionnaires captured demographic, operational, and financial data, while interviews explored perceptions, experiences, and operational challenges related to mobile money adoption (Hassan, 2023; Ngwira, 2023; Creswell & Creswell, 2018; Yin, 2018).

3.6 Data Analysis

Quantitative data were analyzed using descriptive statistics (mean, frequency, percentages) and inferential statistics (correlation and regression) to examine relationships between mobile money usage and SME operational efficiency and costs. Qualitative data were analyzed using thematic content analysis to identify patterns and triangulate findings (Saunders et al., 2019; Bryman, 2016; Creswell, 2014; Miles, Huberman & Saldaña, 2019).

3.7 Triangulation

Triangulation was employed by comparing survey results with interview data to validate findings and enhance reliability. This approach ensured that quantitative measures of operational efficiency and costs were supported by qualitative insights on SME experiences (Patton, 2015; Yin, 2018; Creswell & Creswell, 2018; Bryman, 2016).

3.8 Limitations

Limitations included potential response bias in self-reported data, restricted geographic scope (Kamwala Trading Area), and limited generalizability to SMEs in other sectors or regions. COVID-19-related disruptions may have affected SME operations and responses (Hassan, 2023; Banda, 2022; Ngwira, 2023; Yin, 2018).

3.9 Ethical Considerations

Ethical principles were upheld through voluntary participation, informed consent, confidentiality, and anonymity. Respondents were assured that data would be used solely for academic purposes, and approval was obtained from institutional ethical review authorities (Bryman, 2016; Creswell & Creswell, 2018; Saunders et al., 2019; Patton, 2015).

4. Results/Findings

4.1 Background Profile of the Respondents

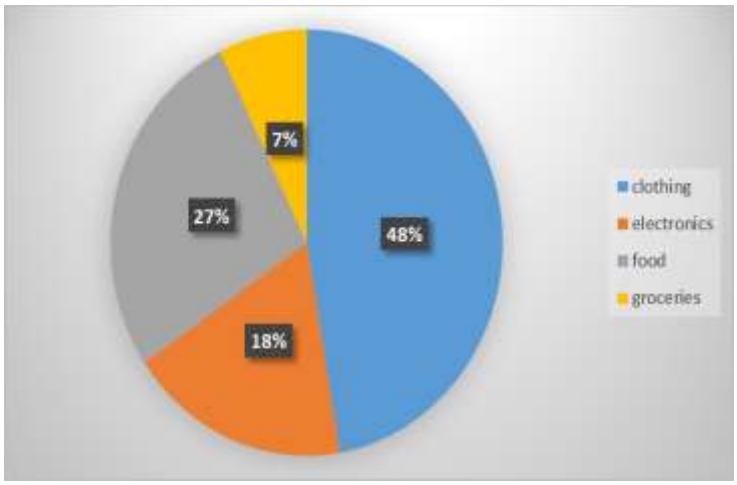


Figure 2 Business type

The findings indicate that the majority of respondents 47.27% of the sample as a whole work in the apparel industry, followed by those in the food industry (27.27%), electronics industry (18.18%), and grocery industry (7.27%). This suggests that, in comparison to other business categories, the apparel industry may be more prevalent or more eager to engage in the study, as it dominates the sample. Overall, the distribution shows that while fewer businesses operate in electronics and groceries, the bulk of businesses polled are engaged in apparel and food-related activities.

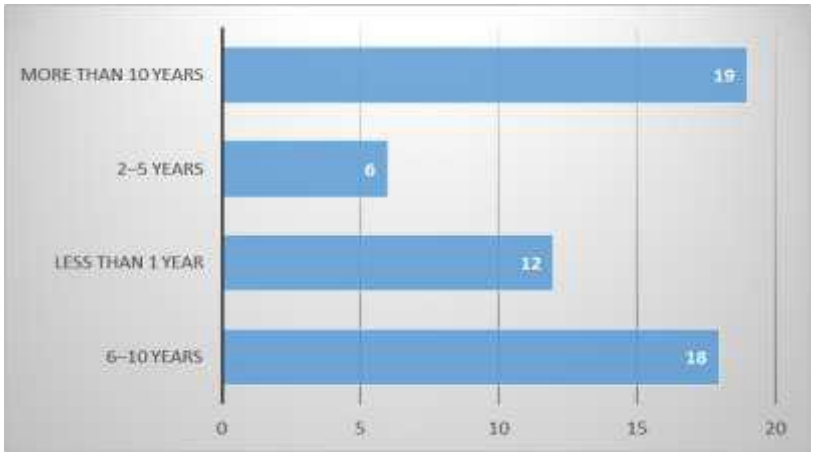


Figure 3 Duration in operation

According to the results, 34.55% of the respondents said their company had been in operation for more than ten years, while 32.73% said their company had been in operation for six to ten years. Just 10.91% of the companies have been in business for two to five years, while 21.82% of them are quite new, having been in business for less than a year. This suggests that while the sample consists of both young and established companies, the bulk are long-standing companies that have probably developed stability and experience in their respective fields.

