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## **Contribution of Financial Services Quality on Financial Performance of Banking Sector in Rwanda: A Case of Bank of Kigali Limited (BK)**

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# Contribution of Financial Services Quality on Financial Performance of Banking Sector in Rwanda: A Case of Bank of Kigali Limited (BK)

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## Abstract

The study examined the contribution of financial services quality on financial performance of banking sector taking Bank of Kigali (BK), Rwanda. Specifically, this study assessed the effects of saving quality on financial performance of Bank of Kigali Limited-Rwanda, ascertained effects of loan quality on the financial performance of Bank of Kigali Limited-Rwanda and analyzed effects of e-banking service quality on financial performance of Bank of Kigali Limited-Rwanda. The research used a cross-sectional design using both qualitative and quantitative approaches. The study target population was 320 staff members and clients of the bank of Kigali operating in the City of Kigali. The sample size was 178 respondents determined using the Slovene formula. Simple random sampling technique was used for sample selection. The findings revealed there is positive relationship between saving services quality and the financial performance of the bank of Kigali as indicated saving service quality and market share ( $r=.759$ ,  $p=.000$ ), increase return on investment ( $r=.401$ ,  $p=.000$ ); increase earnings per share ( $.702^{**}$ ;  $p=.000$ ) increase customer retention ( $r=.708^{**}$ ,  $p=.000$ ). It was concluded that saving service quality can explain 72.7% of the variations in financial performance and that improvement in saving service quality by one unit leads to an increase of financial performance by 0.557 units in the Bank of Kigali. Further, it was concluded that majority of the respondents appreciated the quality of loan services provided at the bank of Kigali, and that there is a strong positive relationship between loan services quality and financial performance as indicated by loan service quality and return on investment ( $r=.631$ ;  $p=.000$ ); earnings per share; ( $r=.528^*$ ,  $p=.000$ ) and customer retention ( $r=.644^*$ ;  $p=.045$ ), it was also concluded that the combined effect of the loan service quality explains 55.3% of the financial performance of the Bank of Kigali, and that increase in quality of loan provided at the BK by one unit lead to the improve 0.194 unit on the financial performance of the Bank of Kigali. It was established there is strong positive relationship between e-banking services quality and market share increase ( $r=.694$ ;  $p=.000$ ); return on investment ( $r=.729$ ;  $p=.000$ ), earnings per share ( $r=.121$ ;  $p=.008$ ), and that the combined effects of e-banking service quality explain 75.3% of the variations on financial performance of the Bank of Kigali. The study recommended that other commercial banks should put more emphasis on electronic banking in order to perform well. More features of electronic banking should be introduced in commercial banks to attract more customers and perform well. The government of the republic of Rwanda through the national bank of Rwanda should help commercial banks by training their staff and clients on the benefits of electronic banking.

**Keywords:** *Saving quality, loan quality, banking service quality, financial performance, Bank of Kigali-Limited, Rwanda.*

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## 1.0 Background of the Study

The financial sector had not been free from the effects of globalization. In these regards, globalization, together with regulatory, organizational and technological factors had led to positive adjustment in financial sector. As a result, it stimulated deep competitiveness burdens (Anubav, 2010). Financial performance developed to be basis of high demand rates of financial services has been viewed as an important methods of each banking institutions. The financial performance is not a condition for effective and viable banks and standard against which various had group their qualities. Bashir, *et al.*, (2012) argue that customer satisfaction were the growing issue for banking sales. Researchers assessed prominent factors affecting the level of satisfaction for clients (quality, characteristics, size nature of problems and issues). Manu (2011) surveyed how image, apparent quality of services and ascertained the faithfulness in banking sales. Markovic and Jankovic (2013) assess the factors influencing customer satisfaction. Nowadays, there is a growing problem concerning customer satisfaction. The internationalization of competition, saturation of markets and development of information technology have enhanced customer awareness and lead to a condition where long term performance is no longer attained through maximized product price and qualities. As an alternative, firms attain their performance through the establishment of collaboration between the firm and customer.

Previous researches could be expenses six times more to gain new customers than it did to preserve the previous one. Relying on special sector, it is probable to improve revenue by up to 60% after the reduction of migrating by 5%. Therefore, the growing in number and retaining the existing clients is a pertinent element for banks to perform well. Clients were more oriented toward high service quality, whereby, there was a growth of their demand for high quality of service delivery (Yator, 2012). Meanwhile, banking institutions usually afford services to their clients with the intention to attain the sustainability in term of competitive advantages in the present situation of free trade and open market. In this situation, the increase in number of members rely on how customers are satisfied with the service provided to them. Sadeghi and Bemani (2011) evidenced that banks in less developed countries have been experiencing adjustment for keeping up the international financial trends undergoing. Rwanda is also affected by the aforementioned change. Absolutely among them are Ecobank, Kenya Commercial Bank, Equity Bank, Access, Bank, Bank of Africa, and Bank of Kigali. Internationally, financial sector is getting greater and greater in term of competitiveness and with various banking institutions must be careful reconstruct its profitability and the level of services delivery. This situation leads the researcher to the research problem consisting in knowing if and how quality of service delivery affects financial performance of commercial banks in Rwanda using a case of Bank of Kigali.

