



Analyzing Effect of Alternative Banking Channels on Financial Performance of Burundi Commercial Banks: Evidence from Kenya Commercial Bank in Burundi

Nkeshimana Carlos^{1*} and Martin Onsiro Ronald¹

¹*School of Business and Economics, Mount Kenya University, General Kargo Road, P.O.Box 342-01000, Thika, Burundi.*

Authors' contributions

This work was carried between both authors. Author NC designed the study, performed the statistical analysis, wrote the protocol, wrote the manuscript. He also did the analysis of the study and literature review. Author MO Ronald supervised, corrected and proofread the manuscript. Both authors read and approved the manuscript.

Article Information

DOI: 10.9734/AJARR/2020/v10i430247

Editor(s):

- (1) Dr. Shih-Chien Chien, Shu-Te University, Taiwan.
- (2) Dr. Rachid Masrou, University of Cadi Ayyad, Morocco.
- (3) Dr. Fagbadebo Omololu Michael, Durban University of Technology, South Africa.

Reviewers:

- (1) Mosharraf Hosen, Universiti Tunku Abdul Rahman, Malaysia.
 - (2) Nelson Hein, Universidade Regiional de Blumenau, Brazil.
- Complete Peer review History: <http://www.sdiarticle4.com/review-history/55854>

Original Research Article

Received 02 March 2020
Accepted 07 May 2020
Published 29 May 2020

ABSTRACT

The study sought to assess the effect of channels of alternative banking on financial performance of Kenya Commercial Banks in Burundi. The specific objectives were: to examine the effect of mobile banking on financial performance of Kenya Commercial Bank, Burundi; to assess the effect of internet banking on financial performance of Kenya Commercial Bank, Burundi; to examine the effect of auto teller machines on financial performance of Kenya Commercial Bank, Burundi; and to assess the effect of agency banking on financial performance of Kenya Commercial Bank, Burundi. The study employed descriptive survey research design as well as correlation research designs. Based on information obtained from KCB, the target population for the study was 37 employees and 114 customers. The researcher used Slovin's formula to define the sample population $n = 60$ (14 employees and 46 customers). A questionnaire was used for data collection. The data was qualitatively and quantitatively analyzed. The results of the study showed that there was a strong

*Corresponding author: Email: cnkeshimana@bi.kcbbankgroup.com, cnkeshimana@gmail.com;

relationship between the different banking distribution channels and the financial performance of KCB Bank. It also found that 14.1% of the total variance in financial performance of KCB Bank could be attributed to alternative banking channels. The remaining 85.9% of the variance in financial performance could be attributed to other determinants of financial performance that were not the focus of this study. ANOVA statistics revealed that the regression model was ideal since it had a significance level of 0.0%. The study also found that mobile banking, Automated Teller Machine, agencies and Internet banking affected the performance of commercial banks in a positive and statistically significant way. The study recommends that Burundian commercial bank sought to invest heavily in alternative banking as this will lead to an improvement in banks' financial performance. The study also recommended that KCB should examine the competitive environment and determine the means to achieve the goal of interoperability, and continue to make electronic banking products available, offering various types of bank cards adapted to the needs of each client.

Keywords: Financial performance; mobile banking; internet banking; auto teller machines; agency banking.

1. INTRODUCTION

Today, there are new conduits and techniques, which have emerged in banking services known as alternative banking delivery channels, which are directly serving customers. Recently, financial threats have along with rising complexity of markets have caused financial institutions to embrace current rapid growing changes [1]. The need to modern methods of doing things and the springing up of new technology has brought changes at workplaces. Additionally, critical shift in demography and a manageable framework, are putting the finance sector to fundamental challenges in times of market uncertainty, which is rigorous. It is during a time like this that commercial banks should seize opportunities to adopt changes arising from innovations of financial services delivery.

