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## Relationship between Bank Balance Inquiry and Customer Satisfaction in Tanzanian Commercial Banks: A Case Study of CRDB Bank, Singida

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### **Abstract**

*Maximizing customer satisfaction through mobile technology advancements has proven to be a significant challenge for Tanzanian commercial banks. Meeting customer requests is a business's top priority. Using CRDB Bank, Singida, as a case study, this study attempts to explore the association between bank balance queries and customer satisfaction in Tanzanian commercial banks. This study uses SPSS software to analyze data. Two approaches were used in the study, namely, binary logistic regression and theme analysis. A cross-sectional survey was used in the study technique to collect both quantitative and qualitative data. Qualitative information was obtained through interviews with CRDB management, while quantitative information from 100 CRDB-Singida consumers was obtained through a survey of a sample chosen using the Yamane formula. A conclusion is reached based on the facts after examining and discussing the anticipated outcomes of the survey and interview. According to the study, there is a strong correlation between bank balance queries and customer satisfaction. Based on findings demonstrating the impact of bank balance enquiries on customer satisfaction of commercial banks, particularly the CRDB-Singida branches, the study suggested to develop and introduce cutting-edge technology that would enable them to better encounter the demands and favorites of their users. Also, the study suggests, the commercial banks use bank balance inquiries in international mobile transactions.*

**Key Words:** Bank Balance Inquiry, Customer Satisfaction, Commercial Banks

### **Introduction**

Any electronic transaction involving the transfer of ownership for the purpose of consuming goods and services that is carried out by a mobile device while engaging with a computer-mediated network is further characterized as mobile technology in commercial banking (Li, 2021). According to Khatoon et al. (2020), mobile accounted for more than four billion euros of the Western European economy in 2023. Comparably, mobile applications brought in eight billion euros in income to Germany in 2022 (Fida et al., 2020). A key component of innovation and business development is meeting client needs (Fida et al., 2020). To increase customer satisfaction and bank services, financial banks use a variety of strategies to improve their current online customer services (Zouari and Abdelhedid, 2021). However, there is still a lack of inquiries in Tanzanian studies on the subject matter, which means that managing customer needs is the first consideration. By offering value beyond what mobile technology currently offers is very important, this study examines how bank balance queries affects customer happiness and possible revenue generating opportunities for CRDB Bank, the bank used as a case study as research design.

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Kenya was the first nation in Africa to adopt internet banking in East Africa and to use an MB service with reference to M-Pesa on money transfer (Sasono et al., 2021). The impact of mobile banking on financial performance was examined by Kamath et al. (2020), who found that while it presents challenges with capital adequacy, mobile banking increased transaction volume. Similarly, Rahi et al. (2020) described mobile loans as having a good impact on financial performance and that they need to be effective. They also discussed e-banking and the financial performance of Tier One banks. Conversely, Fida et al. (2020) examined the innovation in mobile banking and the financial performance of a few chosen institutions, coming to the conclusion that mobile banking affects the financial performance of the chosen banks and that its effectiveness should be taken into account (Annaraud and Berezina, 2020).

Otto et al. (2020) revealed the effects of mobile banking on customer satisfaction at the NMB bank branch in Dar es Salaam, Tanzania. They discovered that, in order to satisfy clients with NMB service, cost service reduction and customer care should come first. According to Albdery et al. (2023), the primary obstacle preventing customers from being satisfied with m-banking technology is network availability. They investigated the effect of mobile phones on customer satisfaction through a case study conducted at the Morogoro branch of KCB Bank. Therefore, when Balinado et al. (2021) looked at how mobile banking affected customer satisfaction, they found that people who thought of mobile banking as a reliable service felt insecure. But Adam et al. (2021) investigated Tanzanian industrial clients' views on mobile banking. However, Prasetyo et al. (2020) examined the variables affecting clients' usage of mobile banking. Government rules and the cost of services are impeding consumers' contentment with mobile banking services, according to a recent assessment by Packard and Berger (2021) on the impacts of these services on customer satisfaction indicated that the bank balance inquiry influences customer satisfaction.

Early in the 1990s, the internet spread quickly across the US, bringing with it a wealth of financial services that fundamentally altered the banking sector (Fida et al., 2020). Chen et al. (2020) report that compared to previous years, participation at mobile commerce events has climbed significantly and relatively quickly. A laptop, a phone, and a tablet are identified as capable of providing MB services; these devices are distinct from electronic banking, which is retrieved via a diverse graphical user interface.

## Literature Review

Because mobile banking allows for fewer in person interactions between clients and service providers than traditional banking methods, its dynamic nature is creating challenges for commercial banks and has resulted in a decline in customer trust in the platform (Gajewska, 2020). The desire to use mobile banking services is positively correlated with perceived utility, according to it was shown that social norms (SN) were the sole significant factor. Similar to this, Sasono et al. (2021), looked into the variables affecting the usage of mobile banking by extending the technological acceptance model to rural Zimbabwe. The study's conclusions showed that participants' intentions to accept and use mobile banking were influenced by a number of variables, including perceived utility, PEOU, relative advantage, individual creativity, and societal norms. To gather data for the study, the researcher employed stratified regression sampling, or RS. Moreover, by applying theories of risk, trust, and social image.

