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The Moderating Effect of Financial Literacy on The Relationship Between Digitalisation of Operations and Customer Satisfaction in Selected Commercial Banks in Zimbabwe.

Mbizi Rangarirai[1], Chinjanja S[2], Zingwina Moses[1]

[1]Graduate School of Business, Zimbabwe Open University, Harare.
[2]Faculty of commerce, Department of accounting & auditing, Zimbabwe Open University.

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Abstract: The paper investigates the moderating effect of financial literacy on the relationship between digitalisation of commercial bank operations and customer satisfaction in selected commercial banks in Zimbabwe. To accomplish this a quantitative study anchored on post positivist philosophical standpoint was conducted featuring selected commercial banks in Zimbabwe. The main theory informing this study is the Technology Acceptance Model complemented by expectation-confirmation theory to better understand the relationship among research constructs. The sample comprises of 377 individuals was selected from clients of commercial banks using stratified sampling from selected commercial banks. A total of 318 questionnaires were returned fully completed, giving a response rate of 84% response rate. The researcher used structured questionnaires which were administered to each member of the sample via emails. The findings revealed four digital banking technologies used by commercial banks namely internet banking, mobile banking, point of sale technologies as well as tele banking. Regression results show that there is a positive relationship between digitalization and customer satisfaction in commercial banks as reflected by the standardised beta coefficients from regression output of point-of-sale, mobile banking, and internet banking usage and customer satisfaction. The available evidence showed that tele banking use was not related to customer satisfaction. In addition, results show that financial literacy positively moderate the relationship between digitalisation of bank operations and customer satisfaction as both the interaction variable and financial literacy were found to be statistically significant in explaining customer satisfaction. The implications of these results are that there is need for awareness campaigns, expansion of services nationwide, power backups and government support, continuous upgrades, secure and reliable systems. There is also need to institute cost effective strategies to boost digitalization in commercial banks so as to enhance customer satisfaction.

Keywords: Financial literacy, moderating, digital banking, customer satisfaction

BACKGROUND TO THE PROBLEM

As digitalization increases frequently in commercial banks, majority of the customers prefer to queue in banking halls to get service rather than using digital platforms such as internet banking, ATMs, POS machines and mobile banking in the comfort of their homes or workplaces anytime. Lately there has been an increase in the number of deposits (fees payments, rents, business), withdrawals as most employers are processing salaries electronically and other various banking transactions triggering customers to chain in banking halls for assistance (Belbergui, Elkamoun & Hilal, 2021). In recent times, banks have invested huge sums of money to transform their banking operations by making digital banking user friendly as a tool to aid excellent customer service delivery and yet only 35% of the customers are utilizing the online services fully (RBZ Annual report 2020). This is an indication that about 65% of customers do not use digital banking services but prefer the orthodox way with a lot of paperwork.

Customer satisfaction is a key term in measuring how well banks are meeting or exceeding customers' expectations as these customers are the bloodline of the bank since they are the ones conducting business with the bank and bringing revenue into the bank (Theiri & Hadoussa, 2024). Despite numerous advantages that digitalization offers, most customers still opt for physical interaction when it comes to customer service delivery (Dadoukis, Fiaschetti & Fusi, 2021). This prompted the researcher to look deeper into the enhancing customer satisfaction in Zimbabwean commercial banking sector through digitalisation of operations.

Research Objectives

- To examine the impact of digitalization of banking operations on Customer satisfaction in commercial banks.
- Determine the moderating effect of financial literacy on the relationship between digitalization of bank operations and customer satisfaction.

***Corresponding Author:** Mbizi Rangarirai

THEORETICAL REVIEW

This section explores the various theories and model that explains the impact of digitalization of operations on customer satisfaction in commercial banks. Several theories were explored: these include; technology acceptance model, theory of planned behavior, diffusion of innovation theory, services quality model and Technology Readiness Index.

Technology acceptance model (TAM)

Fred Davis proposed the Technology Acceptance Model (TAM) in 1986, and it was further improved in 1989 and 1993. The Technology Acceptance Model (TAM) is useful for researchers seeking broad insights into the acceptance of a technology. Through the substantial digital revolution of the banking industry, TAM has developed into a powerful analytical instrument that provides insight into consumer behavior. TAM suggests that an individual's intentional intention to use a technology, which is influenced by their attitude and evaluation of the technology's usefulness, determines whether or not they adopt it (Khan *et al.*, 2021). The individual's attitude toward using that technology and how they evaluate its utilization affect their goal. A person's attitudes are shaped by their beliefs about how technology should be used. Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are two primary beliefs that influence an individual's acceptance of information systems (Davis, 1989).The effect of digitization on customer satisfaction in commercial banks has been the subject of numerous research. The question of whether digitalization in commercial banks affects customer satisfaction has been and continues to be debated. Numerous individuals, groups, and organizations have carried out comparable studies to see whether digitization affects commercial banks' overall customer satisfaction.

