

## Effect of Internet Banking On Financial Performance of Commercial Banks in Kisumu City- Kenya

Clare Barasa<sup>1</sup>, Prof Willis Obura<sup>2</sup>, Francis A. Anyira<sup>3</sup>

<sup>1</sup>Department of Marketing and Management, the Catholic University of Eastern Africa, Kisumu, Kenya

<sup>2</sup>Department of Marketing and Management, the Catholic University of Eastern Africa, Kisumu, Kenya

<sup>3</sup>Department of Marketing and Management, the Catholic University of Eastern Africa, Kisumu, Kenya

### \*Corresponding author

Francis A. Anyira

### Article History

Received: 02.10.2017

Accepted: 11.10.2017

Published: 30.10.2017

### DOI:

10.21276/sjbms.2017.2.10.6



**Abstract:** The purpose of this study was to examine effect of internet banking on financial performance of commercial banks in Kenya. Internet banking under technology acceptance model extended from theory of reasoned action entails the inclusion of technology or information system within the operations of a bank. Internet banking is about creating complementary distribution channels in form of information technology. The study used descriptive survey research design. Both quantitative and qualitative data were collected to meet the objective. The proposed study area was Kisumu City targeting all the 34 commercial banks. A total of 11 banks were picked through a simple random sampling strategy. In addition, 5 employees were picked from each commercial bank through a simple random sampling strategy, while 11 branch managers purposively sampled from the selected banks. Therefore, the total number of participants forming a representative sample was 66 comprising of 55 employees and 11 branch managers of which there was a response rate of 92.7 for employees and 100% for branch managers. A combination of primary and secondary sources of data was used to obtain data. The primary sources included self-administered questionnaires and interviews. Document analysis was used to collect secondary data. Quantitative data was analyzed using descriptive statistics (frequency and percentages). Statistical analysis was done with the aid of Statistical Package for Social Sciences version 22.0. All the results of the quantitative analysis were presented in tables, charts, and graphs while the results of qualitative analysis presented in form of themes. From the quantitative analysis, the study established a positive effect of internet banking on financial performance of commercial banks. The qualitative findings also established that there is a positive effect of internet banking on financial performance of commercial banks. Based on the findings, the study recommends that commercial banks enhance their internet banking.

**Keywords:** Internet Banking, Financial Performance, and Commercial Banks

## INTRODUCTION

From a global perspective, different studies have so far been developed assessing the effect of internet banking on performance of banks or financial institutions. While acknowledging paradigm shift in banking operations resulting from advances in technology as well as aggressive infusion of information technology, Singh and Malhotra [1] conducted an empirical investigation of the Indian sector. The aim of these researchers was to fill knowledge gaps especially with respect to internet banking landscape in India. Descriptive research design, the researcher administered questionnaires to 271 banking employees for quantitative data. Using descriptive statistics (frequency and percentages), the study found that tremendous advances in technology have resulted into incorporation of information technology, which has caused some paradigm shift in

banking operations. In addition, the scholars noted that internet banking continues to revolutionize banking industry. In their bid to understanding banking landscape in India with respect to internet banking, Singh and Malhotra [1] investigated commercial banks that offered internet banking in India by 2004. While the reviewed study used only quantitative data, the present study will use both quantitative and qualitative data to fill the gap in the literature.

Such findings were consistent with those of Al-Smadi and Al-Wabel [2]. Courtesy of correlation descriptive design, using questionnaires that were administered to 141 banking employees and 11 interviews that were organized to management officials and through inferential statistics (Pearson correlation), the researchers established that there was no significant correlation between profitability and internet banking

who also established no effect of internet banking on profitability of the firm. However, Martins *et al.* [3] and Alsajjan and Dennis [4] established positive correlation between internet banking and profitability or performance of commercial banks. Other than using quantitative research that only provide correlational analysis between internet banking and profitability, Al-Smadi and Al-Wabel [2] confirmed that there is no significant relationship between the two variables, which contradicts studies such as Sayar and Wolfe [5], Alsajjan and Dennis [4], and Martins *et al.* [3]. It would be important to establish whether there is a significant effect of internet banking on profitability or performance besides conducting but exploration and analysis of the same.

Al-Smadi and Al-Wabel [2] on the other hand also conducted a study with the aim of examining e-banking (internet banking) and financial performance of Jordanian banks. In other words, Al-Smadi and Al-Wabel [2] noted the fact that amidst the numerous forms of electronic banking, Jordanian banks had extensively adopted the internet or e-banking; hence, the need to examine how such adoptions impacted on commercial banks in the said country. The researchers noted in their study that internet, banking had become one of the most important and modern applications within banking industry. While using a panel data of 15 Jordanian banks for the period of between 2000 and 2010, Al-Smadi and Al-Wabel [2] performed a regression analysis of the same. Courtesy of the regression analysis, the researchers established that e-banking (internet banking) had not improved performance of the banks that were under investigation.

