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INFLUENCE OF ALTERNATIVE BANKING CHANNELS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

The objective of this study was to assess the influence of alternative banking channels on the performance of commercial banks in Kenya. The research was guided by the following specific objectives: to assess the effect of agency banking on the performance of commercial banks in Kenya, to establish the influence of mobile banking on the performance of commercial banks in Kenya, to determine the effect of electronic banking on the performance of commercial banks in Kenya, to establish the relationship between internet banking and the overall performance of commercial banks in Kenya. This study employed descriptive survey research design. The target population of this study was commercial banks operating in Kenya. The study utilized annual financial reports to collect and analyze data. Data collected in this study was analyzed through quantitative methods and assembled to form the final findings and interpretations. The SPSS program Version. 25.0 was used as the main statistical tool of calculating the expected parameters. Inferential statistics like regression analysis, other forms of analysis such as ANOVA and correlation were applied to establish the association between the dependent and the independent variables. Data was presented using charts, graphs as well as the frequency percentages. The study concluded that agency banking influences performance of Commercial banks. Mobile banking has benefitted commercial banks from the decreased cost of delivery of services to their clients. The use of electronic banking by customers replaced labour intensive and paper-based banking methods leading to quicker access to services. The study recommends that Central Bank and the Kenyan government needs accelerated interoperability of the alternative banking channels among commercial banks in Kenya. This in the long run will help banks reduce cost of investing in technology individually by jointly developing and sharing the available technological platforms and resources to offer products and services to their clients seamlessly.

Keywords: *Agency Banking, Mobile/Phone Banking, Internet Banking, Electronic Banking, Financial Performance*

INTRODUCTION

The global financial crisis of 2008 has triggered a plethora of challenges for the financial industry that still have an impact on global economic scene mostly affecting the performance of commercial banks in different countries or states in the world. Since then, the global economy has been characterized by drastic and dramatic changes. Due to this, financial institutions have continued to evolve, working to grow and maintain profits while adjusting to ever-changing regulations and the downturn's effects on profitability and performance (Adetunji, 2013). This has been to address strategic, regulatory, and operational based challenges as asserted by Deloitte (2016). In this case, the global banking industry has been transformed, in the past 30 to 40 years, by the adoption of an onslaught of new technologies and a widespread change in the regulations governing the use of this technology. For the developed countries, their banking industry has been able to successfully reassess and realign their operating models through regulatory reforms, improving on their competitive dynamics to be in tandem with evolving markets and increased expectations from stakeholders (Edet, 2008).

Most commercial banks especially in developing economies have also taken a strategic approach. The commercial banks have therefore adopted distribution channels, shifting from frontal personal service to direct sales and marketing via phone, email or electronic transactions. The general understanding is that this has continued to create value both for the organization and its clients (Guinaliu, 2013). Leading commercial banks have been moving away from managing branches and instead are managing distribution across all the banks' channels. As part of their multi-channel distribution strategy, leading banks' branch channels include a variety of branch models that balance retail and small-business customer needs in the local market with the cost of delivery. Not all models work for all banks. Adopting a combination of branch models based on target customer segments in the local market as well as the commercial banks' strategic goals is the most effective strategy.

Alternative banking channels have been adopted by banks due to the vast changes in technology and customer perspective. The use of alternative form of banking, which has gained prominence in the banking sector, dates back to early times. According to Patrício et al, (2009) the first alternative methods of banking were introduced in Assyria, Babylon, and Egypt. The first advertisement for Automated Teller Machines (ATMs) was placed in 1730 by Christopher Thorton, who offered furniture that could be paid off weekly. From 18th century until the early part of 20th century, tallymen sold clothes in return for small weekly payments. They were called 'tallymen' because they kept a record or tally of what people bought on a wooden stick. One side of the stick was marked with notches to represent the amount of debt and other side was a record of payments. In the 1920's a shopper's plate – a 'buy now, pay later' system was introduced in the United States of America.

According to Polasik and Wisniewski, (2009) the use of alternative banking originated in the United States during the 1920s, when individual firms, such as oil companies and hotel chains, began issuing them to customers. Around 1938, European companies started to accept each other's alternative methods of banking. Today alternative methods of banking enable us to make countless transactions. During the 1990s, the number of active units in Europe rose by a staggering 50%. Originally only used to withdraw cash, the ATM has evolved to support a wide variety of services, including deposits and account details. To counteract the impersonal impression of the so-called "hole in the wall", the Spanish bank BBVA has developed its "future ATM", an innovative touch screen interface with customized shortcuts to reflect individual user requirement (Edet, 2008).

African banks have also constantly evaluated and improved their operations in order to keep up with the fast pace of change in the banking and financial industry today. In order to face the demanding challenges, institutions have transformed their operating models to reach their maximum possible profitability and reputation. Commercial banks have opted to embrace technology as a key strategy in propelling them out of the foreseen economic crisis (San-Jose et.al, 2009). Due to adoption of alternative banking channels and to optimize services and minimize costs, most commercial banks in African countries have already migrated to a day and night service provision and customers are enjoying a greater sense of freedom that this creates. Availability is the name of the game as customers' demand instant access to loans, deposits and account status (Kohali, 2016).