Theory of planned behaviour (TPB)

Theory of planned behaviour is a psychological theory that links beliefs to behaviour (Ajzen, 1985). According to the theory of planned behavior (Ajzen, 1991), behaviors are influenced by intentions, which are determined by three factors: attitudes, subjective norms, and perceived behavioral control. It is also possible for external factors to directly force or prevent behaviors, regardless of the intention, depending on the degree to which a behavior is actually controlled by the individual, and the degree to which perceived behavioral control is an accurate measure of actual behavioral control (Archie, Hayward, Yoshinobu, & Laursen, 2022).

The digitalization and customer satisfaction

The impact of digitization on improving customer satisfaction in Canadian banks was examined by Thompson and Patel (2020). Focus groups (n = 6) and a survey (n = 800) were used in this qualitative study to analyze topics pertaining to customer experiences. The survey found that consumer satisfaction and digital service offerings are strongly correlated, with users of mobile banking apps reporting a 40% boost in satisfaction. In a similar vein, Dubois and Martin (2021) investigated how digital banking affected French banks' customer satisfaction. In order to compare satisfaction levels before and after digital implementations, the study used Likert scales to administer online surveys to 1,000 bank clients. The findings showed a 30% rise in satisfaction after adoption, mostly as a result of faster transactions and more readily available services. Kumbhar (2021) explored customer satisfaction elements in e-banking: some data from Indian banks. This study looked at the three primary factors—service quality, brand perception, and perceived value—that affect customer satisfaction in e-banking service environments. Additionally, this study examined the relationship between service quality and e-banking satisfaction, perceived value, and brand perception. The required data was obtained through customer surveys. A questionnaire based on a Likert scale was created for customer surveys after a review of the literature and discussions with bank management, customer service experts, and marketing specialists. Principal component analysis (PCA) was employed to analyse the gathered data using SPSS 19.0. The results indicate that 48.30% of the difference in availability may be explained by perceived value, brand perception, cost effectiveness, ease of use, convenience, problem solving, security/assurance, and responsiveness, all of which are significant factors in e-banking customer satisfaction. System availability, contact facilities, fulfilment, efficiency, and compensation are significantly less significant and account for 21.70 percent of the variation in customer satisfaction.

In addition, Belbase and Paudel (2023) looked into how Nepalese commercial banks' customers were satisfied with e-banking. Looking into how e-banking affects customer satisfaction at a Nepalese commercial bank was the primary objective of the study. Using structured questionnaire approaches, the study collected primary data from 200 respondents who utilize banking services. In order to investigate the factors that affect customer satisfaction with regard to service quality, the SERVQUAL technique is used in a descriptive and cause-and-effect research design. Regression and correlation analysis were used to examine the results obtained in this study. Four characteristics and customer satisfaction were shown to be positively correlated in this study. The findings showed that the factor that had the biggest impact on customers' happiness with online banking was security.

Tien *et al.* (2021) looked at the factors that affect Vietcombank customers' happiness in Vietnam. Finding the factors affecting Vietcombank's customer happiness and service quality in Ho Chi Minh City was the aim of this study. Clients who are directly involved with the bank were the study's target, and a quantitative

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research approach was adopted. To evaluate the study hypotheses, 347 valid questionnaires were analyzed using linear regression and exploratory factor analysis (EFA). The results showed that tangible characteristics (facilities and forms), warranty, rate of interest and cost, dependability, and system all positively affected consumer satisfaction. It highlights how important interest rates, service fees, and systems are in improving consumer satisfaction with the service and, in turn, fostering more bank loyalty. CRM is a clever commercial strategy for finding new and profitable consumers for the bank. Customer relationship management is therefore one of the prerequisites for the bank to achieve its goals.

An empirical study of the banking aspects influencing customer satisfaction was carried out by Gazi *et al.* in (2021). A sample of 382 respondents who were customers of 32 selected commercial banks in Bangladesh provided the data. A pre-structured questionnaire was used in order to gather the required facts and information. Descriptive statistical techniques and the OLS regression model were used to analyse the data. The results of this study demonstrated that customer satisfaction is statistically significantly impacted by service quality (such as tangibility, dependability, and empathy). In Bangladesh's banking sector, the results similarly show a positive correlation between customer satisfaction and service quality metrics.

