

Contribution of Digital Banking in Achieving Customer Satisfactions: A Case Study of NMB Bank PLC in Morogoro Municipality

Shangwe Gonza

P. O. Box 1859, Morogoro, Tanzania
gonzashangwe[at]gmail.com, +255745100255

Abstract: *The application of digital technology in the banking sector has altered customers' preferences and demands. The purpose of this study was to assess the contribution of digital banking in achieving customer satisfaction, a case study of NMB Bank PLC in Morogoro Municipality. Using a mixed research approach, data was collected from a sample 140 respondents, 130 of whom were from MSEs and 10 from the NMB bank in Morogoro municipality. The study employed purposive and convenient sampling techniques and the collected data was analyzed by using content analysis and quantitative data were analyzed by descriptive statistics. The study found that there is a positive and statistically significant association between online customer care and customer satisfaction at 1% significance level. The association between customer satisfaction and transaction processing, online interactivity and decision support was found to be statistically significant at 5% significance level. These findings indicate that, digital banking contributes significantly to customer satisfaction.*

Keywords: Digital Banking and Customer Satisfactions

1. Introduction

The introduction of the most recent digital developments in the banking industry implies that retail banks' role in the financial sector has changed (Capgemini & Efma, 2016). Recent innovations in digital technology have resulted in increased competition from innovative firms, but it has also sparked a change in consumer preferences and demands that have altered the relationship between the consumers and the retail banks (Ortstad & Sonono, 2017).

Currently customers are in the era of mass marketing whereby because of existing competition, they are sophisticated and being informed ones (Hamdallah & Evelyn, 2010). This had raised customer-centric marketing philosophy that received high level of attention from marketing practitioners that cause most of business organizations to embrace and practice this philosophy (Kotler, 2000). Because of this, customers are today more willing to conduct their bank errands through digital platforms (Skinner, 2014).

Due to an increasingly competitive, saturated and dynamic business environment, retail banks in many countries have adopted customer-driven philosophies to address the rapid and changing needs of their customers (Walker, et. al.2008). Through this, customers can access service quality by comparing their expectation prior to the service encounter with bank, develop perceptions during the service delivery process and then compare their perceptions with the actual service received from the bank employee (Kassim, 2005).

The pace of digital developments and the fact that the industry is becoming digital oriented has opened the way for new competitors to establish themselves in the financial services market (Capgemini & Efma, 2016). For years, the industry's high entry barriers protected retail banks. However, the development of digital technologies has

lowered the entry barriers for more innovative businesses to capture parts of the incumbent banks' value chain (Deutsche Bank, 2015). This has made it possible for non-financial competitors to establish themselves in the industry by offering more niche and customized financial services and products (Capgemini & Efma, 2016).

On the other hand, customer satisfaction emerged to be not only the cornerstone of increased demand of banking services, but also a benchmark against which many banks have set their standards. This has caused most of commercial banks to invest significant resources in the introduction of digital banking and improve the existing ones as to retaining customers and capture new ones with aim of increasing their sales and profits (Mwiti, 2016). Currently almost all commercial banks are providing most of their services through digital banking channels (Kumbhar, 2011a).

Due to the increase in digital solutions in the banking industry, the industry is witnessing an increase in mobility among customers between banks (Ndubisi, 2007). The digital transformation within the industry has also affected the switching costs for customers that are able to choose from both non-financial and financial businesses in order to maximize their value (Ndubisi, 2007). Hans and Kamath (2013) suggested that, with the availability of a variety of banking, customers could now perform their banking transaction easily. For instance, by opening deposit accounts, fund transfers, paying utility bills, ordering cheque books and demand drafts, applying for loans, and getting account statements without visiting a branch, that play a key role in satisfying them. Digital technology has a large impact in terms of increasing competition and contestability of banking markets (Adrian & Mancini-Griffoli, 2019). According to Capgemini and Efma, (2016), the pace of digital developments has opened the way for new competitors to establish themselves in the financial services market. The Deutsche Bank observed that digital

technologies have lowered the entry barriers for more innovative businesses to capture parts of the incumbent banks' value chain (Deutsche Bank, 2015). The pressure from the competitors has forced the participants in banking industry to refocus on customers as well as the changes in their needs over time (Deninson, et al., 2019).

