

PERCEIVED INFLUENCE OF ELECTRONIC BANKING EFFECTS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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Abstract: *The purpose of this study was to describe the current state of Electronic banking in Kenya commercial banks and to discuss implications for electronic banking profitability and risk. Particularly the study sought to examine the impact of electronic banking on banks, how internet is growing rapidly and how it has taken financial sector by storm how banks have provided customers with financial services over the internet, and how competitive pressure has led to bank to offer electronic banking. The study sought to determine analysis of the perceived influence of electronic banking effects on financial performance of commercial banks in Kenya. The specific objectives of the study were to analyze the effect of efficiency and accessibility of electronic banking on financial performance of commercial banks in Kenya. The literature review for the study variables was guided by the innovation diffusion theory and the Technology acceptance model. The study target population was all the 42 registered. The data collected was analyzed using descriptive statistics. Statistical data analysis was done using SPSS and STATA statistical software. Descriptive statistics, diagnostic tests and tests of hypothesis were done. Data was presented using tables and charts. Study findings indicated that when used in isolation; e-banking efficiency and accessibility had a significant positive effect on financial performance. The finding further indicated that e-banking efficiency had the strongest effect on banks performance. The study findings pointed that the two variables had strong positive effect on financial performance. Based on the findings the study concluded that adoption of e-banking enhances efficiency and accessibility of services offered by commercial banks in Kenya. Therefore the study recommends that commercial banks in Kenya should considers enhancing technology and innovation in their systems through e-banking adoption to ensure efficiency of service to customers. The study further recommends that managers in the banks to adopt e-banking so can access their services more easily and at their convenient time.*

Keywords: *Efficiency, Accessibility and Financial performance*

1.1 Introduction

The revolution of information technology has influenced almost every facet of life, among them is the banking sector. The introduction of electronic banking has revolutionized and redefined the ways banks were operating. As technology is now considered as the main contribution for the organizations' success and as their core competencies. So the banks, be it domestic or foreign are investing more on providing on the customers with the new technologies through e banking.

The concept of electronic banking has been defined in many ways (Daniel, 1999; Karjaluoto, 2002) namely as the delivery of banks' information and services 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. Electronic banking is a larger concept than banking via the internet (Karjaluoto, 2002) and the internet is a main delivery channel for electronic banking and its value to customers and banks is continuously increasing (Karjaluoto, 2002; Mattila, 2001). The evolution of electronic banking, such as internet banking from e-commerce, has altered the nature of personal-customer banking relationships and has many advantages over traditional banking delivery channels. This includes an increased customer base, cost savings, mass customization and product innovation, marketing and communications, development of non-core businesses and the offering of services regardless of geographic area and time (Giannakoudi, 1999). Internet banking is expected to become a widely adopted method for disseminating information and exchanges in the near future.

According to Faure (2013), commercial banks –also referred as high street banks are banks that provide all services the public associates with banking, such as ATM withdrawals/deposits, cheque, current accounts, other deposit accounts, overdraft facilities, mortgage advances leasing, installment credit advances and so on. During the last two decade, e-banking acceptance globally has been rapid. In fact, by 2003 over 55 percent of the private banking customers, were using, e-banking services (The Banker's Association, 2003; Mukherjee and Nath, 2003). In general, Europe has been and still is the leader in e-banking technology adoption and usage (Schneider, 2001). By comparison, at the end of 2000 only roughly 20 percent of the US banks offered e-banking services and only 20 percent of US private banking customers used e banking services (Sheshunoff, I 2000; Orr, 2001). By the end of 2002 about 120 largest US banks offered e-banking services (Pyun et al., 2002).