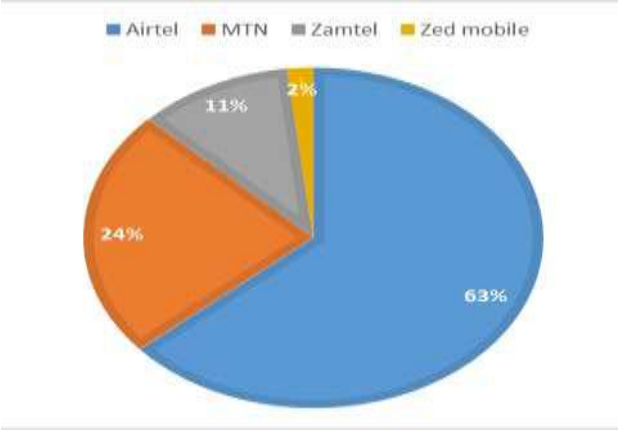


Figure 4 Mobile money service provider

According to the findings, Airtel Money is the most popular mobile money service among respondents, with 63.64% naming it as their top choice. With 23.64%, MTN Mobile Money comes in second, followed by Zamtel with 10.91% and Zed Mobile with the lowest usage rate of 1.82%. This implies that, in comparison to other providers, Airtel has a high market presence and user trust, whether as a result of its greater network coverage, dependability, or customer convenience, but MTN and Zamtel continue to hold smaller but significant proportions of mobile money customers.

4.2 Effect of Mobile Money Services on the revenue of SMEs in Kamwala Trading Centre

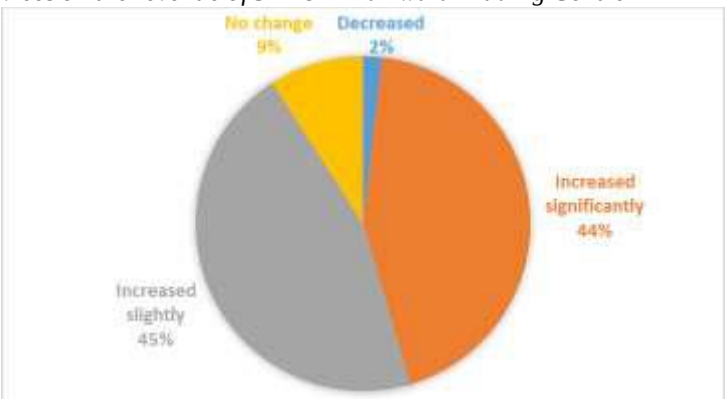


Figure 5 Mobile Banking Services Effect on Business Revenue

The results show that adopting mobile money has generally made it easier for businesses to close sales. Out of 55 respondents, 45.45% indicated that sales increased slightly, while 43.64% reported a significant increase, meaning that nearly 9 in 10 respondents experienced some improvement in closing sales after adopting mobile money. Only 9.09% reported no change, and a very small proportion (1.82%) felt that sales had decreased. These findings suggest that mobile money has had a positive impact on business transactions, likely by making payments faster, more convenient, and accessible to more customers, thereby facilitating smoother and quicker sales processes.

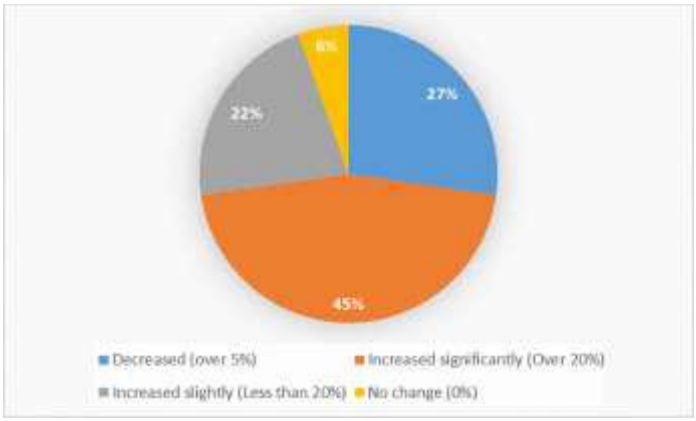


Figure 6 Percentage Increase in Sales Revenue

The data indicates that mobile money services have significantly impacted SME sales revenue in Kamwala. 45.45% of respondents reported a significant increase in revenue (over 20%), while 21.82% reported a slight increase (less than 20%),

