INFLUENCE OF ELECTRONIC BANKING PRACTICES ON PERFORMANCE OF BANKS LISTED AT NAIROBI SECURITIES EXCHANGE

AHMEDNOR MOHAMED IBRAHIM

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DECLARATION

This study is entirely original to me and hasn't been submitted to any other academic institutions for review.

Sign: Date___**17/07/2023**_____

AHMEDNOR MOHAMED IBRAHIM

Reg. No. D61/36692/2020

As the university supervisor, I have given my clearance for this project to be examined.

Sign: Date__20th July 2023_____

Prof. Justus Munyoki

Department of Business Administration

Faculty of Business and Management Sciences

University of Nairobi

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The respondents who voluntarily gave the data and inputs needed to complete this study are thanked once more.

DEDICATION

I dedicate this work to my family, especially my parents, for their continuous encouragement and

patience during the process. May Allah provide them blessings.

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ABSTRACT

The inquiry was based on the view of evaluating how electronic banking practices influence the success and value of banks within Nairobi Securities Exchange. Information was gained from a number of firms and data was based on numbers. The inquiry was based on Technology Acceptance Theory as well as the diffusion models of innovation. The population in this inquiry was banks within NSE and it is true that the adoption of online based models promoted the success of this firms. With online systems, it is possible to automate operations and get customers feedback from various parts of the world. The analysis indicated that firms that use electronic and nontraditional ways of managing their customers find it simple and easy to manage their operations. The online tools make it cheaper and far way better to coordinate operations in the firms. From the findings, the inquiry established that mobile, ATM as well as online transactions promoted the performance of the firms. This confirms the view that digital platforms promote success of firms. The study also established that mobile banking models had a significant value towards success of the firms. The study concluded that firms should use mobile models and programs to promote their value and success in the long term. The inquiry also recommends the need for firms to collaborate with various stakeholders in promoting the privacy and security of their clients. This should be done after adoption of digital platforms in their major operations. It is important that firms find ways of adopting automation in their major programs. Automation programs are cheaper and allow the firms to reach customers in all parts of the world. This is one of the best ways of promoting the market share of the firms. With online platforms, the firms can coordinate, plan and manage their operations from all parts of the world. As such, the inquiry supports and argue that firms within NSE should adopt full online-based systems and improve their success in the long run.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Globally, the business world has undergone through a tremendous growth and expansion in the recent years. Key among them is the use of ICT as an enabler in businesses. Banks have therefore followed suit and enhanced technology to be part and parcel of their daily activities (Suleiman & Ahlam, 2017). Non-tradition tools in management are the most important business aspects in many sectors today. Chhabra, Suri & Vema (2012) opined that banking, air-ticketing, online market, insurance among other government services employ the use of electronic payment system as an enabler in business transactions. The system has increased performance and improved efficiency. More importantly E-Banking is employed to decongest banking holes. Today, Banks are also utilizing electronic payment service to its clients as a way of enhancing its performance.

The researcher is posed to employ transactions cost theory and innovation diffusion theory. Innovation Diffusion Theory was first put forward in 1931 by commons. The theory established how every transaction are promoted to achieve success in firms in the long run. The individual acts are transactions in nature and thus considered transformative to the concerned parties involved (Commons, 1931). According to Davis Bagozzi & Warshaw (1989) TAT was utilized as a conceptual model that users' intentions are well considered significantly in terms of use and utilization of information technology. The model highlights more on how useful I.T. is in terms of enhancing organizational performance. Also the model recognizes perceived usefulness is influenced by perceived ease.

Kenya as a nation adopted the use of ATM as a major E-Banking Services (Nyangosi, 2009). The annual report by Central Bank of Kenya (CBK) in years indicated that the use of ATM is slowly

diminishing while M-Banking has been embraced more (CBK, 2016). The increase of handsets has significantly increased the chances of adopting M-Banking services. This is because it has been realized that digital wallets have replaced conventional way of payments. According to the Central Bank of Keya, banks have adopted the use of modern ICT in their day to day operations which has significantly improved in service delivery to customers. Moreover, the banking sector has also implemented digital information technology strategies in innovating products and services that meet customers' needs in real time. Key among such innovations are the use of A.T.M machines for deposition and withdrawing money anywhere (CBK Annual Report, 2016).

1.1.1 Electronic Banking Practices

Electronic Banking refers to the banking services offers through mobile phones as well as the application of other electronic devices to transfer or receive money remotely (Suleiman & Ahlam, 2017). Most banks and other microfinance institutions have embraced m-banking services by virtue of modern technology. M-banking model promote efficiency and accessibility of all banking transactions. Internet banking involves banking transactions done on electronic machines such as machines without going through banking halls.

The transactions sought include funds transfers, withdrawal, deposits among others. E-Commerce driven by internet banking by use of electronic card for payment of goods and services between a customer, a vendor payment of bills as well as payment of air tickets (Litter, 2016). In 2015, Berg Insight (2010), revealed how M-Banking users have increased over the years to approximately 894 Million people globally.