The picture of e-banking in the USA is one of a wide variety of services used by a disparate number of consumers. Approximately, 91 percent of US households have a bank account and, of these, 93 percent have one or more EFT features associated with their accounts. In 2003, the number of ATM transactions stood at 902 million per month, up slightly from 2002 (EFT Data Book, 2003). In addition, by 2003, the number of point-of-sale debit transactions stood at 495 million per month, up 21 percent from 2002, and the volume of electronic payments in the USA in 2003 exceeded that of cheques for the first time. Thanks in part to the US Department of Treasury's EFT '99 initiative, nearly four-fifths of social security recipients now have their benefits deposited directly into their bank accounts and one-half of employees use direct deposit for their paychecks. A total of 32million Americans view at least one bill each month over the Internet.

Bhan (2014) observed that financial services in Africa are experiencing a moment of exciting change. Many companies are taking advantage of development in technology to steer emerging African economies toward a mobile-driven, cashless (or cash lite) future by introducing new products, services, and business models. Banks globally have invested in enterprise mobile and online financial service solutions to deliver banking services and reduce the overall cost of operations (Capgemini, 2012). According to CGAP (2008) technology can enable banks and their customers to have an interaction in a trusted way through existing local retail outlets. The key challenge for banks is to justify the high costs of branch banking on one hand and achieving branch-driven revenue growth on the other.

Rosen (2013) observed that the Kenyan financial environment has changed significantly over the last decade as a result of changes in market structure, and especially, as a result of the emerging branchless banking. One of the main contributors to this transformation is the technological progress that has been taking place in Kenya in the past 10 years allowing financial institutions to provide their customers with financial tools such as mobile banking Capgemini (2012) argues that the ever changing regulatory environment and heightened competition

for retail deposits are putting pressure on banks' profitability, forcing them to reduce their overall transactions costs. While consumers in United States of America are just being introduced to Apple Pay, mobile money services like MPesa and MTN Money have been flourishing in African markets (Bhan, 2014). More people have mobile money accounts than bank accounts in at least nine African countries, up from four in 2012. And the Africa continent as a whole leads the world in the adoption of financial services on the mobile platform (Bhan, 2014).

1.1.1 Financial Performance

Financial performance refers to the measure of how well firms are able to leverage on their assets to generate revenues in their operations. It is a concept that refers to the state of financial health of a firm at a given time or over a given period for purposes of gauging the firm against others whether within the same industry or other industries. In terms of the banking industry, this refers to profitability, liquidity, and management. One of the inalienable truths of electronic banking is the fact that more effectiveness and efficiency are realised by the bank. It leads directly to higher rates of turnover and consequently higher performance. However, one of the areas where contention exists is how and whether ICT delivers benefits to performance of a bank. This comes from the fact that ICT does not exist in a vacuum; it depends on other variables such as level of skill possessed by staff and the extent to which certain operations are affected by it. This translates to risks that may have rewards or hazards attached to them.

1.1.2. Commercial banks in Kenya.

Kenyan banks have developed in significant magnitude in terms of service delivery through ICT as a transformative undertaking. This represents a generational shift to what industry stakeholders refer to as digital cash, comparable to the switch from barter trade to currency trade, or the shift from disparate currency to paper money. The Central bank of Kenya intimates that the adoption of ICT by Kenyan banks is high, from its published reports. As a direct consequence of this trend, electronic payments have become the normal method of effecting payments by clients.

The application of ICT in terms of the policies, implementation, concepts, and technology choice have become a matter of significant concern to the banks in an ever more connected business world. This has been adopted even in defining sectoral standards and competitiveness around the world even for local banks. Massive improvements in banking service delivery have been marked by such advancements as agency banking, money transfer via mobile devices, ATM deposit and withdrawal, utility bill payments, online purchases, and a vast array value added electronic banking products.

1.2. Statement of the Problem.

Application of electronic banking in Kenya has been one of the central pillars of banking innovation in Kenya. It has contributed to growth of new products, markets, and increase in bank performance. ICT has driven the most significant changes in banking in the country. As such, performance of banks has been heavily hinged on their ability to use, adopt, innovate, and manage electronic banking. It has become so significant a factor that innovations in new technology are taking up second position in bank expenditure after operational costs.