The banking sector in the world has gone through transformation over the years due to recent technological advancement, beside an enormous transition in the laws that govern the use of this technology [2]. Hence, several banks have adopted new delivery channels changing from teller person service to marketing and selling directly via phone, emails and other electronic transactions [3]. Banking channels are categorized as direct and indirect. Direct channels refer to those that are owned by the bank thus it has control over them while indirect channels refer to the channels that the bank does not wholly control. The two types of direct channels are location-based (those that occupy a physical space such as branches, roaming vans, kiosks and business units) and remotely-based channels (those that do not occupy physical space such as internet, Interactive Voice Response and call centers [4].

In the United States, commercial banks use alternative banking to reduce costs and enhance the delivery of customer care services [5]. In Turkey, empirical evidence reveals that alternative banking services is widely adopted. In 2015, the country recorded the highest users accessing alternative banking compared to other European nations as well as Spain, Netherlands, and America [6]. In Australia, most of the banks have adopted alternative banking services at high rates to match consumer needs, with most of the rural banks lagging behind due to inadequate supply of infrastructure [7]. In India, both private and public service providers provide alternative banking, and research has tied this banking mode with increased levels of service satisfaction.

In Pakistan, the adoption of alternative banking has been at a slower pace [8]. Malaysian banks have been known as common in adopting alternative banking services through the implementation of diverse communication and electronic channels [9]. The services have made it easier for their clients to make transactions remotely without having to present themselves physically to the banks.

In developing nations, and more specific, the African continent, the adoption of alternative banking services has significantly improved. The stiff competition from local banks and from the entry of internal banking institutions, has forced all banks to provide services that enhance consumer delivery and profitability. Nigeria ranks high among all other African nations in using alternative banking followed by Ghana [10]. Within the East African Region, Kenya, Tanzania and Uganda have embraced alternative banking by making enormous investments in ICT.

However, the situation in Uganda has been marred by challenges associated from technological failure of the services [11].

Banking institutions in Burundi work in an environment where it is difficult to build a competitive advantage. Currently in Burundi, competition in banking sector is very high, thus customers have a wider choice to make in banking services. Since Burundi market share is small, each bank is competing to outdo the other through effective services to win interests of customers as much as possible [12]. Even today, there is an increase in the market with the integration of Burundi into the East African Community. Customers emphasize the possibility of expanding competition and customers have a wider range of choices that can be used by other banking institutions.

Kumbhar [12] asserts that in Burundi, there are various alternative banking channels such as; Automated Teller Machines, Core banking Solution, POS Terminals, Credit Cards, Internet Banking, Debit Cards, Mobile Banking among others. Kohali & Sheleg [1] recognize the use of tele banking, ATMs, online, mobile, and social media banking by banks worldwide.

1.1 Problem Statement

An empirical analysis on the adoption of internet banking and consumer satisfaction by Musiime & Malinga [13] found out that there was an essentially positive association between banking via internet and satisfaction of customers. Globally, banking sector has embraced alternative banking channels because of rapid technological changes and client point of view. For instance, in 2010 a report shows that 5.5 million customers were recorded as online banking users in Middle East, that is 30% percent of banking transactions were done through the internet.

In East and Central Africa region, especially Kenya, banking institutions have embraced the use of alternative banking channels services in the last 5 years. In the past, bank interactions could take as much as 2 hours, which made customers to queue to get services from, sometimes, unmotivated tellers.

After looking at the technological situation and on the educational level in Burundi, and after having a look on that information discussed above, the suspending question in researcher's mind is to

know if banking channels are the best way to serve successfully the customers in Burundi. The fact that those channels necessitate a technological tool, and that most of KCB customers in Burundi are Burundi natives, the question is to know if those bank channels are adequate to the KCB customers.

Are those channels really helpful and useful for all customers? Do KCB customers trust in those channels and do they adopt them for reducing the task and saving their time? After grasping on all those questions, the researcher has decided to examine how alternative banking channels influence customers of KCB in order to find out if those channels are effecting positively or negatively upon KCB customers in Burundi.

1.2 Objectives of the Study

The purpose of the study was to evaluate the effect of alternative banking channels on the financial performance of Kenya Commercial Bank, Burundi.