E-Banking has transformed the way of life in terms of enhancing convenience to users, offering cost effective transaction options, as well as guaranteed efficiency in service delivery (De Young, 2015). The E-banking includes SMS banking; Self-service banking, use of ATMs, Credit and

Debit Cards. In Kenya, common M-Banking services is offered through M-Pesa Services such as M-Shwari, M-Kopa, M-Tawi, Fuliza, Airtel Money Cash Deposit and withdrawals among the payments for goods and services (CBK, 2012). Moreover, every financial institution in Kenya have their own specific M-Banking service platform in collaboration with M-Pesa, T-Cash, M-Kesho, Hello Money by Barclays, Equitel Money by Equity Bank among others (CBK Annual Report,2016).

The research involves internet banking, ATM machine, M-banking services as key components utilized by financial institutions and their respective customers. Electronic cards are in the form of plastic material microchip such as ATMs or point of sale terminal utilized to order payments by a vendor from a customer. The electronic cards involves Debit Cards, Credit Cards that connects the customers to the product line and can also be utilized in settling bills for goods and services being sought by customers. The guiding principle of infrastructure for the use of such cards is operationalized by trusted global schemes such as master cards and visa cards.

Internet banking incorporates transactions done through the worldwide web in terms of funds transfer, inquiry into accounts payments for goods & services among others. Internet banking utilizes electronic cards in execution of transactions depending on the circumstances. Current e-ticketing through the internet or online platforms is common practice and is encouraged to ctime merchants and customers are the common consumers of internet banking. The most significant element of internet banking is the use of wireless penetration rates. This has led to the increase in efficiency, profitability of bank transactions (Litter, 2006).

Mobile Banking essentially refers to banking transactions offered through mobile phones (Mari, 2003). The mobile banking transactions involves, account opening, checking balance, money

transfer, withdrawals and deposits among others. SMS and card payments are used for low value transactions and its efficiency (Saleen & Rashid, 2011).

1.1.2 Firm Performance

The alignment of organizational needs to the infrastructure and external environment justifies firm performance. The role of management is to align the organizational goals to the resources available in order for them to achieve specified objectives. Also, organizational norms, and strategies, values and culture informs the level of efficiency in terms of performance (Wadogo & Abblel-leader, the banking environment achieves its performance through organizing their contingency factors addressing external environment needs and external processes. This guarantees positive impact of organizational performances on the other hand the reverse is also true (Vidal et al, 2017).

E-Banking is deemed to be a game changer in the I.T. environment. The use of ATM, smart cards, mobile banking among other platforms have been used as significant is providing service delivery to clients. Customers are satisfied when there is mutual understanding amongst them. Essentially, E-banking is vital in enhancing customer satisfaction.

1.1.3 Listed Banks in Kenya

According to CBK Annual Report (2012), the banking sector is regulated promptly to enhance service delivery in Kenya. There are 44 commercial banks in Kenya that are regulated by Central Bank of Kenya (CBK). Local banks in Kenya are dominant in the industry over foreign banks. The local banks have 66.6% market share while foreign banks controls 37.4% of the market share respectively. The banks have invested heavily in implementing virtual banking services that reduce the use of paperwork and adopted electronic system of banking transactions (KEPSS, 2014).

Kenya as a nation experienced value capping in 2009 that was not successfully executed in the market. Since the banking industry has continued with its volatility over the last 2 decades, the banking industry has experienced a surge in online banking services offered in digital platforms in terms of credit and debit. The digital financial services have made significant contributions to the high level of customer satisfaction (market intelligence, 2015).

1.2 Research Problem

Electronic banking is considered a modern way of transacting with banks through electronic medium such as ATM, Debit Card, for buying and selling of goods and services. The services include cash deposits, cash withdrawals, cheque clearance and financial inquiries via online platforms. E-banking refers to the use of online platforms to conduct banking transactions through interactive communication channels that are customer oriented (Onyedimekwu & Oruan, 2013). Previous researchers have carried out studies relevant to the current study. Sumra, Manzoor and Abass 2011 conducted research on the impact of E-banking profitability of banks in Pakistan. The study opined that E-banking enabled banks achieve level of profitability in a cost-effective manner.

Sium (2006) analyzed the role played by E-banking on determining net income for banks in Jordan. The study concluded that E-banking influenced profitab8lity negatively in the short run. The study recommended that banks should conduct robust training for employees in order for them to improve their performance (Jmwansa, 2009).

Malhotra and Sigh. In 2009, a study was conducted on the impact of internet banking on the risk and effectiveness of Indian financial institutions. According to the study's findings, internet banks are bigger banks with more revenues attained through efficiency. However, the previous studies did not cover the current study topic and they are based on industries which are not baking. The majorities of the past studies are also based on western literature and were done outside Kenya,

hence a contextual gap that is to be addressed by the current study. The research will therefore investigate the influence of E-Banking practices on value of firms within NSE.

1.3 Research Objective

The purpose of this study was to determine how the performance of banks listed on the Nairobi Securities Exchange was impacted by E-Banking practices..

1.4 Value of the Study

The study is envisaged to promote the functionality of the banking industry. The recommendations of the study would allow banks listed at NSE to address the challenges brought about by manual banking practices. The banks would have full knowledge of e-banking practices that would be significantly employed to make key strategic decisions.

