
**EFFECTS OF E-BANKING SYSTEM ON FINANCIAL PERFORMANCE OF COMMERCIAL
BANKS: A CASE STUDY OF CENTENARY BANK MAPEERA BRANCH**

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ABSTRACT

The study sought to assess the effect of electronic banking on financial performance of Banks in Uganda: a case study of Centenary Bank Mapeera Branch. It was guided by three specific objectives, that included; (i) to determine the effect of ATM (Automatic teller machine) on financial performance of Banks in Uganda, (ii) to establish the effect of electronic funds (EFT) transfer on financial performance of Banks in Uganda and (iii) to establish the effect of mobile banking on financial performance of Banks in Uganda. This research employed a cross-section research design to describe the variables and the questionnaire and interview guide were used as the research instruments. Descriptive statistics which were used in this study including frequencies and means and regression analysis was used to evaluate the significant effect of e-banking on financial performance. The findings revealed the following: ATM (Automatic teller machine) significantly affects the financial performance of Banks in Uganda. this effect therefore implies that ATM (Automatic teller machine) highly contribute to the financial performance Banks in Uganda, the findings revealed that there is a significant effect electronic funds (EFT) transfer has on financial performance of Banks in Uganda. The researcher recommended that: the commercial banks in Uganda should develop a good system to monitor all ATM transactions so that there is effectiveness in electronic banking and ensure to cover loopholes in the system to enhance financial performance of commercial Banks. the bank managers in Centenary Bank Mapeera Branch should develop an effective electronic funds (EFT) transfer system which makes electronic funds (EFT) transfer and flexible so as to boost the financial performance of the Bank. In a clientele world, the customer is the king

so if these technologies are meant to improve on service delivery and satisfaction. electronic banking acquires a better future and was still shown in the recommendations.

Key words: e-banking system, financial performance and commercial banks

Background of the study

Nelson (2015) defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television. According to santomero (2017). Electronic banking is characterized by the use of data communication networks to establish electronic connections between banks and customers/clients in preparation, management and control of financial transactions (Matthew & Mike, 2016).

Performance refers to how well an organization is performing. Good performance is an indicator of success and development of all organizations. Today best practices evaluate organizational financial performance in terms of financial results, products innovations, customer loyalty and people performance helps ensure organizational goals are being achieved. Flamini (2016) defined financial performance as the way how well an organization accomplishes its financial objectives, he also added that financial performance is the individual's or group's financial achievement after any business activity (Gracious, 2023).

The commercial banks report (2016) indicated high incidence of poor financial performance reflected in the rising levels of non-performing loans by commercial banks of in the last 10 years. This is a situation that has adversely impacted on their

performance. Despite rigorous e-credit assessment process the, Commercial banks of Uganda use that include among others proof that customers do not have other e-credit obligation, analysis of their account performance, sustainability of their income levels, security and ability to pay (commercial banks e-credit, manual, 2016), the commercial banks of Uganda are faced with poor management of their loans portfolio as noted in e-credit reference Bureaux report 2016 (Kiplagat Ngetich & Matanda Wepukhulu, 2017). This leads to poor quality loan portfolios which had to be provided for fully. The financial records show that the commercial Banks provisions and bad debts written off increased from 1.9 billion in 2015 to 6.8billion dollars in 2015. This trend not only threatens the viability and sustainability of the commercial banks but also hinders the achievements of the goals for which it is intended which are to provide e-credit to the population and bridge the financing gap in the mainstream financial sector (Hemedi, 2016).

Problem Statement

In the absence of the formal banking sector, money transfer/remittance services have sprouted throughout the country, handling roughly \$2 billion remittance annually (Uganda commercial banks report, 2017). The commercial banks operations despite existence are hindered with operational mechanisms such as low sales capacity, limited employee output and low profitability resulting in the business operation (Annet et al., 2023). The financial performance of commercial banks in Uganda continue to underperform despite the mechanisms intend to enable them operate fully with the systems of management tailored to improving the performance and functionality of the banking system (Bank of Uganda annual report, 2017). This is impresses with the low performance in relation to ratios, where huge amounts of bad debts (non-performing loans) declare by banks each year shows their failure in lending functions (Polycarp et al., 2023). This may be attributed to the absence of modern e-banking systems. The researcher therefore intends to find the relationship between e-banking systems and financial performance.

