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Abstract

The rapid digitalization of the financial sector has positioned payment services as a critical driver of banking competitiveness, yet their specific impact on institutional financial performance in emerging markets requires empirical validation. This study examined the effect of payment services on the financial performance of commercial banks in Rwanda, using Bank of Kigali PLC as a case study. The objectives were to assess the influence of bill payments, money transfers, mobile money integration, and recurrent payments on economies of scale, customer growth, and profitability. Adopting a descriptive and correlational research design, primary data were collected from 138 agency banking agents using structured questionnaires. Data were analyzed using descriptive statistics and linear regression. Findings revealed that respondents perceived payment services as highly efficient and conducive to financial performance, although agent commission satisfaction remained low. Regression analysis demonstrated a strong positive relationship, with payment services explaining 93.4% of the variance in financial performance. The study concludes that payment services significantly enhance financial performance through cost efficiency and customer expansion. It recommends that Bank of Kigali PLC strengthen agent training, review commission structures to align incentives, and leverage data analytics for service innovation. These insights contribute to strategic decision-making for sustainable growth in Rwanda's digital banking landscape.

Keywords: *Payment Services, Financial Performance, Agency Banking, Bank of Kigali, Digital Transformation*

1.1 Background of the Study

Globally, advancements in the financial sector stand as vital in the attainment of sustainable socio-economic development (Pyoko, Akims, Nyachae & Mbugua, 2023). Historically early adopters of technology, banks in the twenty-first century now face a complex and highly competitive landscape shaped by economic volatility (Irakoze & Osiemo, 2024). Payment systems have increasingly become central revenue drivers for banks, contributing substantially to profitability through transaction fees, expanded customer reach, operational efficiency, and growth in non-interest income. Payment revenues have grown steadily, averaging approximately 6–7% annually between 2019 and 2024, highlighting payments as one of the most valuable segments within financial services with strong returns on equity for financial institutions (McKinsey & Company, 2024).

Across Sub-Saharan Africa, the evolution of payment services has been closely linked to mobile technology and fintech integration, enabling banks to expand digital offerings, improve operational efficiency, and generate new revenue streams. Kenya provides a leading example, where mobile money platforms such as M-Pesa have significantly increased digital financial participation, strengthened transaction frequency, and extended banking services to previously unbanked populations (World Bank, 2023; GSMA, 2025). Evidence from the continent indicates that adoption of electronic payment channels enhances profitability, operational efficiency, and market reach (Mabe & Simo-Kengne, 2025). In addition to mobile money and agency banking, online banking has emerged as a critical electronic payment channel. It enables customers and financial institutions to execute diverse financial transactions through secure digital platforms such as bank websites and portals. By reducing reliance on physical branches, online banking enhances convenience, lowers transaction costs, and expands customer reach, thereby reinforcing the role of payment services as drivers of operational efficiency and profitability in the modern banking sector in Rwanda, digital payment and agency banking services have expanded access to financial services and supported commercial bank performance. Agents act as retail channels enabling clients to perform transactions such as deposits, withdrawals, and bill payments, thereby reducing operational costs and improving customer convenience (Rwanyarare & Kalimba, 2023). By extending services beyond traditional branch networks, these channels contribute to financial indicators such as return on assets (ROA) and return on equity (ROE). Among Rwandan commercial banks, Bank of Kigali PLC has been at the forefront of adopting diversified payment service channels and investing in digital banking infrastructure.

Despite these developments, empirical evidence on the extent to which payment services contribute to financial performance in Rwanda remains limited. This study seeks to bridge this gap by examining the effect of payment services on the financial performance of Bank of Kigali PLC. The research contributes to the growing literature on digital banking in emerging African economies by providing context-specific insights into how channel-specific payment innovations such as mobile banking, agency banking, and electronic transaction platforms translate into measurable financial outcomes. By linking operational adoption to key financial metrics like ROA, ROE, and non-interest income, the study informs bank managers, policymakers, and fintech developers on strategies to enhance profitability and financial inclusion in Rwanda.

1.2 Statement of the Research Problem

The Rwandan banking sector has undergone rapid digital transformation, with payment services becoming a central driver of financial intermediation. Mobile and internet banking transactions grew by 47.3 percent year-on-year to reach RWF 28.7 trillion in 2023, reflecting strong adoption of digital channels (National Bank of Rwanda [BNR], 2024). However, this growth in transaction volumes has not translated into commensurate profitability. The average return on assets (ROA) for commercial banks stagnated at 3.2 percent in 2023 a full 0.9 percentage points below the Sub-Saharan African benchmark of 4.1 percent (BNR, 2024). Bank of Kigali PLC, the country's largest commercial bank, illustrates this paradox: despite a 62 percent increase in digital transaction value between 2021 and 2023, its cost-to-income ratio worsened from 48.5 percent to 52.1 percent. This suggests that expenditures associated with maintaining and securing digital infrastructure may be outpacing revenue gains (Bank of Kigali, 2023; African Development Bank [AfDB], 2024). These trends point to a persistent challenge: sustaining financial performance amidst rapid digital growth.