Simon and Thomas (2018) examined how customer satisfaction was affected by electronic banking in a sample of commercial banks in Kenya. Assessing the effect of electronic banking on customer satisfaction among Nairobi's top banks was the primary objective of the study. Stratified sampling was employed to determine a sample size of 225 respondents. Respondents were asked to complete structured questionnaires in order to collect primary data. To do an initial analysis of the data, the researcher employed descriptive statistical techniques. A regression analysis was also performed to determine the association between the research variables. Based on the data, the study came to the conclusion that the flexibility of online banking has a major impact on the satisfaction of customers. Additionally, a lot of consumers prefer online banking because it's user-friendly, and personalized online banking significantly boosts client satisfaction. The survey also showed that the ease of use of mobile banking has a big influence on consumer satisfaction. The survey also revealed that ATM privacy, accessibility, and user-friendliness had a major influence on the satisfaction of customers.

Claude (2022) investigated how Rwandan customers' satisfaction was affected by electronic banking. The Bank of Rwanda's headquarters in Kigali was cited in the case. Validity and reliability were taken into account in this study since it was simpler to maintain high reliability if the experiment could be repeated multiple times and producing consistent results. Quantitative data was gathered and analyzed using the Statistical Package for Social Sciences (SPSS) software, version 23.0. The effect of electronic banking on customer satisfaction was assessed using descriptive statistics and the coefficient of correlation. The linear relationship between predictor and outcome variables was evaluated using regression analysis. In this study, however, descriptive statistics were quite helpful in providing a summary of the data. The results of the investigation showed that the dependent and independent variables had a stronger degree of association. In a similar vein, the R square showed how customer happiness and the total variance of all dependent variables were related. Technology, electronic mobile devices, electronic banking transactions, and financial regulations were found to have a significant impact on consumer satisfaction.

Maduku, D. K. (2018) studied how customers depend on the banking system and how they use e-banking services. Self-administered questionnaires were implemented to gather data from 394 clients of South Africa's four major retail banks as part of a cross-sectional descriptive survey research approach. Customers' decision to use internet and mobile banking services is mostly influenced by their level of trust in the electronic banking system. Banks were advised to create and carry out programs to increase customer confidence in online and mobile banking services.

Worku *et al.* (2019) looked into how consumer satisfaction in Ethiopia's banking industry was affected by electronic banking. The goals of this study were to determine how customer satisfaction with electronic banking differed from that with traditional brick and mortar banking services; how it was related to age, occupation, and education; how it affected branch visits; how knowledgeable customers were about e-banking; and what advantages and disadvantages it offered. The study used chi-square independence tests to ascertain the relationship between demographic factors and e-banking, tables, percentages, regression analysis tests to explain the factors that determine customers' satisfaction with e-banking, and independence t-tests to determine whether or not customer visits to offices before and after e-banking are significant. As per the study's findings, the majority of people who use e-banking are students, young, educated, and employed. There is a correlation between e-banking and demographic characteristics, e-banking is currently only available to current account holders and savers, business men and women do not actively use e-banking, and e-banking has reduced customer wait times, increased customer satisfaction, and reduced the frequency of bank halls for banking services.

The investigation by Wadesango and Magaya (2020) was centred on determining how digital banking services affected Zimbabwe's commercial banks' performance which did not extent to customer