The reason behind findings that e-banking (internet banking) has no positive effect on performance of banks is due to costs associated with internet banking. Al-Smadi and Al-Wabel [2] confirmed from their study that costs of adopting e-banking (internet banking) are usually more than realized revenues; hence, resulting into negative impact on performance. Despite agreeing with Al-Smadi and Al-Wabel [2] on the issue of increased costs from adoption of e-banking (internet banking), Goi [6] and DeYoung *et al.* [7] noted that such costs are always less than revenue. Consequently, the findings by Al-Smadi and Al-Wabel [2] were inconsistent with those of Goi [6] and DeYoung *et al.* [7] especially with respect to positive relationships between e-banking (internet banking) and performance of banks. Despite such inconsistencies, which would call for more research, the present study focused mainly on quantitative research leading to lack of exploration, analysis, and discussions into why the two relate variables the way they do.

DeYoung *et al.* [7] a study with the aim of establishing how the internet affects performance and

output at 424 community banks. The study used cross-sectional study design. With the help of research tools and descriptive statistics, the study found that internet web sites continue to play a significant role especially as distribution channels for banking institutions. Despite their significance, very little has been established with respect to internet sites and how they affect output and performance. The researchers established that a number of community banking franchises offer banking services through the internet. In respect to findings, it was established that internet adoption within banking improved the profitability as well as output of the community banks. In other words, there was a positive relationship between internet banking and deposits from checking accounts to the market deposit accounts. DeYoung *et al.* [7] also found out from their studies that increased revenues from deposit services charges were also associated with adoption of the internet. Other aspects that resulted from adoption of internet as noted by the researchers included use of brokered deposits and wage rates.

Based on such findings, the researchers suggested that the initial click-and-mortar as well as their customers used the internet channels as a complement and not a substitute to the banking branches. Findings by DeYoung *et al.* [7] are consistent with those of Boateng [8] and Guru *et al.* [9] who also established in their findings that indeed internet banking has a positive impact on the output and performance of the banks. Even though the study provided an understanding of how internet adoption affected a number of aspects of banking performance and output, the study was inclined to quantitative research. Quantitative research provides a correlational effect without giving adequate explorations, evaluations, and discussions into the reasons as to why two or more variables could be related. Therefore, there is a need to have more studies using both qualitative and quantitative researches for purposes of analysis and exploring impact of internet banking on performance of the bank.

From a Kenyan perspective, Okiro and Ndungu [10] conducted a study determining the impact of internet banking on performance of financial institutions. The study used case study design. Both questionnaires and interview schedules were used to collect primary data from 67 bank employees. The study was motivated by the fact that financial institutions in Kenya have for a long time undergone significant transformations, which included the adoption of internet banking. Internet banking as indicated by Okiro and Ndungu [10] has been anchored on innovations within information technology. While agreeing Okiro and Ndungu [10] noted that rapid development of information technology within the banking sector has resulted into efficiency and

effectiveness in service delivery. From their findings, Okiro and Ndungu [10] established that most prevalent internet banking service was balance inquiry with online bill payment. In this respect, the researchers found out a positive impact of internet banking on the performance of financial institutions.

With increased balance inquiry and bill payment, banks are able to deduct service fee, which is part of the revenue. Consequently, the adoption of internet banking within financial institutions as explained by Okiro and Ndungu [10] results into increased revenue; hence, the performance of the institutions. These findings were consistent with those of Nasri and Charfeddine [11], Abubakar and Tasmin [12] and Kesharwani and Singh Bisht [13] who also established that internet banking has a significant positive relationship with performance of financial institutions. Even though this study provided a good foundation for understanding how internet banking relates with performance of financial institutions, the study leaned on quantitative research, which did not provide an exploration as well as explanation as to why the two variables relate positively. There is a need to not only analyze but also explore the relationship between internet banking and performance of banks or financial institutions through qualitative and quantitative researches.

**OBJECTIVE OF THE STUDY**

The specific objective of the study was to determine the effect of internet banking on financial performance of commercial banks in Kisumu city

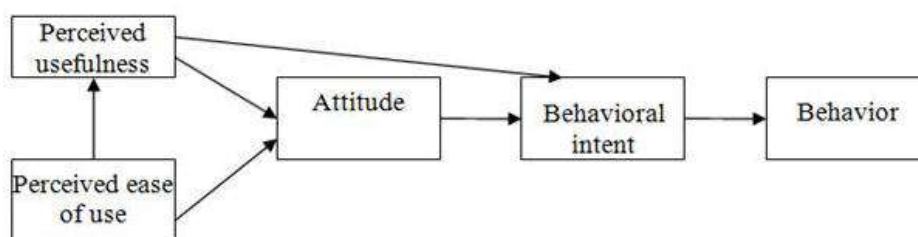
**RESEARCH QUESTION**

What is the effect of internet banking on financial performance of commercial banks in Kisumu city?