Locally, Kenyan banking sector has undergone tremendous changes in the last two decades. Advances in technology and changing economic conditions have created impetus for this change. Commercial banks have been adopting alternative banking channels as well as innovating new delivery channels at a high rate. The banks use internet, automated teller machines (ATMs), Point of Sale (POS) devices, Electronic Funds Transfer at Point of Sale (EFTPOS) devices and mobile phones as technologies to deliver banking services. They achieve this through a combination of distribution channels including stationary bank branches, mobile bank branches, ATMs, bank agents, online banking, and mobile banking (Mwangi, 2007). Each of this distribution channel serves to deliver a set of banking services and are part of distribution channels that may be used either separately or in conjunction to form the overall distribution channel strategy. It is noted that mobile phone branchless banking has successfully functioned mainly in Kenya with seven million customers, followed by South Africa and Philippines.

Commercial banks in Kenya have been deploying both traditional and new alternative channels for banking activities. Mobile banking as an alternative channel is relatively new but is already showing steady growth (Chebii, 2013). Used in its early stages as a push/pull tool for text messages, cell phone banking now supports personal account access and is forecasted to become the new mobile payment method or "digital wallet" of the future. The mobile banking came to be as a result of the introduction of smart phones into the mobile market in 2007. M-PESA which is an electronic banking system that employs use of mobile phones has tremendously been adopted by all local commercial banks thus making it the highest growing network for financial transactions. Commercial banks also started agency banking in Kenya where people with established businesses are appointed to serve as agents for bank services. For instance, cooperative bank has its agency services branded as "Coop Kwa Jirani", Equity bank "Equity Agents" and Kenya Commercial Banks "KCB Mtaani" among others. Alternative banking channels is a strategy that has been widely employed by various local commercial banks hence it is imperative to study the effects they have on their performance (Liu & Mithika, 2009). With almost every bank in Kenya enrolling the mobile banking method, mobile banking has been well received and implemented in Kenya (Musiega, 2016).

Statement of the Problem

The banking industry in both developed and developing economies represent a significant and influential sector of business that plays a crucial role in global economy Drigă, (2012). Commercial banks, as financial intermediaries, serve as financial resource mobilization points in the global economy. The role of banks in an economy is therefore paramount because they execute monetary policy and provide means for facilitating payment for goods and services in the domestic and international trade and a research on their wellness can therefore not be

underrated (Lencer, 2011). A well-developed efficient banking sector is an important prerequisite for saving and investment decisions needed for rapid economic growth.

Currently, banks' alternative banking channels are faced with various challenges which bring concerns on their impact on the performance of banks (Maungu, 2015). The commercial banks in Tier I control 49.9% of the market, Tier II control 41.7% of the market share whereas Tier III control 8.4% of the market respectively with very low performance trends (CBK, 2020). Maungu further notes that among the various barriers faced include lack of customer confidence, security concerns, system failures, cases of transaction errors and network failures. Further, it has been noted by Wisdom (2012) that despite the existence of alternative banking channels, bank halls continue to face congestions. This is despite banks like Equity doubling over the counter cash withdrawal charges. This clearly shows that despite presence of alternative banking channels, customers continue to seek services in banks' branches. Further, the financial performance of commercial mobile banking in Kenya over the last five years has been stagnating at 2 to 5% despite the adoption of alternative channels rapidly increasing from 55% in 2015 to 75% in 2018(CBK, 2019). Further, such trend puts into question the impact of alternative banking channels on the financial performance of banks given that customers still flock into banks despite existence of alternative banking channels. Nedelescu and Stănescu, (2012) argue that unreliable channels of distribution highly lower customers' perception on the quality of service offered and hence reduces the banks' credibility hence profitability. This forms the conceptual argument on whether mobile banking, internet banking, and agency banking and other banking channels are affecting the overall performance of the commercial banks.

Musiime and Malinga (2011) conducted a study on internet banking, consumer adoption and customer satisfaction context among commercial bank's branches in Machakos County. The study established that there was a positive relationship between Internet banking and customer satisfaction. Few local studies have been done. For example, Okun (2012) did a study on the effect of level of deposits on financial performance of Commercial Banks in Kenya. The results indicated that there was a positive and significant relationship between Deposits Ratio and ROE. Kamau (2014) did a study on the effects of financial innovations on the financial performance of commercial banks in Kenya. The study findings established that financial innovations had great impact on the financial performance of the banks. More critically, none of the above studies specifically established the relationship between the adoption of alternative banking channels and the overall performance of commercial banks in Kenya. This study therefore sought to fill this knowledge gap by assessing the influence of alternative banking channels adoption on financial performance of commercial banks in Kenya.

Objectives

The general objective was to assess the influence of alternative banking channels on financial performance of commercial banks in Kenya.

Specific objectives were;

- To assess the influence of Agency banking on financial performance of commercial banks in Kenya.
- To establish the influence of mobile/ phone banking on financial performance of commercial banks in Kenya.
- To determine the effect of internet banking on financial performance of commercial banks in Kenya.

- To establish the effect of electronic banking on financial performance of commercial banks in Kenya.