### 1.1 Statement of the Problem

The influx of new banks in the new millennium into Rwanda's banking sector has engendered competition that is unprecedented in the annals of Rwandan banking history. Reports on financial performance of commercial banks indicated the existence of a growing of higher financial performance of commercial. In fact, higher level of financial performances is expressed in term of increased market shares (Sadeghi & Bemani, 2011), higher rate of return on investments (Tiwary, 2011), Higher rate of earning per share (Yator, 2012) and higher rate of customer retention (Anubav, 2010). According to BNR data, Bank of Kigali is the largest bank in the country with leading market share by assets (33.9%), net loans (31.2%), customer deposits (32.0%), and

shareholders' equity (43.8%) as of 31 December 2019. For the twelve months ended 31 December 2019, the Bank generated net income of Rwf 18.3 billion, had total assets of Rwf 482.6 billion and shareholders' equity of Rwf 88.54 billion. The bank's CAR was 26.7% as at 31 December 2014. However, the factors behind this performance and the banking service which contributed a lot to this performance was still unclear to the stakeholders of BK, thus a need for this study. This study, was therefore established the contribution of financial services (saving service, loan service and e-banking service) on the financial performance (market share, return on investment, earning per share customer retention) at the bank of Kigali Rwanda.

## 1.2 Research Objectives

- i. To analyze effects of saving quality on financial performance of Bank of Kigali Limited-Rwanda
- ii. To assess effects of loan quality on financial performance of Bank of Kigali Limited-Rwanda
- iii. To evaluate effects of e-banking service quality on financial performance of Bank of Kigali-Limited- Rwanda.

## 2.0 Literature Review

This part of the chapter reviews empirical studies conducted on the effects of quality of services to the performance of banking industry. Therefore, this review provides the basis for informing the attainment of the study objectives. Previous studies on commercial banks and service quality investigated the problem associated with profitability and customer royalty and transactions expenses. A study carried out on the evaluation of effects of customer satisfaction on performance of commercial banks in Netherland, using a sample size of 172 sample population, and mixed research methods. The study concludes that the satisfaction of customers towards services delivered rely on different mechanisms used by banking institutions (Yator,2012). This scholar suggested that the assessment of quality of services technically and functionally is very important in banking sector. This means the context in which service are afforded to client while in the context of functionality is approaches of implementing these services.

According to a study conducted by Al-Azzam (2015), it was found that service quality perception is contrasted with service quality expectation in the context of banking institutions. Moreover, expectations change from the nature of service to the service delivered to customers, it based on various position mechanism of various given. Whether the client did not possess any past practices they are more to the foundation of their desire on really speaking, new events or the market efforts to the bank. Moreover, an array of elements or components was assessed in the existing documents for evaluating the quality of service. For instance, Badara, et al., (2013) assess the quality of service in the contents of client insights, client desire, client satisfaction and client behaviors. The uniformity and perpetuation of the success of service abilities, best and management team is perceived as crucial. This comprise of prompt service provision and capacity to preserve contract made with clients.

Boundless (2015), the consistency refers to the capacity of success the assured both regularly and precisely with mistakes free. The author defines responsiveness as the rapidity and on time service provision by providing adequate and suitable services to client complaints, minimal waiting and line up. The capacity for banking institutions to improve rapidly from the failure of services and



prohibition of profession mechanism would establish a pertinent point of views of service qualities. The assurance parameter comprises of competitiveness to achieve adequate services, high discipline and high opinion for clients, effective dissemination of information between the bank and their clients and behavior that the employees had client's desire at their heart (Chimoriya, 2015). Financial quality service system was revealed as the main aspect of an institution management for a smooth function. Bayous and Sayyad (2015) contended that the assessment of financial quality service system stimulated the identification of the effects of new banking reformation system and regulations on the risk assessment, identification and risk reduction. The results from the above study evidenced that the general financial quality service and risk management system in Palestine had significant effects on banking qualitative and quantitative performance.

A study by Channar, *et al.*, (2015) on financial quality service efficiency and its association with financial success in Pakistan demonstrated that financial quality service adequacy is strong in private banking institutions, followed by public banks and in Islamic banks, although the discrepancy is not statically large but slight change exists. Furthermore, private banks were more likely to perform better than public banks. Kotler and Armstrong (2012) investigated a survey on financial quality service system and financial performance in Kenya, where findings revealed a dimension of the financial quality service system and financial performance in Kenya were seen to be positive in association with the success and profitability measured in terms of liquidity, accountability and reporting. Nyakundi *et al* (2014) analyzed the financial quality service system and financial performance in Kenya. The study reveals a strong correlation between financial quality service system and the growth rate for earning. Furthermore, the study evidenced the level of skills, the degree of awareness of them within financial quality service system is also correlated with the probability and the level of awareness in financial quality service system to the increased income ( $r= 0.988$ ).