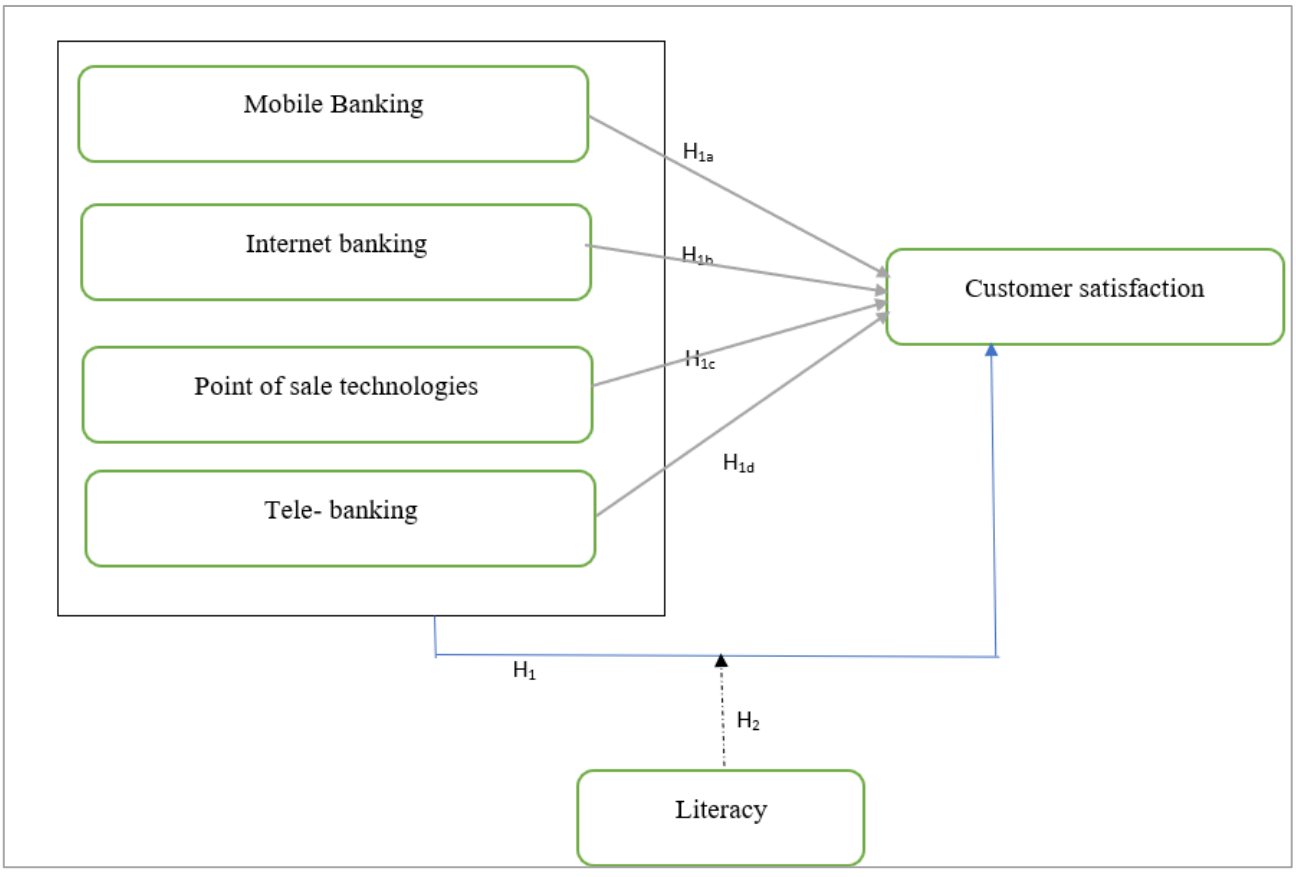
satisfaction. The researchers used correlation to do the assessment, and the Return on Assets (ROA) ratio was used to gauge performance. Their study's findings revealed a positive relationship. Notably, digital banking and return on assets were positively correlated. This suggests that digital banking services improved bank performance in terms of asset utilization and profitability since a rise in online client deposits and online banking transactions was correlated with an improvement in the Return on Assets. Nevertheless, the study also found a negative correlation between Return on Assets and two variables: commissions and fees associated with online banking as well as spending on online banking. This implies that the Return on Assets declined as commissions and costs for online banking rose. This inverse relationship emphasizes how banks must carefully control the costs connected with digital banking in order to make sure that the advantages of these services outweigh the drawbacks.

Financial literacy and digitalisation of bank operations

Studies on the direct effects of financial literacy on commercial bank performance are remote with few studies relating financial literacy to commercial bank performance (Angeles, 2022). Muhammad and Farhan (2023) note a positive relationship between financial literacy and adoption of internet banking, thus leaving out customer satisfaction completely. Thus, the effect of financial literacy directly on customer satisfaction hasn't been explored even as the moderator. This justifies the value of this paper as it seeks to go beyond what is in the public domain. The introduction of an interaction variable help isolates the moderating effect of financial literacy on the relationship between digitalisation of bank operations and customer satisfaction. A theoretical gap exist in that there is no direct research assessing the moderating effect of financial literacy on the relationship between digitalisation of bank operations and customer satisfaction, the few which attempted to look at that mostly looked at the subject from a quality perspective.

Conceptual Framework

The conceptual framework that served as the study's guidance included the following variables, which are shown:



The conceptual model is presented in figure 2 above. Taken together, these digital banking technologies impact customer satisfaction in commercial banks directly and is hypothesized to be moderated by financial literacy. Initiatives for digitalization include a range of digital platforms provided by commercial banks, such as POS machines, ATMs, internet banking, debit and credit cards, and mobile banking.