In the academia, the study anticipates to add significant relevant literature to the existing knowledge about E-banking practices. This eventually would be a key pointer to be used as a reference point for information. This would help guide theoretical and literature associated with the topic of the study.

It is also anticipated that the study output would be utilized as a key reference point for police development about banking industry both in Kenya and other nationals. Government policy makers would use the study findings to develop effective policies dealing with digital banking. This would promote economic development in the region.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section presents the theories used to demonstrate how they relate to the research variables.. Also, E-Banking practices in the study will be addressed.

2.2 Theoretical Framework

The researcher employed technology acceptance model (TAC) as well as the diffusion aspects of Mahajanad Peterson advanced the theory (1985). They claimed that an innovation is a concept that develops through prescribed channels in a social system as a result of creativity.innovations in firms.

2.2.1 Innovation Diffusion Theory

Mahajanad Peterson proposed the hypothesis (1985). According to their claims, innovation is an idea that develops through predefined channels in a social system as a result of creativity. The theory explains the mechanisms in which new inventions are created through the internet and are strengthened to succeed in solving social challenges (Clarke, 1995), Severilla (2004) noted good innovations take time to be established and put to practice (Servaki, 2014). On the other hand, some individuals are resistant to change but in the long run, through consistency of innovation, the idea is accepted and implemented (Servaik, 2004).

The model supports this analysis because it explains how digital innovations can be promoted in firms like banks through the use of different systems. The theory supports the need for creativity in promoting online transaction in the banks. This is imperative towards growth and success of the banks.

2.2.2 Transaction Cost Theory

Transaction cost is an economic thinking that involves individual activities deemed to be transacted for personal and organizational benefits (Ormmores, 1931). Transaction cost was introduced by (Coase, 1960). The theory supports the consideration of transaction costs in managing firm activities and operations.

The theory elaborates the specific economic roles that are handled by organizations at specified time period in the market Oliver (2009), highlighted that transactional costs theory is significant in the current study topic in that the key objectives of technology is cost savings by the banks listed at N.S.E. The transactions for such banks benefit the customers in the long run. The lower the transaction costs, the higher the revenue earned by banking institutions (Oliver, 2009).

This theory is relevant to this topic since it outlines why banks have adopted electronic transfers to lower their transaction costs. The theory also explains why adoption of efficiency is important towards attracting clients and promoting bank success. The theory can help bank managers to avoid challenges associated with transaction operations.

2.2.3 Technology Acceptance Theory

The Technology Acceptance Theory (TAT) was coined by Davis, Baggozi & Warshaw (1989) to establish a technology based model that is user friendly to customers and staff. In this regard, it is known as perceived usefulness that work rate by employees is powered by the new technology. The theory has some external factors that influence its applicability and acceptance by all stakeholders involved in research activities in IT (Liu and Aruett, 2016).

Technology Acceptance Theory (TAT) incorporates the study variables with the modern technology for its applicability. The theory holds that perceived usefulness of employees and their

tasks in the organization is determined by new technological innovations. The model is useful and provides tools that firms can use to manage their systems and improve their success in the long run.

The theory is suitable to this study since it outlines how banks can promote useful and applicable technology adoption in their operations. Companies can use this theory to explain the type of technology important in their major operations. With the theory in place and using its models, banks can promote adoption of new technologies.

2.3 Influence of E-Banking on Performance of Banks listed at NSE

The banking industry is faced with continuous changes of technological innovation. As such, more emphasis should be put on the innovation and creativity so as to keep up with such changes. For the external environment, banking has evolved and does not deal with money transactions alone but also access to business related information is key (Padral, 2015). E-banking plays a very significant role in enhancing customer satisfaction, cost reduction and general experience in organizational performance. Through innovations, ATMs, smart cards, phone banking have been established as key components that determine financial performance in banks. The increase on customer satisfaction leads to customer retention and customer loyalty. Furthermore, quality service is well achieved through e-banking services.

The benefits of ICT on electronic commerce are real and highly embraced. However, there exists a debate about the adoption of ICT improves performance. More and more research is needed so as to determine the existence of such relationships. The uses of E-banking contribute a lot on financial institutions reference at different levels within a specified time period through market share. Increase in product portfolio, customer satisfaction as well as improvement of income levels (Kariuki, 2013).

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2.4 Empirical Review and Research Gaps

Sumra Manzoor and Abass (2011) conducted research on how Pakistani banks' profitability was affected by electronic banking. The context of the study involved 12 banks from 3 cities in Pakistan. The output of the study revealed that E-banking had a positive influence on profitability. More profit was realized at a cost-effective manner. Their ability to provide goods and services was also unaffected by the literacy levels of their customers. Furthermore, the researcher pointed out that E-banking aids in client retention, thus financial institutions should maintain it. It was necessary to conduct the current study in order to close the information gap because the study context was not in Kenya.

A study on E-banking services and how they relate to bank earnings in Jordan was conducted by Siam in 2016. According to the study's findings, the costs associated with e-banking had a short-term negative impact on the institution's revenues. However, it was also highlighted that following the installation of electronic infrastructure, skilled workers trained them, and long-term profitability was obtained. However, because the study was not conducted in Kenya, Kenya is where the current study must be conducted, as well as Kenya's banks that are listed on the NSE.