Research Objectives

- 1. To investigate the effect of ATM (Automated Teller Machine) on the financial performance of commercial banks in Uganda.*
- 2. To establish the effect of electronic funds (EFT) transfer on the financial performance of commercial banks in Uganda.*
- 3. To assess the relationship between e-banking systems and financial performance of commercial banks in Uganda.*

Research Questions

- 1. What is the effect of ATM (Automated Teller Machine) on the financial performance*

of commercial banks in Uganda?

2. *What is the effect of electronic funds (EFT) transfer on the financial performance of commercial banks in Uganda?*
3. *What is the relationship between e-banking systems and financial performance of commercial banks in Uganda?*

Methodology

Research Design

This study employed a cross-sectional research design, cross sectional design allowed the study of the population at one specific time and the difference between the individual groups within the population compared. The study also used survey design; this was used to collect data from a large sample of respondents. This study also followed a descriptive research design, whereby qualitative and quantitative research approaches was used to gain insight to variables, it described the characteristics of respondents.

Study population

The study population was comprised of commercial banks which are composed of 94 respondents from centenary bank Mapeera branch. This population was comprised of senior management, tellers, operational staff and customers. The reason for selecting these categories of respondents was due to the fact that the researcher expected them to have a good understanding of the affairs on electronic banking and financial performance of the commercial banks.

Sample Size

The researcher was not be able to access all the respondents because of time and

resources. Out of the total population of the study, the researcher selected a sample of 79 respondents who will be identified from the total population of 94. This number was arrived at by use of the Slovene's formula as illustrated below.

N

$$n = \frac{N}{1 + N(e)^2}$$

Equation 3.1: Slovene's Formula

$$\underline{n= 94}$$

$$1+94(0.05)^2$$

$$N= \underline{94}$$

$$1+94 (0.0025)$$

$$n = \underline{94}$$

$$1.235$$

$$n= 79 \text{ respondents}$$

Table 1: Showing Breakdown of Population and Sample of Respondents

<i>Category of Respondents</i>	<i>Targeted population</i>	<i>Sample size</i>
<i>Management</i>	11	9
<i>Tellers</i>	21	18
<i>Middle staff</i>	26	21
<i>Customers</i>	36	34

<i>Grand total</i>	<i>49</i>	<i>79</i>
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Source: Human Resource Report, October, 2017

Sampling Technique

The researcher used simple random sampling technique to select the respondents. The Management was randomly selected since they head different departments of the selected banks and thus have sufficient knowledge concerning electronic banking. Tellers and managers were randomly selected so as to get equal representation of the respondents. In that way, every member had an equal chance to be selected.

Data Analysis

And regression analysis was used to analyze data on objective 1, 2 and 3, this aims at determining the effect between the variables. The frequency and percentage distribution were used to determine the demographic characteristics of the respondents. The mean and standard deviations was applied for the extent of electronic banking and performance of commercial banks using SPSS (Nelson et al., 2022). The data on both the independent/dependent variables (Electronic banking and financial performance of commercial banks) was interpreted using the following mean ranges

RESULTS

Response rate

The study targeted a sample of 79 respondents. However, out of 79 questionnaires distributed 64 respondents completely filled in and returned the questionnaires, this represented 81% response rate. This is a reliable response rate analysis as Mugenda and Mugenda (2003) showed that 50% of response rate is sufficient for analysis and presentation of the data. 60% is reliable and 70% of response rate and over is excellent. However, 18% of the respondent were reluctant to responded to fill the questionnaire

this was due to reasons like, the respondent was not available to fill them in at the required time and even after subsequent follow-up there were no positive reactions from them.

Table 3: Descriptive statistics Effect of ATM (Automated Teller Machine) on the financial performance of commercial banks

