

European Journal of Business and Strategic Management (EJBSM)

**Assessing the Effect of Internet Banking on Customer Satisfaction of Commercial
Banks in Bujumbura City, Burundi**

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Strategy

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Article History

Received 12th December 2024

Received in Revised Form 17th January 2024

Accepted 20th February 2025



How to cite in APA format:

Bangirinama, A., Aliata, V., & Owoche, P. (2025). Assessing the Effect of Internet Banking on Customer Satisfaction of Commercial Banks in Bujumbura City, Burundi. *European Journal of Business and Strategic Management*, 10(1), 48–56. <https://doi.org/10.47604/ejbsm.3243>

Abstract

Purpose: The bank sector plays a critical role on the development of the economy in Burundi. The banks provide different services to its customers and internet banking is among the services. This study investigates the effect of internet banking on customer satisfaction in commercial banks in Burundi.

Methodology: The study used a correlation design to establish the relationship. The study used correlation research design and it targets 11 commercial banks using internet banking in commercial banks in Bujumbura Burundi. Simple random sampling was used to select 399 customers using internet banking and the sample size was obtained using the Yamane's formula. Pilot research was done in Bujumbura, Burundi, with 40 clients who used electronic banking at two commercial banks. Cronbach's alpha coefficient was used to assess internal consistency reliability, and all variables looked to have a coefficient greater than 0.7. The researcher subjected the study tool to five experts to determine content validity, and the resulting average value was greater than 0.7. Construct validity was determined by Kaiser-Meyer-Olkin Measure of Sampling Adequacy and it was found to be 81.4% and significant ($p = .000$). Data was analyzed using descriptive and inferential statistics. Correlation analysis was utilized to determine the direction and intensity of the association between internet banking aspects. Simple linear regression was employed to test the null hypothesis.

Findings: The study found a strong positive relationship between the aspects. With simple linear regression, the study found that; there was the influence of internet banking in customer satisfaction in commercial banks in Bujumbura, Burundi.

Unique Contribution to Theory, Practice and Policy: Commercial banks to implement effective online banking services. Regularly received customer feedback can also serve as a foundation for improving online banking offerings.

Keywords: *Internet Banking, Customer Satisfaction, Commercial Banks*

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INTRODUCTION

Internet banking plays a critical role in customer satisfaction in commercial banks. According to Karjaluo et al. (2002), internet banking which is also referred to online banking utilized the internet as the delivery channel for a variety of banking operations, including money transfers, bill payments, checks on the balances of checking and savings accounts, mortgage payments, and the purchase of securities and certificates of deposit. Customers of Internet banking can access their accounts using browser software, which runs Internet banking programs that are stored on the bank's Web server rather than the user's computer (Anouze & Alamro, 2020).

In Burundi, financial institutions and banking institutions are spending a lot of money on technology in order to offer new and crucial electronic financial services. The Bank of the Republic of Burundi (2018) reports that these web-based retail banking services are making it easier for small businesses to adopt technology at an affordable price. Additionally, Customers in Burundi now have access to a variety of banking services via their mobile phones, which serve as an extra banking channel. This development fits into a larger pattern of digital banking, which increases the convenience and accessibility of financial services. The Bank of the Republic of Burundi (2018) lists these mobile banking services as including deposits, withdrawals, fund transfers between accounts, bill payment, and balance inquiries. Additionally, the fact that these mobile financial services offer an extra delivery method to current bank customers makes them advantageous. To provide internet-banking services to those without traditional bank accounts, mobile network operators have partnered with commercial banks.

Problem Statement

Internet banking is among the different technological solutions that implemented by Commercial banks in Bujumbura City, Burundi to improve the efficiency and accessibility of electronic banking services. This led to foster accessibility, efficiency and convenience for both individual and companies. As a result, the number of registered mobile money accounts increased by 9% from 8.7 million to 9.4 million between June 2017 and June 2018 (Bank of Republic of Burundi, 2018). Furthermore, internet banking subscribers increased by 112% from 43,882 to 92,865 during the same period (Bank of Republic of Burundi, 2018). In addition, the total volume of internet banking transactions increased by 6% in 2019-20 from 1,004 billion to 1,064 billion (Bank of Republic of Burundi, 2020).