Customer satisfaction has become the central focus of commercial banks, in order, to retain and increase their customer base. Thus, customer's perception of digital banking services offered by commercial banks is one area that banks need to pay attention. Previous studies such as by Ondiege (2010), Kumbhar (2009) and Shrotriya (2007) noted that customer satisfaction in commercial banks is still a challenge in most parts of the world and Morogoro Municipality is no exception. This is because even with the introduction of digital banking in commercial banks including NMB Bank PLC there are still customers found in long queues, which can cause them to seek better service elsewhere.

However, studies in this area are still rare. In this case, this study aimed in determining the contribution of digital banking in achieving customer satisfaction at NMB Bank PLC in Morogoro Municipality. This study used a convergent mixed research approach, which is a type of a research approach in which qualitative and quantitative data

are collected in parallel, analysed separately, and then merged. The reason for collecting both quantitative and qualitative data is to complement the results from one approach with the findings from another approach.

2. Theoretical Literature Reviews

This study was guided by the Technology Acceptance Model (TAM) was developed by Davis by adapting the Theory of Reasoned Action (TRA) by Fishbein. The TAM focuses specifically on how users accept and use a technology (Okoye, 2019). TAM adapted the TRA model to the domain of user acceptance of technology, replacing the TRA attitudinal determinants with two beliefs namely, Perceived Usefulness (PU) and Perceived Ease of Use (PEU).

TAM suggested that, PEU and PU predict the acceptance and use of a technology. As suggested by Sadeghi and Hanzae (2010), PEU and PU are influenced by external variables that vary according to the context. Originally TAM was made with four variables namely, PU, PEU, attitude toward using and actual system uses. Later two variables were added in the model which was external variables and behavioral intention (Eramus, 2001). The modified version of basic TAM is presented in Figure 2.1.

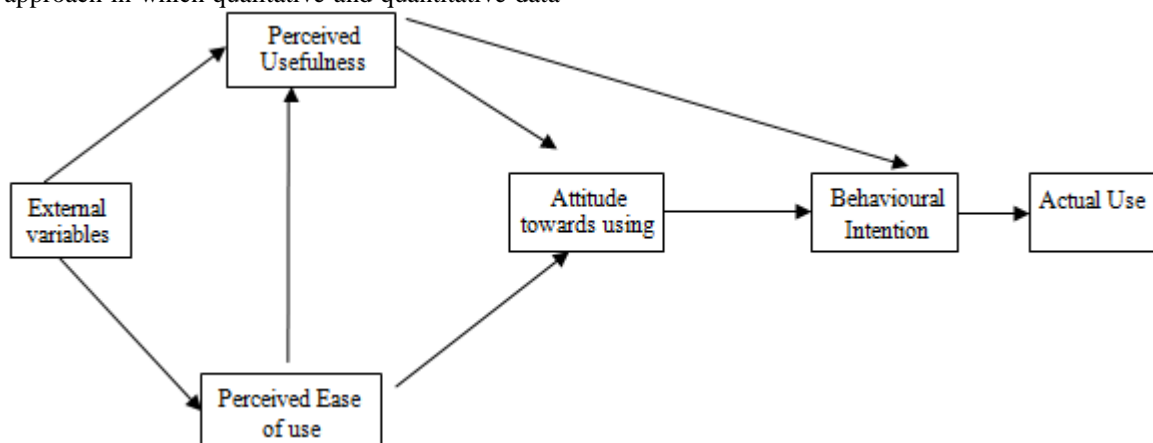


Figure 2.1: Modified Version of Basic TAM

Sources: Davis, et. al. (1989)