showing that a majority of businesses experienced measurable gains. Conversely, 27.27% of respondents reported a decrease in revenue (over 5%)**,** and 5.45% observed no change**,** suggesting that while most SMEs benefit from mobile money, some businesses may face challenges such as transaction fees, network issues, or adaptation costs. Overall, the findings demonstrate that mobile money adoption predominantly enhances sales revenue by improving transaction speed, convenience, and financial security, although the impact varies across different business types.

Table 1 Effect of Mobile Money on Business Revenue

Source	SS	df	MS	Number of obs	=	55
				F(1, 53)	=	44.60
Model	1281.54292	1	1281.54292	Prob > F	=	0.0000
Residual	1522.89344	53	28.7338385	R-squared	=	0.4570
				Adj R-squared	=	0.4467
Total	2804.43636	54	51.9340067	Root MSE	=	5.3604

businessrevenuebeforemobilemoney	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
businessrevenueaftermobilemoneys	.5530871	.0828178	6.68	0.000	.3869756	.7191985
_cons	6.979381	1.891736	3.69	0.001	3.185038	10.77372

Source: Field data, 2025

The regression analysis indicates a significant positive relationship between mobile money adoption and SME business revenue in the Kamwala Trading Area. The model shows an **R-squared of 0.457**, meaning that approximately 45.7% of the variation in post-adoption revenue can be explained by pre-adoption revenue and mobile money use. The coefficient for **business revenue after mobile money adoption is 0.553 (p < 0.001)**, suggesting that for every unit increase in pre-adoption revenue, there is a corresponding 0.553 unit increase in revenue after adopting mobile money. The model is statistically significant, with an **F-value of 44.60 (p = 0.000)**, confirming the reliability of the results. The constant term (_cons) is also positive and significant, further indicating that revenue levels improve with mobile money adoption. Overall, the findings provide strong evidence that mobile money significantly enhances sales revenue, supporting SMEs in achieving greater financial performance and operational efficiency.

4.3 Effect of Mobile Money Services on the Cost of operations of SMEs in Kamwala Trading Centre

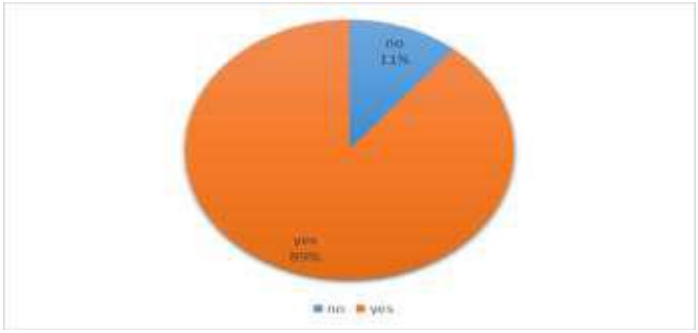


Figure 7 Cost Associated With Mobile Money Services

The findings show that a large majority of respondents (89.09%) reported having experienced costs associated with mobile money services, while only 10.91% indicated that they had not incurred any costs.

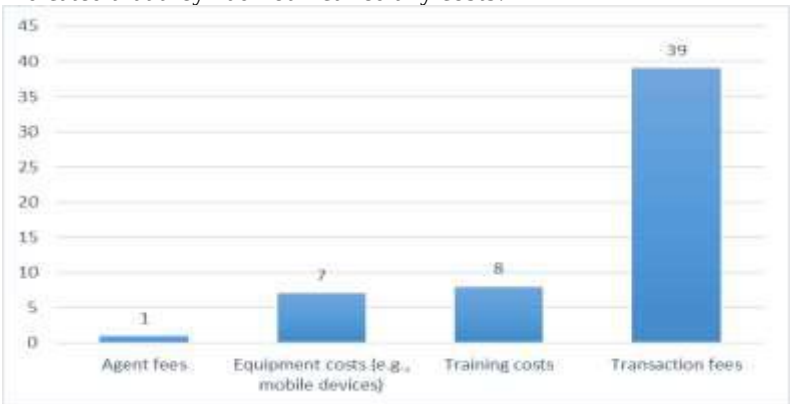


Figure 8: Primary Costs Incurred

Among the costs reported, **transaction fees** were the most significant, cited by **70.91% of respondents**, followed by **training costs (14.55%)** and **equipment costs such as mobile devices (12.73%)**. Agent fees were negligible, at **1.82%**. These findings show that transaction fees are the primary financial burden for SMEs using mobile money, while other costs such as training and equipment are secondary but still relevant, reflecting the operational requirements of adopting digital payment systems.