Theoretical Literature Review

Innovation Diffusion Theory

According to Mahajan (2010) an innovation is any idea, object or practice that is perceived as new by members of the social system. It is defined by the diffusion of innovation as the process by which the innovation is communicated through certain channels over time among members of social systems. Diffusion of innovation theory attempts to explain and describe the mechanisms of how new inventions in this case internet banking is adopted and becomes successful. Sevcik, (2004) stated that not all innovations are adopted even if they are good, and they usually take a long time before being adopted. The study further concluded that resistance to change may be a hindrance to diffusion of innovation and although it might not stop the innovation, it will slow it down.

There are five critical attributes that greatly influence the rate of adoption. These include relative advantage, compatibility, complexity, triability and observability. The rate of adoption of new innovations will depend on how an organization perceives its relative advantage, compatibility, triability, observability and complexity (Clarke, 2008). If an organization in Kenya observes the benefits of mobile and internet banking, they will adopt these innovations given other actors such as the availability of the required tools. Adoption of such innovations will be faster in organizations that have internet access and information technology departments than in organizations without (Rogers, 2016). This theory relates to the innovations towards the adoption of agency, electronic, mobile and internet banking. The theory is thus anchored on the objective on the relationship between agency banking, electronic, mobile and internet banking on the financial performance of commercial banks.

Agency Theory

Agency Theory was developed primarily by Jensen (1976). Agency theory analyzes the relationships between a business and its agents. The key issues in agency theory center upon whether adequate market mechanisms exist that agents can act in ways that maximize the utility of a firms where ownership and control are separated. Under the terms of agency theory, a principal passes authority to an agent to conduct transactions and make decisions on behalf of the principal in an effort to maximize P's utility preferences. Agency problems can arise if: P and A have different goals; P and A have disparate skills in evaluating A's performance; P and A possess different sets of information relevant to the managerial decisions A must make as a representative of P; or P and A have different degrees of risk aversion. At the core of agency problems is the fact that principals may be unable to monitor agents, either perfectly or costless, as to the agent's actions or the information behind those actions (Kiragu, et al 2013).

In the commercial banking industry, ownership is becoming increasingly diversified among individual and institutional shareholders, and the dominance of individual stockholders in the industry appears, on the whole, to be decreasing. These trends may exacerbate "agency problems" in the banking industry if these problems truly exist. Agent banks are retail establishments contracted by the banks and authorized by the central banks to render services for banks. This theory points out the possibility of emergence of problems if the coordination between the banks and alternative channels is not well managed (Jensen, 1976). The theory is

hence anchored on the objective on the relationship between agency banking, internet banking and the financial performance of commercial banks.

Financial intermediation theory

This theory was developed by Mises (1912). This theory suggests that financial institutions, more so banks, play the role of a financial intermediary. Their role is to mobilize deposits from customers who have excess money and lend them out to the deficit spending units in order to get interest. This relationship puts banks in a situation where they take money from customers who have short term maturity and lend it out to customers on long term basis and this enables them to create liquidity Dewatripont, Rochet & Tirole, (2010). According to Mises (1912), the banks activity as negotiators of credit is characterized by borrowing money from lenders in order to lend it.

The role of banks is thus that of financial intermediation or that of creating credit and money. If banks play the role of financial intermediary, they would not create money and if they stop, then they would be unable to assume the role of money creation (Mises, 1912). The Financial Intermediation Theory is criticized by Allen and Santomero (2001) on the basis that the theory views risk management as only of recent concern to the financial sector and putting central the concept of participation costs. This view is relevant to this research through its concept where banks can determine their performance through enhancing customer deposits by developing channels that would enable the customers to easily and conveniently transact with the bank. The researcher will be in a position to relate well with the financial performance of commercial bank institutions. The theory is therefore anchored on the measures of the dependent variable aspect that stresses on the best approaches towards improving the financial performance of commercial banks.

Empirical Literature Review

Al-Jabri (2012) studied on mobile banking adoption by looking at the application of diffusion of innovation theory and established that with better mobile banking support and provision of variety of services, the more useful customers perceive mobile banking to be the more they increase their level of adoption. The study suggested that banks must seek to reduce risk perceived by their customers by offering specific guarantees protecting them and taking their complaints seriously and urgently. This study intends to establish the unique relationship between the alternative banking channels on financial performance of commercial banks other than just the adoption impacts.

According to Chebii (2013) alternative channels which have highly been adopted include mobile banking, Agent Banking and Internet Banking. He further argues that alternative banking channels are the newer methods of carrying on banking operations. Alternative distribution channels provide convenient alternatives to branch banking. For Alternative banking customers do not have to visit physical branch as most of banking transactions are possible through alternative channels Kumbhar (2009). He further argues that alternative distribution channels are not only important in reducing costs and improving competitiveness, but also their ability to retain the existing customer base as well as in attracting new customers. Bank executives looking to attract new customers while engaging and reducing the attrition of existing customers can use alternative delivery channels as an end to their means.

According to Christopher, et.al (2005), alternative banking channels that are commonly used by banks are internet banking, ATMs, bank automation, mobile banking, core banking, credit cards and debit cards. The study lists agent banking, mobile banking internet banking and electronic

banking as the most used alternative banking channels. Kumbhar (2009) asserts that in India, there are various alternative banking channels such as ATMs, Core Banking Solution (CBS), POS Terminals, Credit Cards, Internet Banking, Debit Cards, Mobile Banking among others. Kohali, (2016) recognize the use of telebanking, ATMs, online banking, mobile banking and social media banking by banks worldwide.