1.2.1 Specific objectives

The specific objectives of the project were:

- i. To examine the effect of mobile banking on financial performance of Kenya Commercial Bank, Burundi.
- ii. To assess the effect of internet banking, on financial performance of Kenya Commercial Bank, Burundi.
- iii. To examine the effect of auto teller machines on financial performance of Kenya Commercial Bank, Burundi.
- iv. To assess the effect of agency banking, on financial performance of Kenya Commercial Bank, Burundi.

1.3 Significance of the Study

The study will be of importance to managers of commercial banks including KCB, Burundi as it is the area of focus is the channels of alternative banking. The results will be of insightful value on the influence of the channels of banking on the clients, which will direct banking institutions to adopt, manage and expand their channels of alternative banking. The study findings will be essential to makers of policies in bodies of government of Burundi, as they will be directed on their guideline creating on sector of banking. This will consequently, lead to policy enactment that control the channels of alternative banking in the excellent customers and banks interest.

2. LITERATURE REVIEW

2.1 Conceptual Framework

Fig. 1 shows the conceptual framework guiding the study. It includes the predictor and dependent variables. The predictor variables include alternative banking channels including mobile, internet, ATM, and agency banking. The dependent variable is the firm performance as measured ROE, ROA, NPM and NIM.

2.2 Empirical Literature

2.2.1 Performance measurement

The procedure of common and precise assortment, examination and revealing of information to be used by an organization to screen the assets it uses, the result got with the fabricated items and services is known as performance management [14]. The assessment of performance can be done by application of

balanced score card, it handles other facets that do not involve measurements of finance but instead intellectual and intangible assets like services of high quality or royal clients which are vital to the business success. Islami et al. [15] argues that performance measurement purposes at encouraging workers enhance and for the next key objectives : to offer guidance and feedback, performance goals setting, training needs identification and input provision of administration of pay management, promotion and reward. The phases taken in efficient performance involve key performance areas identification and laying annual aims for every major indicator of performance, necessary features identification of successful performance, periodical performance review and an examination of performance with workforce and training and development needs of identification. When one has running enterprise or has absolute interest in business via their investments, one requires understanding way to measure its performance grounded on numbers and facts.