METHODOLOGY

The study adopted a post positivism philosophical stand point to better understand the

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relationship between digitalization of banking operations and customer satisfaction as well as how literacy level moderates the relationship. The paper adopted a quantitative research paradigm rooted in deductive research approach as the research sought to establish whether there exists a relationship between the variables or not. This approach allowed the study to determine the direct relationship among research variables as well as the moderating effect of literacy on the relationship. The approach allowed the study to test set hypotheses and draw conclusions (Saunders, Lewis & Thornhill, 2019). The unit of analysis were commercial bank clients based in Harare. The study administered 377 questionnaires selected using stratified random sampling to ensure that bank clients were drawn from all commercial banks and 318 were returned fully completed, giving a response rate of 84%. Quantitative data was analysed using descriptive and inferential statistics (regression). To assess the moderating effect of financial literacy, an interaction variable was created by combining financial literacy with digital technologies use and a new regression model was run and statistical tests were conducted to establish whether the interaction variable moderates the relationship between independent variable (digital technologies) and dependent variable (customer satisfaction).

RESULTS

The paper used simple regression to test for the relationship between digitalization and customer satisfaction as well as the moderating effect of financial literacy on the relationship. To begin with a regression model was conducted between the four different dimensions of digital banking technologies and customer satisfaction in commercial banks. The results are provided in table 1 below. The table shows adjusted R square, T statistic, regression coefficients and significant values as well as collinearity statistics. For all the predictor variables (mobile banking, internet banking, point of sale and Tele-banking), variance inflation (VIF) was all less than 5 ranging from 1.189 to 1.613 implying that there were very low levels of correlation between predictor variables (showing that there is no problem of multi-collinearity). This is a precondition for regression.

Table 2: Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.180	.479		6.733	.000		
	Mobile banking	.052	.097	.075	2.530	.007	.649	1.542
	Internet banking	.025	.073	.043	1.336	.030	.793	1.261
	Point of Sale (POS) Machines	.104	.106	.093	5.306	.042	.841	1.189
	Tele-banking	-.034	.093	-.053	-2.366	.076	.620	1.613

a. Dependent Variable: customer satisfaction
b. Adjusted R square 0.631
c. F statistic 28.486, prob value 0.006

The adjusted R square is 0.631. This measures the explanatory power of the model. The model predicts 63% of variability in customer satisfaction as explained by use of five digital banking platforms, the remainder of 37% is explained by factors outside the model. This represents a higher predictive power and therefore the model can be relied upon for primary decision making by bankers. This is further buttressed by the ANOVA table below which shows the significance of the model in explaining variability is customer satisfaction as shown by a sig value of 0.006 of the F statistic which is less than 0.05 thus confirming that the model as represented by the four predictors is significant in explaining variability in commercial banks customer satisfaction. A look at the five predictor variables shows that only one variable (Tele-banking) has a sig value of 0.066 which is above 0.05 implying that it is not significant in explaining variability in customer satisfaction. Mobile banking has been found to have a sig value of 0.007 which is less than 0.05 and this imply that it is significant in explaining variability in customer satisfaction. The standardized beta coefficient 0.075 shows that a 100% increase in usage of mobile banking brings in a 7.5% improvement in customer satisfaction. There is a positive relationship between mobile banking and customer satisfaction. Internet banking was also found with a sig value of 0.03 which once again shows that it is significant in explaining customer satisfaction. A standardized beta coefficient of 0.043 shows a positive causation where a 100% increase in use of internet banking brings a 4% increase in customer satisfaction. ATM use has got a significant of 0.04 which shows that there is a positive correlation with customer satisfaction. Use of point of sale in business has a standardized beta coefficient of 0.093 which imply that a 100% increase is usage of point-of-sale technology leads to a 9% increase in customer satisfaction.

To assess the moderating effect of financial literacy on the relationship between digital banking technologies use and customer satisfaction was assessed by creating an interaction variable which combines financial literacy and commercial bank digital

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technologies use and rerun the model. The results in table 3 below were generated.

Table 2: Regression Coefficients[a] (With an interaction variable digitfinlit)

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	.172	.479		6.438	.000		
	Digital bank technologies	.145	.097	.105	3.530	.000	.699	1.431
	Digital_financial_literacy	.089	.073	.083	2.336	.003	.561	1.784
	Financial literacy	.072	.106	.068	2.107	.040	.789	1.268

a. Dependent Variable: customer satisfaction
b. Adjusted R square 0.682
c. F statistic 34.743, prob value 0.002