The undisputed fact that electronic banking is the way to go for the future of banking is unfettered. However, there exist several challenges that emanate from two common problem points. The first is that innovation in electronic banking is not well understood. The second is that innovation in electronic banking has its risks as much as it has benefits. Banks have been losing money through loopholes in electronic banking systems over

the last decade in the country. In addition, the cost of innovation in electronic banking is high. It thus remains to be seen whether the cost of electronic banking yields tangible results through financial performance boosts.

Considering the foregoing, banks need to check how their expenses in electronic banking transfer value to them in terms of financial performance of the banks. In so doing, a bank must strike a balance between expenditure on acquiring technology and the benefits of technology in terms of returns. Industrial practice in terms of standardisation has been another core problem in Kenya. Banks have not had a single standard approach of implementing electronic banking. This has led to situations where different banks have systems so different that communication between the systems at a transactional level remains a significant challenge. As such, the benefits of innovation even to the extent of financial returns for the banks could be hindered significantly by the very innovation that is supposed to help boost them. In one perspective, electronic banking greatly increases the efficiency and effectiveness of service delivery, but on the flipside, the challenges involved with instituting standardisation and system security controls call for prudence in adopting electronic banking.

Despite the projected positive effect of electronic banking on the financial performance of banks, the real tangible effect of electronic banking on the performance of bank financials remains mostly unestablished because on one hand, there is very little understanding of what ICT innovation in the banking sector encompasses, and on the other hand because conflicting research findings have been arrived at to establish the extent to which the financial performance of banks relies on electronic banking. It is on the premise of such criticality of innovation, its low understanding, and the conflicting results of prior research, that this research paper focuses on electronic banking in order to find out its effect on the financial performance of banks. Financial performance in this case will be represented by profitability as the desired measure.

E-banking has led to improved performance of banks in Kenya. However it is not clear which aspects of e-banking is mainly responsible for this performance and hence this study.

1.3. Objectives of the Study

1.3.1. General objective

The main objective of this study will be to investigate the perceived influence of electronic banking effects on financial performance of commercial banks in Kenya.

1.3.2. Specific Objectives

1. To analyze how efficiency of e-banking affect financial performance of commercial banks.
2. To establish how accessibility of e-banking affects financial performance of commercial banks.

1.4. Research Questions

1. How does efficiency of e-banking affect financial performance of commercial banks in Kenya?
2. How does accessibility of e-banking affect financial performance of commercial banks in Kenya?

1.5. Scope of the study: -

The study will be undertaken to investigate analysis of perceived influence of e-banking effects on financial performance of commercial banks. The main focus will be on all 42 commercial banks registered in Kenya by December, 2017.

2.0 LITERATURE REVIEW

2.1. Theoretical review

2.1.1 Innovation Diffusion Theory

Innovation Diffusion Theory (IDT), formulated by Everett M. Rogers in 1962, is the pioneering theory that laid down the primary foundation for the future of innovation diffusion research (Rogers, 1962). It was grounded in theories of economics, sociology and communication and a synthesis of adoption diffusion literature across disciplines, IDT identified five characteristics of an innovation that influences its adoption: relative advantage, compatibility, complexity, trial ability, and Observability. Relative advantage (RA) refers to an individual's belief that IB is better than traditional ways of banking and can be related to diverse economic, social, convenience and satisfaction dimensions of IB (e.g. convenience in the form of freedom from time and place constraints, efficient management of finance, a better overview of banking matters, and the speed of conducting banking activities).

The influence of one technology on the next generation of that innovation is expected to be positive especially when the relationship between the two technologies is compatible (Lee, Miranda and Kim, 2004). In other words, willingness to adopt a new technology is affected by a prior adoption pattern of related technologies and a greater level of compatibility. This will allow the new technology to be interpreted in a more familiar context. Customers' perception of compatibility with other electronic banking services (e.g., home banking, ATMs e-payment, and phone banking) and with the IB service medium (Internet) has been found to be positively related to their attitude towards IB and its usage (Puschel, Mazzon and Hernandez., 2010). Complexity (CP) refers to the degree to which IB is perceived to be relatively difficult to comprehend and use.