Chindengwike (2023) conducted a study to close the information gaps about the variables impacting clients' acceptance of mobile banking apps. Numerous factors were taken into consideration while evaluating the primary drivers of user behavior, including trust, social perception, adoption desire, and user-friendliness. Chindengwike (2024) evaluates the TAM Model's elements as well as how they affect Zambia's adoption of electronic taxes. The study's main focus was on the rural Tax Online system usage by Zambia's domestic tax division. A wide variety of taxpayers visited the Zambia Revenue Authority's online area, from which the sample size of one hundred respondents was chosen with care. Using descriptive statistics, the information gathered from semi-structured survey questions was investigated. The E-TAX system was found to be advantageous, safe, and user-friendly.

Chindengwike (2024) conducted study on electronic mobile payments using bibliometric analysis. However, Tanzanian studies on the topic are still deficient in color, which calls for more thought to be put into controlling customer satisfaction. Chindengwike (2023) claims that mobile communications devices provide a practical way to handle daily client transactions and obtain access to confidential information. Banking systems employ several strategies to satisfy the demands of their customers (Chindengwike, 2023). Mobile banking (MB) is one of the new tactics being employed to satisfy customer needs (Annaraud and Berezina, 2020). A cutting-edge method of providing client service, known as an m-banking system, builds on time-tested conventional banking methods like automated teller machines, internet banking, and phone banking (Sasono et al., 2021). Because of its

intricacy, this increased service is carried out via a mobile phone, which is more portable. It allows customers to work together and communicate with a bank through a mobile device (Sasono et al., 2021).

**Research Methodology**

This study made use of SPSS software. Thematic analysis and logistic regression were the study methodologies used. A cross-sectional survey was used in the research methodology to collect both quantitative and qualitative data. A poll of one hundred CRDB-Singida customers yielded quantitative data, while employee interviews with CRDB produced qualitative data.

**Econometric Model Specification**

According to the recommendations of the study, a binary logistic regression model was used to estimate the likelihood of a binary variable with two alternative outcome occurrences, such as pass/fail, win/lose, or high/low (Sasono et al., 2021). The discrete random variable and dummy in the environment that might be quantified using binary logistic regression or the logit model is customer

$$Log(Odd\ ratio) = Log \frac{(High)}{(Low)} = Log \frac{Y_i = 1}{(Y_i = 0)} = X_i' \beta \dots \dots \dots (1)$$

satisfaction.

**Results and Discussion**

**Data Validity and Reliability**

A reliability analysis was conducted on the 19-item scale. The reliability alpha value, according to the data, was 0.778. With an internal consistency score of 0.778 out of 1, the items have a very high and consistent level. Table 4.1 presents the results.

**Table 4. 1: Reliability Statistics for All Items**

Variable	Number of Items	Alpha Value
Cronbach`s Alpha Value	19	0.778

Source: Research Findings (2024)

The dependability of each item to the entire 18-item scale was also evaluated, which explains the fourth column in table 4. The degree to which each item is related to the other items is displayed in Table 1.2b (Corrected Item-Total Correlation). The results indicate that the TS4 and TS5 items were kept

even though they had poor correlations with the other items, since their correlations are neither significantly near to zero nor negative. Furthermore, the last column on the right shows the degree of consistency that each item has with the other items, as well as Cronbach's alpha if an item is deleted. Table 4.2 Analysis of binary logistic regression. The logit model was estimated using the binary logistic regression technique. Since the dependent variable (customer satisfaction) responses were on a 5-point Likert scale, a cutoff level was established. Consumers who received a score of one (1) were considered satisfied if their mean value was 3.5 or greater. Consumers with mean values of zero (0) were considered dissatisfied. This made binary logistic regression feasible.

### Binary Logistic Regression Goodness of Fit Test

The Hosmer and Leme show test was used to determine the model's goodness of fit. As a result, the Hosmer & Leme show test (Table 4.3) indicates that the model seems to be a good fit to the data, since  $p=0.288$ , which is larger than 0.1.

**Table 4. 3: Hosmer and Lameshow Goodness of Fit Test**

Step	Chi-square	Df	Sig.
1	7.210	9	0.288

Source: Research Findings (2024)

### Omnibus Test of Model Coefficients

In order to determine whether a model is statistically significant and open to further interpretation, the omnibus test of model coefficients is employed. The model as a whole is statistically significant ( $\chi^2(3) = 59.465$ ,  $p < 0.05$ , as shown in table 4.4), and its p-value of 0.000 (Table 4.2.2), which is below 0.05, indicating that the model is statistically significant and can be utilized for estimations.