Understanding this challenge is critical because commercial banks are vital drivers of Rwanda's economic growth. They mobilize savings, allocate credit, facilitate trade, and promote financial inclusion. In the regional context, Mohamed, Akims, Nyachae, and Mbugua (2023) observe that while traditional intermediation activities remain foundational, commercial banks must explore other profitable business ventures to sustain financial stability. A bank's financial health therefore directly influences investment, employment creation, and macroeconomic stability. However, when the costs of maintaining and upgrading digital infrastructure erode profitability, a bank's capacity to perform this intermediation role and explore such ventures is undermined. Rising operational costs and declining returns on equity (ROE) have consequently raised concerns about the long-term sustainability of current revenue models (BNR, 2023). While payment services are widely recognized for enhancing customer convenience and expanding access, their net contribution to profitability remains ambiguous, particularly in highly competitive, low-margin environments

The existing empirical literature reflects this ambiguity. Irakoze and Osiemo (2024) examined electronic banking in Rwanda and found efficiency gains but mixed profitability outcomes. Similarly, Tuyisenge and Rusibana (2021) found that service quality in Bank of Kigali's digital platforms positively influenced ROA and ROE, yet cost-to-income ratios remained problematic. At the regional level, the expansion of digital payment systems in Sub-Saharan Africa has undoubtedly increased financial inclusion and transaction volumes (World Bank, 2023; GSMA, 2025). However, limited empirical evidence examines how specific payment services such as mobile banking, agency banking, and electronic transaction platforms influence the financial performance of banks within distinct regulatory contexts such as Rwanda.

This study filled this gap by examining the effect of payment services on the financial performance of Bank of Kigali PLC. By linking specific payment channels to key financial indicators return on assets (ROA), return on equity (ROE), and non-interest income the study seeks to provide empirical insights that can inform bank managers, policymakers,

and fintech developers on strategies to align digital investment with sustainable financial performance, thereby supporting Rwanda's broader economic development objectives.

2.0 Literature Review

2.1 Empirical Literature

In previous studies, the performance of modern banking institutions has been closely linked to the expansion of digital and branchless service channels, with researchers highlighting their role in shaping financial outcomes. For instance, mobile banking, agency networks, internet banking, and real-time payment systems have been examined as mechanisms that enhance profitability, liquidity, and capital adequacy (Uwilingiyimana & Kato, 2025). Evidence suggests that banks adopting such platforms often report improved indicators such as Return on Assets (ROA) and Return on Equity (ROE) (Shyaka & Munene, 2021). Moreover, institutional reports emphasize that digital innovation and customer-centric strategies have underpinned the strong financial performance of Bank of Kigali Plc in recent years (BK Group Plc, 2025). Despite these insights, empirical investigations remain limited at the bank-specific level in Rwanda. In particular, few studies have systematically assessed how payment-related innovations influence the financial performance of Bank of Kigali Plc, highlighting the need for focused research to bridge this gap.

2.1.1 Payment Services

Payment services have increasingly become an important driver of banking performance, as transaction-based platforms influence both revenue diversification and cost efficiency (Shyaka & Munene, 2021). Digital channels such as mobile banking, agency banking, and internet banking are widely recognized as key innovations that reshape how banks manage transactions and customer relationships (Ndatenyirigira, 2023). One of the most debated issues in banking research is how these payment innovations affect profitability indicators such as Return on Assets (ROA) and Return on Equity (ROE).

According to efficiency-based perspectives, digital banking channels may reduce transaction costs and expand fee-based income, thereby improving overall profitability (Kyasimire & Njenga, 2023; Tuyisenge & Rusibana, 2021). Mobile platforms, moreover, are often effective at broadening outreach and strengthening customer participation, making them critical for financial inclusion and long-term sustainability (Tuyisenge & Rusibana, 2021). However, scholars also caution that digital payment systems face challenges such as affordability constraints, cybersecurity risks, and fraud vulnerabilities, even though they remain essential tools for expanding financial inclusion.

This dual perspective highlights that payment services can simultaneously enhance profitability while introducing strategic and operational challenges depending on how they are managed. In Rwanda, evidence shows that Bank of Kigali has leveraged mobile and agency banking channels to improve operational efficiency and expand its customer base, contributing to improved financial performance (Shyaka & Munene, 2021).

2.1.2 Financial Performance of Commercial Banks

Financial performance reflects a bank's ability to generate income, manage operational costs, and sustain profitability while supporting long-term growth. It is commonly assessed

using financial ratios such as Return on Assets (ROA) and Return on Equity (ROE), which measure operational efficiency and the capacity to create value for shareholders (Ishimwe & Akims, 2025). ROE indicates how effectively a bank converts shareholders' equity into profits, with higher ratios suggesting efficient management and stronger growth prospects. In contrast, ROA evaluates the extent to which a bank utilizes its asset base to generate net income, providing insight into managerial efficiency in resource utilization.

In Rwanda, empirical studies similarly highlight the growing influence of digital innovation on financial performance. Shyaka and Munene (2021) reported that the adoption of electronic banking services, including mobile and internet banking, significantly improved ROA and ROE at Bank of Kigali while reducing operational inefficiencies. Similarly, Ndatenyirigira (2023) observed that the expansion of mobile banking services among Rwandan commercial banks increased transaction volumes and fee-based income, contributing positively to profitability. Likewise, Tuyisenge and Rusibana (2021) found that reliable and accessible e-banking services enhanced customer satisfaction and revenue growth, strengthening overall financial performance.

Collectively, these studies suggest that financial performance in Rwanda's banking sector is increasingly shaped by the interaction between digital service delivery, governance structures, and managerial efficiency.