**THEORATICAL FRAMEWORK**  
**Technology Acceptance Model**

Technology acceptance model is an extension of the theory of reasoned action (TRA) model which was introduced by Davis in 1986. This theory is mainly based on the idea of technology adoption, TAM replaced TRA with two technological accepted features, perceived usefulness (PU) and perceived ease of use (PEOU) which have been proven to be of significance to the adoption of technologies such as mobile banking, many researchers have used this models to analyze key issue pertaining to the acceptance and usage of mobile banking and many have yield positive results which showed a correlation between the incorporated variables such as PEOU and PU. According to Davies [14] Perceived usefulness is an extent to which a person believes the use of a certain technology will benefit and improve his/her job performance while perceived ease of use refers to the level in which a person understands that the use of a new technology will be less complex for him/her.

Alsajjan and Dennis [4] studied the TAM model in their study which investigated consumer acceptance of mobile banking services, by explaining relationships that exist between variables such as PEOU and PU and the results indicated that perceived usefulness, perceived credibility, perceived self-efficacy and PEOU have an influence in the adoption of mobile banking but the results revealed that PU had more significance than the rest of the variables in influencing consumers to adopt mobile banking services.



**Fig-1: Technology Acceptance Model**  
Source: Davis, Bagozzi, &Warshaw [14]

Lee, Cheung, and Chen, [15] used the TAM model to analyze relationships between variables that influenced adoption of mobile banking in Malaysia. The findings of this research revealed that the model is capable of predicting intention to adopt mobile banking, Perceived Usefulness, PC and awareness were given high priority in this study and the results proved the idea to be useful because these variables showed that they have a high effect on individual intention to use

mobile banking. Other models that were used after TAM were such as the ETAM which were proven to be able to predict the intention to use new technologies. This model like many others that followed years later, was criticized many times due to its limitation in explanations, failure to acknowledge social processes of Information System development and implementation and its inability to predict outcomes as a results it was redefined several times.

The relation of the theory to this study is that, Technology Adoption Model incorporates two important constructs which are PEOU and Perceived Usefulness, these two variables have been widely explored by many researchers to study behaviors and in this study they were also applied to see if they have the same effect.

In criticizing this theory, many scholars have argued that the theory may not apply when the new technology is imposed by managers or organizations even though the attitude of the individual or collective workforce is negative towards the innovation. For instance, Malhotra and Galletta [16] criticized the conceptualization, inherent in the TAM, of subjective norm based on the Theory of Reasoned Action. They suggest that it is difficult to distinguish if technology usage behavior is caused by the influence of outside factors on one's intent or by one's own attitude. They argued for much greater emphasis on social influences, rather than the nature of the technology. In their work social influence is operationalized in terms of Kelman's processes of internalization, identification and compliance [17]. They developed and tested constructs based around these factors which may be particularly significant in complex financial organizations such as commercial banks in which many different players are likely to be in a position to influence the success or failure of the innovation, even if they are not involved in adoption decisions. Moreover, according to Malhotra, & Galletta[18] they criticized the model saying it did not serve the original purpose but despite the opposition many researcher still support the use of this model as an excellent model that can explain acceptance of information system, other researcher such recommended integrating of the TAM model with other models such as Innovation Diffusion Theory(IDT) and Unified Theory of Acceptance and Use of Technology (UTAUT) in order to have a more accurate and deep explanation of the variables.

## **RESEARCH METHODOLOGY**

### **Research Design**

A research design is the plan that describes the conditions and procedures for collecting and analyzing data [19]. The study adopted a descriptive survey research design. The design was used to describe the characteristics of a phenomenon in a particular situation [20]. This design serves best in studies that collect descriptive data, and that's why the researcher adopted this design. Owing to the characteristics of data from a sample of a large population being able to be generalized to the entire population, descriptive survey design was suitable and appropriate for this study.

### **Target Population**

The target population entailed all commercial banks in Kisumu city. There are a total of 34 commercial banks in Kisumu (CBK, 2016). Therefore, the target population was made up of all the 34 commercial banks.