A study by Waithanji (2012) on agency banking as a means of financial inclusivity initiative in Kenya found out that a relation could not be established between the two variables of concern. However conclusive inference could not be drawn due to the low number of financial institution that had adopted agency banking. Kithuka(2012) study on factors influencing growth of agency banking on the other hand found that factors such as ease of access of the transfer of money services, cost implication and security guarantee determine uptake and use of agency banking.

Saluja and Wadhe (2015) examined the impact of E-banking on profitability of Indian commercial banks in the period 2006 and 2014. The study sample consisted of 31 banks under four major commercial banks groups in India. The study employed multiple regression analysis to test the effect of E-banking services on the profitability of commercial banks. The researcher established a positive effect between e-banking and profitability of both national and private sector commercial banks. The study also established an increase in profitability with the increase in number of ATMs. The study though established an insignificant relationship between number of branches and profitability of banks. The study never explained on the extent to which ebanking aided on the performance, depicting a dilemma on the same.

Ndungu (2015) studied the impact of alternative banking channels on how financial institutions performed financially in Kenya. A descriptive research design was used, data was collected from banks' yearly reports and reports issued by CBK. Descriptive survey research design was used. The study found that alternative banking channels such as mobile banking, agency banking, customer deposits and operating expenses causes a variation of 73.4% of the financial performance among commercial banks in Kenya. The research found out that the rate of usage of mobile banking had declined since 2012. The study then recommended that the banks management should adopt more alternative banking channels as well as exploiting more innovation that enhance alternative banking.

Conceptual Framework

The predictor variables include alternative banking channels such as agency banking, mobile banking, electronic banking and internet banking. The dependent variable on the other hand is the organization performance.

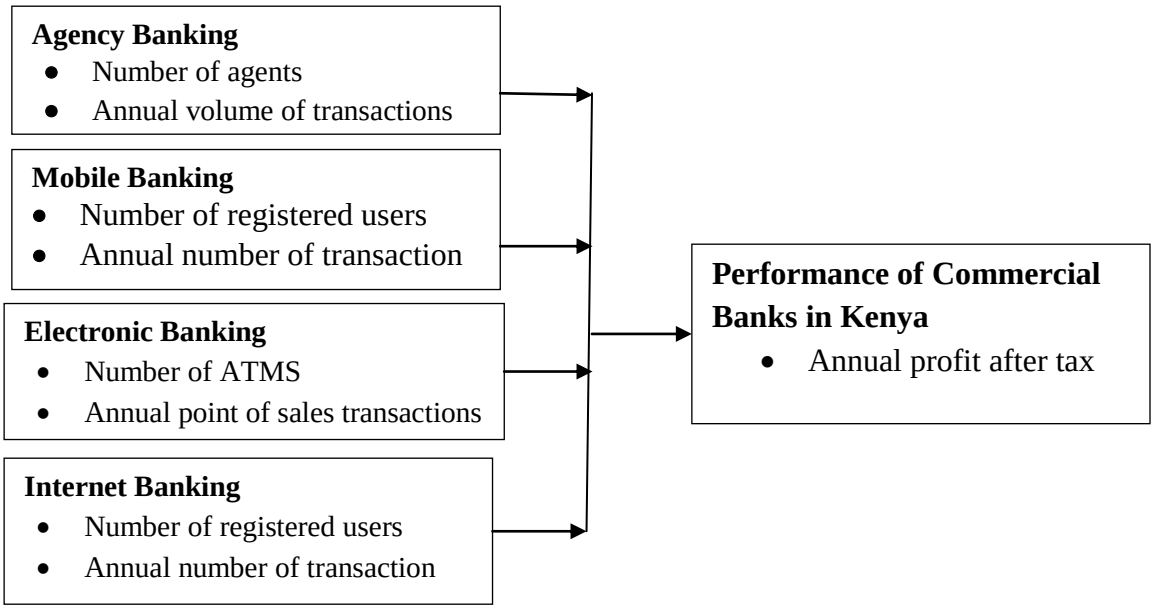

Figure 1: Conceptual Framework

METHODOLOGY

This study employed case study research design approach as well as desktop research approach. The population of this study was the commercial banks operating in Kenya. Specifically, the study targeted the commercial banks operating in Nairobi County as the geographical location of the mother banks. The justification of this was based on the fact that Nairobi happens to be the hub of the headquarters of all the 42 registered and signified as Tier 1, II and III commercial banks in Kenya. This study used annual financial reports as the only data collection tool on the influence of alternative banking channels on financial performance of commercial banks in Kenya. A secondary data collection sheet was used to collect information concerning both the independent and dependent variables.

Data collected in this study was analysed via quantitative method and assembled to form the final findings and interpretations. The SPSS program Version. 25.0 was used as the main statistical tool of calculating the expected parameters. Descriptive statistics revolved around charts, graphs as well as the frequency percentages were utilized in measuring the central tendencies such as mean and standard deviation and reporting the data assembled from the findings. Above the inferential statistics like regression analysis, other forms of analysis such as ANOVA and correlation were applied to establish the association between the dependent and the independent variables.