2.2 Theoretical Literature Review

In examining the relationship between payment services and financial performance at Bank of Kigali Plc, this study adopts Agency Theory and the Technology Acceptance Model (TAM) as its guiding frameworks. The assertions derived from these theories provide a foundation for understanding how digital payment innovations influence banking outcomes. These perspectives highlight that payment services are not merely technological tools but strategic mechanisms that shape institutional performance. Agency Theory frames their role in reducing inefficiencies and aligning management with shareholder interests, while TAM explains how customer adoption drives transaction growth and revenue diversification. The integration of these theories thus provides a comprehensive lens for evaluating how payment services influence the financial performance of Bank of Kigali Plc.

2.2.1 The Agency Theory

Agency theory is a conceptual framework that examines the relationship between principals (owners) and agents (managers) within an organization. Originating from the work of Jensen and Meckling (1976), the theory posits that managers are entrusted by shareholders to oversee organizational transactions and act in the owners' best interests. As Mirichii, Akims, Mbugua, and Nyachae (2023) explain, agents represent the principals' particular business transactions and constitute the contracted management team in an organization. The performance of the agents, who are always expected to represent their bosses and required to work in the interests of the owners without self-interest, is suggested to benefit both the agents and the principals through improved efficiency and value creation. However, agency conflicts arise when managers prioritize personal gains over shareholder objectives, often exacerbated by information asymmetry a situation where

managers possess more operational knowledge than owners leading to inefficiencies and weakened financial outcomes (Fama & Jensen, 1983; Ishimwe & Akims, 2025).

In the banking sector, agency theory helps explain how managerial decisions impact financial performance. Effective governance mechanisms, such as performance-based compensation and robust monitoring systems, help align these managerial actions with shareholder interests (Berger & Hannan, 1998). When managers implement secure, efficient, and customer-oriented payment solutions such as mobile banking, internet banking, and agency banking, they contribute to shareholder wealth and institutional stability by enhancing operational efficiency and expanding financial access.

Applying this framework to Bank of Kigali, strong governance and oversight ensure that payment services are effectively managed, reducing agency costs and improving key performance indicators such as Return on Equity (ROE) and Return on Assets (ROA). While agency theory has been criticized for oversimplifying human behavior, it remains a relevant lens for analyzing the impact of managerial decision-making on payment services and financial performance (Karangwa & Mulyungi, 2017; Sukendri et al., 2024)

2.2.2 Technology Acceptance Model (TAM) Theory

The Technology Acceptance Model (TAM), proposed by Davis (1989), explains why individuals adopt new technologies. The model identifies Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) as the primary determinants of technology adoption. PU refers to the degree to which users believe a technology will improve their performance, while PEOU reflects the degree of effort users expect is required to use it (Davis, 1989). These constructs have been widely validated across contexts, including financial services (Al-Emran, Mezhuyev, & Kamaludin, 2021).

In the context of payment services, TAM helps explain how customer perceptions influence the adoption of mobile banking, internet banking, and agency banking platforms. When customers view these platforms as useful and easy to use, adoption increases, which enhances transaction volumes, fee-based revenue streams, and overall financial performance. TAM is recognized for explaining the usefulness of financial technology to individuals and businesses in accessing financial services. The benefits attributed to financial technology include savings, credit, and payment processes (Pyoko, Akims, Nyachae, & Mbugua, 2023). This study draws on TAM to understand how the widespread acceptance of financial technology shapes financial performance

While TAM effectively predicts individual adoption behavior, it has limitations. The model assumes rational decision-making and does not account for contextual factors such as infrastructure, regulations, or socio-cultural influences that may shape technology adoption in financial services. Despite these limitations, TAM remains valuable due to its simplicity and empirical support.

In this study, payment services including mobile banking, internet banking, ATM/POS, and agency banking represent the technology under investigation, while financial performance is measured through Return on Assets (ROA) and Return on Equity (ROE). TAM provides the theoretical lens for explaining how customer perceptions of usefulness and ease of use shape adoption intensity, which in turn influences transaction behaviors that drive financial performance (Al-Emran, Mezhuyev, & Kamaludin, 2021).

2.3 Conceptual Framework

A conceptual framework serves as a visual and narrative representation of the expected relationships between study variables, providing a structured lens for investigating research questions (Ravitch & Riggan, 2021). In this study, the conceptual framework illustrates how specific payment service channels, operationalized as independent variables, influence key dimensions of financial performance among commercial banks, with Bank of Kigali PLC as the focal case. The framework is based on the premise that digital payment adoption reduces transaction costs, expands market reach, and diversifies revenue streams, thereby enhancing institutional profitability and operational efficiency (Capgemini, 2023; World Bank, 2023). By mapping these causal pathways, the framework guides hypothesis development, variable measurement, and data interpretation, ensuring analytical coherence throughout the research process.