Onay (2013) conducted research on how internet banking determines banks profits in Turkey. The study established that internet banking is a major contributor to banks return on Equity (ROE). It was also concluded by the researcher that the adoption of E-banking enhances the changes in terms of positive performance over time. The study context was done in India as opposed to Kenya thus a research gap that the current study seeks to address.

Malhotra and Singh 2009 did research about the influence of internet banking on performance of financial institutions in India. 85 banks were involved as context of the study. The findings revealed that 85% of banks in India had adopted internet banking services and that this led to high

operating efficiency as well as earning high profits for the institutions compared to the ordinary banks. However, the study was only limited to internet banking only therefore there is need to cover other forms of E-banking practices, thus the relevance of the current research in Kenya's banks listed at NSE.

Kingoo (2011) analyzed how E-banking in 43 commercial banks determined their level of financial performance. The output of the study through return of asset as a performance measure was well influenced through E-banking debit cards issued to them. Moreover, the study concluded that there existed both positive and negative relationship between e-banking and performance of the institutions of finance. The study recommends the use of fees and commissions as a measure of performance thus the need for the current study topic.

Gikandi and Bloor (2010) did a research on how effective is E-banking practices in Kenya. The findings noted that there is more significant influence of E-banking on the banks performance. Internet security was highlighted more a key driver to enhancing customer trust, privacy and technical knowhow. The study held that cost reduction is the main achievement in the process.

Suleiman and Ahlam – Jebreen 2017 did a study on electronic banking services and how they relate with loyalty of customers among commercial banks in Jordan. The research established that there is a statistical significant relationship between the study variables such that privacy, website design and ease of use were highly influenced by loyalty customers in the banks.

Ann and Nathaniel (2016) did research about E-banking and performance of Banks in Nigeria. The output showed that savings and time demand deposits were highly influenced by points of sale transactions. The researcher recommended for collective responsibility of financial institutions

creating more awareness to customers about the adoption of E-banking services to better their performance levels in the long-run.

Although all these studies relate to the topic of the study, some of them were done outside Kenya. Majority of the studies were also done outside the Banking sector. This leaves contextual and conceptual gaps that require further research. In addition, some of the studies were based on case study and there is need for more studies on cross-sectional design to fill the methodological gaps.

2.5 Conceptual Framework

The conceptual framework illustrates how the study variables relate to one another as a way of operationalizing them. In this case, the framework depicts Electronic Banking Services (ATM Banking, Online Banking and Mobile Banking) as the independent variable while performance of banks listed at NSE as the dependent variables.

Independent Variable   **Dependent Variable**

Electronic Banking Practices
• ATM Banking
• Online/internet Banking
• M Banking

Firm Performance
• Sales Volume
• Profits
• Market Share
• Brand Image
• Customer satisfaction
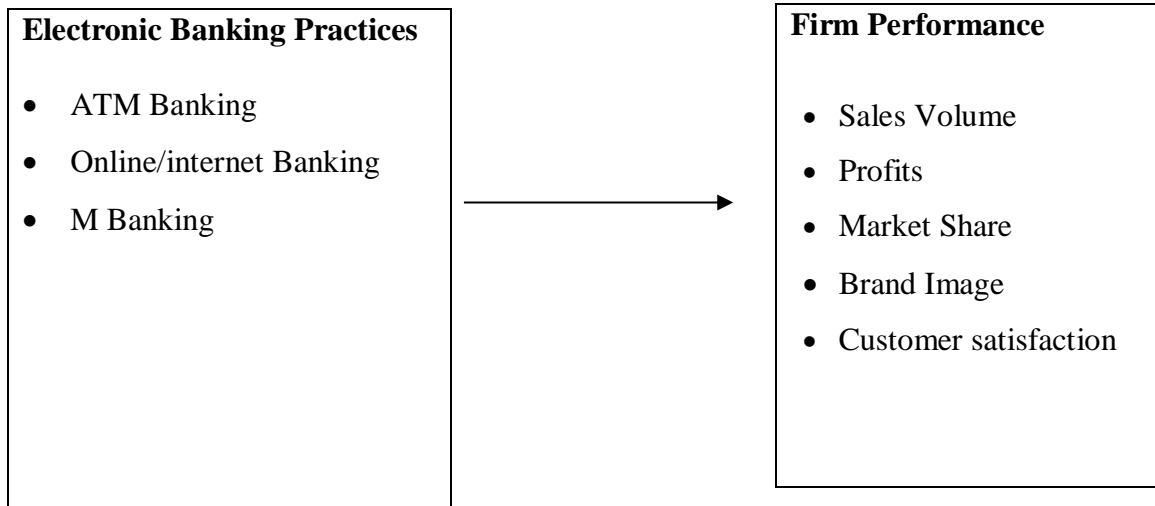
Figure 2.1: Conceptual Framework,

Source: Author, (2022)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section highlights on the design employed by the researcher, sample design, population and utilities for assembling infrastructure and how analysis will be carried out.