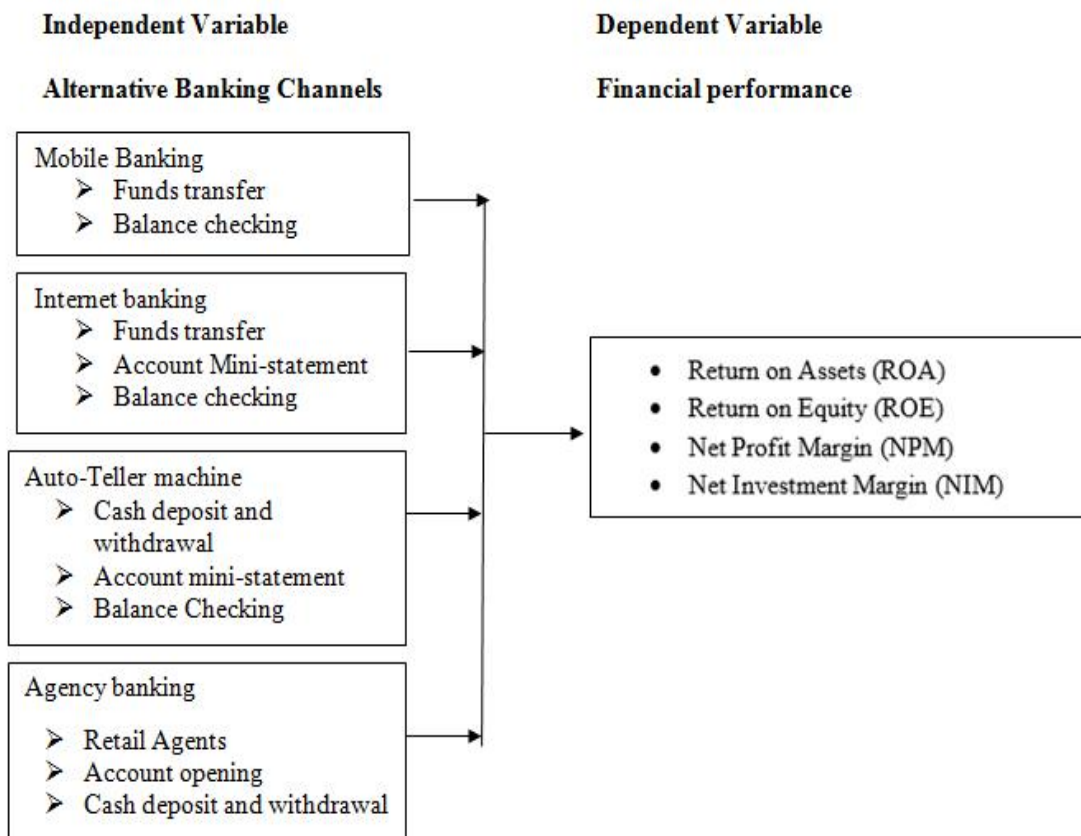


Fig. 1. Conceptual framework
Source: Researcher, 2019

There are many sections in an enterprise to observe. Some of clues that evaluate an enterprise and make proper changes to achieve successful objectives include review of business liabilities and assets, evaluation of the cash flow to assess operating activities of finance and investment. The effects of the mentioned activities can be understood through expenses and income from the income statement. They can also be understood by doing a comparison between sales and cost within the institution to understand if the amount of stock accumulated is increasing while at the same time no change in sales and thus, showing poor utilization of stock. Creditor and debtor values comparison between the earlier and existing balance sheets to assess history of credit, comprehend the satisfaction level of customer via complains and evaluations from the consumers, having reliability and performance quality enhances.

Initiatives of performance measure are unsuccessful since the design is poor and implementation difficulties. Performance of organization ought to be evaluated across both at work department level and organizational level needing supplementary elements and planning, tracking, reviewing and improving information. [16] assert that measuring of performance should concentrate on success makers, identifiers and communicators, organizational learning bolstering and provision of a ground for review and reward. Islami, Mulloli and Mustafa [15] in addition state proper measures of performance are those, which assist the organization to steer their acts towards attaining strategic goals. Measures of performance employed are those, which reinforce aims of the business, since the performance of the company is necessary to the tomorrow welfare and enterprise success.

Profitability has been broadly applied to assess the monetary performance. It is described as the surplus of revenue over expenses, which can be shown by the ratios such as ROE, NPM, and GPM. Nevertheless, the study used profit as a performance measure, which was a disadvantage. Profit is complex as various individuals, for instance, Accountants and Economists, can view it in various angles. It besides includes numerous approximations such as stock valuation and depreciation which result in providing barring values as per techniques applied. Drucker [17] highlights that the popular profit and cost performance measure of accounting hardly accommodates transformation in the company's size and structure, hence, non-

monetary assessments such as employee and management abilities and their turnovers should be applied to suit within the strategic design.

Indirect channels include; using a mobile phone to transact, issuing a MasterCard prepaid card, joining a national switch and deploying Automated Teller Machines, or using banking agent. Alternative banking channels are methods or ways of providing the banks services to the customer [18]. These methods are also known as to as branchless banking, which implies that they are applied by banks as distributional channels for delivering financial services to the customers without physically visiting the bank branches. Alternative banking is commonly referred as electronic, virtual, direct, and high-tech banking by existing literature [19].

Advancement in ICT has made it possible that bank account holders can transact from any location without physically walking into the budgetary structure through elective financial channels. This has been developed with an end goal to come to the unbanked population that has no time to make queues in banks to transact. According to Zhelyazkova & Angelakis [20], alternative banking channels that are commonly used by banks are internet, ATMs, mobile, and banking, credit and debit cards. Chebii [21] on the other hand list agent, mobile and internet banking as the most commonly used alternative banking channels.