In his study, Olumbe (2012) evidenced that most of the banking financial institutions established different measures to evaluate the level financial quality service system practices and entity performance. Respondents also posited that their banks had incorporated strong financial quality service system and added that significant positive association ship exist between financial quality service and corporate governance. According to Ayagre, *et al.*, (2014). Information from research undertaken by Ayagre, *et al.*, (2014), indicate that, tough controls system was established where control environment and monitoring activities were found to be the main elements of financial quality service system of banks in Ghana and these two elements have been extremely evidence by the respondents with the mean if 4.72 and 4.66 respectively.

Kotler and Armstrong (2012) assessed impacts of quality of services on retention at banks sales level. A correlation of antecedents is adequately discovered in scientific and empirical ways. The rapidity of service provision suitable site of bank related infrastructure, capable employee and common sociability have been taken into consideration to be crucial elements of customer satisfaction (Kotler & Keller, 2011). Uwaoma (2015) investigated the role of financial quality service system on banking success using a case of production in Nigeria. Findings showed a positive correlation between financial service quality system and effective utilization of organization funds with a significant interaction 0.9345. The study demonstrated that 87.33% of the total adjustment in financial management are disseminated to appropriate money in the bank.

Sabina and Priya (2015) assessed the financial quality service system on financial control system on financial managements and impact of the performance of Siri-Lanka in Jaffna District. positive correlation was discovered between financial quality service system and organizational performance through regression model analysis, whereby an increase in financial quality service by one unit could leads to 17.65 units increase in organizational performance. Niyonsenga and Abuya (2017) investigated the financial quality service system and financial performance in financial institution. Results evidenced that financial quality service had a positive correlation to financial performance equal to .964\*\* and the significance value is 0.000 is less than 0.01 meaning that variables are correlated and that financial quality service system contributed to the profitability of Bank of Kigali.

A study conducted in India banking system on effects of service quality on financial success with the application of economic model has showed that financial performance has been stimulated by the quality of banking service in five types of measurements but with different levels. Regarding the general performance for financial institutions, the answerability is positively a determinants element (Ravichandran, et al., 2010). According to Kotler & Keller (2011) research conducted in Taiwan on Relationships between services quality and profit among banks located in Taiwan using profitability approach has found that performance scale developed were discovered in Taiwan. The insight of quality proceeds behavior and service quality proceed finance performance is antecedent of profitability. A research done in Malaysia on assessing the role of critical elements in providing service quality of banking institutions, using dominant analysis after analysis found that factor 11 analysis have been reduced into four factors: tangible, reliable, competitive and convenience. Generally, banking products and services were low of quality as clients judge provide to be low according to their needs (Lau, et al., 2013).

### 2.1 Conceptual Framework

The conceptual framework that depicts the relationship between independent and dependent variables is depicted in Figure 1