The regression model with an interaction variable, financial literacy and combined digital technologies variable shows a new adjusted R square value of 0.68 showing that the inclusion of financial literacy and interaction improved the predictive power of the model as the new model explains 68% of variability in customer satisfaction leaving only 32% explained by variables outside the model. This is further buttressed by the increase in F statistic to 34.7 as it shows that the significance of the overall model increased (measure the ratio of explained variance to unexplained variance adjusted for degrees of freedom). The new model with interaction variable does not suffer from multicollinearity challenge as all the variance inflation factor values were found to be less than 2 and this therefore paved way for regression modelling as predictors were not highly correlated. The significance values for all new predictors were above 0.05 showing that they were all statistically significant in explaining variability in customer satisfaction including the interaction variable. The standardised beta coefficient for digital banking technologies was 0.105 showing that the combined effect remains positive on customer satisfaction as a 100% increase in digital banking technologies use by customers leads to an 11% increase in customer satisfaction and the opposite is true holding other factors constant. A look at financial literacy as a variable shows a standardised beta coefficient of 0.068 which shows that financial literacy positively affect customer satisfaction as a 100% increase in financial literacy is expected to be met with a 6.8% increase in satisfaction. Similarly, the interaction (Digital_financial_literacy) had a standardized beta coefficient of 0.083 which shows that the combined variable (interaction) positively affects customer satisfaction as a 100% increase in the interaction leads to an 8.3% increase in customer satisfaction. Since both the moderator and the interaction variable (Digital_financial_literacy) were found to be positively related to customer satisfaction, it can be concluded that financial literacy indeed positively moderates the relationship between digital banking technologies use and customer satisfaction.

DISCUSSION OF RESULTS

The results show that there is a statistically significant positive relationship between digital banking technologies use and customer satisfaction. These results corroborate the works of Worku *et al.* (2019) whose study on how consumer satisfaction in Ethiopia's banking industry was affected by electronic banking showed a positive relationship, though in their case the magnitude was high. The results maybe attributable to huge data costs, unstable connectivity and other barriers weighing down on the relationship. The study further notes the occupation of respondents having a positive moderation of the relationship. Belbase and Paudel (2023) looked into how Nepalese commercial banks' customers were satisfied with e-banking. Looking into how e-banking affects customer satisfaction at a Nepalese commercial bank was the primary objective of the study. Using structured questionnaire approaches, the study collected primary data from 200 respondents who utilize banking services. In order to investigate the factors that affect customer satisfaction with regard to service quality, the SERVQUAL technique is used in a descriptive and cause-and-effect research design. Regression and correlation analysis were used to examine the results obtained in this study. Four characteristics and customer satisfaction were shown to be positively correlated in this study. The findings showed that the factor that had the biggest impact on customers' happiness with online banking was security. The results added a new dimension in understanding digital technologies in modern times by relating it directly to customer satisfaction which extend the works of Tien *et al.* (2021) whose study focused on digital technologies and service quality without necessarily looking at customer satisfaction.

The present results also extend Gazi *et al.* (2021) study by relating three variables namely financial literacy, digital technologies and customer satisfaction whose results through descriptive statistical techniques and the OLS regression demonstrated that customer satisfaction is statistically significant in impacting

***Corresponding Author:** Mbizi Rangarirai

service quality (such as tangibility, dependability, and empathy). In Bangladesh's banking sector, the results similarly show a positive correlation between customer satisfaction and service quality metrics. Claude (2022) investigated how Rwandan customers' satisfaction was affected by electronic banking. The Bank of Rwanda's headquarters in Kigali was cited in the case. Validity and reliability were taken into account in this study since it was simpler to maintain high reliability if the experiment could be repeated multiple times and producing consistent results.

Contribution of the paper

Existing literature shows that there has been a greater focus on mobile banking, internet banking, ATMs, debit, online banking, and credit cards, as well as their impact on customer satisfaction (indirectly) and their connection to the development of deposits or sales. This study has managed to relate the two research constructs directly and extend further by assessing the moderating effect of financial literacy on the nexus between digital banking technologies and customer satisfaction. There has been a lot of research on digital banking, but most of it has concentrated on how technology may be utilized to improve financial performance, risk management, and banks' overall performance. Not much has been stated about how digitalization affects commercial banks' customer satisfaction. Most research findings are based on extrapolations from one or two digital components. Amiiswe (2019) and Wadesango & Mhaka (2020) are two researchers who only looked at mobile banking, which is a subset of digital banking. The adoption of Digital Banking Services appears to be minimal, showing a lack of willingness to change and differing client expectations. Furthermore, the majority of the research were conducted outside of Zimbabwe, particularly in countries with unique macroeconomic situations and better technology advancements than Zimbabwe. The rate of technology acceptance in most of these countries is substantially higher than in Zimbabwe. As a result, the goal of this study is to see how beneficial digitalization in Zimbabwean commercial banks is to satisfying customers.