### **Sampling Design and Procedures**

Owing to constraints in resources, it is advisable that part of target population should be selected in order to form a representative sample [21]. Jwan (2010) recommends that the most representative sample should be between 10% and 30% of the total target population. In this respect, 30% of the target population was identified as the most ideal number of banks to form a representative sample. In this case, a total of 10.2 (30%) of 34 commercial banks in Kisumu) commercial banks were used as a representative sample for the target population. Rounding off 10.2 to the nearest whole number becomes 11 commercial banks. The 11 banks were picked through a simple random sampling technique. Every bank has approximately 15 employees.

Out of these 15 employees, 30% recommended by Jwan (2010) was identified as 5 employees. While using simple random sampling, the study picked 5 employees from each of the commercial banks. Simple random sampling method was selected since it gave commercial banks and their employees an equal and independent chance to form part of the representative sample. Therefore, a total of 55 employees were selected to form a representative sample. As for the Managers, purposive sampling technique was used to select all branch managers of selected banks. Thus, 11 managers for 11 banks were selected. Purposive sampling was used to obtain respondents with particular information of interest. In this study, branch managers are considered to have comprehensive information regarding their banks performance that the other staff members do not have.

### **Data Collection Instruments and Procedures**

Berg and Gall [22] define research instruments as "tools for collecting data". In a study, there are a number of research tools which a researcher can select depending on the nature of the study, the kind of data to be collected and the kind of population targeted [23]. Questionnaires, interview and document analysis were the main tools for collecting data. This choice was guided by the nature of the study, the kind of data to be collected and the kind of population targeted [23]. The overall aim of the study was to determine the effect of internet banking on financial performance of commercial banks in Kisumu Kenya. The researcher was mainly concerned with views, opinions, perceptions and attitude. Such information can be collected through use of questionnaires and interviews



(Bell, 1993). Document analysis technique was used to obtain data on ROCE, Sales volume and net income.

**Validity**

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomena under study [24]. In this study, the validity was taken to mean the extent to which the instruments covered the objectives. To determine the validity of the instruments, expert advice was sought from the supervisors and lectures in the department of Business Administration for modification and improvement of the questionnaires. To specify and determine the content validity of the research instruments, the researcher consulted experts from the finance department whose critique helped in improving the document analysis checklist to ensure that the instrument is viable to collect data from the intended area. The supervisor checked the data collection instrument for its general content, content validity and thoroughness. Based on their comments, the document analysis checklist was modified and the necessary review and adjustments made. Content validity is a non-statistical type of validity that involves "the systematic examination of the test content to determine whether it covers a representative sample of the domain to be measured [24].

**Reliability**

Reliability of the data collection instruments was determined through pilot study and expert opinions

respectively. Mugenda and Mugenda [24] define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial. Pilot study was conducted in two banks that were not part of the representative sample. The questionnaires were issued to a total of six (three employees from each of the two banks) employees forming the pilot study sample. To test the reliability of the instruments, the researcher employed the test-retest during the pilot study. The researcher administered the questionnaire to the random sample from two commercial banks that were not part of the representative sample. After one week the researcher administered the same instruments to the same respondents. A test re-test was done to test the reliability of the study techniques and to perfect the questionnaire concepts and wording. It also helped in finding out if the wording was clear and if all the questions were interpreted in the same way by the respondents. The reliability of the instruments was estimated after the pilot study using the Cronbach's reliability coefficient, which is a measure of internal consistency. Mugenda and Mugenda [24] suggest a Cronbach's alpha of 0.7 stating that the instrument is reliable.

Test-retest procedure for establishing reliability for the general questionnaire was very high ( $r = .89, p < 0.0001$ ) as illustrated in the following Table 1 from all the various items that were included within the general questionnaire.

**Table 1: Reliability Statistics**

Cronbach's Alpha	No of Items
.891	44

According to George and Mallery (2003), an instrument that has more than .70 Cronbach's Alpha is considered to be very reliable given the high internal consistency. Therefore, the study established that indeed the self-administered questionnaire used in gathering data and information was very reliable with high internal consistency.

**Data Analysis and Presentation**

**Quantitative Data Analysis**

Given that the study had quantitative data, descriptive statistics was used to analyse data. After data collection, the questionnaires were coded then data entered into the computer for analysis. To analyze the results for the objective, scores obtained from the 5 point likert scale from the self-administered questionnaires was used. In this respect, descriptive statistics assisted in analyzing the quantitative data with the help of SPSS ver. 22. Descriptive statistical analysis entailed the use of frequency and percentages.

**Qualitative Data Analysis**

Data from interviews was analyzed using content analysis which followed the principles of content analysis [25] and it's a method for identifying, analyzing and reporting patterns (themes) within data. It minimally organized and described data set in (rich) details. In addition, content analysis interpreted various aspects of research (Boyatzis, 1998). Content analysis was not grounded in any particular theoretical and epistemological framework and can therefore be applied across a wide range of qualitative research approaches, making it flexible [25]. While this is an advantage, it was also a disadvantage in that it makes developing specific guidelines for higher-phase analysis difficult and can be potentially paralyzing to the researcher trying to decide what aspects of their data to focus on [25].