FINDINGS

Descriptive Analysis

Table 1 Descriptive Analysis of the Data

	N	Min	Max	Mean	Std. Dev
Net income	10	3.81	7.53	5.45	1.15
Mobile banking number of transactions	10	5.11	125.81	39.63	41.27
Mobile banking number of users	10	0.35	1.37	0.71	0.289
Agency banking number of transactions	10	46788	137124	85208	25870
Number of agents	10	4771	12584	7259	2332
Electronic banking number of transactions	10	4.97	8.79	6.32	1.155
Number of ATMs	10	3603	7058	5538	1199
Internet banking number of transactions	10	0.74	1.39	1.00	0.23
Internet banking number of users	10	358852	959507	676536	188783
Valid N (listwise)					

As shown in Table 1, net income of commercial banks in Kenya ranges between 3.81 billion to 7.53 billion for the last 10 years. Mobile banking number of transactions ranged from 5.11 million to 125.81 million. The number of agents range also between 4771 to 12584.The number of ATMs ranges between 3603 to 7058 with a mean 5538.From the above figures, it's clear that commercial banks in kenya to a larger extent have invested heavily in alternative banking channels which in return has improved the banks financial performance.

Agency Banking

Agency banking was analysed in terms of the number of agents and the number of transactions. The orange line represents the number of agents while the blue line represents the number of transactions in millions.

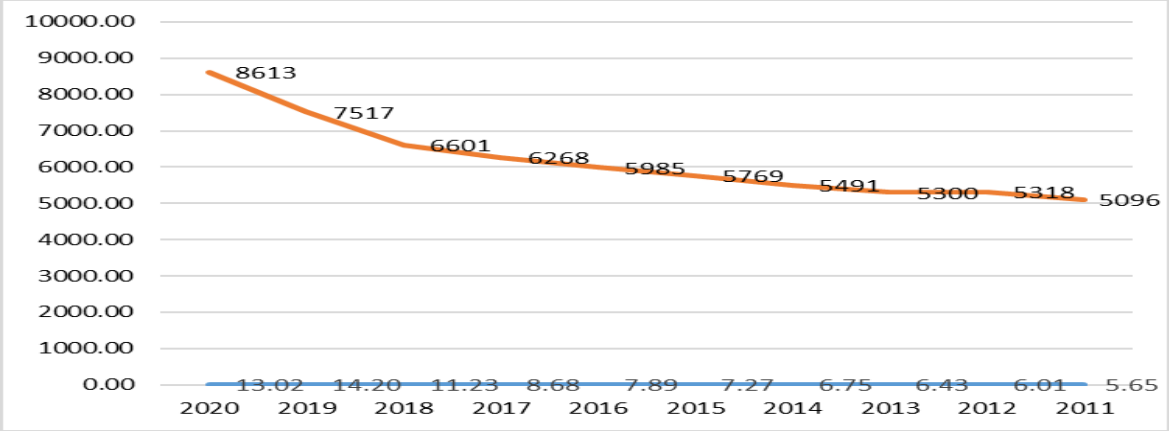

Figure 1 Agency banking

The number of agents have increased moderately from 5096 in 2011 to 8613 in 2020. Further, the number of transactions have increased from 5.65 million in 2011 to 13.02 million in 2020. This shows a steady rise on the agency banking use among the Kenyan Consumers. The findings concur with Karume (2017) who established that commercial banks in Kenya have to a larger extent have rolled out the agency banking service and have registered significant usage by the citizens. According to the study, use of agency banking reduces the costs of banks, the employees of banks and improves customers' convenience in accessing services which in the end

leads to increased profitability. Further, use of agents offers the possibility of massive outreach to people in locations that remain underserved, especially those in hard-to-reach rural areas. The findings are also in line with those of Lyman and Ivatury (2006) who revealed that agency banking has enabled bank customers to access the basic banking services, for example, cash deposit, cash withdrawal and bank balance inquiry conveniently or what would be termed as within the comfort of their neighbor-hood. The convenience of access to banking services and the extended hours that the agencies work has been the most attractive features to the customer.

Mobile Banking

Mobile banking was the next objective and was measured in terms of Number of transactions and Number of users. The blue line represents the number of transactions while the orange line represents the number of users.