REFERENCES

1. Ahmed, S., & Sur, S. (2023). Change in the uses pattern of digital banking services by Indian rural MSMEs during demonetization and Covid-19 pandemic-related restrictions. Vilakshan-XIMB Journal of Management, 20(1), 166-192.
2. Akara, C. K. (2018). Cashless policy and commercial banks' profitability in Nigeria. *Advances in Social Sciences Research Journal, 5*(3), 395-406.
3. Ali, A. A., (2018). Impact of Online Banking on Financial Performance of Commercial Banks: a Case Study of Barclay Bank of Kenya.
4. Alnemer, H. (2022). Determinants of digital banking adoption in the Kingdom of Saudi Arabia: A technology acceptance model approach. Digital Business, 2(2).
5. Ardizzi, G., Crudu, F., & Petraglia, C. (2019). Innovation and cost efficiency in the banking industry: The role of electronic payments. *Economic Notes: Review of Banking, Finance and Monetary Economics, 48*(1), 12121.
6. Arner, D., Barberis, J., & Buckley, R. (2019). The Evolution of Fintech: A New Post-Crisis Paradigm? University of Hong Kong Faculty of Law Research, Paper No. 2015/047.
7. Asiimwe, E. (2019). Effect of mobile banking on the financial performance of commercial banks in Hoima district (Bachelor's dissertation, Kampala International University, College of Economics and Management).
8. Belbergui, C., Elkamoun, N., & Hilal, R. (2021). E-banking overview: Concepts, challenges and solutions. Wireless Personal Communications, 117(28), 1-20.
9. Borri, N., & Giorgio, G. (2021). Systemic risk and the COVID challenge in the european banking sector. Journal of Banking and Finance.
10. Chauhan, S., Akhtar, A., & Gupta, A. (2022). Customer experience in digital banking: a review and future research directions. International Journal of Quality and Service Sciences, 14(2), 311–348.
11. Choudhury, M. M., Haque, A., Alam, M. N., & Hasan, R. (2021). Exploring the Impact of Digital Transformation on Customer Experience: Evidence from the Banking Sector. Journal of Retailing and Consumer Services, 66, 102723
12. Dadoukis, A., Fiaschetti, M., & Fusi, G. (2021). IT adoption and bank performance during the Covid-19 pandemic. Economics Letters, 204, 109904.
13. Deloitte. (2022). Digital banking maturity. Retrieved from Deloitte Report.
14. Dubey, A., & Sharma, B. (2022). Digital banking: A need of time. International Journal of Advance and Applied Research, 9(3), 504-513.
15. Gazi, M. A. I., Nahiduzzaman, M., Harymawan, I., Al Masud, A., & Dhar, B. K. (2022). Impact of COVID-19 on financial performance and profitability of banking sector in special reference to private commercial banks: Empirical evidence from Bangladesh. Sustainability, 14(10), 1-26.
16. Iheanachor, N., & Ozegbe, A. E. (2020). Dynamic linkages between mobile money and banks' performance in Nigeria: An autoregressive distributed lag (ARDL) approach. *International Journal of Management, Economics and Social Sciences, 9*(3), 224-246.
17. Kasri, R., Indrastomo, B., Hendranastiti, N., & Prasetyo, M. (2022). Digital payment and banking stability in emerging economy with dual banking system. Heliyon, 8(11).
18. Kataria, M. (2019). Digital banking in India: Recent trends, advantages and disadvantages. InspiraJournal of Commerce, Economics & Computer Science. 5(3): 301-304