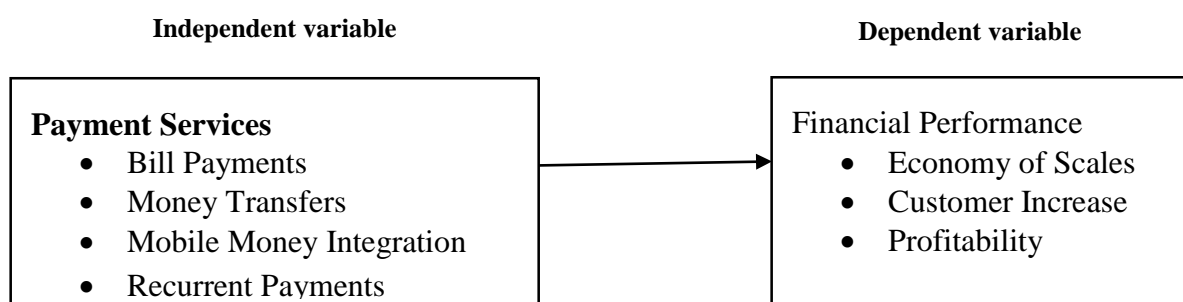


Figure 1: Conceptual Framework

Source: Researcher, 2025

The framework posits direct and mediated relationships between payment services and financial performance. Bill Payments and Recurrent Payments enhance customer stickiness and transaction frequency, which drive economies of scale by spreading fixed technology costs over larger transaction volumes (Capgemini, 2023). Money Transfers and Mobile Money Integration expand the bank's addressable market, attracting new customer segments and increasing fee-based revenues that directly boost profitability (Karangwa, 2024; Al-Gasaymeh, 2023). Furthermore, moderating factors such as regulatory support, cybersecurity infrastructure, and digital literacy can strengthen or weaken the payment-performance linkage (Ndung'u & Signé, 2020). In the banking sector, profitability also plays a stabilizing role because financially strong banks are better positioned to withstand economic downturns and absorb adverse macroeconomic shocks (Akims, 2020).

By articulating these pathways, the framework provides a testable model for examining how Bank of Kigali's strategic deployment of payment services translates into tangible financial outcomes, thereby addressing the research objectives with theoretical and empirical rigor.

3.0 Research Methodology

3.1 Research Design

According to Yin (2015), research design is a logical issue rather than a logistical one, similar to how an architect or builder must first determine the type of structure, its purpose, and the needs of its occupants before creating a work plan or acquiring materials. Saunders, Lewis, and Thornhill (2016) emphasize that research design serves as a structured plan guiding the study process. This study employed a descriptive research design with a cross-sectional approach, as it enabled the researcher to develop an accurate representation of factors, events, and conditions within the study population at a specific moment in time. The study aims to assess the relationship between agency banking services, the independent variable, and the financial performance of commercial banks, the dependent variable. Correlation analysis was applied to determine the association between variables, while multiple regression analysis was utilized to test the study hypotheses. The research focuses on Bank of Kigali Plc as a case study, intending to collect relevant data to achieve its objectives.

3.2 Population of the Study

Kothari and Garg (2014) referred to population of the study as the collection of individuals or objects that are the main focus of scientific queries. This research tending to assess the agent banking and financial banking performance; thus, this study was carried out among agents of Bank of Kigali Plc in Gasabo District, Kigali City. According to the information from the Bank of Kigali Plc, they are 270 agents operating in the whole Gasabo District.

Table 1: Study Population

S/N	Study Population	Population Size	Sample Size
1	Agents of BK Plc in Gasabo District	270	153
	Total	270	153

Source: **Bank of Kigali Plc (2024).**

3.3 Sample Design

A sample size refers to a subset of individuals selected from a larger population to represent it in a study (Saunders, Lewis, & Thornhill, 2016). According to Richey and Klein (2016), sampling involves selecting a small group of respondents that serve as a representation of the entire population under investigation. Determining an appropriate sample size requires consideration of both statistical and resource constraints to ensure accuracy and generalizability of findings. Given the relatively large population, the sample size was determined using Slovin's formula, which provides a systematic approach to selecting a representative sample while minimizing sampling errors. This approach ensures that the study obtains reliable data while maintaining efficiency in data collection. The formula by Slovin was used by the researcher to determine the sample size of the study as shown below:

$$n = \frac{N}{1 + N(e)^2}$$

n = Sample size, N = Population size, e = Margin of error (expressed as a decimal)

$$n = \frac{270}{1 + 270(0.05)^2} 153 \text{ respondents}$$

Therefore, our sample size was composed of 153 respondents who are agents of Bank of Kigali Plc Rwanda operating in Gasabo District.

Sampling is the aspect of statistical practice that deals with the selection of single items intended to provide information about the population under consideration, particularly for the goal of drawing statistical conclusions (Saunders, Lewis & Thornhill, 2016). In this study, a representative sample was chosen via simple random sampling. In this method, any member of the study population has the chance to be sampled for the study (Roundy, 2015). The sample participants in the study share the fact that they operate within Bank of Kigali Plc/Gasabo District, and deal with the variables under study.

3.4 Data Collection Methods

For this study researcher used both primary and secondary data to reach the objectives of this study. Therefore, to attain this a set of techniques such as questionnaire, interview and documentary was used. The study employed questionnaires and undertook desk research on available documentation for data collection. Desk research was based on the material published in reports and similar documents that are available in public libraries, websites, data obtained from surveys already carried out within Bank of Kigali Plc.

3.4.1 Questionnaire

The researcher distributed self- structured questionnaires to respondents selected for the study. The questionnaire design uses the Likert scale having five anchors strongly disagrees, disagree, neutral, agree, and strongly agree to capture respondents' perceptions about Agency banking services of commercial banks in Rwanda and financial performance within the case study. It was administered to respondents sampled for the study over a period of three weeks. The equivalent weight for the answers provided by respondents would be measured as follows: 1. Strongly Disagree, 2. Disagree, 3. Neutral, 4. Agree, and 5. Strongly Agree.