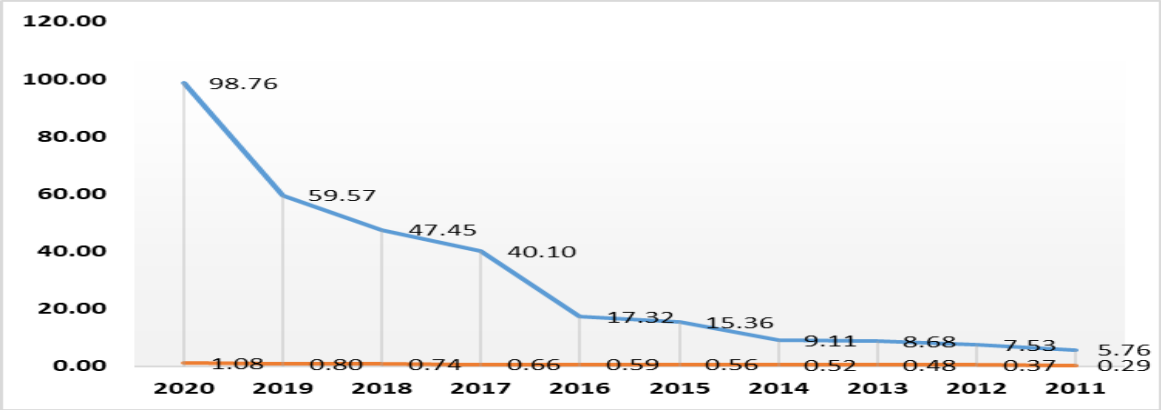

Figure 2 Mobile Banking

Both the number of users and the number of transactions have increased at a higher rate from 2011 to 2020. The most outstanding observation is the increase in the number of mobile transactions from 5.76 Million in 2011 to 98.76 million in 2020.This can be attributed to the vibrant telecommunication industry in Kenya which has come up with innovations easing mobile money transfers. The huge rise is observed between 2019 to 2020 and this could be as a result of the Covid19 pandemic whereby many people opted to use mobile banking as opposed to visiting banking halls. Mobile banking services allow customers access their account balance, order cheque book, do funds transfer, receive credit and debits alerts, receive minimum balance alerts, do bill payments from their phones and check information such as interest rates and exchange rates. The findings concur with those of Porteus (2006) who suggested that mobile banking is the next big scheme that is emerging so fast in the global banking and financial service sectors. This is attributed to the fact that mobile banking reduces overall operational cost, taps in a larger customer base as well as reduce operational cost. This high rate of demand is being fueled by the increasing adoption of mobile phones and the increased demand for convenience by account holders. The findings are also in line with those of Mburu (2013) who found that mobile banking offers many benefits to customers as well as the banks. To clients it increases convenience and saves time. To the banks they benefit from the low cost of delivering their services to the customers and eliminating location barriers to customer's access to the banks.

Electronic Banking

The third variable was electronic banking. This was measured in terms of the transactions registered by the commercial banks and the number of ATMs. The Orange line represents the number of ATMs while the blue line represents the number of transactions.

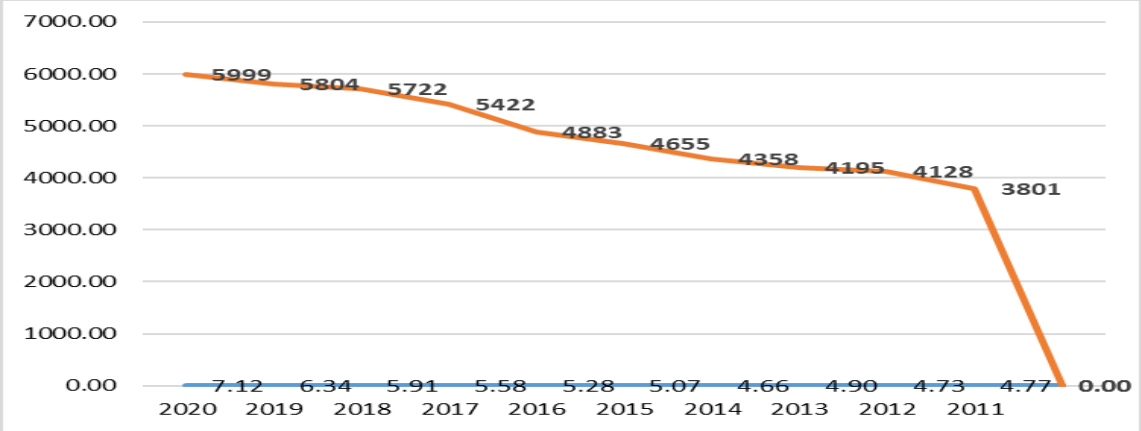

Figure 3 Electronic Banking

On average, the number of ATMs on the sampled commercial banks increased from 3801 in 2011 to 5999 in 2020.The transactions also increased from 4.77 million in 20211 to 7.12 milliion in 2020. According to Ogbuji (2012) electronic banking the customers can access their bank accounts and information and also do transactions. This allows the customers the flexibility and convenience since it does not involve the account holder visiting the bank. ATMs replace labour intensive transaction systems that were paper based. As compared to other alternative channels, use of ATMs seems to be growing at a very low rate. This could be attributed to the risks associated to usage of ATM machines such as physical robbery and information theft through card skimming, eavesdropping and network sniffing. Other registered risks include physically breaching the safe of the ATM where the cash is stored.

Internet Banking

The fourth variable was internet banking. This was measured in terms of the transactions registered by the commercial banks and the number of users. The Orange line represents the number of users while the blue line represents the number of transactions.