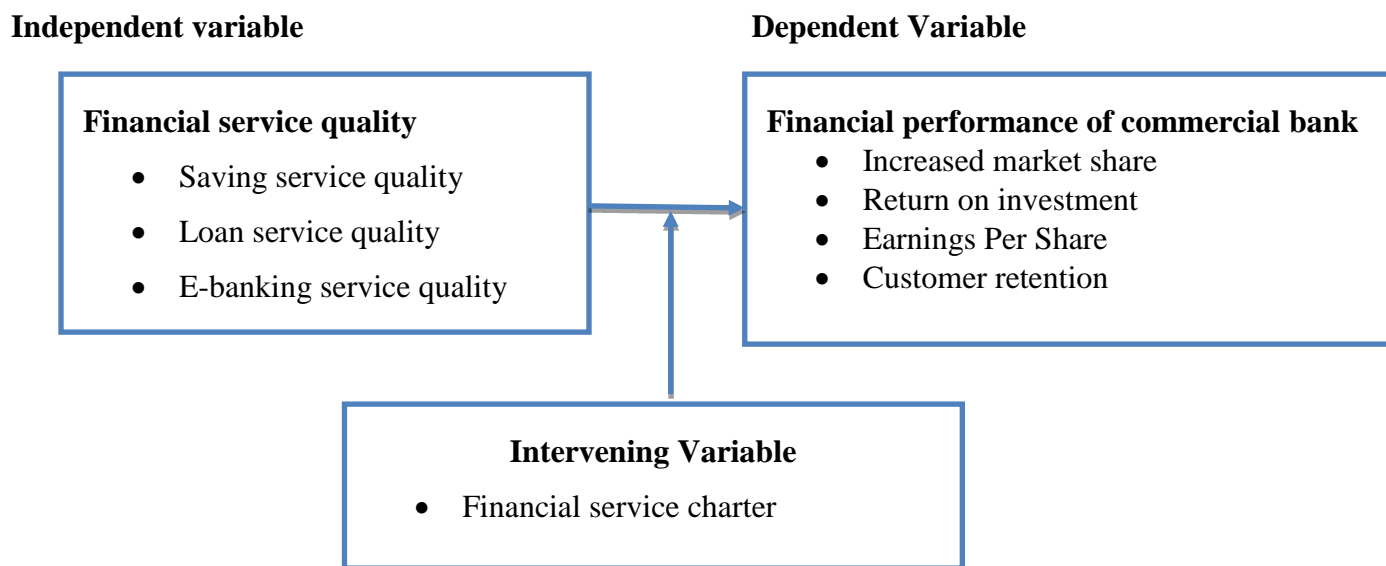


Figure 1: Conceptual Framework

The independent variable were financial service quality that was measured through saving services quality, loan service quality, e-banking service quality. These indicators have been accepted and applied by many academics and practicing managers in various industries. The dependent variable was the financial performance. Its indicators included increased market share, return on investment, earning per share (EPS) and delivery versus payment (DVP). Both independent and dependent variables were moderated by intervening variables which was financial service charter.

### 3.0 Research Methodology

The research used a cross-sectional design using both qualitative and quantitative approaches. The study target population was 320 staff members and clients of the bank of Kigali operating in the City of Kigali. The sample size was 178 respondents determined using the Slovene formula. Simple random sampling technique was used for sample selection. Data collection instruments used included documentary analysis, questionnaire survey and interview guide. The process of analyzing data was done by content analyzing for qualitative data and statistical analysis for quantitative data.

### 4.0 Research Findings and Discussion

The findings presentations were based on research objectives

#### 4.1 Analysis of the Effects of Saving Quality on Financial Performance of Bank of Kigali Table

The study findings on the effects of saving quality on financial performance of bank of Kigali is summarized in Table 1

**Table 1: Nature of Saving/Deposit Quality**

Nature of saving/deposit quality	SDA		DA		Neutral		Agree		SA		Total N	Mean	Std.Dev
	N	%	N	%	N	%	N	%	N	%			
It is easy to open an account	0	0.0	11	6.2	11	6.2	63	35.4	93	52.2	178	4.404	.993
Saving forms is easy to fill	11	6.2	0	0.0	0	0.0	62	34.8	105	59.0	178	3.927	1.147
I have financial security become of my savings	11	6.2	21	11.8	0	0.0	84	47.2	62	34.8	178	4.466	.511
Savings should be withdrawn for use at any time	0	0.0	0	0.0	1	0.6	93	52.2	84	47.2	178	3.657	1.476
There is supervision and ensure safety of money	24	13.5	30	16.9	10	5.6	43	24.2	71	39.9	178	3.848	1.246
There is relevant facilities for saving/withdraw	13	7.3	24	13.5	3	1.7	75	42.1	63	35.4	178	4.151	1.185
There enough facilities for savings / withdraw	9	5.1	19	10.7	2	1.1	54	30.3	94	52.8	178	4.124	1.205

Source: Primary data (2021)

Table 1 shows nature of savings at the bank of Kigali. It was established that 93 (52.2%) strongly agreed that it easy to open an account at the bank of Kigali; 105 (59.0%) strongly agreed that

savings forms at Bank of Kigali are easy to fill; 84 (47.20%) agreed that they have financial security because of the savings, 93 (52.20%) agreed that Bank of Kigali provided them an opportunity to withdraw their savings in time; 71 (39.9%) strongly agreed that there is adequate supervision to ensure the safety of stakeholders' money at the Bank of Kigali; 75 (42.10%) agreed that Bank of Kigali provide relevant facilities which support savings and withdraw; and 94 (52.80%) strongly agreed that Bank of Kigali have adequate facilities for savings and withdraw. This tells us that there is a favorable saving nature and environment at the Bank of Kigali, which influence the performance of Bank of Kigali. These findings collaborated with that of Defee *et al.*, (2010) which stated that the quality of saving at any banking institutions plays a role to the financial performance of commercial banks.