Quantitative results of the analysis were presented in tables and charts. On the other hand, qualitative results were presented in a narration form.

All the quantitative results were augmented and justified by the qualitative results collected.

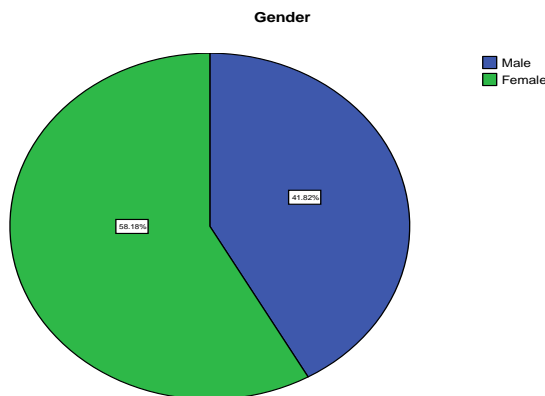
**RESULTS AND DISCUSSION**

**Composition by Gender**

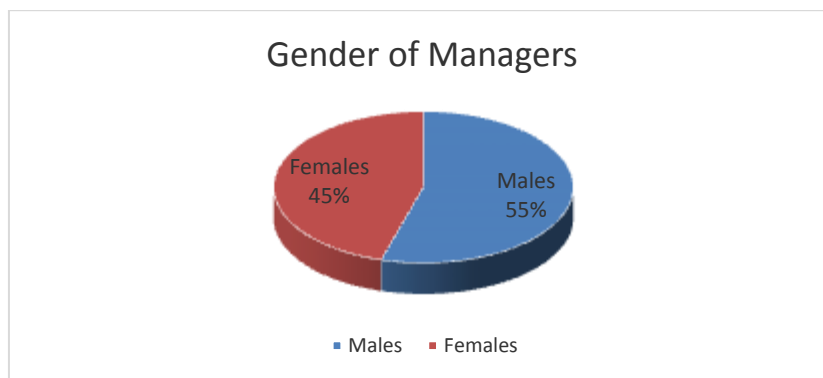
Results in Figure 2 show that majority of the participants were females. Based on the responses from

participants, 58.2% were females whereas the remaining 41.8% were males.

For the interview, of the 11 managers, 6 were males whereas the remaining 5 were females as illustrated in the following Fig. 3.



**Fig-2: Gender of Participants**



**Fig-3: Gender of Managers**

The fact that majority of the respondents were females show that most bankers in commercial banks in Kisumu are females as opposed to male bankers. This is not a unique phenomenon, for instance in their studies, Paradi and Zhu (2013) noted that banking industry, given that it's an art, is considered a female-dominated career. Hanafizadeh et al. (2014) further noted that amongst the many aspects that banks look for in a person is attractiveness in order to easily attract customers. Women are also believed to be strong in external networking, more objective as well as

performance oriented. However, in the case of Managers this research proves that ladies have not fully broken the glass ceiling although the difference is not significant which implies that gender parity is slowly being realized in leadership positions in the banking sector.

**Composition by Age**

The study also asked respondents about their ages. The responses obtained are summarized in table 2.

**Table 2: Participants by Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 31 years	15	29.4	29.4	29.4
	Between 31 and 35 years	13	25.5	25.5	54.9
	Between 36 and 40 years	12	23.5	23.5	78.4
	Between 41 and 45 years	6	11.8	11.8	90.2
	Above 45 years	5	9.8	9.8	100.0
	Total	51	100.0	100.0	

Source: Survey Research Data, 2017

Table 2 shows that majority of the respondents, 29.4% were less than 31 years with 25.5% being between ages 31 and 35 years. Only 9.8% were above 45 years. The implication is that 54.9% of the respondents (29.4 + 25.5) were below 35 years. Hence, the study deduced that majority of the staffs working in commercial banks within Kisumu city are youths or young adults. Such findings are similar to Kesharwani and Singh Bisht [13] indicating that in the present business environment, banks like any other firms are

looking for fresh individuals who are not only trainable but can also adapt to many circumstances-agile.

Managers were also asked for their ages during the interview. The responses obtained from the managers in respect to their ages are summarized in Figure 3. According results in Figure 3, the study established that majority of managers were between ages 45 and 55 years with those below 45 years being the least. Nonetheless, the implication of the results is that more managers fell below the age of 55 years.