3. METHODOLOGY

According to Mugenda & Mugenda [22] a research design is a layout that is to be followed when seeking to give questions answers. The study employed descriptive survey research design as well as correlation research designs. According to Kothari [23] this method is appropriate for establishing two or more variables' relationship. Descriptive survey research design method helped in gathering information about the existing status of alternative banking channels among Burundian commercial banks.

Population is the theoretically specified aggregation of the elements in a study [24]. In total, there are 10 Commercial banks. The research did not use all banks for the study. Thus, KCB, Burundi was selected case study since it had a variety of the alternative banking channels well penetrated in Bujumbura City as compared to other banks. The target population

of this study involved 37 employees and approximated 114 customers of KCB, Burundi. Hence, the total target population of the study was 151 respondents.

Sample means a selected of a limit number of individuals, objects, or events whose observation allows conclusions useable to the whole population within which the selection will be done. As KCB has many employees and customers to say that the population is very large, this does not allow us to investigate our entire population. As a result, the researcher chose a sample from our population.

The researcher used Slovin's formula to define the sample population presented as;

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

Where;

n = sample size,
N = sampled population and
e = errortolerance.

The study adopted an error tolerance of 10%, hence the confidence coefficient was 90%. Therefore;

$$n = \frac{151}{1+151(0.1)^2} \quad n = \frac{151}{1+151(0.01)} \quad n = \frac{151}{1+1.51}$$

$$n = \frac{151}{2.51} = 60.15$$

As calculated above the total sample size of the study was 60 respondents.

The sample size for each of employee categories was determined as follows;

$$n = \frac{\%N}{100} \times \text{Sample Size}$$

Purposive technique of sampling was used select study respondents. Purposive sampling subjective and based on judgments' made by the researcher in regards to the population. Thus, the assumption was that bank employees and consumers would be the most appropriate respondents to provide the study with accurate responses. Stratified technique of sampling was utilized to divide the sample population as per its unique characteristics, which included bank employees and customers. Convenience sampling was then used to select respondents as their availability and convenience.

The researcher used both open and close-ended questions. The survey instrument was consisted of two parts where part one focused on personal information to capture socio-demographics, which included an integration of closed and open ended questions. The questionnaire's second part was focused on questions that yielded relevant information targeting the research questions.

4. RESEARCH FINDINGS AND DISCUSSION

4.1 Assessment of Financial Performance of KCB

As assessment of the financial performance level of KCB was as indicated below. ROE, ROA, NPM, and NIM, which were measures financial performance and findings documented in Table 1.

As indicated in Table 1, the financial indicators of the financial performance of the bank increased significantly from 2012 to 2017. The ROA was lowest in 2012 (0.0288) and highest in 2017 (2.0375), ROE was lowest in 2012 (3.569) and highest in 2017 (4.245), NPM was lowest in 2012 (1.529) and highest in 2017 (2.765), and NIM was lowest in 2012 (1.680) and highest in 2017 (3.075). The trend was as indicated in Fig. 2.

The findings in Table 1 and Fig. 2 suggested that KCB's profitability level has significantly increased all the performance metric measures. The suggestion was that alternative banking affected the financial performance given that they offer consumers with strategic and easy to access means to access banking services with minimal destructions and at their own comfort. The findings were consistent with those by Sujud and [25] who a positive and significant impact between alternative banking and ROA. The findings were consistent with those by Zimucha et al. [26] which linked the adoption of website marketing with increased the bank's profits through the improvement of service quality and consumer purchases. The findings too were also consistent to those by Gündoğdu & Taşkin [27] who linked alternative banking channels with significant positive effect on ROA and ROE, suggestion that profitability was increased and hence the performance of the banking system.

4.2 Inferential statistics

The financial performance has aroused the interest of researchers but the consensus is far

from being reached. These studies used performance measures based on market value and the reaction of the stock market following the announcement of mergers. Commercial performance is a major issue in the banking and financial sectors and the essential element of the profitability of institutions. It allows the establishment of a lasting relationship of trust with your customers.

A multivariate regression was adopted to determine the correlation between the financial performance of KCB and alternative banking channels in Burundi.