2.1.2. Technology Acceptance Model

Technology Acceptance Model (TAM), proposed by Fred Davis in 1989 and based on

TRA, was one of the first research models to study how an individual's perceptions about the usefulness, ease of use, and attitude towards the use of a specific technology affects its eventual use (Davis, 1989). Perceived Usefulness (PU) refers to an individual's perception that using IB would enhance his or her performance, whereas Perceived Ease of Use (PEOU) is the perception that using IB would be free of effort (Davis, 1989). PU and PEOU mediate the effects of external variables, such as training and technology characteristics, on behavioral intention and use. PU is influenced by PEOU because, other things being equal, the easier it is to use a technology, the more useful it can be.

TAM also suggests that the direct effect of PEOU on behavioral intention is significant only in the early stages of use (Venkatesh, Morris, Davis and Davis 2003). Over the long term, as user experience increases, this effect becomes indirect and operates through PU (Venkatesh and Davis, 2000). TAM has been the most widely applied model to study IB behavior. Previous research employing TAM in the IB context has focused on model replication (McKechnie, Winklhofer and Ennew., 2006), theoretical underpinning of TAM constructs i.e. PU and PEOU (Celik, 2008; Eriksson and Nilsson, 2007), Model extension by adding additional constructs as direct determinants of attitude, intentions or use (Chong et al., 2010), and model modification by combining TAM with other models (Chan and Lu, 2004). In a comparison of TAM, TPB and TRA to predict actual IB behavior, Yousafzai et al., (2010) showed that TAM was empirically superior to the other two models. However, the key advantages of TAM, i.e. parsimony and utilitarian and technological focus, can lead to overlooking the influence of a customer's social and psychological perceptions regarding the adoption of a

technology. Another prominent criticism of TAM is the lack of acknowledgement of individual differences (Agarwal and Prasad, 1999).