A simple inferential statistic was done to investigate the correlation between saving service quality and performance of the Bank of Kigali (increased market share, return on investment, earnings per share, and customer retention) and the results are depicted in Table 2

**Table 2: Correlation Analysis between Saving Service Quality and Performance of the Bank of Kigali**

		Increased market share	Increased return on investment	Increased earnings share	Increased per customer retention
Saving service quality	Pearson Correlation	0.759**	.401**	.702**	.708**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	178	178	178	178

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Source: Primary Data (2021)**

Table 2 shows that there is a strong positive degree of relationship between saving services quality and the financial performance of the bank of Kigali. This was indicated by the correlation between saving service quality and market share increase correlated at ( $r=.759^{**}$ ,  $p=.000$ ), saving service quality and increasing return on investment correlated at ( $r=.401^{**}$ ,  $p=.000$ ); saving service quality and increase earns per share was correlated at ( $r=.702^{**}$ ,  $p=.000$ ) and saving service quality and increase customer retention correlated at ( $r=.708^{**}$ ,  $p=.000$ ). These correlations were statistically significant given that the p value was  $< 0.01$  suggesting that an increase in saving service quality leads to the increase of financial performance of the bank of Kigali vice versa. These findings were supported by the findings presented by Kumbhar (2012) who asserts that financial service quality is stimulating increased market share, return on investment, earnings per share, customer retention at Barclays Bank in Nigeria.

A regression analysis was done to produce a model summary, analysis of variance and coefficient model for all dependent variables. The study results of model summary is presented in Table 3

**Table 3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.852 <sup>a</sup>	.727	.722	.57890

a. Predictors: (Constant), Saving service quality

**Source: Primary (2021)**



Results presented in Table 3 on model summary indicates that  $R = 0.825$ ,  $R\text{-square} = 0.727$ , adjusted  $R\text{-square} = 0.722$ , and the  $SE = 0.57890$ . The coefficient of determination also called the  $R\text{-square}$  is  $0.727$ . This means that the effect of saving service quality, explains  $72.7\%$  of the variations in financial performance of the Bank of Kigali. This implies that a change in independent variables has a strong and a positive effect on financial performance.

The regression coefficient analysis is summarized in Table 4

**Table 4: Regression Coefficient Analysis**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.569	.165		3.443	.001
	Saving service quality	.521	.042	.557	12.458	.000

a. Dependent Variable: Financial Performance

**Source: Primary data (2021)**

Table 4 shows that regression coefficients of the saving service quality is statistically significant in explaining financial performance of the Bank of Kigali. This was shown by saving service quality which is statistically significant to influence financial performance of the bank of Kigali ( $B = 0.557$ ,  $p\text{-value} = 0.000$ ). This implies that an improvement in saving service quality by one unit leads to an increase of financial performance of Bank of Kigali by  $0.557$  units. This finding concurs with the findings presented by Kamau, et al., (2013) who found a strong positive degree of relationship between financial services quality and financial performance

#### 4.2 Assessment of the effects of Loan Quality on Financial Performance of Bank of Kigali

The second objective was to assess the effects of loan quality on financial performance of Bank of Kigali where strategies used to ensure Loan quality were provided before establishing their effects on financial performance at the Bank of Kigali. The summary of strategies used to ensure loan quality of Bank of Kigali is presented in Table 5

**Table 5: Strategies used to ensure loan quality of Bank of Kigali**

Strategies used to ensure loan quality at the Bank of Kigali	SDA		DA		Neutral		Agree		SA		Total N	Mean	Std.Dev
	N	%	N	%	N	%	N	%	N	%			
Loan requirements at BK is sensitive to customers	20	11.2	24	13.5	27	15.2	81	45.5	26	14.6	178	4.337	.618
BK gives loan on favorable rates	11	6.2	15	8.4	23	12.9	83	46.6	46	25.8	178	3.955	1.243
There is a high degree of fairness and respect in the process of loan processing at the bank of Kigali	11	6.2	23	12.9	43	24.3	90	50.6	11	6.2	178	4.028	1.333
Interest rates are continuously reviewed in line with prevailing economic conditions.	9	5.1	30	16.9	30	16.9	73	40.1	36	20.2	178	3.387	1.217
Loan at the Bank of Kigali is delivered within the time	11	6.2	36	20.2	42	23.6	48	27.0	41	23.0	178	3.775	1.112
Loan is responsive and respectful to customers expectations	12	6.7	47	26.4	31	17.4	49	27.5	39	21.9	178	3.376	.996

**Source: Primary data (2021)**

Table 5 shows the extent to which stakeholders at the bank of Kigali appreciated the quality of loan services provided to them. It was indicated that 81 (45.50%) agreed that loan requirement at the Bank of Kigali is sensitive to the customers; 83 (46.60%) agreed that Bank of Kigali gives favorable loan on time; 90(50.60%) agreed that there is high degree of fairness and respect in the process of loan processing at the bank of Kigali; 73 (40.10%) interest rate at BK is continuously reviewed; 48(27.0%) agreed that loan at BK is delivered within the time, and 49 (27.50%) agreed that loan at BK is responsive and respectful to the customers’ expectations. These results concur with the observation of Badara et al. (2013) assess the quality of service in the contents of client insights, client desire, client satisfaction and client behaviors. The uniformity and perpetuation of the success of service abilities, best and management team is perceived as crucial. This comprise of prompt service provision and capacity to preserve contract made with clients. This means that the quality of loan services provided to the customers of the Bank of Kigali influence financial performance of this bank. A simple inferential statistic was done to investigate the correlation between loan service quality and performance of the Bank of Kigali.