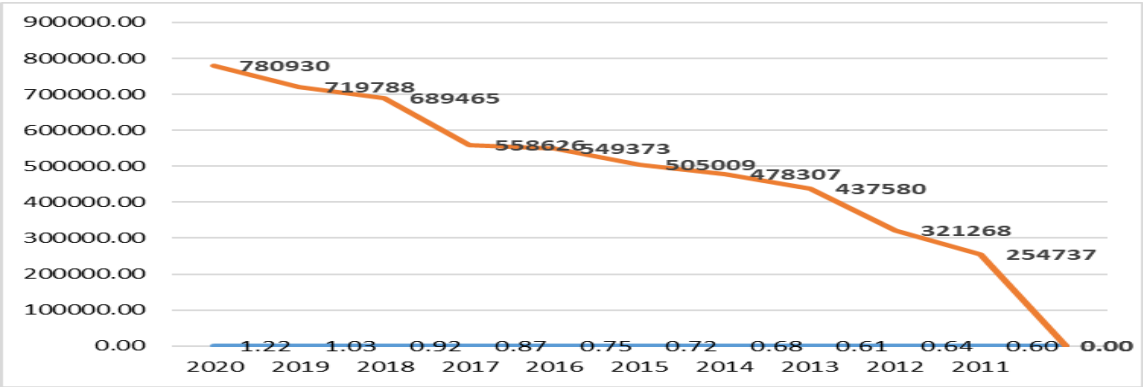

Figure 4 Internet Banking

The number of internet banking users have steadily been on the rise. In 2011 the sampled banks had an average of 254,737 users and in 2020 the users had grown to almost 800,000. The Number of transactions have growth from 0.6 million in 2011 to 1.22 in 2020. This can be attributed to ease and efficiency of usage. Further, Kenyan institutions are moderately digitizing all their operations and highly advocating for non-cash transactions. Availability of reliable internet service providers and efficient internet banking applications to a larger extent have

influenced the adoption of internet banking. The findings concur with Ram, Kagan and Lingam (2008) who noted that the increased usage of internet in banking has an additional channel of the bank marketing its services and products had significantly improved the community banks performance financially.

The study findings are also in line with the Innovation Diffusion Theory as proposed by Mahajan (2010). According to this theory, if an organisation observes the benefits of other banking channels, they will adopt these innovations given other actors such as the availability of the required tools. Adoption of such innovations will be faster in organizations that have internet access and information technology departments than in organizations without (Rogers, 2016).

Financial Performance

Financial performance was measured in terms profits reported at the end financial years.

Figure 5 Financial Performance

On average, commercial banks performance has been on an upward trajectory from 2011 to 2119. However, decline was recorded in the year 2020 and this can be attribute to the Covid 19 pandemic which affected like almost institutions across the globe. But in an overall overview, commercial banks in Kenya have been reporting profits from 2011 to 2020 except on few cases at Family Bank and Housing Finance Commercial Banks. The findings support the Financial Intermediation Theory as developed by Mises (1912). The theory states that banks can determine their performance through enhancing customer deposits by developing channels that would enable the customers to easily and conveniently transact with the bank.

Correlation Analysis

Table 2 Correlation Analysis

		Financial Performance	Agency banking	Mobile banking	Electronic banking	Internet banking
Financial Performance	Pearson Correlation	1	.644**	.716**	.714**	.692**
	Sig. (2-tailed)		0.00	0.00	0.00	0.00
	N	10	10	10	10	10
Agency banking	Pearson Correlation	.644**	1	.571**	.600**	.420**
	Sig. (2-	0.00		0	0	0

	tailed)					
	N	10	10	10	10	10
Mobile banking	Pearson Correlation	.716**	.571**	1	.569**	.587**
	Sig. (2-tailed)	0.00	0		0	0
	N	10	10	10	10	10
Electronic banking	Pearson Correlation	.714**	.600**	.569**	1	.665**
	Sig. (2-tailed)	0.00	0	0		0
	N	10	10	10	10	10
Internet banking	Pearson Correlation	.692**	.420**	.587**	.665**	1
	Sig. (2-tailed)	0.00	0	0	0	
	N	10	10	10	10	10

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

From the results of the study, it showed that there was a strong and positive relationship between the Commercial Banks Financial Performance and agency banking as indicated by a significant coefficient of 0.644. A strong positive significant correlation was established between Financial Performance and mobile banking as indicated by a coefficient of 0.716. Electronic banking also had significant positive correlation as shown by a coefficient of 0.714. Internet banking also indicated a positive significant correlation with Financial Performance as indicated by a correlation of 0.692.

Regression Analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 25.0) to code, enter and compute the measurements of the multiple regressions.

Table 3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842[a]	.708	.692	.46250

The study used coefficient of determination to evaluate the model fit. The adjusted $R^{2,}$ also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. The model had an average adjusted coefficient of determination (R^2) of 0. 692 and which implied that 69.2% of the variations on commercial financial performance is explained by the independent variables understudy (Mobile banking, Agency banking, electronic and internet banking).

The study further tested the significance of the model by use of ANOVA technique.

Table 4 Summary of One-Way ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.892	4	9.473	44.2663551	.000[b]
	Residual	1.07	5	0.214		
	Total	**38.962**	**9**			

Critical value = 5.19

From the ANOVA statics, the study established the regression model had a significance level of 0.000% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value (44.288 > p) an indication that agency banking, mobile banking, electronic banking and internet banking all have a significant effect on commercial bank financial performance in Kenya. The significance value was less than 0.05 indicating that the model was significant.

In addition, the study used the coefficient table to determine the study model.