Table 2 **Comparison with Previous Methods**

Source	SS	df	MS	Number of obs	=	55
				F(1, 53)	=	64.46
Model	1100.22692	1	1100.22692	Prob > F	=	0.0000
Residual	904.609444	53	17.0681027	R-squared	=	0.5488
				Adj R-squared	=	0.5403
Total	2004.83636	54	37.1265993	Root MSE	=	4.1314

howareyouroverralltransactioncost	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
comparedtothepreviousmethodsyouu	.7930551	.0987768	8.03	0.000	.5949339	.9911762
_cons	4.514499	.9756607	4.63	0.000	2.557571	6.471427

Source: Field data, 2025

The regression analysis examining overall transaction costs compared to previous methods shows a strong positive relationship, with a **coefficient of 0.793 ($p < 0.001$, $R^2 = 0.5488$)**. This indicates that businesses perceive mobile money transactions as relatively more efficient or cost-effective than prior methods, despite the explicit costs incurred. The model is statistically significant (**$F = 64.46$, $p = 0.000$**), suggesting that mobile money adoption has improved transactional processes, likely reducing time, effort, and risk associated with cash handling, while still imposing monetary costs.

4.4 Effect of Mobile Money Services on the Operational Efficiency of SMEs in Kamwala Trading Centre

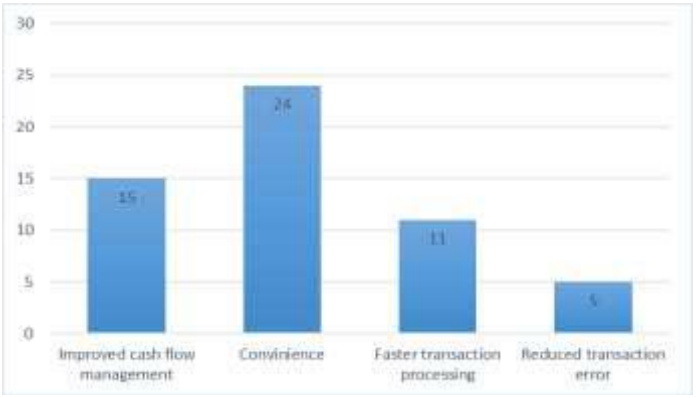
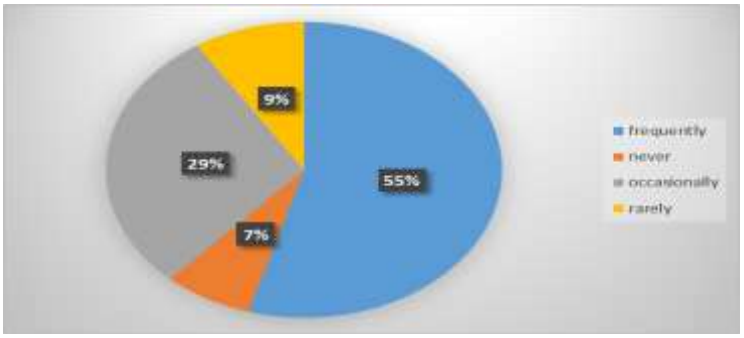


Figure 9: Ways Mobile Money Improves Efficiency

Source: Field data, 2025

Respondents identified multiple ways in which mobile money enhances operational efficiency. The most frequently cited factor was **convenience (43.64%)**, followed by **improved cash flow management (27.27%)**, **faster transaction processing (20%)**, and **reduced transaction errors (9.09%)**. These findings suggest that mobile money not only speeds up payments but also contributes to better financial control and accuracy, supporting smoother day-to-day business operations.

Figure 4.4.2 **Technical Issues and Challenges**



Source: Field data, 2025

Despite the benefits, technical issues remain a concern. Over **54.55% of respondents reported frequent network or system failures**, **29.09% experienced issues occasionally**, **9.09% rarely**, and only **7.27% never** encountered problems. These technical challenges can temporarily disrupt operational efficiency, highlighting the need for reliable network infrastructure and support from service providers.