3.4.2 Documentation

According to Saunders, Lewis, and Thornhill (2016), documents serve as valuable sources of information that provide insights into topics of academic interest. In this study, the researcher ensured that data obtained from questionnaires are cross-verified with information from other sources, such as publicly available financial reports. Specifically, the financial statements of Bank of Kigali Plc over a five-year period (2019–2023) was analyzed to enhance the reliability and comprehensiveness of the study's findings.

3.4.3 Data Collection Procedure

Frequency tables, means, and standard deviation was used to interpret the data for numerical variables, while qualitative data helped the researcher better understand the respondent's perceptions on the study variables. The researcher used the Statistical Product & Service Solutions (SPSS) version 27.0 to analyze the quantitative data gathered in the study.

3.4.4 Pilot Study, Validity and Reliability

A pilot study is a preliminary test of research methods and procedures on a smaller scale before full implementation (Saunders et al., 2019). In this study, a pilot test was conducted to assess the clarity and comprehension of each statement in the questionnaire. This process ensures that the intended meaning of each construct is effectively communicated. Conducting a pilot study minimizes the risk of errors in the formulation of the questionnaire's constructs. The pilot study was carried out at Bank of Kigali, where 20 Bank of Kigali Plc agents have received copies of the questionnaire. Based on the pilot study results, necessary revisions may be made to refine unclear statements or reword those that do not elicit the expected responses.

According to Sürücü and Maslakçı (2020), validity and reliability are interrelated yet distinct properties of a measuring instrument. An instrument may be reliable without being valid, making it crucial for researchers to test both aspects to ensure consistency across respondents (Saunders et al., 2019). To validate the research instrument, two finance experts reviewed the questionnaire to confirm that it aligns with the study's objectives. Additionally, the research supervisor has cross-checked and approved the instrument. Validity is measured on a scale from 0 to 1, where 0 indicates high errors, and 1 signifies no errors. A validity score above 0.5 is generally considered acceptable (Lohrey, 2017).

Furthermore, the reliability of the questionnaire was confirmed through post-testing. The study assessed reliability using Cronbach's Alpha coefficient, which measures the correlation between different items in the questionnaire. This statistical measure groups related questions and calculates correlation coefficients for each group. A computer-based algorithm computed the Cronbach's Alpha value, which must exceed 0.7 to indicate a reliable instrument with high internal consistency (Lohrey, 2017).

3.5 Data Analysis Techniques

Descriptive and inferential statistics, namely correlation analysis and multiple regression, was utilized for data analysis. The SPSS version 27.0 was used to compute and analyze the data in this study. The study assessed the perceptions of respondents on Agency banking services in terms of Payment services, Banking transactions, and Technology integration and account opening. Descriptive statistics like mean and frequency, standard deviation was used to interpret the perceptions of respondents upon the variables under study. The statistical relationship between Agency banking services and financial performance in commercial banks may be measured extremely well using the Pearson correlation coefficient.

A multiple regression model was used to examine the significance of the impact of the independent variables on the dependent variables. With multiple regression analysis, the impacts of several predictor variables (rather than just one) on the dependent measure are evaluated. Linear regression shall be used to identify the mean change that occurs in a variable when a one-unit change occurs in each independent variable (Saunders *et al.* 2016). Ordinary Least Squares regression (OLS) is utilized when the dependent variable is continuous (ratio or interval data) and the independent variable is another variable that could be categorical, continuous, or ordinal. Since the dependent variable in this study is a ratio data rather than an ordinal data (Likert scale of five responses), multiple linear regression analysis can be performed after testing the hypotheses that includes linear

relationship, multivariate normality, no or little multicollinearity, no autocorrelation, and homoscedasticity.

Based on previously utilized models that have been used to assess the impact of each predictor, the current study used the following Multiple Linear Regression Formula:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Y = Dependent variables (financial performance) X₁ = Payment services (PS),

while the f(y) = (y₁ = Economy of Scales (EOS), y₂ = Customer increase (CI), y₃ = Profitability (PROF));

The following multiple regression models was established:

$$EOS = \beta_0 + \beta_1 AO + \beta_2 PS + \beta_3 BT + \beta_4 TI + \varepsilon, \quad \text{Model 1}$$

$$CI = \beta_0 + \beta_1 AO + \beta_2 PS + \beta_3 BT + \beta_4 TI + \varepsilon, \quad \text{Model 2}$$

$$PROF = \beta_0 + \beta_1 AO + \beta_2 PS + \beta_3 BT + \beta_4 TI + \varepsilon, \quad \text{Model 3}$$

$$FP = \beta_0 + \beta_1 ABS + \varepsilon, \quad \text{Model 4}$$

Where,

β_0 = Constant,

$\beta_1 - \beta_3$ = regression coefficients,

ε = error term

3.6. Diagnostic Tests

After the model has been run, post-estimation tests were carried out to make sure the model fits the data well and that the estimates it produces are accurate and trustworthy. Conditional diagnostics statistical tests were successfully completed by this investigation. The study checked for multicollinearity, heteroscedasticity, and normality.