**Table 4. 4: Omnibus Test of Model Coefficients**

		Chi-square	Df	Sig.
Step 1	Step	49.465	3	0.000
	Block	49.465	3	0.000
	Model	49.465	3	0.000

Source: Research Findings (2024)

### Logistic Regression Model Summary

An explanation of the variation in the model can be found in Table 4.4. In this instance, additional factors (apart from mobile banking) account for 28.8% of the variations in customer satisfaction, leaving the model to explain 71.2% (Nagelkerke R Square) of the variability in consumer happiness. The results are displayed in the following table 4.5.

**Table 4. 5: Logistic Regression Model Summary**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	42.336	0.489	0.823

Source: Research Findings (2024)

### Logistic Regression on Bank Balance Inquiry

Table 4.6 presents the results. A binary logistic regression was conducted between customer satisfaction and mobile money information services in response to the second specific aim. The quality of mobile money information services was evaluated using the following methods: bank balance queries, bank statement requests, check deposit inquiries, and confirmations of payments and receipts. With a regression coefficient of 2.354 and a p-value of 0.001, the bank balance query's results indicate that it is a significant predictor of customer happiness. Thus, there may be a 10.530 increase in the chance of client satisfaction for every increase in the availability of bank account balance query services. Additionally, the results demonstrated that the request for bank statements had a substantial impact on customer satisfaction (p-value = 0.033 and  $\beta = 1.587$ ).

Evident from the results of the customer interview conducted by CRDB in Singida, consumers appear to be content with the mobile survives balance inquiry they received. To check their accounts in the past, clients had to go to the bank or ATM. However, the results showed that customers can now request a bank balance query from a distance using mobile banking services. The other finding by Fida et al., 2020 corroborated the study. Moreover, it was shown that the probability of customer satisfaction rises by 4.887 times when bank statement queries are asked. The results demonstrate that, in reality, clients are happier using mobile banking services to obtain bank statements than they are when they visit bank branches to do so because they can request and print statements from a remote location.



**Table 4.6: Logistic Regression Results on the influence of Bank Balance of Inquiry on Customer Satisfaction**

Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Bank Balance of Inquiry	3.98	0.648	58.368	1	0.005	11.368
Inquiry of Cheque (IS3)	2.638	0.398	0.533	1	0.01	0.003
Receipts	3.480	5.697	3.222	1	0.07	0.008
Constant	-7.795	2.648	12.66	1	0.001	0.007

**Source:** Research Findings (2024)

Similar results were obtained from the interviews that were conducted for the study. According to the study's findings, the platform offers transaction services via mobile money services, in addition to bank account information for its users. Customers can also use a mobile device to access account-related data. One of the participants said:

*“Mobile money does not just provide transaction services; registered clients may examine what is going on in their bank accounts and enquire about everything they want to know about their bank accounts at any time and from any location without having to visit the banking hall”..... (February 2023, CRDB, Singida branches) ... (CRDB, Singida branches, August, 2024).*

The findings show that customers who prefer to check their account balances in person and do not utilize mobile banking must visit the bank. Clients can now use their mobile devices to view their bank statements. Mobile money services have made it easier to obtain other services, like payment confirmations and receipts. A participant made the following observation:

*“Customers had to visit the bank to acquire information from their bank accounts prior to the advent of mobile money services. With the introduction of mobile money services, however, all information services may now be accessed via a cell phone. Customers may check their bank accounts, receive bank statements, and confirm different transactions using their mobile phones.” (CRDB, Singida branches, August, 2024).*

*“I may check my account balance at any time and from any location, including during a pay period, without having to visit the banking hall.”*



Fida et al. (2020), who examined how electronic banking influenced client satisfaction in Ethiopia's banking sector, state that the results are consistent with one another. According to the report, mobile banking offers include both transactional (savings) and informational services.

Annaraud and Berezina (2020) conducted a client satisfaction survey using mobile banking services. All bank customers, regardless of their cell network, can now access mobile banking services offered by the Reserve Bank of India. It is now possible for mobile banking users to add an infinite number of recipients to their list when sending money (Annaraud and Berezina, 2020). The researcher also discovered that using mobile banking is less dangerous, that transferring money is simple, that checking a balance is uncomplicated, that mobile banking provides speedier services, and that the menu is quite simple to understand and use. The fact that mobile banking allows for quicker transactions, which boosts revenue, has the most impact on consumer happiness. Additionally, a significant positive correlation was noted between the two variables: factor of 14.649 for bank statement inquiries, and  $\beta=0.211$  and p-value of 0.005 for check deposits were identified in terms of customer satisfaction. In a similar vein, customer satisfaction was significantly impacted by receipts and payment confirmations ( $\beta=6.185$ , p-value=0.002, odds ratio: 4.102).

### **Conclusion and Recommendations**

The findings of the research indicate a significant association between bank balance enquiries and customer happiness. Commercial banks, particularly the CRDB-Singida branches, should create and apply innovative technology to make life easier and help clients achieve their goals. Among other things, the study suggests that commercial banks offer international mobile transactions that include bank balance inquiries. Thus, it is recommended that future research focus on banks other than Singida branches and CRDB.

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