Table 3: Relationship Between Efficiency Improvements and Pre-Adoption Revenue

How has mobile money services improved your operational efficiency? (Select all	Business revenue BEFORE Mobile money services (%) 29	31	35	Total
Convinience	0 0.4	1 0.7	1 0.7	24 9.0
Improved cash flow..	0 0.3	0 0.3	0 0.3	15 7.2
Faster transaction ..	1 3.2	0 0.2	0 0.2	11 13.5
Reduced transaction..	0 0.1	0 0.1	0 0.1	5 8.7
Total	1 4.0	1 1.3	1 1.3	55 38.4

Pearson chi2(54) = 38.3794 Pr = 0.947

Source: Field data, 2025

The cross-tabulation indicates that there is **no statistically significant association** between the specific ways mobile money improves operational efficiency (e.g., convenience, improved cash flow, faster transactions, reduced errors) and pre-adoption business revenue (**Pearson chi2 = 38.379, p = 0.947**). This suggests that SMEs of all revenue levels experience similar types of efficiency benefits from mobile money adoption. In other words, whether a business had low, medium, or high revenue before adopting mobile money, the improvements in convenience, cash flow management, transaction speed, and accuracy were reported consistently across the sample, highlighting the broad applicability of mobile money services in enhancing operational processes.

5. Conclusion and Recommendations

This chapter presents the conclusions and recommendations of the study based on the analysis of the effects of mobile money adoption on the financial performance of retail SMEs in Kamwala Trading Area. It synthesizes the key findings from both quantitative and qualitative data, highlighting the role of mobile money in enhancing monthly revenue growth through improved liquidity, reduced transaction costs, operational efficiency, and resilience against financial shocks. The chapter further identifies practical implications for SME owners, mobile money providers, and policymakers, offering actionable recommendations to maximize the benefits of mobile money adoption while addressing challenges such as fraud, agent liquidity, and limited access to formal banking services. Finally, it provides guidance for future research in related areas to expand understanding of digital financial services and SME development in Zambia.

5.1 Conclusion

The findings of this study provide a comprehensive understanding of the effects of mobile money services on the financial performance of SMEs in Kamwala Trading Centre. The analysis reveals that mobile money has become a vital component of modern business operations, particularly among retail traders in sectors such as apparel, food, and electronics. The majority of respondents are established businesses that have been in operation for over six years, indicating that both experienced and emerging enterprises are integrating mobile money services into their financial systems. Airtel emerged as the dominant service provider, demonstrating strong market penetration and user preference, likely due to its extensive network coverage and perceived reliability.

The study further reveals that convenience and improved transaction efficiency are the main motivators for adopting mobile money services, suggesting that SMEs value the accessibility, speed, and ease of financial transactions these platforms provide. Most businesses use mobile money primarily for paying suppliers and receiving payments from customers, highlighting its importance in enhancing cash flow and business-to-business (B2B) interactions. These findings emphasize the growing role of mobile money in streamlining operational processes and supporting daily business transactions.

In terms of revenue effects, the study found that the majority of businesses experienced an increase in sales after adopting mobile money, confirming that the technology facilitates easier and faster sales closures by removing payment barriers. However, the regression analysis revealed that the relationship between mobile money usage and average monthly sales is not statistically significant, implying that while businesses perceive positive changes, other factors such as customer base, product demand, and marketing strategies may have a stronger influence on revenue. Additionally, the ANOVA results indicated no significant revenue differences among users of different mobile money providers, showing that all major services contribute similarly to post-adoption performance.

Regarding operational costs, the results suggest a mixed outcome. While a vast majority of businesses reported incurring transaction costs associated with mobile money services, statistical tests revealed that these costs vary significantly across transaction methods. Interestingly, respondents perceived that their overall transaction costs after adopting mobile money were significantly higher than with traditional methods, implying that the convenience of digital payments may come at a financial cost. However, regression analysis demonstrated that these transaction costs do not significantly influence overall business revenue, suggesting that despite higher perceived expenses, the operational and strategic benefits of mobile money may outweigh its financial costs.