3.7 Ethical Consideration

The study on the adhered to strict ethical standards to protect participants' rights, privacy, and dignity. Formal access to the bank and its agents was obtained through ethical clearance and approval from management, while participants provided informed consent and were assured of voluntary participation, anonymity, and freedom from coercion. Data were handled confidentially, securely stored according to Rwanda's Data Protection Law, and destroyed after the study. All sources were properly cited to maintain intellectual integrity, and the researcher-maintained professionalism, cultural sensitivity, and respectful conduct throughout the research process.

4.0 Results and Findings

4.1 Descriptive Results on Payment Services

This section aimed to assess respondents' opinions regarding payment services offered through agency banking at Bank of Kigali Plc. Data were collected using a five-point Likert scale, where 1 represented Strongly Disagree and 5 represented Strongly Agree.

Participants indicated their level of agreement with statements related to the efficiency and accessibility of payment services. The summarized results are presented in Table 2

Table 2: Views on Payment Services in BK Plc

Statements on Payment services	SD		D		N		A		SA		M	SD
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%		
I am able to assist customers with making bill payments smoothly and efficiently at my agency.	-	-	4	3	10	7	45	33	79	57	4.44	0.41
The process of handling money transfers for customers is quick and hassle-free through agency banking.	-	-	3	2	5	4	48	35	82	59	4.51	0.4
I can easily help customers with mobile money transactions, including deposits and withdrawals.	-	-	-	-	4	3	51	37	83	60	4.57	0.38
I have received adequate training to handle merchant payments for goods and services at my agency.	12	9	11	8	17	12	38	28	60	43	3.89	0.58
The payment services provided through my agency meet the needs of the customers in my area.	-	-	-	-	8	6	41	30	89	64	4.59	0.38
Overall Mean											4.40	

Source: Researcher (2025)

Results in Table 2 show that 57% of respondents strongly agreed and 33% agreed that they are able to assist customers with bill payments smoothly and efficiently at their agency. The mean score for this statement was 4.44, which falls into the very high category, suggesting a strong perception of efficiency in bill payment services. The standard deviation was 0.41, indicating that responses were relatively homogeneous.

For the statement that handling money transfers for customers is quick and hassle-free through agency banking, 59% strongly agreed and 35% agreed. The mean score was 4.51, categorized as very high, implying that agents find money transfer processes highly efficient. The standard deviation of 0.40 further suggests close agreement among respondents.

On the ability to assist customers with mobile money transactions, including deposits and withdrawals, 60% of respondents strongly agreed while 37% agreed. The mean score was 4.57, which is also in the very high category, showing very positive perceptions. The standard deviation of 0.38 indicates strong consistency in responses.

Regarding the adequacy of training to handle merchant payments, 43% strongly agreed and 28% agreed, while 12% disagreed and 9% strongly disagreed. The mean score was 3.89, falling into the high category. However, the standard deviation of 0.58 suggests some variation in perceptions, especially concerning training sufficiency.

Lastly, 64% of respondents strongly agreed and 30% agreed that the payment services provided through their agency meet the needs of customers in their area. The mean score was 4.59, categorized as very high, indicating strong satisfaction with service relevance. The standard deviation of 0.38 reflects a high level of agreement.

Overall, the mean score for the payment services indicator was 4.40, which falls into the very high category. This shows that respondents have a strong and generally consistent positive perception of the payment services offered through agency banking at BK Plc. Nonetheless, the slightly lower mean and higher standard deviation on training suggest that additional focus on capacity-building for merchant payments could further enhance service delivery.

4.2 Descriptive Results on Financial Performance

This section aimed to analyze respondents' perceptions of Bank of Kigali Plc's financial performance, evaluated through indicators such as economies of scale, customer growth, and profitability. Participants expressed their level of agreement with statements related to these aspects of performance. The summarized findings are presented in Table 3.

Table 3: Views on financial performance in BK Plc

Statement on Financial Performance	S		D		U		A		SA		M	SD
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%		
Economy of Scales												
The increase in transaction volume has led to reduced operational costs at my agency.	2	1	5	4	4	3	54	39	73	53	4.38	0.39
As my agency has grown, I've been able to handle more transactions without significantly increasing costs.	10	7	11	8	4	3	43	31	70	51	4.10	0.52
Offering a wide range of services at my agency has resulted in better cost efficiency.	6	4	10	7	12	9	42	30	68	49	4.13	0.51
Customer Increase												
The number of customers visiting my agency has grown significantly in the past few months.	7	5	6	4	9	7	46	33	70	51	4.20	0.48
We have successfully attracted many new customers due to the convenience of agency banking.	7	5	5	4	12	9	45	33	69	50	4.19	0.48
Customer satisfaction has led to increased customer referrals and a rise in foot traffic at my agency	10	7	9	7	17	12	31	22	71	51	4.04	0.53
Profitability												
The commission I earn from providing banking services has increased over time.	28	20	38	28	30	22	22	16	20	14	2.77	0.86
My agency's profitability has grown as a result of more banking services being offered to customers.	7	5	8	6	13	9	45	33	65	47	4.11	0.5
The growing number of transactions has directly contributed to increased profits for my agency.	7	5	7	5	13	9	47	34	64	46	4.12	0.5
Overall Mean											4.00	

Source: Researcher (2025)

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The perceptions of respondents regarding financial performance at BK Plc were assessed based on three key indicators: Economy of Scales, Customer Increase, and Profitability. In terms of Economy of Scales, respondents generally reported a high level of agreement with statements reflecting cost efficiency due to increased operations. A majority (53%) strongly agreed and 39% agreed that the increase in transaction volume had led to reduced operational costs at their agency ($M = 4.38$, $SD = 0.39$). Similarly, 51% strongly agreed and 31% agreed that agency growth allowed more transactions without significantly increasing costs ($M = 4.10$, $SD = 0.52$). Additionally, 49% strongly agreed and 30% agreed that offering a wide range of services had improved cost efficiency ($M = 4.13$, $SD = 0.51$).