The summary of correlation analysis between loan services quality and performance of the bank of Kigali is as shown in Table 6

**Table 6: Correlation Analysis between Loan Services Quality and Performance of the Bank of Kigali**

		Increased return on investment	Increased earnings per share	Increased customer retention
Loan service quality	Pearson Correlation	.631*	.528*	.644*
	Sig. (2-tailed)	.000	.000	.045
	N	178	178	178

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

**Source: Primary Data (2021)**

Table 6 shows correlation between loan service quality and financial performance at the bank of Kigali. It was established that loan service quality correlated with return on investment at ( $r=.631^*$ ;  $p=.000$ ); earns per share correlated at ( $r= .528^*$ ,  $p=.000$ ) and customer retention correlated at ( $r=.644^*$ ;  $p=.045$ ) significant at 0.05 as significant level. This tells us that there is a high positive degree of relationship between loan services quality and financial performance at the Bank of Kigali. This means that an increase in loan quality provided to the customers at BK will improve the performance of the bank. These findings are in line with the findings presented by Niyonsenga and Abuya (2017) who investigated the financial quality service system and financial performance in financial institution, where concluded that financial quality service had a positive correlation to financial performance.

A regression analysis was done to produce a model summary and coefficient model for all dependent variables. The model summary is summarized in Table 7

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.744 <sup>a</sup>	.553	.545	.97339

a. Predictors: (Constant), Loan service quality

Source: Primary (2021)

Results presented in Table 7 on model summary indicates that R= 0.744, R- square = 0.553, adjusted R- square= 0.545, and the SE= 0.97339. The coefficient of determination also called the R square is 0.553. This means that the combined effect of the loan service quality explains 55.3% of the variations in return on financial performance of the Bank of Kigali. This implies that a change in independent variables has a strong and a positive effect on the increase of financial performance.

The regression coefficient analysis is presented in Table 8

**Table 8: Regression Coefficient Analysis**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.327	.278		1.177	.241
	Loan service quality	.186	.073	.194	2.544	.012

a. Dependent Variable: Financial Performance

Source: Primary data (2021)

Table 8 shows the effects of loan service quality on financial performance at the bank of Kigali. Based on the computed standardized Beta of 0.194 sig.012<.05. It was concluded that an increase in quality of loan provide at BK by one unit lead to the improve 0.194 unit on the financial performance of the Bank of Kigali. This study did not contradict the findings of Sabina and Priya (2015) where a positive correlation was discovered between financial quality service system and organizational performance through regression model analysis, whereby an increase in financial quality service by one unit could leads to 17.65 units increase in organizational performance.

### 4.3 Evaluation of effects of e-banking service quality on financial performance at the Bank of Kigali-Limited- Rwanda

The perception of respondents on whether their expectations from electronic banking services were met are summarized in Table 9

**Table 9: Perception of Respondents on whether their expectations from electronic banking services were met**

	SDA		DA		Neutral		Agree		Sa		Total N	Mean	Std.D ev
	N	%	N	%	N	%	N	%	N	%			
E-banking of BK functions well	13	7.3	30	16.9	20	11.2	74	41.6	41	23.0	178	4.028	1.333
e-banking is regularly available	15	8.4	38	21.3	42	23.6	46	25.8	37	20.8	178	3.898	1.188
I get mini-statement when I need it	13	7.3	39	21.9	42	23.6	46	25.8	38	21.3	178	4.466	.511
I check my account history when I need it	9	5.1	37	20.8	41	23.0	50	28.1	41	20.3	178	3.623	1.480
Payment order are faster	16	9.0	36	20.2	40	22.5	51	28.7	35	19.7	178	3.561	1.220
I get ATM card as soon as I apply for it	16	9.0	41	23.0	43	24.2	48	27	30	16.9	178	3.573	1.133
ATM Machine function well	14	7.9	35	19.7	30	16.9	58	32.6	41	23.0	178	3.292	1.250
Money transfer services function well	23	12.9	22	12.4	47	26.4	51	28.7	35	19.7	178	3.320	1.236