2.2 Conceptual framework

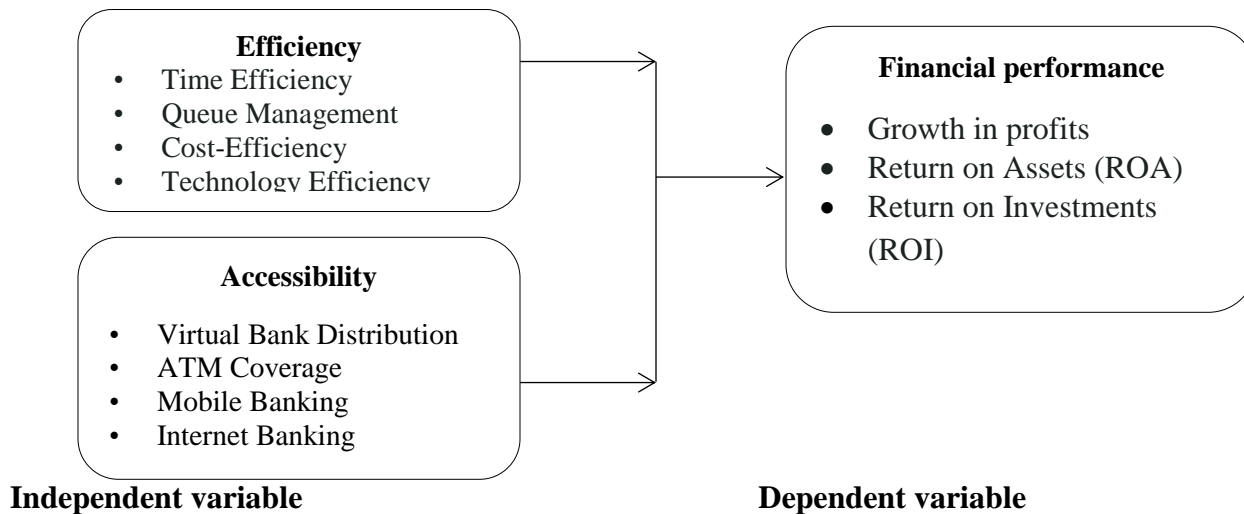


Figure 2.1 Conceptual framework

2.3 Empirical review

2.3.1. Effects of efficiency of electronic banking on financial performance

Efficiency means the maximum output that can be produced from any given total of inputs (Mwai, 2013). This refers to the efficiency of a firm, which allocates resources in such a way as to produce the maximum quantity of output. Banks with lower cost structures could maximize their profits either by maintaining the current level of prices and size or reducing the price levels and expanding a positive relationship between firms' profits and market structures being attributed to the gains made by more efficient firms. Increasing the number of ATMs does not effectively improve the status of a bank's inefficiency and a bank should also engage in electronic businesses, such as an Interactive Video Terminal (IVT) System, Automated Clearing House (ACH) System, Point of Sale (POS) system, remote banking system, financial electronic data interchange, or even internet banking as well.

The benefits that accrue to both consumers and business from the advent of e-banking are numerous. For consumers, unprecedented convenience, variety, ease of shopping, and options are available from e-banking. For businesses, increased consumer traffic, 24/7 availability, lower costs, and increased consumer demographics are just some of the benefits. By use of E banking consumers can shop 24/7 from the privacy of their own homes. After a few clicks of a mouse and supplying valid credit card information, the product is shipped directly to the consumer. For businesses, the increasing number of consumers who prefer to shop via the internet and E-Commerce mean profits. The Internet market is except to rise from \$20 billion to \$200 billion by 2004 (Laudon 2003).

Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labor intensive methods its automated process thus leading to higher productivity and profitability. However, to date researchers have produced little evidence regarding these potential changes. Nonetheless, recent empirical studies indicate that internet banking is not having an independent effect on banking profitability, although these findings may change as the use of the internet becomes more widespread (Maccubery 2000).

2.3.2 e-banking accessibility

Psychological and behavioral factors which affect the adoption of any innovation such as electronic banking includes; consumer awareness, ease of use, security, accessibility. Accessibility is the degree to which a product or service is accessible by as many people as possible and can be viewed as the "ability to access" and possible benefit from some system or service (Kapoor, 2010). Electronic banking through use of ATMs and other models make access. To financial services easier than before during the 'brick-and-mortar' banking system owing to, the 24-hour service availability and home access. This makes a lot of people make banking transaction in large volume than before when people use to make long queues in order to do a financial transaction. It is this voluminous transaction done that increases the financial performance of banks that have adopted electronic banking services.

The necessity of geographical accessibility between service provider and the customer has been essential for fact to face contacts in many service industries worldwide. However, the emergence of electronic commerce (EC) and new technologies has altered the concept of location and geographical accessibility of service industries. In this study the researcher has employed statistical tools such as factor analysis in the study to gain fully understanding of the main dimensions underlying this variable in relation to customer perception and customer satisfaction.

According to bank focused theory, branchless banking brought about serious concerns with the quality of experience, security of identity and transactions, reliability and accessibility of service and extent of personalization allowed (Kapoor, 2010). According to Kapoor (2010) Use of ATMs is complementary in nature and may be seen as a modest extension of conventional branch-based banking. This offers advantages such as more control and branding visibility to the concerned financial institutions. However there are concerns with the experience, protection of identity and transactions, consistency and accessibility of service and extent of personalization allowed.