3.2 Research Design

The cross-sectional models were used here to show how the study variable relates to one another. The design is well placed to be used since it enhances privacy of information from any kind of manipulation whatsoever (Tonhatos and Campton, 2000), (Robison, 2022), (Handdridge, 2004). The model helped to evaluate the topic of study within a specified time. It also helped to collect huge data from the participants within a short period of time.

3.3 Target Population

A population represents numerical representations of figures of a particular subject with different variable characteristics. Mugenda and Mugenda (2003), noted that a 10% representation in a population is considered good enough to over views of the entire population representations. The researcher involved all the 44 banks listed at NSE and are all regulated by Central Bank of Kenya (CBK, 2021). This study was based on census and all the banks listed in the NSE were considered in the study.

3.4 Data Collection

The research deployed a research questionnaire to obtain information. Kothari 2004 noted that primary data is vital in establishing the information sought based on the objectives. It is therefore prudent to note that 44 participants participated in this study, thus a census. In this regard, finance managers were engaged in the practice since they have enough knowledge and experience of the

current study variables. The participants were considered in the study due to the fact that they are skilled and experienced enough to offer credible information being sought. To ensure co-operation from them, the researcher explained the significance of the study and their participations. Further, the expected durations were agreed upon when the competed questionnaires would be ready for collection.

The questionnaire was separated into three parts. The first part involved general information about the participants. The second part of the questionnaire accommodated information about extent to which electronic banking practices have been adopted at NSE banks in Kenya. The third part involved electronic banking practices and how they relate to performance of banks listed at Nairobi Stock Exchange. The data collection tool used 5 point lickert scale for close ended questions based on the objectives offered. The drop and pick mechanism was deployed.

3.5 Data Analysis

In preparation for analysis, the obtained data was cleaned, modified, and entered into the SPSS software. Descriptive statistics were used to analyze the data. Values for the mean, median, and standard deviation were included in the descriptive statistics. To make it simple to grasp the correlations between the variables, the data were displayed as tables, graphs, and pie charts. Based on the relevant factors, regression analysis was also included in the study.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

Here models are presented using charts, diagrams and graphs. The data is analyzed with the view of topic and the analyzed data is presented in this chapter. Discussions on the analyzed data and the findings are made and also presented to underscore the effect of the predictors with reference to the findings of earlier studies in a bid to fill the research gaps that had been established.

The researcher presented questionnaires to the respondents in all the 44 banks listed firms in NSE. Specifically, the finance manager from each bank was considered for the study. The finance managers were accessed, contacted and briefed to enable the researcher to gain consent. They were then issued with questionnaires by hand or through e-mails and the filled questionnaires were collected with the help of research assistants deployed. The feedback from the respondents were analyzed as follows.

4.2 Background Information and Demographic Characteristics

Demographic information about the participants, such as gender, age, and the greatest degree of education reached by the respondents, was gathered by the researcher. According to the results, less than 10% of respondents were under the age of 30, and more than 70% of respondents were above the age of 40. On the other hand, it was found that just 36% of respondents were female, with 64% of the respondents being men. revealed that more than 76 percent of respondents had at least a master's degree, 18 percent had a bachelor's degree, and the remainder respondents had other degrees or education levels higher than a bachelor's. More than half of the respondents had

more than 10 years of experience working in banks in various managerial roles, according to research on experience.

Table 4.1. Age of Respondents

Age (years)	Frequency	Percentage
Below 30	3	6.8
31 – 40	8	18.2
41 – 50	23	52.3
Above 51	10	22.7
Total	**44**	**100**

The findings show that education is an important qualification for the position of finance manager in the banks since most of the finance managers had at least a Masters' degree. Likewise, experience is a critical factor for finance managers in most of the banks listed in the NSE. Experience and level of education go hand in hand; therefore, most of the respondents who had higher levels of education attainment also had higher experience in management. The findings also show that there still exists gender disparity in the management of the banks since most of the finance managers in the studied banks were male and only about a third were female.

4.2.1 Bank Ownership

The owner of the banks under investigation needed to be identified. The respondents were questioned in order to determine who owned their banks; the answers are shown in table 4.2 below.

Table 4.2. Bank Ownership

Ownership	Frequency	Percentage
Public Shareholders	12	27.3
Private Shareholders	28	63.6
Government Owned	4	9.1
Total	**44**	**100**

4.3. Electronic Banking Practices

Prior to determining how electronic banking practices affected business performance, it was important to identify the precise electronic banking methods used by the banks listed on the NSE. Therefore, the respondents were asked to rate how much of the statements that claimed their banks had embraced particular electronic banking procedures they agreed with. Automated teller machines (ATMs) were used for deposits and withdrawals, online banking was used for bill payments and interbank fund transfers, and credit cards and mobile banking were also used. These were the unique electronic banking practices. The answers had to be provided on a Likert scale of 1 to 5, where 1 denoted strongly disagreeing, 2 disagreeing, 3 uncertain, 4 agreed, and 5 highly agreed. The results are presented in table 4.3 below, along with a descriptive analysis of the results.