Despite this growth of internet banking service, customer satisfaction with commercial banks in Bujumbura City remains unclear. Understanding customer satisfaction is crucial for commercial banks to retain their customers and remain competitive in the market. Therefore, the study aimed at investigating the relationship between internet banking and customer satisfaction of commercial banks in Bujumbura City, Burundi

LITERATURE REVIEW

In UK, according to Mukhtar, (2015), the ease and versatility of internet banking, it's becoming extremely prevalent. In order to improve operations and reduce operating costs, banks are being compelled to advertise online banking services. This study aimed to evaluate the opinions of UK consumers regarding internet banking, and a sample of 100 UK online banking customers was selected. The convenience sampling technique was used to select the samples. To assess the research objectives, qualitative and quantitative methods were used. Consumers experience

internet banking services to be safe and trustworthy according to descriptive analysis of the study's results. However, some of the older participants did not find it convenient to use internet banking, and they may have greater safety issues when doing so. Clients rated the measurements of confidentiality, safety, comfortability, and time efficiency favorably. The study has long-term implications for online lenders who can motivate more internet users by implementing higher security and confidentiality standards. The sample size and survey used have limitations on the results. By using a large and diverse sample, future researchers would be able to deepen their understanding of recent studies. This was in line with the study conducted by (Susanto, 2017) in Indonesia, the study revealed that banking transactions are impacted by mobile and internet banking. Among the options the bank offers to help clients with their banking needs are mobile and internet banking. The bank's services are designed to provide the client with excellent service as well.

Furthermore, In Pakistan context, Raza et al., (2020), conducted a study which looked at the aspects of online banking service quality and how they affect client loyalty and satisfaction. Based on many criteria, this study sought to examine the relationship among electronic customer happiness, electronic customer loyalty, and online banking service quality. This study used a quantitative methodology, collecting information from 500 bank customers in Pakistan using structured questionnaires. The theoretical model was assessed using partial least square structured equation modeling (PLS-SEM). Convergent validity and discriminant validity were also evaluated. The findings reveal that every aspect exerts a positive and notable impact on customer contentment, while customer satisfaction significantly and positively influences customer loyalty. Also, it proves beneficial for e-retailers and managers seeking to tap into the e-retail market. The research unveils a novel framework that bolsters customer loyalty in Pakistan by improving the quality of Internet banking services and enhancing customer satisfaction. The framework incorporates a modified version of E-SERVQUAL, focusing on user friendliness, website efficiency, personalization, and site organization. Additionally, it demonstrates the link between internet banking consumer satisfaction and loyalty. In the end, this innovation may help the Internet banking industry create powerful marketing campaigns, build long-lasting customer connections, and increase its market share.

On the other hand, Ling et al., (2016) claimed that the banking industry has rapidly embraced Internet banking as an efficient tool to provide value to customers in Malasia. Traditional banks offer this popular service to deliver faster and reliable services to online users. The advancement of computer technology enables Internet banking to attract more customers for banking transactions. However, a major problem faced by Internet banking providers is the reluctance of many customers to use these services due to their dissatisfaction. For banks to be competitive, customer pleasure is essential. Thus, the goal of their study is to investigate the elements that affect Internet banking users' pleasure. Five elements are the focus of the study: speed, convenience, security and privacy, site design and content, and service quality. Two hundred working individuals participated in a questionnaire survey that yielded insightful responses about these elements and how they affect consumers' decisions to use online banking. The results of the study show that customer satisfaction in online banking is strongly correlated with web design and content, speed, and convenience. Also, the study's findings show that the three main elements affecting consumers' satisfaction with internet banking are speed, convenience, and web design and content.

In the context of Burundi, information systems have impacted all facets of life on a global scale, converting traditional social structures into digitalized ones (Mulema & Ramadhan,

2019). This research looks at the impact of electronic money banking on the company performance of Eco banks in Burundi. The case study was Ecobank Main Branch Bujumbura. In this study, the experimental method was applied to a total population of 61 staff from the Ecobank Bujumbura branch of 53 respondents chosen using stratified purposive sampling. The data was gathered using a survey, and the evaluation was carried out employing the Statistical Package for Social Scientists (SPSS. 22.0). The research found that electronic money payment systems via internet banking, mobile banking, and digital cards enhanced client access to services, enhanced money transfer, simple bill payment, banking service provision development, and overall client satisfaction, reduced waiting line duration, fast and convenient banking services, international banking promotion, cost effective services, and protected facilities; and reduced operational costs

Research Gap

The review of the literature on internet banking and customer satisfaction has revealed some several research gaps that need further investigation especially in Burundian banking sector. Firstly, some of the researchers used inconsistent methodology specifically the use of convenience sampling. Convenience sampling might introduce bias, limiting the generalizability of findings, and possibly skewing data due to the non-random selection of participants. This makes it difficult to draw trustworthy conclusions about the target group as a whole.