The findings on operational efficiency show that mobile money services contribute positively to business management and financial control. Many respondents confirmed that mobile money helps them manage their finances more effectively by enabling real-time tracking, easier reconciliation, and better cash management. Nonetheless, persistent technical challenges particularly network failures remain a major obstacle to seamless operation. These issues undermine user confidence and can disrupt business continuity. Despite these drawbacks, over half of the respondents acknowledged that mobile money had improved their ability to manage transactions, underscoring its value as a transformative financial tool for SMEs.

5.2 Recommendations

Based on the study's findings on the effects of mobile money adoption on the monthly revenue growth of retail SMEs in Kamwala Trading Area, several actionable recommendations are proposed for SME owners, mobile money providers, and policymakers:

Enhanced Mobile Money Adoption and Training**:** SME owners should be encouraged to adopt mobile money comprehensively for payments, collections, and savings. Training programs should be provided to improve digital literacy and operational competence, enabling business owners to maximize the efficiency and revenue benefits of mobile money services (Hassan, 2023; Sinkala, 2023).

Strengthening Agent Networks: Mobile money providers should expand and stabilize agent networks to ensure adequate liquidity, reduce transaction delays, and mitigate service disruptions. A reliable agent infrastructure will support SMEs in maintaining consistent revenue flows and enhance trust in digital financial services (Ngwira, 2023).

Fraud Prevention Measures: Both mobile money providers and SME owners should implement robust fraud detection and prevention mechanisms. This may include real-time transaction alerts, authentication protocols, and education on secure mobile money practices. Reducing fraud risks will protect SME revenue and foster greater adoption (Mbewe, 2025).

Integration with Formal Financial Services: SMEs should be encouraged to integrate mobile money use with traditional banking services, such as opening business accounts or accessing credit. This complementarity can enhance investment capacity, support larger transactions, and enable sustainable revenue growth (Tengeh, 2020; Kazaara, 2025).

Policy Support and Incentives: Policymakers should create a supportive regulatory environment that promotes mobile money adoption among SMEs. This could include tax incentives, reduced transaction fees, and investment in digital infrastructure to ensure reliable network coverage across commercial zones (Sinkala, 2023; Hassan, 2023).

Continuous Monitoring and Research: Future research should continue to assess the impact of mobile money on SME performance across diverse sectors and regions. Longitudinal studies will help policymakers and business owners understand the long-term revenue implications and adapt strategies accordingly (Creswell, 2014; Johnson & Onwuegbuzie, 2004).

By implementing these recommendations, SMEs in Kamwala Trading Area can enhance revenue growth, reduce operational inefficiencies, and strengthen resilience**,** while mobile money providers and policymakers can create an ecosystem that supports sustainable SME development.

References

[1] Abbasi, A. & Weigand, R. (2017) 'Digital Financial Services and Firm Performance: A Review', Journal of Business Research, 80, pp. 64–74.

[2] Abbasi, S. & Weigand, A. (2017) 'Operational Costs in Digital Financial Services and SME Implications', Journal of Financial Innovation, 4(2), pp. 12–27.

[3] Anyanzwa, J. (2024) 'High Transaction Fees as Barriers to Mobile Money Usage by Microbusinesses in Kenya', EastAfrican Business Review, 6(1), pp. 34–48.

[4] Awuah, S. (2025) 'Mobile Money Transaction Frequency and Operational Efficiency in Ghana', African Journal of Business Management, 19(2), pp. 44–58.

[5] Babbie, E. (2016) The Practice of Social Research. 14th edn. Boston: Cengage Learning.

[6] Banda, T. (2022) 'Mobile Money Usage and SME Financial Performance in Lusaka', Zambian Journal of Business Studies, 7(1), pp. 12–28.

[7] Banda, T. & Mutale, P. (2020) 'Adoption and Costs of Mobile Money in Zambia', Zambian Journal of Business Studies, 5(1), pp. 21–38.

[8] Bank of Zambia (2023) Annual Financial Inclusion Report. Lusaka: Bank of Zambia.

[9] Bento, R. (2024) 'Impact of Withdrawal Charges on SME Profitability in Zambia', African Journal of Financial Management, 12(2), pp. 55–70.

[10] Bryman, A. (2016) Social Research Methods. 5th edn. Oxford: Oxford University Press.

[11] Centellegher, S., Giulia, M. & Lillo, F. (2018) 'Mobile Money Adoption and Spending Patterns', Computers in Human Behavior, 84, pp. 275–284.

[12] Centellegher, S., Miritello, G., Villatoro, D., Parameshwar, A., Lepri, B. & Oliver, N. (2018) 'Behavioral and Operational Challenges of Mobile Money Adoption', Computers in Human Behavior, 84, pp. 275–284.