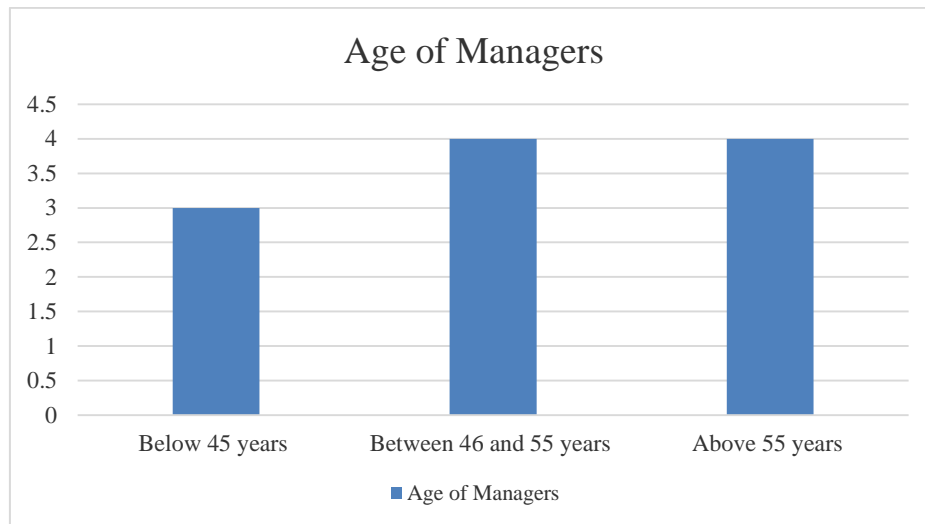


Fig-4: Age of Managers

**Performance of Commercial Banks in Kisumu City**

The dependent variable in this study was performance of commercial banks in Kisumu City. The study established how commercial banks in Kisumu have performed poorly especially in the last financial year. Various questions were asked and document analysis was also conducted. The results of the

responses from respondents and document analysis are illustrated and discussed below.

**Performance rating in last Financial Year**

The study asked respondents to rate the performance of their banks in the last financial year. Responses obtained are summarised in Table 3.

Table 3: Rating Performance in Last Financial Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	21	41.2	41.2	41.2
	Very Good	20	39.2	39.2	80.4
	Good	10	19.6	19.6	100.0
	Total	51	100.0	100.0	

Source: Survey Research, 2017

From the results in Table 3 the study established that 41.2% of the respondents rated their banks as excellent, 39.2% rating them as very good, and the remaining 19.6% stating that the performances of their banks in the last financial year could be rated as just good. The different ratings were as a result of various factors that the respondents could have considered. According to Okiro and Ndungu [10], performance of commercial banks is based on a number

of metrics including changes in revenue, customer base, and even profitability.

**Performance before and after Internet Banking**

The study also aimed at establishing the differences in performances before and after adoption of electronic banking. The respondents were asked to rate the performances of their banks before and after the adoption of electronic banking. Responses obtained from the respondents are illustrated in Table 4.

**Table 4: Performance before and after E-Banking**

		Before Adoption of E-Banking		After Adoption of E-Banking	
		Frequency	Percent	Frequency	Percent
Valid	Excellent	0	0	39	76.5
	Very Good	0	0	12	23.5
	Good	21	41.2	0	0
	Fair	30	58.8	0	0
	Total	51	100.0	51	100

Source: Survey Research, 2017

Results in Table 4 indicate that whereas respondents rating performance of their commercial banks before adoption of internet banking as good and fair, their ratings changed to excellence and very good considering the adoption of electronic banking. The implication is that respondents believed on the fact that introduction of electronic banking had impacted positively on the performance of the banks. Such findings are consistent with Okiro and Ndungu [10] and Alsajjan and Dennis [4] which indicated that with enhanced electronic banking, banks are likely to experience significant positive improvements in the performances.

**Internet Banking and Performance of Banks**

Having established some of the aspects relating to performance of the commercial banks in Kisumu City, the objective of the study was to establish the effect of internet banking on commercial banks. Various statements were developed and participants asked to state in a scale of 1 to 5 (1 = strongly disagree and 5 = strongly agree) how much they agreed with the statement. The descriptive statistics of their responses are illustrated in Table 5.