4.2.1 Model summary

This section summarized the effects of financial performance with mobile, internet, agency and ATM banking. Table 2 documented the research findings.

As indicated in Table 2, the summarized the model shows that there was a significant relationship ($R = 0.518$) between the performance of KCB and alternative banking channels. The adjusted R was 0.141, suggesting that 14.1% of the total change in the financial performance of KCB, Burundi was attributed to alternative banking channels. The findings were consistent with those by Ocharo & Muturi [28] who found a significant correlation ($AnR^2=0.81$) alternative banking and the financial performance of the banking industry and Aluoch, et al. [29] who linked a 50.5% change in the bank performance as being explained by the mobile banking, agency banking, ATM banking, and internet banking.

4.2.2 Coefficients of determination

In the event that the R^2 is zero, it implies that the condition of the relapse line decides 0% of the point dispersion, recommending that the

Table 1. Return on asset (ROA)

Year	2012	2013	2014	2015	2016	2017
ROA Mean	0.0288	0.0381	0.0414	0.0419	1.1375	2.0375
ROE Mean	3.569	3.669	3.623	3.978	3.973	4.245
NPM Mean	1.529	1.595	1.743	1.852	2.002	2.765
NIM Mean	1.680	1.894	2.432	2.590	2.806	3.075

Source: Primary Data, 2019

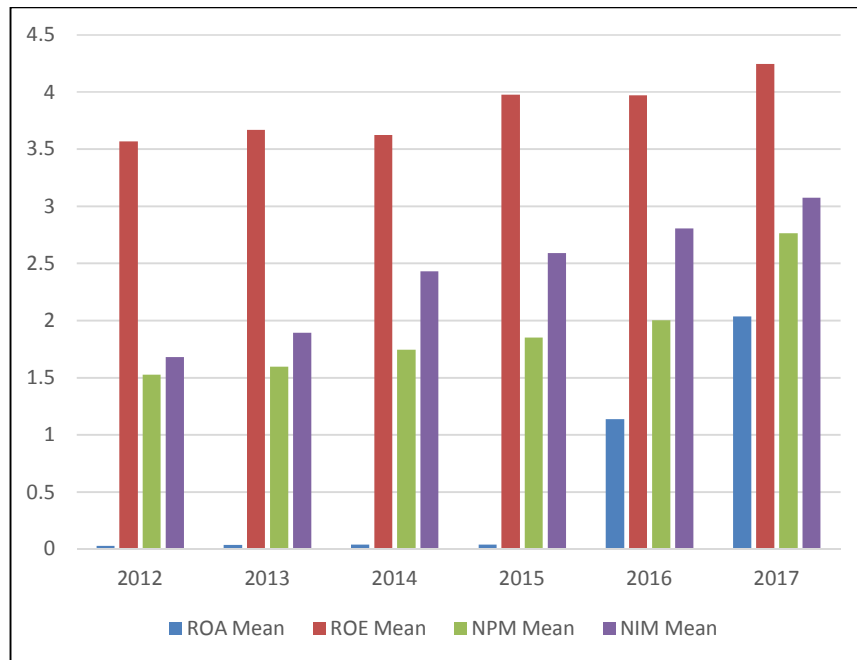


Fig. 2. Financial performance

Source: Research Data, 2019

numerical model utilized did not clarify the point appropriation by any stretch of the imagination. On the off chance that the R² is 1, it implies that the condition of the relapse line had the option to decide 100% of the point dissemination. This implies the numerical model utilized, just as the determined and parameters, are those that decide the dispersion of the focuses. Therefore, the closer the coefficient of assurance is to 0, the more spread spreads around the relapse line. Unexpectedly, the more the R² watches out for 1, the more the haze of focuses fixes around the relapse line. At the point when the focuses are actually adjusted on the relapse line, at that point R² = 1.

They showed the general trend of the relationship between study variables. Therefore, the following section shows the indicators of the money related execution of the bank brought about by the utilization of portable banking, mechanized teller machine, bank office and web banking. The results of this study were illustrated in Table 3.