Then, there is limited research that specifically focused on the impact of internet banking in customer satisfaction within the banks in Burundi. Since other research have been done in other countries and sectors apart from banking sector, Burundi might influence the relationship between internet banking and customer satisfaction differently. Therefore, there is a need for more studies in banking sector in Burundi.

Finally, there is lack of comparative studies between different types of banks such as microfinance institutions versus commercial banks on internet banking and its impact on customer satisfaction. Different institutions have its own structures and policies that could assist them in customer satisfaction. Through comparative studies, the respective variations can be identified among different types of banks and the recommendations can be made accordingly.

METHODOLOGY

Research design: The correlation research design was used to establish the relationship between internet banking and customer satisfaction in commercial banks.

Target population: The study's target audience was 104,208 customers of Burundi's commercial banks who use internet banking.

Sample Size: Taro Yamane's formula was used to calculate the sample size of 399 out of the 104,208 users of internet banking in Commercial banks in Bujumbura City, Burundi. The sample size was calculated using a margin of error of 5% and a 95% confidence level.

$n = \frac{N}{1 + N(e^2)}$ where n: sample size, N: population size, e: margin error.

$$\begin{aligned} n &= 104208 / 1 + (104208 \times 0.05^2) \\ &= 104208 / 1 + (104208 \times 0.0025) \\ &= 1004208 / 1 + 260.52 \end{aligned}$$

$$= 104208 / 261.52 = 398.47$$

n= 399 customers

Sampling Techniques: For this investigation, a simple random selection method was employed. Every instance in the population has an equal probability of being included in the sample of 399 internet banking users (Sharma, 2017).

Data Collection Instrument: A well-designed and structured questionnaire was used to collect feedback from all research respondents. Closed-ended questions were included in the questionnaire in this study. The questionnaire had different parts; Part A described the study participants' demographics, and part B asked for participants' opinions on how satisfied they were with the commercial banks in Bujumbura, Burundi. The goal of Section C was to gather participant feedback on internet banking among commercial banks in Bujumbura, Burundi. Finally, part D compiled participant feedback on the company's facilities among commercial banks in Bujumbura, Burundi. The closed-ended questions were scored using a 5-point Likert scale. This enabled the study variables to be weighted and rated in order to determine the customer satisfaction and internet banking levels of commercial banks in Bujumbura, Burundi.

Validity and Reliability: Cronbach's alpha coefficient was used to assess internal consistency reliability, and all variables looked to have a coefficient greater than 0.7 which indicates high reliability. The researcher subjected the study tool to five experts (two supervisors and three e-banking professionals) to determine content validity, and the resulting average value was greater than 0.7. Construct validity was determined by Kaiser-Meyer-Olkin Measure of Sampling Adequacy and it was found to be 81.4% and significant ($p = .000$).

Data Analysis and Presentation: The study used descriptive and inferential statistics to analyze data collected from the research field for this study. Descriptive statistics in this study were to highlight trends in the responses of the participants and the overall trend of the data. In addition to indicators of central tendency (means and median), these descriptive statistics also included measurements of dispersion (standard deviation). To determine the direction and strength of the correlation between level of internet banking and satisfaction among commercial banks in Bujumbura city, Burundi, the correlation analysis used a Pearson Correlation Coefficient (r) was used. Simple Linear Regression analysis was also used to establish the relationship on the indicators under internet banking in commercial banks in Bujumbura, Burundi. Finally, the multiple linear regression analysis was done to predict the value of customer satisfaction (a dependent variable) on internet banking as the independent variable on this study

RESULTS AND DISCUSSION**Table 1: Descriptive Statistics on Internet Banking**

Items	Mean	Std.
The bank's internet banking services provide value for money	3.22	1.085
Internet banking boost transactions	3.12	1.105
Internet banking helps me to do the majority of things by myself	3.18	1.040
The use of internet banking reduces traffic in banking halls	3.46	1.141
My revenue has increased due to the use of internet banking	3.30	1.261
Transaction is easy with internet banking	3.24	1.146
Internet banking increase customer loyalty	3.50	1.109
The efficient internet banking leads to the increase of customer's retention	3.44	1.096
I feel happy to reduce time spent at bank waiting for a service	3.34	1.061
Efficient internet banking leads to the increase of my retention	3.54	.998
I feel committed towards my bank due to the use of internet banking	3.40	1.126
Average	3.34	1.008

The results show that, the customers in commercial banks in Burundi viewed the aspects on internet banking at the average mean of 3.34 and the standard deviation of 1.008.

Table 2: Correlation Analysis on Internet Banking

Variable	Correlation Coefficient	Sig. (2-tailed)
Communicative Internet Banking	.745	.000
Transaction Internet Banking	.741	.000

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

The results depict that, commutative internet banking has stronger correlation to customer satisfaction ($r = .745$, $p = .000$) compared to transaction internet banking ($r = .741$, $p = .000$).