Item	SD	D	N	A	SA	Mean	Std. Dev.
N = 76							
I frequently use my ATM card and I have not encountered any problem in using it.	22 (28.9 %)	49 (64.5 %)	5 (6.6%)	00	00	1.78	0.56
I am suspicious about my ATM account information	00	19 (25.0 %)	54 (71.1%)	3 (3.9%)	00	2.79	0.50
I am aware of ATM fraud activities	5 (6.6%)	12 (15.8 %)	4 (5.3%)	31 (40.8%)	24 (31.6 %)	3.75	1.24
I have ever lost money to ATM fraud	3 (3.9%)	14 (18.4 %)	8 (10.5%)	32 (42.1%)	19 (25.0 %)	3.66	1.16
I have had complaints about ATM fraudulent from other people.	4 (5.3%)	14 (18.4 %)	9 (11.8%)	30 (39.5%)	19 (25.0 %)	3.61	1.20
ATM fraud is common in centenary bank	7 (9.2%)	11 (14.5 %)	7 (9.2%)	28 (36.8%)	23 (30.3 %)	3.64	1.30
ATM services at centenary bank are secure and safe	8 (10.5 %)	10 (13.2 %)	8 (10.5%)	26 (34.2%)	24 (31.6 %)	3.63	1.34
Transacting bank services using ATM is risky	6 (7.9%)	10 (13.2 %)	4 (5.3%)	35 (46.1%)	21 (27.6 %)	3.72	1.23
When I lose my ATM I get so much worried about the safety of my money in the bank.	6 (7.9%)	9 (11.8 %)	2 (2.6%)	36 (47.4%)	23 (30.3 %)	3.80	1.22

Source: Primary data (2022)

The majority of respondents agreed that they were aware of ATM fraud activities (mean=3.75), they had had complaints about ATM fraudulent from other people (mean=3.61), frequently used their ATM card and had not encountered any problem in using them (mean=1.78), were suspicious about their ATM account information (mean=2.79) and had ever lost money to ATM fraudulent(mean=3.66). They also revealed that when they lost their ATMs, they got so much worried about the safety of their money in the bank (mean=3.80) and transacting bank services using ATM was risky (mean=3.72).

From the results, the standard deviation result of greater than 1 is proof that ATM fraud influences financial performance at the bank. Likewise, the standard deviation results provided evidence that the results obtained on ATM banking could be applied to the bank and therefore could be generalized on other commercial banks in Uganda. The general view from the results is that the results on ATM fraud as an electronic fraud at the bank provided confirmation that there was some level of ATM fraud at the bank. This implies that continued ATM fraud would eventually affect performance at the bank. Testing of hypothesis one: There is no significant relationship between ATM fraud and performance at Centenary Bank

Effect of electronic funds (EFT) transfer on the financial performance of commercial banks in Uganda.

Table 4: Effect of electronic funds (EFT) transfer on the financial performance of commercial banks in Uganda

Item	SD	D	N	A	SA	M ea n	Std. Dev.
						N = 179	
The bank allows customers to obtain consolidated information about their accounts status via internet	6 (7.9%)	8 (10.5%)	11 (14.5%)	35 (46.1%)	16 (21.1%)	3.62	1.17
The bank allows customers to obtain consolidated information about their non-financial accounts	9 (11.8%)	7 (9.2%)	13 (17.1%)	32 (42.1%)	15 (19.7%)	3.49	1.28
There is training offered to clients on how to use the services online	7 (9.2%)	10 (13.2%)	7 (9.2%)	35 (46.1%)	17 (22.4%)	3.59	1.23
Our bank provides on-line tutorials for new e-banking users	6 (7.9%)	12 (15.8%)	3 (3.9%)	37 (48.7%)	18 (23.7%)	3.64	1.23
Our Bank protects customers information from intruders	5 (6.6%)	10 (13.2%)	4 (5.3%)	36 (47.4%)	21 (27.6%)	3.76	1.19
The government is directly involved to manage internet banking security	4 (5.3%)	8 (10.5%)	11 (14.5%)	35 (46.1%)	18 (23.7%)	3.72	1.10
Clients are informed of the possibility of internet banking fraud	6 (7.9%)	8 (10.5%)	10 (13.2%)	35 (46.1%)	17 (22.4%)	3.64	1.17
Customers are told how to deal with Internet fraud in case it comes up	7 (9.2%)	5 (6.6%)	21 (27.6%)	31 (40.8%)	12 (15.8%)	3.47	1.13
Our Bank is able to detect fraudulent e-banking system activities	6 (7.9%)	5 (6.6%)	10 (13.2%)	39 (51.3%)	16 (21.1%)	3.71	1.12