Table 5 Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
1 (Constant)	1.525	.293		5.210	.000
Agency banking	.429	.164	.221	2.610	.011
Mobile banking	.577	.169	.299	3.418	.001
Electronic banking	.399	.166	.232	2.402	.019
Internet banking	.507	.171	.268	2.968	.004

Y= 1.525 + 0. 429 + 0.577 + 0.399 + 0.507

From the regression model obtained above, a unit change in agency banking while holding other factors constant would positively change banks financial performance by a factor of 0.429. Results show that a unit change in mobile banking while holding the other factors constant would positively change bank financial performance by a factor of 0.577. Results show that a unit change in electronic banking while holding the other factors constant would positively change bank financial performance by a factor by a factor of 0.399. Finally test regression results show that unit change in electronic banking while holding the other factors constant would enhance the change bank financial performance by a factor by a factor of 0.507. The results therefore display a clear picture that in an effort to also reach new customers, banks have embraced alternative banking methods which have also seen a rise in new payment methods. Alternative banking methods are characterized by modern banking strategies including core banking, mobile banking, both credit and debit cards, bank automation, e-banking and ATMs (Chris, 2005). The results being positive clearly indicates and confirms with the literature that alternative banking strategies are used to give banking services to clients. Alternative banking channels offer alternatives to traditional banking with technological advancements. According Kambua (2015) alternative banking channels affects the banks performance positively.

Further the study tested the following hypothesis based on the t calculated in the table of coefficients and t critical which is 2.26 as per the t table with a degree of freedom of 9. The first null hypothesis was that agency banking has no significant influence on financial performance of

commercial banks in Kenya. The t calculated was 2.610 which is greater than the 2.26 t-critical therefore rejecting the null hypothesis and failing to reject the alternate hypothesis that states that agency banking has a significant influence on financial performance of commercial banks in Kenya. The second null hypothesis was that mobile banking has no significant influence on financial performance of commercial banks in Kenya. The t calculated was 3.418 which is greater than the 2.26 t-critical therefore rejecting the null hypothesis and failing to reject the alternate hypothesis that states mobile banking has a significant influence on financial performance of commercial banks in Kenya. The third null hypothesis was that internet banking has no significant influence on financial performance of commercial banks in Kenya. The t calculated was 2.402 which is greater than the 2.26 t-critical therefore rejecting the null hypothesis and failing to reject the alternate hypothesis that states internet banking has a significant influence on financial performance of commercial banks in Kenya. The fourth null hypothesis was that electronic banking has no significant influence on financial performance of commercial banks in Kenya. The t calculated was 2.968 which is greater than the 2.26 t-critical therefore rejecting the null hypothesis and failing to reject the alternate hypothesis that states electronic banking has a significant influence on financial performance of commercial banks in Kenya

Conclusions

The study concluded that agency banking influences performance of Commercial banks. The Agency banking model employed by banks has an easy to understand, well-structured and detailed list of services and products offered and incomes from agency banking have had had favorable effects. The Banks' management have visibility and a deep understanding of agency banking related issues and have taken a leading role in ensuring timely resolutions. Agency banking leads to lower operational costs and improved bank performance.

The study concluded that Mobile banking influences performance of Commercial Banks. From the study, it was concluded that; alerts given by mobile phones and smart phone apps assist customers to make informed choices. Mobile banking has benefitted commercial banks from the decreased cost of delivery of services to their clients, mobile banking has enhanced consumer convenience for one can access the services and products anywhere in Kenya. Mobile banking gives banks access to hard to reach locations while at the same time enabling in improving customer convenience. Mobile banking has led to convenience in accessing services through elimination of location barriers. The mobile banking approaches adopted by commercial bank involves selling more products or services to prioritized customers at a faster rate.

The use of electronic banking by customers replaced labour intensive and paper-based banking methods leading to quicker access to services. ATM banking allows customer flexibility and convenience thereby increasing their satisfaction levels.

The study concluded that internet banking influences performance of Commercial Banks. Banks have in place policies driving the internet banking activities adopted as well as ensuring growth in performance. Incomes deduced from internet banking favorably affects bank's performance.

Recommendations

Central Bank and the Kenyan government needs accelerated interoperability of the alternative banking channels among commercial banks in Kenya. This in the long run will help banks reduce cost of investing in technology individually by jointly developing and sharing the

available technological platforms and resources to offer products and services to their clients seamlessly.

The study recommends increased number of products and services offered across the alternative banking channels to mirror the services and products that customers access when they visit the physical banking halls. This will help customers access more products and services at their convenience which will lead to increased transactions and revenues. Further, more security features need to be adopted to ensure that the system is up to date upcoming technology to avoid loss of funds for clients or system hacking.

The study recommends that the managers and stakeholders responsible for internet banking and mobile banking take it as an initiative to educate their esteemed customers on the usage of their mobile phones and computers in accessing banking services while at the same time enlightening them on occasional problems they might experience due to making poor entries or applications which could lead to losses of their funds and data.

The study further recommends a review of the pricing models adopted by the banks to enable customers' access products and service on alternative banking channels affordably. A downward review of pricing of specific services offered on alternative banking channels will encourage customers to transact more and eventually lead to increased utilization which will positively impact on the revenue that banks gain.

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