- 1) PU: PU is the degree to which a person believes that using a particular system would enhance his or her performance. According to the TAM, PU is a key reason to technology adoption, the expected benefits to customers include lower administration cost, increased internal efficiency, enhanced relationship with business partners, improved competitiveness, improved quality of information, access to bank account, fund transfer as well as bill payment.
- 2) PEU: PEU is the degree to which a person believes that using a particular system would need little effort or no effort in using technology. TAM hypothesised that the attitude of ease of use is the major determinant of whether the user will use or reject the system. The user believes that the system, which is easier to use, is more useful to his or her job performance. PEU determines both PU and attitude towards using the system.
- 3) Attitude toward Using: Attitude toward using is an individual's positive or negative feeling about

performing the target behaviour. In this case, TAM include both PU and PEU influences the user's attitude toward a mobile money service. Hence useful and ease to use then develop a positive attitude toward services.

- 4) External Variable: TAM had some limitations in explaining the reason for which person would perceive a given system useful, and thus external variable was added to the original TAM. External variables are defined as the variables that might influence the beliefs of person toward a system, such variable are system characteristics, user training, user participation in design, computer anxiety, computer self-efficacy, information richness, and the nature of the implementation process.

TAM relate to this study because, the central argument of the TAM is that the acceptance of an innovation on digital banking depends on its PU as well as its PEU. In this context, top management, which is responsible for offering

and developing digital banking, uses TAM in predicating user's acceptance? This can lead to actual changes and modifications in user's behavior when thinking about and using digital banking. This knowledge allows developers within commercial banks to devise ways as to make digital banking services easier to use and thus satisfy customers.

3. Research Methodology

This section presents the methodology that guided the study. This study was carried out in Morogoro Municipality. The study employed case study research design. The study employed a mixed research approach. The targeted population comprised Medium and Small Enterprises (MSEs) and NMB bank officers from Morogoro municipality. Data were collected from a sample 140 respondents including 130 MSEs and 10 NMB bank officers in Morogoro municipality. Questionnaires, interviews and documentary reviews were used as the tools of data collection. Qualitative data were analyzed by content analysis and quantitative data were analyzed by descriptive statistics.

4. Research Findings and Discussions

This section focuses on presenting the contribution of digital banking in achieving customer satisfaction, a case study of NMB Bank PLC in Morogoro Municipality. To gather data of this objective; questionnaire, interview and documentary reviews were applied as the data collection methods. The results of this objective were presented below.

Table 4.1: ANOVA

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	158.601	4	52.867	128.276	.000 ^b
	Residual	60.172	146	.412		
	Total	218.773	149			
a. Dependent Variable: Y						
b. Predictors: (Constant), X ₁ , X ₂ , X ₃ , X ₄						

Source: Field Data (2022)

Table 4.1 show that at 1% the critical value is 3.45032. Since the calculated F value is 128.276, we can conclude that there is a relationship between the dependent and independent variables. Furthermore the p-value is lower than 1% which confirms that there is a significant relationship between the dependent and independent variables.

Table 4.2: Multiple Regression Analysis

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.057	.139		.410	.682
	X ₁	.103	.042	.115	2.476	.014
	X ₂	.259	.122	.257	2.127	.035
	X ₃	.663	.142	.559	4.683	.000
	X ₄	.100	.352	.109	.003	.042

Source: Feld Data (2022)

The multiple regression equation developed from Table 4.15 is presented below:-

$$Y = 0.026 + 0.103X_1 + 0.259X_2 + 0.663X_3 + 0.1X_4$$

Where:- Y = Customer Satisfactions

X₁ = Transaction processing

X₂ = Online interactivity

X₃ = Online customer care

X₄ = Decision support

Findings in Table 4.2 indicate that transaction processing, online interactivity, and decision support are significant at 5% while online customer care is significant at 1%. These results indicate that, improved transaction processing, online interactivity, decision support and online customer care could be used to enhance customer satisfaction in the selected banks.