**Source: Primary data (2021)**

Table 9 shows the extent to which stakeholders appreciated the e-banking services provided by BK. Being specific, 41.60 percent agree and 23.0 percent strongly agreed that e-banking at BK function well; 25.8 percent; 20.8 percent strongly agreed that e-banking at BK is always available; 25.8 percent, 21.3 percent strongly agreed that e-banking helps them to get mini-statement when needed; 28.1 percent and 20.3 percent strongly agreed that e-banking helped them to check their bank count; 28.7 percent; agreed and 19.7 percent strongly agreed that e-banking made order command very easily; 27.0 percent agreed and 16.9 percent strongly agreed that BK proved ATM card as soon as possible; 32.6 percent agreed and 23.0 percent strongly agreed that BK ATM is available 24/7; 28.7 percent agreed and 19.70 percent strongly agreed that BK provide the best money transfer services. A content analysis from the interview held with the chief of IT in BK he specifies “what I can ensure you is that we have had adequate services in all parameters and we are happy, but we are struggling for distributing ATM in many Districts and sectors as much as possible”. The researcher concluded that electronic banking in the bank is described by respondents as good due to the benefits it has facilitating the success is concerned. Therefore, electronic banking facilitates satisfaction of the customers and bank officials therefore, stimulate the improvement of bank performance. The study findings are relevant since, mobile banking, ATM, e-fund transfer, account to account transfer, online payment of bills, online statement, credit cards were given by banking institutions (Awondo, 2016). It was concluded that the contacted respondents who include the officials from the bank through increase and satisfaction of customers, the electronic banking in the Bank of Kigali, further facilitated the easy and avoidance of time wastages while improving the banking activities including cross border banking being made easy. The bank has taken advantages of all these aspects and used them in improving its performance.

The researcher established the relationship between e-banking quality and performance of the Bank of Kigali. A simple inferential statistic was done to investigate the correlation between e-banking service quality and performance of the Bank of Kigali.

The correlation analysis between e-banking services quality and performance of the bank of Kigali is depicted in Table 10

**Table 10: Correlation Analysis between e-banking Services Quality and Performance of the Bank of Kigali**

		Increased market share	Increased return on investment	Increased earnings per share	Increased customer retention
E-banking service quality	Pearson Correlation	.694**	.729**	.121**	.081**
	Sig. (2-tailed)	.000	.000	.008	.281
	N	178	178	178	178

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Source: Primary Data (2021)**

Table 10 shows that there is strong positive degree of relationship between e-banking services quality and market share increase as indicated by ( $r=.694^{**}$ ;  $p=.000$ ); high positive degree between return on investment as indicated by ( $r=.729^{**}$ ;  $p=.000$ ), low positive degree with earnings per share as indicated by ( $r=.121^{**}$ ;  $p=.008$ ), but the findings revealed the there is no statistical significant between e-banking services quality and customer retention as indicated by ( $r=.081^{**}$ ;  $p=.281$ ). This means that improvement in e-banking services quality contribute to the financial performance of the bank of Kigali. These findings correlated with the findings presented by Kotler and Armstrong (2012) assessed impacts of quality of services on retention at banks sales level. A correlation of antecedents is adequately discovered in scientific and empirical ways. The rapidity of service provision suitable site of bank related infrastructure, capable employee and common sociability have been taken into consideration to be crucial elements of customer satisfaction.

A regression analysis was done to produce a model summary and coefficient model for all dependent variables. The model summary is as illustrated in Table 11

**Table 11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868 <sup>a</sup>	.753	.748	.52288

a. Predictors: (Constant), E-banking service quality

**Source: Primary (2021)**

Results presented in Table 11 on model summary indicates that  $R= 0.868$ ,  $R$ - square =  $0.753$ , adjusted  $R$ - square=  $0.748$ , and the  $SE= 0.52288$ . The coefficient of determination also called the  $R$  square is  $0.753$ . This means that the combined effect e-banking service quality explains  $75.3\%$  of the variations in return on financial performance of the Bank of Kigali. This implies that a change in independent variables has a strong and a positive effect on financial performance.

The summary of the regression coefficient analysis is as shown in Table 12



**Table 12: Regression Coefficient Analysis**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.076	.149		7.209	.000
	E-banking service quality	.446	.041	.657	10.987	.000

a. Dependent Variable: Financial Performance

Source: Primary data (2021)

Table 12 shows the effects of e-banking service quality on financial performance at the bank of Kigali. Based on the computed standardized Beta of 0.657 sig.000<.05. It was concluded that an increase in the quality of e-banking services provided by BK by one unit lead to the improve 0.657 unit on the financial performance of the Bank of Kigali, these findings collaborated with the findings presented by Kotler and Armstrong (2012) who confirmed that e-banking provide significant impacts on the profitability of banking system in India.

#### 4.4 Financial Services Quality and Financial Performance

There was a need to understand combined effects of financial quality services on financial performance of commercial bank in Rwanda. To this end, multiple linear regression was computed based on the data collected from the bank of Kigali. The computed data were presented in the table 13, 14 and 15.

**Table 13: Model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702 <sup>a</sup>	.493	.484	.78816

a. Predictors: (Constant), Saving service, Loan service, e-banking service.

The Table 13 is a model summary of multiple regression analysis, it shows R= 0.702, R- square = 0.493, adjusted R- square= 0.484, and the SE= 0.78816. The coefficient of determination also called the R square is 0.493. This means that the combined effect of financial performance can explains 49.3percent on the variation of financial performance of commercial banks in Rwanda. This implies that a change in independent variables have a strong and a positive effect on financial performance.