Source: Primary data 2022

Basing on the study results in Table 3, the majority of the respondents agreed that the bank allowed customers to obtain consolidated information about their non-financial accounts (mean=3.49), protected customers' information from intruders (mean=3.76), the government was directly involved in managing internet banking security (mean=3.72), clients were informed of the possibility of internet banking fraud (mean=3.64) and the bank was able to detect fraudulent e- banking system activities (mean=3.71). In line with the qualitative results on internet banking fraud above, the results from the interviews affirmed that;

On the other hand, the bank allowed customers to obtain consolidated information about their finances (mean=3.49), the bank provided on-line tutorials for new e-banking users (mean=3.64), customers were told how to deal with internet fraud in case it comes up (mean=3.47) and there was training offered to clients on how to use the services online (mean=3.59). The research found out that e-banking was mostly used by public and private institutions to carry out transactions such as electronic funds transfer. This was supported by one of the respondents who revealed that there was growing use of e-banking at the bank although the bank needed to create more awareness about e-banking so that its advantages can be appreciated by the general public. Much as globalization was forcing the business/private sector to embrace e-banking so as to be able to transact across the globe.

Relationship between e-banking systems and financial performance of commercial banks in Uganda.

Table 5: Relationship between e-banking systems and financial performance of commercial banks in Uganda.

Table 6: E-banking and financial performance

	Strongly agree		Agree		Not sure		Disagree		Strongly disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Customer's numbers keep increasing	10	33.3	15	50	1	3.3	2	6.7	2	6.7
Customers trust the bank that they are free from fraud.	13	43.3	11	36.7	00	00	3	10	3	10
There are always deposit services in all branches of the bank.	17	56.7	8	26.7	2	6.7	3	10	00	00
There are always withdraw services in all the branches of the bank.	9	30	11	36.7	1	3.3	5	16.7	4	13.3
The bank's mobile technology is always up to date.	11	36.7	12	40	4	13.3	2	6.7	1	3.3
Customers access all they need at the time they need the services.	10	33.3	13	43.3	5	16.7	1	3.3	1	3.3

Source: Primary data 2022

Statement

Table 6 shows that 33.3% strongly agreed that, 50% as the majority agreed, 3.3% were not sure, 6.7% disagreed, and 6.7% strongly agreed. This implies that the bank, always experience a steady increase in the level of customers opening accounts at the bank. According to the findings, 43.3% of the respondents strongly agreed that, 36.7% agreed, 10% disagreed, and also 10% strongly agreed. This implies that the bank always benefits from the trust entrusted in them by their customers regarding their safety. The findings show that the majority of respondents (56.7%) strongly agreed, 26.7% agreed, 6.7% were not sure, and 10% disagreed. This strongly implies the bank has continually provided

deposit services to its customers in all the branches. According to table 5, 30% of the respondents strongly agreed that, 36.7% agreed, 3.3% were not sure, 16.7% disagreed, and 13.3% strongly disagreed. This implies that the bank has continually provided withdraw services to its customers in all the other branches of the bank.

Table 5 above shows that 36.7% of the respondents strongly agreed, 40% agreed, 13.3% were not sure, 6.7% disagreed and 3.3% strongly disagreed. This implies that the bank ensures that it updates its technology on behalf of its customers all the time. The table also shows that 33.3% strongly agreed, 43.3% agreed, 16.7% were not sure, 3.3% disagreed, and 3.3% strongly disagreed. This implies that the bank makes sure all its customers continue accessing its services whenever they need to transact business with the bank. This practice indicates a steady increase in the level of profits due to service availability.

Conclusions

The findings revealed that there were still lapses in the management of electronic funds (EFT) and its associated fraud at the bank. The positive significant relationship between electronic funds (EFT) and financial performance is justification that to ensure efficiency, growth in customer base and brand equity during financial performance management, there was need to adhere to effective risk management in order to reduce internet fraud. The findings validate that a reduction in mobile fraud was principal in promoting financial performance at the bank.

Recommendations

The findings revealed that ATM banking had a positive effect on financial performance at the bank. It is recommended the management of the bank should strengthen the existing ATM banking channels by putting in place effective internal and external controls to manage ATM transaction risks. The implemented structures should be able to promote customer privacy and security by ensuring that customers' private information cannot easily be accessed by second parties (fraudsters) and also secure the ATM machines where the customers carry out the transactions. Customers should be clearly sensitized on how to operate the machines and the dangers of sharing their private information

such as PIN numbers, secret codes with second parties so that they do not become victims of fraudsters.

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