By analyzing the results found on the ground, we noticed that with a confidence level of 95%, mobile banking t = 3,112, p = 0,005, automated teller machines = 4,596, p = -001, banking services t = 3.132, p = 0.005 and online banking t = 4.057, p = .001. The study produced statistically significant values with p values less than 0.05.

Constant = -0.742 shows that the independent variables of mobile banking, ATMs, agencies and Internet banking were zero, the budgetary exhibition of business banks would be - 0.742. An expansion in a unit change in versatile banking would bring about an increment in monetary execution of .029. An expansion in ATM banking units will bring about a 0.056

increment in money related execution. An expansion in organization banking units would bring about a 0.075 increment in monetary execution, while an increase in Internet banking units would increase financial performance by 0.041.

The regression model equation can be expressed as:

$$Y_i =$$

Where: Y_i = financial performance (ROA)

- X1= mobile banking
- X2=ATMs Banking
- X3= Agency Banking
- X4= Internet Banking

Findings from the study were in agreement with empirical evidence by Adaramola & Kolapo [30] and Harelimana [31].

Gündoğdu & Taşkin [27] linked telephone banking with increased profitably among commercial banks in Turkey. Adaramola & Kolapo [30] linked the sensitization of people to adopt mobile banking with enhanced profitably of banks. Ocharo & Muturi [28] found critical positive relationships between portable banking and monetary execution of the financial business, proposing that an expansion in the utilization of versatile bank administrations would subsequently upgrade the exhibition of business banks as was underlined by the current study. Similarly, Kenyan studies by Aluoch, et al. [29] linked mobile banking with significant positive effects on bank performance. The findings were also in agreement with local empirical evidence by Harelimana [31] who linked mobile banking products with enhanced service delivery, which in turn increased bank revenue in Rwanda.

Table 2. Model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.518a	0.268	0.141	.65237

a. Predictors: (Constant), ATMs, Mobile banking, Internet banking, Agency banking; Source: Primary Data, 2018

Table 3. Coefficients of determination

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.742	.429		8.725	.000
Mobile banking	.229	.138	.212	3.112	.005
ATM banking	.356	.152	.369	4.596	.001
Agency banking	.475	.175	.432	3.132	.005
Internet banking	.241	.155	.252	4.057	.001

a. Dependent Variable: Financial Performance; Source: Primary Data, 2018

Table 4. Analysis of variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.449	4	.362	11.312	.000 ^a
	Residual	0.726	56	.032		
	Total	2.175	60			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), ATMs, Mobile banking, Internet banking, Agency banking

Source : Primary Data, 2019

4.2.3 Analysis of variance (ANOVA)

This section presents a variance analysis, a measurable model used to look at the example implies. This test was applied when at least one unmitigated informative factors is estimated (at that point called fluctuation factors, their various modalities now and again being designated "levels") that impact the law of a variable that keeps on being clarified. This is a one-factor investigation when the examination includes a model portrayed by a solitary factor of inconstancy, two-factor investigation or multi-factorial investigation if not. To determine the quality of fit of the regression model, an analysis of variance was sought. The results of this analysis are presented in Table 4.

As indicated in Table 4, the relapse model had a noteworthiness level of 0.00%. This shows the model was a perfect indicator of things to come money related execution of business banks in Burundi given the elective financial channels. This is because the significant value (p-value) was well below 5%, which was used as an indicator of statistical significance. In the light of the data found in the field, we note that the analysis of the variance makes it possible to study the conduct of a quantitative variable to be explained according to one or more categorical variables. When it is desired to contemplate the conduct of a few factors to be clarified simultaneously, we will utilize a various change investigation (MANOVA). On the off chance that a model contains clear cut and consistent illustrative factors and it is wanted to examine the laws connecting the persistent informative factors with the variable to be disclosed by every methodology of the downright factors, we will at that point utilize an examination of the covariance (ANCOVA).