Table 3: Simple Linear Regression on Internet Banking and Customer Satisfaction

Model	R	R Square	Adjusted R Square	Model Summary ^b		Change Statistics			
				Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.723 ^a	.564	.561	.84012	.564	1.260	1	299	.001

a. Predictors: (Constant), Internet Banking

b. Dependent Variable: Customer Satisfaction

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.163	1	10.163	1.260	.000 ^b
	Residual	2411.823	299	8.066		
	Total	2421.987	300			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Internet Banking

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.552	1.685		16.347	.000
	Internet Banking	.451	.046	.723	1.122	.001

a. Dependent Variable: Customer Satisfaction

The results show that, the R squared (R^2) coefficient of determination is 0.564, meaning that internet banking accounts for roughly 56.4% of the variance in customer satisfaction. This significant number highlights the effect that internet banking may have on customer satisfaction. Furthermore, the model maintains a strong fit for the data, as indicated by the adjusted R^2 value of 0.561, which takes the number of predictors into consideration during the analysis.

The standard error of the estimate (.84012) represents the average difference between the models' predicted values and the observed customer satisfaction ratings. This shows that the forecasts are fairly accurate and provides insight into their correctness.

According to the change statistics, the inclusion of internet banking as a predictor significantly enhances the model in terms of statistical significance, as indicated by the change in R squared of 0.564. The F statistic of 1.260 and a significance level of 0.000 support the highly significant relationship between online banking and customer satisfaction. Essentially, the null hypothesis, which states that there is no statistically significant impact on the customer happiness of commercial banks in Bujumbura City, Burundi, might be rejected in favor of the conclusion that internet banking has a significant impact on customer satisfaction.

By examining the coefficients, we can see that 27.552 is the constant term, which stands for the predicted customer satisfaction when there is no internet banking. In the meantime, internet banking has a coefficient of .451. This suggests that, while keeping other variables fixed, consumer satisfaction should increase by roughly .451 units for every unit increase in internet banking. The significance of internet banking as a significant predictor of customer satisfaction is further highlighted by its standardized beta value of 0.723, which also suggests its importance in comparison to other potential predictors.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of the findings: According to the study, there is a significant positive correlation between internet banking and customer satisfaction ($r = 75.6$ and $p < .001$). Additionally, 56.4% of the variation in customer satisfaction was attributed to online banking. This suggests that Bujumbura, Burundi's commercial banks saw an increase in customer satisfaction as a result of the development of internet banking.

Conclusion: Bujumbura's commercial banks depend on internet banking to improve client's satisfaction. The study found that enhancements to online banking directly led to increased customer satisfaction. When they receive complete financial services via internet banking, customers may feel secure and stick with the bank. Commercial banks must thus give internet banking greater priority in order to increase customer retention and confidence

Recommendations: The significant and positive relationship between internet banking and customer satisfaction should make it a top priority for commercial banks to implement effective online banking services. Regularly received customer feedback can also serve as a foundation for improving online banking offerings.

REFERENCES

- Anouze, A. L. M., & Alamro, A. S. (2020). Factors affecting intention to use e-banking in Jordan. *International Journal of Bank Marketing*, 38(1), 86–112. <https://doi.org/10.1108/IJBM-10-2018-0271>
- Karjaluoto, H., Mattila, M., & Pentto, T. (2002). Factors underlying attitude formation towards online banking in Finland.
- Ling, G. M., Fern, Y. S., Boon, L. K., & Huat, T. S. (2016). Understanding Customer Satisfaction of Internet Banking: A Case Study In Malacca. *Procedia Economics and Finance*, 37(16), 80–85. [https://doi.org/10.1016/s2212-5671\(16\)30096-x](https://doi.org/10.1016/s2212-5671(16)30096-x)
- Mukhtar, M. (2015). Perceptions of UK based customers toward internet banking in the United Kingdom. *Journal of Internet Banking and Commerce*, 20(1), 1–38.
- Mulema, S., & Ramadhan, H. (2019). The Influence of Electronic Banking on Performance of Ecobank Burundi: A Case Study of Ecobank Main Branch Bujumbura. *Perspectives on the Information Society*, 3(7), 84–92.
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *TQM Journal*, 32(6), 1443–1466. <https://doi.org/10.1108/TQM-02-2020-0019>
- Susanto, R. J. (2017). Analysis of Internet Banking Applications and Mobile Banking on the Level of Banking Service Quality. *International Journal of Business, Economics and Law*, 12(3), 32–39.