**Table 5: Descriptive Statistics for Internet Banking and financial Performance of Banks**

Statement on Internet Banking	N	Mean	Std. Deviation
Internet banking is up and running within the bank	51	4.02	.490
Through internet banking, the performance of the bank has increased especially in terms of allowing individuals to access banking services irrespective of where they are	51	4.13	.610
Charges on internet banking are friendly and the bank has generated a lot of revenue from the same	51	4.09	.586
My bank adopted internet banking to increase Outreach	51	4.02	.490
Internet Banking have helped ease congestion in banking halls	51	4.04	.470

Source: Survey Research Data, 2017

Findings in Table 5 indicate that the means of all the statements are 4 (rounded off to the nearest number) with standard deviations that are 1 (rounded off to the nearest whole number). The implication is that on average the respondents agreed with the statements presented especially with respect to performance of commercial banks in Kisumu City. Specifically, the respondents agreed with the fact that commercial banks in Kisumu City have their internet banking running (M = 4.02, SD = .49), performance of the bank has significant increased given the adoption of internet banking (M = 4.13, SD = .61), there are friendly charges and a lot of revenue has been generated

in return (M = 4.09, SD = .586), the bank had adopted internet banking to increase the banking customers (M = 4.02, SD = .47), and that the internet banking has assisted significantly in decongesting the banking halls.

The other aspects considered were the various internet banking functions. The study identified some of the functions and asked the respondents to state how effective the functions have been through the internet banking in scale of 1 to 5 where 1 = ineffective and 5 = very effective. The results from the responses are illustrated in Table 6.

**Table 6: Descriptive Statistics for Internet Banking Functions**

	N	Mean	Std. Deviation
Internet banking and Depositing	51	4.15	.524
Internet banking and Checking accounts	51	4.22	.629
Internet banking and Withdrawals	51	4.20	.621
Internet banking and Making Payments	51	4.15	.591
Internet banking and Others	51	4.27	.592

Source: Survey Research, 2017



In terms of the internet banking functions within commercial banks in Kisumu City, the findings in Table 6 indicate that on average respondents noted that depositing through the internet has been effective ( $M = 4.15$ ,  $SD = .524$ ) and that there has been effective in checking of accounts ( $M = 4.22$ ,  $SD = .629$ ), withdrawals over the internet ( $M = 4.20$ ,  $SD = .621$ ), making payments ( $M = 4.15$ ,  $SD = .591$ ), and other banking services ( $M = 4.27$ ,  $SD = .592$ ). The implication of these results is that banking services including deposits, withdrawals, payments, checking accounts, and others have been enhanced through the adoption of internet banking.

The findings of the present study are consistent with Singh and Malhotra [1] and Sayar and Wolfe [5] indicating that internet banking, which is the idea of allowing customers to access banking services via the internet, has continued to transform the operations within the said industry. In their findings, Okiro and Ndungu [10] noted that internet banking has revolutionized banking industry especially with respect to provision of specific services. In their view, Sayar and Wolfe [5] noted that the modernization of the banking sector has been a defining trend in various economies across the world over the last decade. Martins *et al.* [3] also added that financial innovations in particular have provided banks with the necessary tools to obtain competitive advantages. Based on the findings of Singh and Malhotra [1], it has been established that internet banking services have been used by banks in their production process to increase their level of efficiency. Therefore, the present study, while confirming previous findings, has indicated that internet banking has enhanced effectiveness of a number of banking services in addition to affecting operations of banks in a number of ways.

### **Summary of the Findings**

The study sought to assess effect of Internet banking on financial performance of commercial banks in Kisumu City. In order to achieve this, a descriptive research methodology was adopted in which document analysis, questionnaire, and interview schedule were used to collect relevant data and information towards attaining the said objective. A combination of quantitative and qualitative data was obtained in order to assist in meeting the objective. With respect to the objective of determining the effect of internet banking on financial performance of commercial banks, the study findings established that commercial banks in Kisumu City have their internet banking up and running within the bank, allowed individual customer to access banking services irrespective of where they are, and apply friendly charges that bank use as additional revenue from the same. In addition, the study has established that commercial banks in Kisumu City have adopted internet banking to increase outreach. The other

finding is that internet banking has helped ease congestion in banking halls of the various commercial banks in Kisumu City. In respect to the overall effect, the study has established that there is a statistically positive effect of internet banking on financial performance of commercial banks in Kisumu City. In other words, the study has confirmed a direct proportionality between the two variables such that increasing or enhancing internet banking is likely to result into better performances in the banks.

### **CONCLUSION**

In summary, the study has established the fact that from a general perspective, Internet banking affects financial performance of commercial banks in Kisumu City positively. The study implies that since only branches of main banks were investigated, the findings can be replicated to other banks across the country. Therefore, in conclusion, the study states that there is a positive effect of Internet banking on the performance of commercial banks.

### **RECOMMENDATIONS**

#### **Recommendations for Commercial Banks**

Based on the conclusion that Internet banking has a significant positive effect on financial performance of commercial banks, the present study recommends that commercial banks not only in Kisumu City but throughout the country should enhance their Internet banking. From the findings, the present study recommends that commercial banks should focus more on internet banking owing to the fact that it has the greatest positive effect on the performances of banks. In other words, there is a need for commercial banks in Kisumu City and by extension the whole of Kenya to ensure that customers are connected through the internet such that they are able to access internet banking. With improved and enhanced internet banking, commercial banks are likely to enjoy improved performances.