Table 4.3. Electronic Banking Practices

Electronic Banking Practices	N	Mean	SD
ATM Banking for cash deposits and withdrawals	44	4.8864	0.3210
Online Banking for bill payments and interbank fund transfers	44	4.4545	1.0445

Mobile Banking	44	4.6818 0.8832

The finding as shown in table 4.3 above show that most banks had in place ATM banking for funds deposits and withdrawals, only a few banks still did not have such technologies. The mean and standard deviation was 4.8864 and 0.3210. The small standard deviation indicates that the deviation in the responses were minimal, implying that almost all respondents agreed that ATM use was present in their banks. Likewise, mobile banking services were also present in most banks. Even though most banks had in place online banking technologies for their customers, it was evident that it was not as common as other electronic banking techniques since it had the lowest mean and the highest standard deviation (4.4545 and 1.0445 respectively).

4.4 Performance Measures

The purpose of the study was to determine the performance metrics used by the institutions under examination. Table 4.4 below provides an overview of the findings together with relevant descriptive information.

Table 4.4. Accountability Measures

Performance Measures	Mean	S. Deviation
Market Share	4.85450	0.60829
Profitability	4.92417	0.32246
Customer Satisfaction	4.46733	0.58005
Employee Motivation	4.13952	0.67812
Brand image	4.46449	0.83406

Sales	4.89111	0.46378
Average	**4.62352**	**0.58113**

From Table 4.4 above, it is evident that most of the respondents alluded that their banks considered profitability as the most important performance measurement with a mean of 4.92417 and SD 0.32246. They thus strongly agreed with least variations in the responses, that profitability was the key performance measure. Other important performance measures with means more than 4.7 included sales and market share. Also, most respondents looked at customer satisfaction, employee motivation and brand image as important performance measures in their banks. The average mean for all the mentioned performance measures was 4.62352 with a standard deviation of 0.58113; this shows that most respondents were in strong agreement that the banks considered market share, profitability, customer satisfaction, employee motivation, brand image and sales key performance measures.

4.5 Electronic Banking Practices and Bank Performance

The inquiry determines how online systems affect the firm success. The review confirms that online tools promote the success of the firms. The analysis in detail is providing on the table below.

Table 4.5 Online Tools and Firm Success

Effect of Performance Measures on Performance	Mean	S. Deviation
Market Share	3.56818	0.62497
Profitability	3.65909	1.16025
Customer Satisfaction	3.75000	0.89248
Employee Motivation	3.43182	1.04320
Brand image	3.75000	0.89248
Sales	4.56818	0.50106
Average	**3.78788**	**0.8521**

From table 4.5 above, it is evident that most respondents agreed that electronic banking impacted most of the performance parameters. From the findings, sales were highly impacted by electronic banking followed by customer satisfaction, brand image and profitability in that order. On the other hand, employee motivation was least impacted by electronic banking.

4.6.1. Regression Analysis

The model is used to show how concepts relate. This is well documented in this inquiry. The table is a depiction of model values.

Table 4.6 Regression Model Summary

Regression Statistics	
Multiple R	0.848204[a]
R Square	0.719511
Adjusted R Square	0.689624
Standard Error	0.322281
Observations	44

a. Predictors: (Constant), ATM usage, mobile banking, online banking

b. Dependent Variable: Performance (Market share, profitability, customer satisfaction, employee motivation, brand image and sales).

The regression model shown in table 4.6 above indicates how electronic banking has a favorable impact on the performance of Kenya's Nairobi Securities Exchange-listed banks. The coefficient of regression R = 0.848204 and the coefficient of determination measure R squared = 0.719511 show that electronic banking might have a 71.9 percent negative effect on performance. This

suggests that, at a level of confidence of 5%, the performance is accounted for by about 71% by electronic banking processes.

4.6.2 Analysis of Variance (ANOVA)

The researcher conducted a two-way ANOVA without replication and the findings are shown in table 4.7 below.

Table 4.7 Analysis of Variance

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	6	1096.053	182.6755	1758.78	0.0000
Residual	38	3.946867	0.103865		
Total	44	1100			

The analysis of variance presented in table 4.7 above reveals that the data was significant in explaining the relationship between bank profitability and electronic banking, making the conclusions in this article credible and legitimate at the 95 percent significance level. According to the ANOVA, the f-critical value was significantly higher than the f-significant value. This demonstrates that the regression model was statistically significant and had a good fit for the prediction of how electronic banking practices affected the performance of the banks. The significance level of the predictor variance in the regression model is in the range of 0.000, indicating a significant association between the predictor and the dependent variables.

4.6.3 The Coefficients

The ANOVA illustrates the model's fitness, while the Beta value highlights the power of the regression model that was used to evaluate the influence of each predictor on the dependent variable. Table 4.8 below provides a summary of the beta coefficients.