Mwangi (2012) investigated the role of agent banking as a diversification strategy by commercial banks in Kenya. She used descriptive research design. The study found that agent banking was extremely useful as a diversifying strategy among banks. This is because banks used agent banks to expand geographical coverage and promote their products and services because they provide time savings and they are more efficient than branches. The study recommended that agent banking be implemented in all the commercial banks in Kenya and agent channels made accessible to customers. The study also recommended that the agent banking infrastructure needs to be improved. However, the study used only one form of branchless banking hence limiting the scope of generalization of the findings.

3.0 RESEARCH METHODOLOGY

This study employed descriptive research design. According to Cooper and Schindler (2010) descriptive research design is a process of collecting data in order to answer questions concerning the status of the subjects

in the study. On the other hand, Cooper and Schindler (2010) argue that descriptive research design is a method of collecting information by interviewing or administering a questionnaire to sample of individuals. The design is appropriate as descriptive design entails the collection of data on more than one case and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables, which are then examined to detect patterns of association (Bryman, 2012). The population of the study used comprise of all the commercial banks licensed by the Central Bank of Kenya as at 31st July 2017. There are (42) commercial banks listed. All the commercial banks were included in the study with the respondents being the branch managers and operations managers and ICT manager.

The sampling frame for this study comprise of 42 commercial banks in Kenya with Census sampling applied sample the respondents. The Sample size was 126 respondents as shown in Table 3.1.

Table 3.1: Sample Size

Category	Sample Size
Branch Managers	42
Operations Managers	42
ICT manager	42
Total	126

The study used questionnaires for all the respondents. Questionnaire was preferred because it is efficient, cheap and easy to administer. Due to the importance and need to detect and determine weaknesses in the instrument that was applied in the research study, the self- administered questionnaire was pre-tested before distributing it to the whole sample. A pilot study was carried out on 2 commercial banks namely standard chartered bank and family bank in Nairobi County, Kenya. The purpose for the pilot study was to test validity and reliability of the questionnaire.

Primary data from the field was edited to eliminate errors that might be made by the respondents. Coding was done to translate question responses into specific categories so as to organize and reduce research data into manageable summaries. Quantitative data was analyzed using descriptive statistics such as mean and standard deviation with the use of Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics such as frequencies and percentages was used to describe the quantitative data. The analyzed data was presented in form of tables, pie-charts and bar-graphs where applicable. The study used Analysis of Variance (ANOVA) to test the level of significance of the variables on the dependent variable at 95% confidence level. In addition, the study used conduct a multiple regression analysis. The regression equation was: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \epsilon$

Whereby

Y = Financial Performance

X_1 = efficiency

X_2 = service accessibility

$\beta_1, \beta_2,$ = Coefficients of Determination

ϵ = Error Term.

4.0 RESULTS AND DISCUSSION

4.1 Descriptive analysis

4.1.1 E-banking efficiency

Table 4.1 E-banking efficiency

Opinion Statement	Mean	Std. Deviation
Connects customer immediately	4.16	1.115
All banking needs are included in menu options	4.21	1.165
Electronic bank educates customers in how to use	4.22	1.148
Ensures transaction accuracy	4.23	1.102
Reduces the cost of human capital	4.20	1.135
Connects customer immediately	4.24	1.138

The study sought to examine the respondent’s level of agreement or disagreement on the various measures of management support. Table 4.1 presents the relevant results which show that on a scale of 1 to 5 (where 1= strongly disagree and strongly agree=5) the means and standard deviations were; Connects customer immediately, mean 4.16, All banking needs are included in menu options 4.21, Electronic bank educates customers in how to use 4.22, Ensures transaction accuracy 4.23, Reduces the cost of human capital 4.20, Connects customer immediately 4.24. The interpretation was that standard deviation was below 1.96 meaning that the data was normally distributed towards the mean.