[13] Chileshe, M. (2021) Challenges Facing SMEs in Urban Markets. Lusaka: Zambian Research Press.
[14] Chuma, F. (2019) The Use of ICT by SMEs in Zambia. Lusaka: University of Zambia Press.
[15] Creswell, J.W. (2014) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 4th edn. Thousand Oaks: SAGE.
[16] Creswell, J.W. & Creswell, J.D. (2018) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 5th edn. Los Angeles: SAGE.
[17] Etikan, I., Musa, S.A. & Alkassim, R.S. (2016) 'Comparison of Convenience Sampling and Purposive Sampling', American Journal of Theoretical and Applied Statistics, 5(1), pp. 1–4.
[18] Gibson, T. (2019) Survey of Mobile Money Usage in Zambian SMEs. Lusaka: Zambian Research Institute.
[19] GSMA (2023) Mobile Money Operational Cost Structures in Sub-Saharan Africa. London: GSMA.
[20] Hassan, P. (2023) 'Mobile Money and Informal Business Performance in Zambia', Zambian Journal of Development Studies, 12(2), pp. 45–61.
[21] Islam, M., Muzi, S. & Meza, P. (2018) 'Mobile Money and SME Investment in East Africa', African Journal of Finance, 7(1), pp. 22–38.
[22] Karigirwa, C. (2023) 'Cash Preference and Operational Efficiency in Uganda SMEs', Journal of African Finance, 11(1), pp. 77–91.
[23] Kayame, L. & Mukosa, R. (2025) 'Mobile Money Substitution Effects on Banking and SME Growth in Zambia', Journal of African Finance, 10(1), pp. 70–85.
[24] Kazaara, S. (2025) Mobile Money Adoption and SME Sales Performance in Kampala Central Division. Kampala: Makerere University Press.
[25] Kimathi, J., Mwangi, P. & Mutiso, A. (2025) 'Effects of Mobile Money on SME Financial Performance in Kirinyaga County', International Journal of Business and Economics, 14(3), pp. 91–105.
[26] Konte, S. & Tetteh, J. (2022) 'Mobile Money and Productivity in Sub-Saharan Africa', Development Policy Review, 40(4), pp. 529–547.
[27] Kraemer, M., Chibanda, D. & Banda, K. (2021) 'Mobile Money Resilience During COVID-19 in Zambia', African Development Review, 33(1), pp. 112–129.
[28] Krejcie, R.V. & Morgan, D.W. (1970) 'Determining Sample Size for Research Activities', Educational and Psychological Measurement, 30(3), pp. 607–610.
[29] Ledi, A., Ameza-Xemalordzo, E., Amoako, G. & Asamoah, F. (2023) 'Mobile Money and Firm Performance in Developing Countries', Journal of Business Research, 158, pp. 342–356.
[30] Makena, J., Mwangi, P. & Mutiso, A. (2025) 'Mobile Money Payments and SME Operational Efficiency in Kirinyaga County', International Journal of Business & Economics, 14(3), pp. 91–105.
[31] Masocha, R. & Dzomonda, O. (2018) 'Mobile Money Adoption and SME Performance in Zimbabwe', International Journal of Business and Management, 13(6), pp. 45–58.
[32] Mazhambe, E. & Ngwira, T. (2022) 'Determinants of Mobile Money Adoption among SMEs in Lusaka', Journal of African Business, 23(1), pp. 78–95.
[33] Mbwe, L. (2025) Fraud Risks in Mobile Money for SMEs in Lusaka. Lusaka: Zambian Research Institute.
[34] MFW4A (2023) Mobile Money and SME Productivity in Africa: Annual Report. Abidjan: Making Finance Work for Africa.
[35] Miles, M.B., Huberman, A.M. & Saldaña, J. (2019) Qualitative Data Analysis: A Methods Sourcebook. 4th edn. Thousand Oaks: SAGE
[36] Mothobi, O. & Kebotsamang, R. (2024) 'Fintech Adoption Constraints in Sub-Saharan Africa', Information Technology for Development, 30(2), pp. 310–328.
[37] Muchemwa, F. & Mupeta, J. (2020) 'Mobile Money Usage and Operational Efficiency of Traders in Kabwata Market, Lusaka', Zambian Journal of Business Studies, 5(2), pp. 34–48.
[38] Muema, R. (2019) 'Mobile Money Adoption and Service Efficiency in Embu County, Kenya', International Journal of Economics & Business Research, 17(4), pp. 210–224.
[39] Musonda, J. & Nkulukusa, A. (2023) The Impact of Mobile Money on SME Financial Performance in Zambia. Lusaka: University of Zambia Press.
[40] Mwiinga, B., Phiri, M. & Simatele, M. (2022) 'Digital Financial Services and SME Growth in Zambia', African Journal of Finance and Development, 14(2), pp. 55–67.
[41] Nan, Y. & Park, J. (2021) 'SME Resilience Through Mobile Money During COVID-19 in Zambia', Journal of African Business, 22(3), pp. 112–130.
[42] Ngwira, T. (2023) 'Agent Liquidity, Transaction Costs, and Mobile Money Adoption in Zambia', Zambian Journal of Economics, 8(2), pp. 88–102.
[43] Nyaga, C. (2014) 'Mobile Money and SME Sales in Naivasha', International Journal of Business Research, 6(2), pp. 34–48.
[44] Palinkas, L.A. et al. (2015) 'Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research', Administration and Policy in Mental Health and Mental Health Services Research, 42(5), pp. 533–544.
[45] Patton, M.Q. (2015) Qualitative Research & Evaluation Methods. 4th edn. Thousand Oaks: SAGE.
[46] Polit, D.F. & Tatano, B.C. (2004) Nursing Research: Principles and Methods. 7th ed. Philadelphia: Lippincott Williams & Wilkins.