On the indicator of Customer Increase, a substantial number of respondents observed growth in customer numbers, with 51% strongly agreeing and 33% agreeing that the number of customers had significantly grown in recent months ($M = 4.20$, $SD = 0.48$). Likewise, 50% strongly agreed and 33% agreed that the convenience of agency banking attracted many new customers ($M = 4.19$, $SD = 0.48$), while 51% strongly agreed and 22% agreed that customer satisfaction led to more referrals and foot traffic ($M = 4.04$, $SD = 0.53$).

Concerning Profitability, responses were mixed. While 47% strongly agreed and 33% agreed that more banking services resulted in greater agency profitability ($M = 4.11$, $SD = 0.50$), and 46% strongly agreed and 34% agreed that the growing number of transactions had increased profits ($M = 4.12$, $SD = 0.50$), fewer respondents affirmed increased commission earnings only 14% strongly agreed and 16% agreed, while a notable 20% strongly disagreed and 28% disagreed ($M = 2.77$, $SD = 0.86$). Despite this, the overall mean score for financial performance stood at 4.00, indicating a generally high positive perception among respondents regarding BK Plc's financial performance.

Overall, the mean score for financial performance was 4.00, which falls into the high category. This indicates that respondents generally perceive agency banking as contributing positively to the financial performance of BK Plc, especially in terms of economies of scale and customer increase. However, the low perception of increased commissions highlights a critical area where agents may feel undercompensated, suggesting the need for reviewing commission structures or incentive policies to align perceptions of profitability with actual performance outcomes.

4.3 Regression Results for Payment Services and Financial Performance

Specifically, the regression analysis provides the effect of Payment Services on financial performance in BK PLC at a 5% significance level. This section, therefore, provides the model summary, analysis of variance, and regression coefficients.

Table 4: Model Summary of Payment Services on Financial performance

Model	R	R Square	Adjusted R square	Std Error of the estimate
2	.966a	0.934	0.934	0.27915

a. Predictors: (Constant), Payment Services

From the study findings, the coefficient of determination R² value is 0.934, implying that Payment Services contributes 93.4% on financial performance in BK Plc as represented by the R². This means that other factors not studied in this research contribute 6.6% to financial performance in BK Plc.

Table 5: ANOVA between Payment Services and Financial performance

Model		Sum of squares	df	Mean square	F	Sig.
2	Regression	150.041	1	150.041	1925.477	.000b
	Residual	10.598	136	0.078		
	Total	160.639	137			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Payment Services

The F-calculated 1925.477 is greater than the F-critical, and the p-value was 0.000, is less than the significance level (0.05). Therefore, the model is considered to be a good fit for the data, and hence it implies that Payment Services have significant effect on financial performance in BK Plc.

Table 6: Regression coefficients of Payment Services and Financial performance

Model		Unstandardized Coef.		Standardized coef.	t	Sig.
		B	Std. Error			
2	(Constant)	2.258	0.145		15.606	0.000
	PS	1.428	0.033	0.966	43.88	0.000

a. Dependent Variable: Financial performance

The findings from the table 4.13, revealed that Payment Services have significance positive effect on financial performance in BK Plc as indicated by $\beta_1 = 0.966$, p value = 0.000 < 0.05, t = 43.880. The implication is that an increase of 1 unit in Payment Services would lead to 0.966 units increase in financial performance in BK Plc.

4.4 Discussions of the Findings - Payment Services and Financial Performance

The descriptive results reveal that agency banking agents at Bank of Kigali Plc hold strongly positive perceptions regarding payment services, with an overall mean score of 4.40 indicating very high satisfaction across bill payments, money transfers, and mobile money integration. Specifically, agents reported exceptional efficiency in facilitating mobile money transactions (M = 4.57) and meeting customer needs through agency channels (M = 4.59). These findings align with FinScope Rwanda (2024), which

documented that seamless mobile payment interfaces significantly enhance customer confidence and service delivery in Rwanda's financial sector. However, the relatively lower mean score for training adequacy on merchant payments ($M = 3.89$, $SD = 0.58$) signals a critical capacity gap, corroborating European Investment Bank (2024), which argues that insufficient agent training on complex payment products can constrain service quality and limit revenue diversification in emerging market agency networks.

Regarding financial performance, respondents perceived strong gains in economies of scale ($M = 4.38$) and customer growth ($M = 4.20$), consistent with Capgemini (2023, World Payments Report), which posits that digital payment expansion drives operational leverage and market penetration. Nevertheless, the notably low perception of increased commission earnings ($M = 2.77$) highlights a misalignment between institutional profitability and agent compensation, a concern echoed by National Bank of Rwanda (2023, Agent Management Regulation), which cautions that without equitable incentive structures, agent motivation and sustainable network growth may be compromised.