4.1.2 E-banking accessibility

Table 4.2 e-banking accessibility

Opinion Statement	Mean	Std. Deviation
There is extensive ATM branch network in every town all over the country	4.06	1.265
Customers are able to check account balance through the phone	4.16	1.289
Mobile banking enables customers access service anywhere, anytime	4.19	1.258
Customer can deposit or withdraw funds through mobile and ATMs	4.18	1.330
Agency banking has been introduced over remote area	4.16	1.209

The study sought to examine the respondent’s level of agreement or disagreement on the various measures of service accessibility. Table 4.2 presents the relevant results which show that on a scale of 1 to 5 (where 1= strongly disagree and strongly agree=5) the means and standard deviations were; There is extensive ATM branch network in every town all over the

country 4.06, Customers are able to check account balance through the phone 4.16, Mobile banking enables customers access service anywhere, anytime 4.19, Customer can deposit or withdraw funds through mobile and ATMs 4.18 and Agency banking has been introduced over remote area 4.16. The interpretation was that standard deviation was below 1.96 meaning that the data was normally distributed towards the mean.

4.1.3 Financial performance

Table 4.3 Financial performance

Opinion Statement	Mean	Std. Deviation
e-banking has increased the number of transaction per day hence income	4.11	1.266
We have experienced growth in profits due to adoption of e-banking	4.19	1.148
Return on assets has been improving	4.04	1.148
Return on equity has been improving	4.08	1.108
The bank has expanded in terms of new investments ventures	4.09	1.148

The study sought to examine the respondent’s level of agreement or disagreement on the various measures of financial performance of Commercial banks in Kenya. Table 4.3 presents the relevant results which show that on a scale of 1 to 5 (where 1= strongly disagree and strongly agree=5) the means and standard deviations were; e-banking has increased the number of transaction per day hence income 4.11, We have experienced growth in profits due to adoption of e-banking 4.19, Return on assets has been improving 4.04, Return on equity has been improving 4.08 and The bank has expanded in terms of new investments venture 4.09.

4.2 Correlation Analysis

Table 4.4 Correlation Analysis

		efficiency	accessible	Performance
efficiency	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	102		
Accessible	Pearson Correlation	0.559**	1	
	Sig. (2-tailed)	0.000		
	N	102	102	
performance	Pearson Correlation	0.871**	0.857**	1
	Sig. (2-tailed)	0.000	0.000	
	N	102	102	102

** . Correlation is significant at the 0.01 level (2-tailed).

From table 4.4 it can be observed that the correlation between the independent variables and the dependent variable was high and positive at 0.871, and 0.857 for the independent variables. The interpretation was that the level of multi-collinearity between the independent variable was not very high which meant that the influence of each variable in the regression model could be estimated with low Multi-collinearity problem. The study found that Efficiency had the strongest effect followed by accessibility.

4.3 Regression Analysis

4.3.1 Good-of- fit Statistics

The results in Table 4.5 indicated that the overall model was a good fit since the value of(ANOVA) F-statistic was found to be 225.365 and it p-value was found to be 0.00001 which is less than the critical value of 0.05.

The value of the adjusted R squared was found to be 0.899. This suggests that there is a strong relationship between e-banking efficiency, e-banking accessibility and financial performance of commercial banks in Kenya. This indicates that all the variables considered cause a variation of 89.9 % on performance.

Table 4.6 Regression statistics

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	t-statistic	p-value
(Constant)	1.418	0.310		4.574	0.001
efficiency	0.371	0.053	0.371	7.032	0.0001
accessible	0.296	0.055	0.296	5.427	0.0011
F=> 225.365	P- Value 0.00001		Adjusted R Square	0.899	

The fitted regression model is

$$Y = 1.418 + 0.371 X_1 + 0.296X_2 + \varepsilon$$

Standard Error 0.310 0.053 0.055

t-Statistics 4.574 7.032 5.427

p-value 0.001 0.0001 0.00011

Where; Y = Bank Performance, X1 = E-banking efficiency, X2 = E-banking accessibility, ε = Error Term,

4.3.2 E-banking efficiency

From table 4.6 the regression coefficient of E-banking efficiency was found to be 0.371. This value shows that holding other variables in the model constant, an increase in E-banking efficiency by one unit causes the bank performance to increase by 0.371 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between E-banking efficiency and bank performance.