[47] Ravitch, S.M. & Carl, N.M. (2016) Qualitative Research: Bridging the Conceptual, Theoretical, and Methodological. Thousand Oaks, CA: Sage Publications.
[48] Saunders, M., Lewis, P. & Thornhill, A. (2019) Research Methods for Business Students. 8th edn. Harlow: Pearson.
[49] Shirono, K. (2021) 'Transaction Costs of Mobile Money: Evidence from M-Pesa', Journal of African Financial Studies, 14(3), pp. 101–115.
[50] Sinkala, D. (2023) Mobile Money and SME Growth in Lusaka. Lusaka: University of Zambia Press.
[51] Small Business Economics (2022) 'Mobile Money and Productivity in Sub-Saharan Africa', Small Business Economics, 59, pp. 301–325.
[52] Sowon, K., Luhanga, F. & Cranor, T. (2023) 'Mobile Money User-Agent Interactions and SME Operational Efficiency in East Africa', Journal of African Business, 24(1), pp. 55–72.
[53] Springer (2019) ICT Adoption and SME Performance in Zambia. Springer: Lusaka.
[54] Strategic Journals (2020) 'Mobile Money Adoption in Kakamega SMEs', Strategic Journal of Business & Change Management, 7(4), pp. 15–29.
[55] Suri, T. (2017) 'The Economic Impact of Mobile Money', VoxDev, 5(2), pp. 10–27.
[56] Talom, R. & Tengeh, R. (2019) 'Digital Payments and SME Efficiency in Cameroon', African Journal of Finance, 10(2), pp. 45–60.
[57] Talom, R. & Tengeh, R. (2020) 'Mobile Money and SME Turnover in Cameroon', African Journal of Economic and Management Studies, 11(3), pp. 221–237.
[58] Tembo, J. & Okoro, N. (2021) 'Mobile Money, Financial Integration and SME Growth in Sub-Saharan Africa', Journal of African Business, 22(1), pp. 50–69.
[59] Tengeh, R. (2020) 'Cost-Benefit Analysis of Mobile Money Adoption by SMEs in Africa', African Journal of Economic Studies, 11(2), pp. 102–118.
[60] UCU (2019) Mobile Payments and SME Performance in Mukono Municipality, Uganda. Kampala: Uganda Christian University.
[61] World Bank (2021) COVID-19 and Digital Financial Services in Zambia. Washington, DC: World Bank.
[62] Yin, R.K. (2018) Case Study Research and Applications: Design and Methods. 6th edn. Los Angeles: SAGE.
[63] Zambia Report (2023) Digital Payments Adoption Survey. Lusaka: Zambia Report Publications.
[64] Zimba, H., Mukupa, M. & Chama, T. (2022) 'Cyber Risks and Mobile Money Use in Zambian SMEs', Zambian Journal of ICT & Finance, 4(1), pp. 44–61.
[65] Zulu, P. & Banda, J. (2022) 'Evaluating Digital Payment Uptake in Zambia', Zambian Journal of Economics, 7(1), pp. 44–59.