The regression analysis provides robust empirical evidence that payment services exert a statistically significant and substantial positive effect on financial performance at Bank of Kigali Plc, with payment services explaining 93.4% of the variance in performance metrics ($R^2 = 0.934$) and demonstrating a strong positive coefficient ($\beta = 0.966$, $p = 0.000$). This finding substantiates the theoretical proposition that digital payment adoption directly enhances institutional financial outcomes through transaction fee generation, cost optimization, and customer base expansion, as advanced by Bank for International Settlements (2024) in their analysis of digitalization and bank profitability. The magnitude of the effect further supports McKinsey & Company (2022), who observed that banks with comprehensive payment service portfolios achieve superior return on equity through scalable, low-margin-high-volume transaction models.

However, the disconnect between high overall performance perceptions and low commission satisfaction suggests that while payment services drive institutional profitability, benefit distribution across the agency network requires strategic recalibration. Yazdanpanah (2023) emphasizes that sustainable financial performance in agency banking depends not only on transaction volume growth but also on aligning agent incentives with institutional revenue gains, indicating that Bank of Kigali Plc may need to review its commission framework to ensure long-term agent retention and network vitality.

5.0 Conclusions of the Study

This study set out to examine the effect of payment services on the financial performance of commercial banks in Rwanda, using Bank of Kigali Plc as a case study. Based on the findings, it is concluded that payment services play a pivotal role in shaping the financial outcomes of the bank. The descriptive results indicate that agency banking agents perceive payment services such as bill payments, money transfers, and mobile money integration as highly efficient, accessible, and responsive to customer needs. These positive perceptions translate into tangible operational benefits, including enhanced transaction speed, improved customer satisfaction, and greater service reach.

Furthermore, the study establishes that payment services contribute significantly to key dimensions of financial performance. Agents reported noticeable improvements in economies of scale, as increased transaction volumes enabled cost efficiencies without

proportional increases in operational expenditure. Customer growth was also evident, with convenience and reliability of digital payment channels attracting new users and encouraging repeat engagement. However, while institutional profitability showed positive trends, agents expressed mixed feelings regarding their personal commission earnings, suggesting that the benefits of payment service expansion are not uniformly distributed across the agency network.

The regression analysis confirmed a strong, positive, and statistically significant relationship between payment services and financial performance. Payment services were found to explain a substantial proportion of the variation in financial performance indicators, underscoring their strategic importance. Overall, the study concludes that the deliberate deployment and continuous improvement of payment services are essential drivers of financial sustainability, competitive advantage, and market leadership for Bank of Kigali Plc in Rwanda's evolving digital banking landscape.

5.1 Recommendations of the Study

Based on the conclusions drawn, several recommendations are proposed to enhance the impact of payment services on financial performance. First, Bank of Kigali Plc should invest in comprehensive and ongoing training programs for agency banking staff, with particular emphasis on merchant payment systems and complex transaction handling. Strengthening agent capacity will improve service quality, reduce errors, and boost customer confidence across all payment channels.

Second, the bank should review and restructure its commission and incentive framework for agency partners. Aligning agent compensation with transaction volumes and service complexity will enhance motivation, promote network retention, and ensure that the financial gains from payment service expansion are shared equitably across the distribution chain.

Third, management should prioritize the integration of advanced analytics and customer feedback mechanisms into payment service platforms. Real-time monitoring of transaction patterns, customer preferences, and service bottlenecks will enable proactive adjustments, personalized offerings, and continuous innovation that sustain customer engagement and operational efficiency.

Fourth, the bank should deepen its collaboration with mobile network operators, fintech firms, and regulatory bodies to enhance interoperability, security, and scalability of payment services. Strategic partnerships will expand service reach, reduce systemic risks, and position the bank at the forefront of Rwanda's digital financial ecosystem.

Finally, the bank should maintain a customer-centric approach in the design and rollout of new payment features. Prioritizing user experience, accessibility for underserved segments, and affordability will strengthen financial inclusion while driving sustainable growth in transaction volumes and revenue streams.

5.2 Suggestions for Further Studies

While this study provides valuable insights into the relationship between payment services and financial performance, several avenues remain for future research. First, a comparative study involving multiple commercial banks in Rwanda would enhance the generalizability

of findings and reveal sector-wide patterns in digital payment adoption and performance outcomes.

Second, future research could adopt a longitudinal design to track the evolution of payment service impacts over an extended period. This would allow for the assessment of long-term effects on profitability, customer retention, and operational resilience, particularly in response to regulatory changes or technological disruptions.

Third, further studies could explore the moderating role of contextual factors such as digital literacy, infrastructure reliability, cybersecurity threats, and regulatory policies. Understanding how these variables influence the payment-performance relationship would provide deeper strategic guidance for bank management and policymakers.

Fourth, qualitative investigations focusing on customer experiences, agent challenges, and managerial decision-making processes would complement quantitative findings. In-depth interviews, focus groups, and case narratives could uncover nuanced insights into adoption barriers, service expectations, and innovation opportunities.

Finally, future research could extend the scope to examine the impact of emerging payment technologies such as blockchain-based settlements, biometric authentication, and artificial intelligence-driven personalization. Assessing how these innovations reshape cost structures, risk profiles, and competitive dynamics would position academic inquiry at the cutting edge of financial services transformation.

6.0 References

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