***Corresponding Author:** Mbizi Rangarirai

19. Kaur, S., Hassan, M., & Al-Emran, M. (2021). Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. Journal of Financial Services Marketing, 26, 107–121.
20. Khan, I. (2022). How does culture influence digital banking? A comparative study based on the unified model. Technology in Society, 68.
21. Kitigin, B., Korir, M., & Chepkwony, K. (2021). E-banking technology characteristics and performance of micro and small enterprise in Kenya: A moderated mediation model of adoption and innovative behavior. *SEISENSE Journal of Management*, 4(1), 13-30.
22. Kulu, E., Opoku, A., Gbolonyo, E., & Kodwo, M. A. T. (2022). Mobile money transactions and banking sector performance in Ghana. Heliyon, 8(10), e10761.
23. Kumar, H., & Pandey, D. C. (2023). Role of e-banking on banks performance: A quantitative investigation of bank executives. *European Economic Letters (EEL)*, *13*(1), 324-328.
24. Lu, M.-P. (2022). Cashless payments and banking performances: A study of local commercial banks in Malaysia. *International Journal of Business and Society, 23*(2), 855-876.
25. Madugba, J., Egbide, B. C., Jossy, D. W., Agburuga, U. T., & Chibunna, O. O. (2021). Effect of electronic banking on financial performance of deposit money banks in Nigeria. *Banks and Bank Systems*, *16*(3), 71-83.
26. Miklaszewska, E., Kil, K., & Idzik, M. (2021). How the COVID-19 pandemic affects bank risks and returns: Evidence from eu members in Central, Eastern, and Northern Europe. Risks, 9(10), 1-22.
27. Muparadzi, T., & Rodze, L. (2021). Business Continuity Management in a Time of Crisis: Emerging Trends for Commercial Banks in Zimbabwe during and Post the Covid-19 Global Crisis. Open Journal of Business and Management, 9, 1169-1197.
28. Muradova, L.F. (2020). The role of digital banking in modern banking ecosystem and terms of establishing in the Republic of Uzbekistan. *International Journal of Economics, Commerce and management.* 8(2): 363-368.
29. Ndhine, T., Kibati, P., & Jeptepkeny, B. (2020). Effect of debit cards on financial performance of listed commercial Banks in Kenya. *World Journal of Innovative Research, 9*(5), 23–28.
30. Ndirangu, E., & Kimani, J. (2022). Effect of mobile banking on performance of microfinance banks in Kenya. *European Journal of Business and Strategic Management*, *7*(3), 24-38.
31. Nwekpa, K. C., Djobissie, I. C., Chukwuma, N. N., &Ezezue, B. O. (2020). Influence of electronic banking on customer satisfaction in a Fidelity Bank Plc in Nigeria. *IOSR Journal of Business and Management*, *22*, 49-58.
32. Oluwafemi, O. O., Yusuf, A. A., & Shuaibu, H. (2022). Impact of internet banking on profitability of Fidelity Bank Plc. *International Journal of Management, Social Sciences, Peace and Conflict Studies,* 5(2), 385-395.
33. Opiyo, M. (2021). Digital Financial Services and Financial Performance of Commercial Banks In Kenya: A Descriptive & Correlational Approach. IX (2), 427–443.
34. Ouma, S., & Ndede, F. (2020). Adoption of Digital Banking Technology and Financial Performance of Commercial Banks in Kenya. *International Journal of Current Aspects in Finance, Banking and Accounting*, 2(1), 42-50.
35. Ritu, H. K., & Pandey, D. C. (2023). Role of e-banking on banks performance: A quantitative investigation of bank executives. *European Economic Letters (EEL)*, *13*(1), 324-328.
36. Savanhu, N., & Zhang, P. (2020). Statistical Study on the Impact of Digital Economy on Zambia's Banking Sector. Mathematical Theory and Modeling, 10, 10-20.
37. Sebti, R. (2022). Banking in the digital age: Issues and challenges. Rimak International Journal of Humanities and Social Sciences. 4(4): 216-221
38. Shaikh, I., & Anwar, M. (2023). Digital bank transactions and performance of the Indian banking sector. *Applied Economics*, 55(8), 839-852.
39. Ssekamanya, A. (2021). Mobile banking and performance of financial institutions in Uganda. Nkumba University Press Entebbe.
40. Theiri, S. & Hadoussa, S. (2024), "Digitization effects on banks' financial performance: the case of an African country", Competitiveness Review, Vol. 34 No. 1, pp. 144-162.
41. Umugwaneza, J. P., & Kising'u, T. M. (2023). Electronic banking and performance of commercial banks in Mombasa County, Kenya**.** The Strategic Journal of Business & Change Management, 10 (2), 767–790.
42. Wadesango, N., & Magaya, B. (2020). The impact of digital banking services on performance of commercial banks. *Journal of Management Information and Decision Sciences,* 23, 343-353.
43. Wang, R., Liu, J., & Luo, H. (2021). Fintech development and bank risk taking in China. *The European Journal of Finance,* 27(4-5), 397-418.
44. Wu, L., Yu, D., & Lv, Y. (2023). Digital banking and deposit: Substitution effect of mobile applications on web services. Finance Research Letters, 56/
45. Yao, J., Li, M., Wu, Y., & Wang, M. (2020). COMAC's digital transformation and intelligent manufacturing. Beijing, China: Renmin University Business School.
46. Zeleke, S., & Chauhan, S. (2022). The Effect of Electronic Banking Service on Customer Satisfaction: Evidence from Commercial Banks of Ethiopia Operating In Hawassa City Administration.

***Corresponding Author:** Mbizi Rangarirai

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