#### **Recommendations for Further Research**

Even though the study was able to achieve its objective, there were limitations especially with respect to the research design. The study only used 55 participants from 11 commercial banks in Kisumu City to represent all the banks. In addition, the study was limited to commercial banks in Kisumu City. In this respect, there is a need to perform more studies. The present study recommends for further research, which should incorporate more participants in the sample and also incorporate customers who are the users of electronic banking. In addition, the study has indicated that internet banking should be adopted considering its effect on the performance of commercial banks. Considering such recommendations, there is a need for more studies on internet banking highlighting its challenges and limitations as well as how they can be

eliminated for purposes of enhancing performance of commercial banks not only in Kisumu but also throughout the country.

## REFERENCES

1. Singh, B., & Malhotra, P. (2015). Adoption of Internet banking: An empirical investigation of Indian banking Sector. *The Journal of Internet Banking and Commerce*, 2004.
2. Al-Smadi, M. O., & Al-Wabel, S. A. (2015). The impact of e-banking on the performance of Jordanian banks. *The Journal of Internet Banking and Commerce*, 2011.
3. Martins, C., Oliveira, T., & Popovič, A. (2014). Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management*, 34(1), 1-13.
4. Alsajjan, B., & Dennis, C. (2010). Internet banking acceptance model: Cross-market examination. *Journal of Business Research*, 63(9), 957-963.
5. Sayar, C., & Wolfe, S. (2007). Internet banking market performance: Turkey versus the UK. *International journal of bank marketing*, 25(3), 122-141.
6. Goi, C. L. (2015). E-Banking in Malaysia: Opportunity and challenges. *The Journal of Internet Banking and Commerce*, 2005.
7. DeYoung, R., Lang, W. W., & Nolle, D. L. (2007). How the Internet affects output and performance at community banks. *Journal of Banking & Finance*, 31(4), 1033-1060.
8. Boateng, R. (2015). Developing e-Banking capabilities in a Ghanaian Bank: Preliminary lessons. *The Journal of Internet Banking and Commerce*, 2006.
9. Guru, B. K., Shanmugam, B., Alam, N., & Perera, C. J. (2015). An evaluation of internet banking sites in Islamic countries. *The Journal of Internet Banking and Commerce*, 2003.
10. Okiro, K., & Ndungu, J. (2013). The impact of mobile and internet banking on performance of financial institutions in Kenya. *European Scientific Journal, ESJ*, 9(13).
11. Nasri, W., & Charfeddine, L. (2012). Factors affecting the adoption of Internet banking in Tunisia: An integration theory of acceptance model and theory of planned behavior. *The Journal of High Technology Management Research*, 23(1), 1-14.
12. Abubakar, A. A., & Tasmin, R. B. H. (2012). The impact of information and communication technology on banks' performance and customer service delivery in the banking industry. *International journal of latest trends in finance and economic sciences*, 2(1).
13. Kesharwani, A., & Singh Bisht, S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303-322.
14. Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003
15. Lee, M. K. O., Cheung, C. M. K., & Chen, Z. (2005). Acceptance of Internet-based learning medium: The role of extrinsic and intrinsic motivation. *Information & Management*, 42, 1095-1104.
16. Malhotra, Y., & Galletta, D. F. (1999). Extending the Technology Acceptance Model to Account for business management: Theoretical Bases and Empirical Validation.
17. Kelman, H. C. (1958). Compliance, Identification, and Internalization: Three Processes of Attitude Change? *Journal of Conflict Resolution* 9(8), 2:51-60.
18. Malhotra, Y., & Galletta, D. F. (1999). Extending the technology acceptance model to account for social influence: Theoretical bases and empirical validation. *Proceedings of the 32nd Hawaii International Conference on System Sciences*.
19. McMillan, J. H., & Schumacher, S. (2014). *Research in education: Evidence-based inquiry*. Pearson Higher Ed.
20. Kothari, C. R. (2008). *Research Methodology; Methods and techniques* (2nd Ed.). New Age International Publisher, London
21. Creswell, J. W. (1999). Mixed-method research: Introduction and application. *Handbook of educational policy*, 455-472.
22. Berg, B. L. (2007). *Qualitative research methods for the social sciences*. London: Pearson.
23. Orodho, J. A. (2003). *Techniques of Writing Research Proposals and Reports in Education*. Nairobi: Masda Publishers.
24. Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods; quantitative and qualitative approaches*. Nairobi African Centre for Technology Studies.
25. Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research In Psychology*, (2), 77-101.