**Table 14: ANOVA Table**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	105.194	3	35.065	56.448	.000 <sup>b</sup>
	Residual	108.087	174	.621		
	Total	213.281	177			

a. Predictors: (Constant), Serving services, Loan service, e-banking service.

b. Dependent Variable: Financial performance.

The significance of the regression model was tested using Analysis of Variance (ANOVA). Table 14 presents the results of this test. The regression model also indicated that it was significant (p =

.000) to mean that it had not been computed by chance, this was because the significance value is 0.000 which is less than 0.05. This made the results of the regression model is credible and reliable.

**Table 15: Regression Coefficient**

Model		Unstandardized Coefficients		Standardized	T	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	.265	.783		.338	.010
	Saving service	.521	.042	.557	12.458	.000
	Loan service	.186	.073	.194	2.544	.012
	E-banking service	.446	.041	.657	10.987	.000

a. Dependent Variable: Financial Performance

Table 15 Presents multiple regression computed with the aim to determine the contribution of saving service, loan service and e-banking service on the financial performance of commercial bank in Rwanda. The computed results shows that independents variables (saving service, loan service and e-banking service) are statistically significant in explaining the financial performance of commercial banks in Rwanda, as indicated by saving service  $B=0.521$   $P= .000<.05$ . Loan service was  $B= 0.186$ ;  $P= 0.12<.05$ ; and e-banking  $B= .446$ ,  $P=.000<.05$ . These findings were in line with the findings of the study carried out by Ravichandran et al, (2010), Kotler & Keller (2011) in the research conducted in Taiwan on Relationships between services quality and profit among banks located in Taiwan using profitability approach has found that performance scale developed were discovered in Taiwan. The insight of quality proceeds behavior and service quality proceed finance performance is antecedent of profitability. These were also supported by the findings of research conducted in Malaysia on assessing the role of critical elements in providing service quality of banking institutions, using dominant analysis after analysis found that factor 11 analysis have been reduced into four factors: tangible, reliable, competitive and convenience. To the same extent, Lau, et al., (2013) confirmed that financial services qualities influence financial performance. The researcher was therefore established multititle regression as follow:  $Y= 0.268+ 0.186X_1 +0.446X_2 + 0.521X_3$ .

Whereas:  $Y=$  Financial performance,  $X_1$ : saving service;  $X_2$ : Loan services and  $X_3$ : E-banking.

## 5.0 Conclusion

Based on the findings presented for the first objective, it was concluded that there is positive degree of relationship between saving services quality and the financial performance of the bank of Kigali as indicated saving service quality and market share ( $r=.759$ ,  $p =.000$ ), increase return on investment ( $r=.401$ ,  $p= .000$ ); increase earnings per share ( $.702^{**}$ ;  $p=.000$ ) increase customer retention ( $r=.708^{**}$ ,  $p=.000$ ). It was also concluded that saving service quality can explains 72.7% of the variations in financial performance and that improvement in saving service quality by one unit leads to an increase of financial performance by 0.557 units in the Bank of Kigali. Based on the findings presented for the second objective which was assess the effects of loan quality on financial performance of Bank of Kigali, it was concluded that majority of the respondents appreciated the quality of loan services provided at the bank of Kigali, and that there is a strong positive degree of relationship loan services quality and financial performance this was indicated by loan service quality and return on investment ( $r=.631$ ;  $p=.000$ ); earnings per share; ( $r= .528^*$ ,

$p=.000$ ) and customer retention ( $r=.644^*$ ;  $p=.045$ ), it was also concluded that the combined effects of the loan service quality explains 55.3% of the financial performance of the Bank of Kigali, and that increase in quality of loan provided at the BK by one unit lead to the improve 0.194 unit on the financial performance of the Bank of Kigali. It was also established that there is strong positive degree of relationship between e-banking service quality and market share increase ( $r=.694$ ;  $p=.000$ ); return on investment ( $r=.729$ ;  $p=.000$ ), earnings per share ( $r=.121$ ;  $p=.008$ ), and that the combined effects of e-banking service quality explain 75.3% of the variations on financial performance of the Bank of Kigali and that the computed standardized Beta ( $\beta=0.657$  sig. $0.000<.05$ ). It was concluded that an increase in the quality of e-banking services provided by BK by one unit lead to the improve 0.657 unit on the financial performance of the Bank of Kigali.

## 6.0 Recommendations

The researcher recommended that other commercial banks should put more emphasis on electronic banking in order to achieve high level of financial performance of commercial banks. More features of electronic banking should be introduced in commercial banks so as to attract more customers and perform well. The government of the republic of Rwanda through the national bank of Rwanda should help commercial banks by training their staff and clients on the benefits of electronic banking.

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