5. Conclusion and Recommendations

The multiple regression model showed there is a positive and statistically significant association between online customer care and customer satisfaction at 1% significance level. The association between customer satisfaction and transaction processing, online interactivity and decision support was found to be statistically significant at 5% significance level. Basing on these findings, the study concludes that digital banking contributes significantly to customer satisfaction.

The study recommends that, commercial banks should revamp on digital banking other than ATMs as to establish why most customers do not prefer using it and commercial banks should improve the flexibility, privacy and accessibility of the services so as to improve the performance of digital banking. Additionally commercial banks should understand their customers and make sure that the services of alternative banking channels are affordable (reflecting cost of living) and there should be joint efforts between lawyers, ICT experts, commercial banks and Government as to enact new laws which will cover the whole processes relating to digital banking transactions.

References

- [1] Adrian, T., & Mancini-Griffoli, T. (2019). *The Rise of Digital Money*. Washington, DC: International Monetary Fund.
- [2] Capgemini, P. & EY. (2016). *World Retail Banking Report*. Available at: <https://www.febelfin.be/sites/default/files/InDepth/worldretailbankingreport2015.pdf> (Accessed 29st June 2021)
- [3] Davis F., Bagozzi, R., Warshaw, P. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *MIS Quarterly*, 13 (4), 319-340.
- [4] Deninzon, D., Malik, N., Kapoor, A. (2019). *Banking Operations for a Customer-Centric World*. Available at: <https://www.insiderintelligence.com/insights/digital-banking-trends/> (Accessed 7th September 2021).
- [5] Deutsche Bank. (2015). *Delighting Customers and Democratizing Finance: Digitalisation and the Future of Commercial Banking*. Available at: http://cib.db.com/docs_new/Digitalisation_and_the_Future_of_Commercial_Banking.pdf (Accessed 29th June 2021)

- [6] Hamdallah, B. & Evelyn, N. (2010). Service Improvements in Public Services Using SERVQUAL. *Managing Service Quality*, 11 (6), 384-399.
- [7] Kassim, N. M. (2005). E-Banking Service Quality: Gaps in the Qatari Banking Industry. *Journal of Internet Banking and Commerce*, 7 (1), 1-26.
- [8] Kotler, P. (2000). *Marketing Management*, Upper saddle River. N. J. Prentice Hall Inc.
- [9] Kumbhar, V. (2009). Alternative Banking: A Modern Practice in India. *Professional Banker*, IX (9), 1-27.
- [10] Kumbhar, V. M. (2011a). Alternative Banking Channels and Customers' Satisfaction: An Empirical Study of Public and Private Sector Banks. *International Journal of Business and Management Tomorrow*, 1 (1), 1-24.
- [11] Mwititi, B. (2016). The Effect of Alternative Banking Channels on Financial Performance of Commercial Banks in Kenya. Master Dissertation. University of Nairobi.
- [12] Ndubisi, N. O. (2007). Relationship Marketing and Customer Loyalty. *Marketing Intelligence & Planning*, 25 (1), 98-106.
- [13] Okoye, L. U. (2019). Imperatives for Deepening Customer Service Delivery in the Nigerian Banking Sector through Engineering and Technology Based Channels. *International Journal of Civil Engineering and Technology*, 10 (1), 2156-2169.
- [14] Ondiege, P. (2010). *Mobile Banking in Africa: Taking the Bank to the People*. Tunis: The African Development Bank.
- [15] Ortstad, R., & Sonono, B. (2017). The Effects of the Digital Transformation Process on Banks' Relationship with Customers: Case Study of a Large Swedish Bank. Master Thesis. Uppsala University.
- [16] Sadeghi, T., & Hanzae, K. H. (2010). Customer Satisfaction Factors (CSFs) with Online Banking Services in an Islamic Country. *Journal of Islamic Marketing*, 1 (3), 249-267.
- [17] Shrotriya, V. (2007). Alternative Banking: The Emerging Trend. *Professional Banker*, VII (7), 55-58.
- [18] Skinner, C. (2014). *Digital Bank: Strategies to Launch or Become a Digital Bank*. Singapore: Marshall Cavendish International (Asia) Pte.