Table 4.8 Coefficients

Model	Coefficients	Standard Error	t Stat	P-value
Constant	0			
ATM Banking	0.33087	0.068962	4.797818	0.000025
Online Banking	0.157311	0.06928	2.270644	0.028922
Mobile Banking	0.10068	0.056501	1.781921	0.082755

Table 4.8 above gives the regression coefficients of the electronic banking predictors. From the coefficients, it is evident all the p-values are smaller than the critical value. This confirms the statistical significance of the coefficients. The values indicate that ATM banking has a significance value of 0.000025 which is less than 5% significant level thus statistically significant followed by online banking which has significance value of 0.028922. The values further indicate that the relationship between independent and dependent variables. Thus, performance if kept constant at zero, a unit increase in ATM usage would enhance profitability by a factor of 3.309. Likewise, a unit increase in online banking would increase profitability by 1.5371 and a unit increase in mobile banking would increase profitability by 1.0068.

4.7 Discussions on Findings

The findings show that ATM use is significant in explaining bank performance as noted by Ann and Nathaniel (2016) who established that savings and time demand deposits highly influenced by points of sale transactions and that ATM provided convenience in such transactions. It is important that firms use model tools in their major activities. This is the best way to promote their value.

This study also established that the electronic banking practices has positive impact of banks' profitability. This finding agrees with the findings of Sumra Manzoor and Abass (2011) who revealed that electronic-banking had a positive influence on profitability in that more profits were realized at a cost effective manner. Additionally, the finding is in line with that of Siam (2016) who also noted that after installation of electronic infrastructure in banks, profitability was realized. Likewise, these findings agree with Onay (2013) who established that internet banking was a major contributor to banks return on Equity (ROE) and that electronic banking enhanced the changes in terms of positive performance of the banks over time.

The results of this study, which demonstrate that electronic banking improves a bank's performance, are consistent with those of several earlier studies that aimed to establish connections between electronic banking practices and specific performance metrics. For instance, Malhotra and Singh (2009) found that the increased operating efficiency brought about by online banking services led to better profits. They attempted to determine the impact of internet banking on the performance of financial institutions. Additionally, Kingoo (2011) discovered that the return on asset (ROA) performance metric was influenced by electronic banking via debit and credit cards, which is consistent with the results of the current study. Kingoo employed ROA as a performance metric.

Additionally, the findings of this study demonstrated how mobile banking, a form of electronic banking, affects bank performance. The findings of this study are in agreement with those of Suleiman and Ahlam-Jebreen (2017) and Sumra Manzoor and Abass (2011), who discovered that mobile banking was crucial for increasing customer loyalty and hence enhancing customer retention. Therefore, it is evident from the findings and analysis that both a direct and indirect effect of electronic banking on bank performance exists (both financial and non-financial).

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

Here summary is outlined. The issues that guided the study are also summarized. The conclusion is also provided as well as areas of further analysis.

5.2. Summary of the Findings

The purpose of this study is to ascertain how E-Banking practices impact the efficiency of banks that are listed on the Nairobi Securities Exchange. The number of customers in the banking halls and the number of tellers decreased due to a rise in the number of ATMs installed. This in turn lowered operating costs, paper costs, and labor expenses. As a result, the banks listed in Nairobi Security Exchange's financial performance improved. The growth also brought to proper time management, more room for banks, and higher levels of accuracy; this helped banks operate more profitably and effectively. The increase in ATMs in the country could have been brought on by the entry of banking organizations like KCB-Mtaani and the growing use of mobile banking services.

The respondents strongly agreed that more active users in mobile banking led to higher deposits and greater customer convenience because they can access banking services via their phones at any time. This improved the financial performance for the banks in Nairobi Security Exchange. The banks in Nairobi Security Exchange will only need a small staff to manage the systems, this lowers operational and labor expenses. Mobile banking required increased capital investment, which helped boost bank profitability and efficiency.

Electronic Banking usage grew as a result there were more client retention, and less paperwork; this improved the commercial banks' profitability and productivity. Users considered using electronic banking to be helpful since they could use them whenever they wanted to complete their transactions.

The findings indicated that more online banking transactions led to more profits and revenues for the banks. This was because of the commissions and fees that were collected throughout the transactions. Additionally, it was discovered that fewer people visiting banks caused less congestion in the banking halls as a result of the rise in online transactions. Thus, due to the decreased workforce, it was expected that labor expenses would also decline, thereby improving bank performance and efficiency.

5.3. Conclusion

Based on the empirical findings, it was determined that electronic banking had a substantial positive link with ROA, which improved the financial results of banks listed in Nairobi Security Exchange. The ROA demonstrated a substantial positive link with each of the factors that includes electronic banking, ATM banking, mobile banking, and online banking, thus improved financial performance of banks listed in Nairobi Security Exchange. The descriptive statistics revealed that while electronic banking services had the fewest users, Mobile banking services were more popular than the other services, which include ATM banking, and online banking services. The reason for this is the evolving problem in the banking industry caused by the changes in technological levels. The only variable from the trend study to exhibit a continuous rise over the years was internet banking. ATM banking experienced a decline, while mobile banking saw a sharp rise in transactions. As such, the study concluded that electronic banking and operations is important for the success of the firms.

5.4. Limitations of the Study

Due to confidentiality concerns, it was difficult for the research to obtain some specific data, and the majority of banks in Nairobi Security Exchange refused to supply the necessary details out of concern that their rivals may use them against them. Some of the respondents felt their privacy was challenge. However, there was an assurance that the data will be safe and only used for the inquiry.