The coefficient was positive statistically significant with a t-statistic value of 7.032. The variable was also found to be the most influential variable on the bank performance in Kenya. These findings supports those of Mukur (2010) and Ansari’s (2010) who found that E-banking efficiency had effect on performance. The interpretation was that increase in electronic banking would lead to increase in efficiency causing the bank performance to increase. The commercial banks in Kenya should consider the effect of E-banking efficiency to their performance.

4.3.3 E-banking accessibility

From table 4.6 the regression coefficient of e-banking accessibility was found to be 0.296. This value shows that holding other variables in the model constant, an increase in e-banking accessibility by one unit causes the bank performance to increase by 0.296 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between e-banking accessibility and bank performance.

The coefficient was positive statistically significant with a t-statistic value of 5.427. The variable was also found to be the second most influential variable on the bank performance in Kenya. The interpretation was that e-banking accessibility the bank performance to increase. The commercial banks in Kenya should consider increasing e-banking facilities to customer to improve their performance.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of the findings

5.1.1 E-banking efficiency

The measurers of e-banking efficiency were found to be of good reliability that allowed the researcher to proceed to the actual data collection, qualitative and inferential analysis. All the measurers of e-banking efficiency were found to have effect on the commercial bank performance as shown by the various responses from the respondents that were presented using descriptive statistics. This variable was found to have a positive effect from the regression model on commercial bank performance. This meant that increase in e-banking efficiency caused an increase in commercial bank performance in Kenya.

5.1.2 E-banking accessibility

The measurers of e-banking accessibility were found to be of good reliability that allowed the researcher to proceed to the actual data collection, qualitative and inferential analysis. All the measurers of e-banking accessibility were found to have effect on the commercial bank performance as shown by the various responses from the respondents that were presented using tables. This variable was found to have a positive effect on banks performance. This meant that increase in e-banking accessibility caused the increase in commercial bank performance in Kenya.

5.2 Conclusion

The study concluded that e-banking has an influence on commercial bank performance. The findings that, efficiency had a positive effect on commercial bank performance were good indications that increase in e-banking adoption increases efficiency in the banking services which causes the performance of the commercial bank in Kenya. This meant that improving electronic banking facilities would have a positive effect on commercial bank performance. This variable was found to have a positive and a statistically significant effect on commercial bank performance.

The study also concluded that e-banking accessibility in Kenya has an influence on banks performance. The findings that, e-banking accessibility had a positive effect on commercial bank performance was a good indication that increase in e-banking accessibility in the banks causes the performance of the commercial banks to improve. This variable was found to have a statistically significant effect on commercial bank performance.

5.3 Recommendation

5.3.1 E-banking Efficiency

Given that e-banking efficiency was found to be a key determinant of commercial bank performance, the owners of the commercial bank in Kenya should ensure that they embrace technology and innovation to enhance efficiency in their services. Commercial bank in Kenya should therefore come up with strategies to adopt technology to improve their performance. Since the results showed that e-banking efficiency caused the tendency for the commercial bank to perform better, these commercial bank should come up with ways and strategies that help them to do more better in term of innovation development.

Further the study recommends adoption of by coming up with more innovative ways to ensure customers can access services at their convenient time. The relevant authorities should come up with proper ways of ensuring that the commercial bank have adopt technology and innovation to enhance service access to their customers.

5.4 Area for further research

Future research should be directed towards identifying more e-banking factors that affect commercial bank performance. From the regression model it was noted that the variables included were only able to explain 89.9 % of the variation in commercial bank performance. This study therefore recommends the improvement of this model by including more variables that are relevant in explaining the variation some of which have been mentioned above. This study also recommends further research to include studies in other organizations apart from the commercial banks.

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