Moreover, due to incomplete records and the elimination of outdated financial systems in favor of more adaptable ones, accessing historical data was particularly difficult from banks listed in Nairobi Security Exchange. In addition, some of the information online was conflicting. This made it challenging to authentic the information posted. However, thorough analysis was done and only credible sources were adopted in the inquiry.

5.5. Recommendations

From the findings, it is important that banks listed in Nairobi Security Exchange adopt the use of electronic systems in their operations in order to ensure their expansion and sustainability; this will help in improving the financial performance of the banks. It is important that the banks adopt digital platforms in their major operations. This will reduce and control the number of workers and increase their cost-efficiency.

When dealing with transactions linked to point of sale, particularly in retail businesses, shops, and super markets, greater attention should be placed on boosting the usage of ATM banking and electronic cards. Since technical crimes not only impact the banking sector but also other sectors, including the Kenyan economy, the Kenyan government should therefore assist banks in Nairobi Security Exchange in reducing these crimes. The firms should partner and collaborate with

different stakeholders in controlling digital challenges associated with client's safety as well as security issues.

5.6. Suggestions for Future Research

This study focus on different aspects of electronic plans in firms. However, it is indicating that future analysis should focus on online ways of managing customers. These include the effectiveness of electronic cash transfers, the utilization of non-performing loans and the reliability of electronic banking services as a gauge of financial success of banks listed in Nairobi security exchange. Further studies should review the paradox of digital platforms on bank operations since it has been noted that some electronic practices do not result to high value in the firms.

The factors that influence the quality of electronic banking services should also be the subject of future research since banks must be aware of these factors in order to develop electronics banking strategies that will enhance their performance and provide them a competitive edge. There is need for adoption of studies that can investigate ways of controlling security and privacy issues when online matters are involved. This will help promote customer's satisfaction and confidence in the applications.

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APPENDICES

Appendix I: Research Questionnaire

PART 1: General Information

Kindly tick (√) where appropriate

1. **Gender**

   Male   (   )   Female (   )

2. **Age**

   [ ] Below 30   [ ] 31 – 40   [   ] 41-50   [ ] Above 51 years

3. **Highest Level of Educational**

   [ ] Certificate   [ ] Diploma [   ] Undergraduate   [ ] Post Graduate

4. **Position in your bank?**

   Finance Managers (   )

5. **Ownership of the bank**

   Public shareholders (   )

   Private shareholders (   )

   Government-owned (   )

Part II: extent to which electronic banking practices are adopted among banks listed at Nairobi securities exchange.

Electronic Banking Practices	1	2	3	4	5
ATM Banking The bank employs ATM Cash deposits transactions The bank utilizes ATM Cash Withdrawal transactions					
Online banking Clients utilize online banking for their bill payments There exists Interbank fund transfers through online platforms					
Mobile banking Customers prefer credit card payment for service delivery					

There exists Complains management section that handles complains issues in the bank.					

Part III: Electronic Banking Practices and Performance

Indicators	1	2	3	4	5
The firm is having good market value and share					
The bank enjoys high number of customers/clients					
There is enhanced profitability for the bank					
There are high sales volume in the bank					

APPENDIX II: BANKS LISTED AT NAIROBI SECURITIES EXCHANGE AS AT 31st DECEMBER, 2021.

1 Kenya Commercial Bank Ltd

2 Standard Chartered Bank Ltd

3 Absa Bank Kenya Ltd

4 Co-operative Bank of Kenya Ltd

5 CFC Stanbic Bank Ltd Large

6 Equity Bank Ltd

7 Bank of India

8 Bank of Baroda Ltd

9 Commercial Bank of Africa Ltd

10 Prime Bank Ltd Medium

11 National Bank of Kenya Ltd

12 Citibank N.A.

13 Bank of Africa Kenya Ltd

14 Chase Bank Ltd

15 Imperial Bank Ltd

16 NIC Bank Ltd

17 Ecobank Ltd

18 I & M Bank Ltd

19 Diamond Trust Bank Kenya Ltd

20 Family Bank Ltd

21 Housing Finance Co. of Kenya Ltd

22 Habib Bank Ltd

23 Oriental Commercial Bank Ltd

24 Habib A.G. Zurich

25 Middle East Bank Ltd

26 Dubai Bank Ltd

27 Consolidated Bank of Kenya Ltd

28 Credit Bank Ltd

29 Transnational Bank Ltd

30 African Banking Corporation Ltd

31 Giro Commercial Bank Ltd

32 Equatorial Bank Ltd

33 Paramount Universal Bank Ltd

34 Jamii Bora Bank Ltd

35 Fina Bank Ltd

36 Victoria Commercial Bank Ltd

37 Guardian Bank Ltd

38 Development Bank of Kenya Ltd

39 Fidelity Commercial Bank Ltd

40 Charterhouse Bank Ltd

41 K-Rep Bank Ltd

42 Gulf African Bank Ltd

43 First Community Bank Ltd

44 UBA Bank Ltd

Source: Central Bank Supervision Annual Report, (2021)