Findings from the study suggested that the reception of elective financial channels has revolutionized the way commercial banks operate. The banks generally adopted by commercial banks are bank branches, versatile

banking, Internet banking, and the utilization of computerized teller machines that are the most accepted by many commercial bank account holders. The investigation planned to analyze the impact of elective systems on the budgetary presentation of business banks in Burundi. Return on assets has been used to measure the money related execution of business banks. The study considered other alternative banking channels, such n as mobile banking, ATMs, branches and Internet banking. The findings of the study showed that there was a solid relationship (R = 0.518) between elective financial channels and the budgetary presentation of commercial banks in Burundi. An adjusted R-squared value of 0.141 was obtained. This means that 14.1% of the total variance difference in the monetary exhibition of business banks in Burundi can be ascribed to elective financial channels.

5. CONCLUSION

Taking into account the results obtained in the field, the researcher confirmed that the objective of the study was achieved as the research questions were ans. The study concluded that there was a strong relationship between alternative banking channels and the financial performance of KCB Bank, Burundi. 14.1% of the evolution of financial performance of commercial banks can be attributed to other banking channels. The study also concluded that mobile banking, ATMs, branches and Internet banking have a positive effect on the financial performance of KCB Bank, Burundi. From the ANOVA statistics, the study concluded that the regression model was derived and was reliable and well adjusted.

CONSENT

The information on the questionnaires was handled with confidentiality and scholarly consumption only. Once data regarding the study was noted and any concerns raised by the respondents addressed, they will be requested

for consent to be interviewed. The interview commenced only after consent was given, and only the customers of Kenya Commercial Bank was interviewed, the other employees of Kenya Commercial Bank were given a questionnaire to respond to.

SUGGESTIONS FOR FUTURE STUDIES

After analyzing the data found in the field, we noticed that alternative banking channels, only 28.2% of economic performance could be attributed to innovation and technology. Later on, a comparative report ought to be led to look at different elements that influence financial performance of business banks in Burundi. In the coming days, a study should also be conducted to analyze the difficulties faced by commercial banks when adopting alternative banking channels. It will also shed light on how these challenges can be addressed by the commercial banks of Burundi who want performance in their activities.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Kohali A, Sheleg A. Alternative banking channels. Tefen Tribune, Spring; 2011.
2. Buitenhek M. Understanding and applying block chain technology in banking: Evolution or revolution? Journal of Digital Banking. 2016;1(2):111-119.
3. Dermish A, Kneiding C, Leishman P, Mas I. Branchless and mobile banking solutions for the poor: A survey of the literature. Innovations: Technology, Governance, Globalization. 2011;6(4):81-98.
4. Buitenhek, M. Understanding and applying block chain technology in banking: Evolution or revolution? Journal of Digital Banking. 2016;1(2):111-119.
5. Kolodinsky JM, Hogarth JM, Hilgert MA. The adoption of electronic banking technologies by US consumers. International Journal of Bank Marketing. 2014;22(4):238-259.
6. Coskun, E. Customer penetration trends in online Banking: A Turkish case. Journal of Economics Finance and Accounting. 2014;1(4).
7. Khatri A, Kurnia S. Mobile banking adoption in Australian Rural Areas. In PACIS; 2011.
8. Hussain Z, Das D, Bhutto ZA, Hammad-u-Salam M, Talpur F, Rai G. E-banking challenges in Pakistan: An empirical study. Journal. Computer and Communications, 2017;5(02):1.
9. Abubakar AA, Tasmin R, Takala J. The Impact of electronic banking on customer service delivery in the Malaysian banking industry: Using sand Cone model. International Journal of Science and IT Management. 2012;1(11):11-22.
10. Ackah D, Agboyi MR. Adoption of electronic banking in Ghana Banking System: A case Study of Guaranty Trust Bank (Ghana) Limited. GRIN Verlag; 2014.
11. Mohamud JA. The inter relationship between service quality, electronic banking and customer satisfaction in the Commercial Banks in Uganda. East Asian Journal of Business Economics. 2017;5: 27-32.
12. Kumbhar VM. Alternative Banking: A modern practice in India: Professional banker. India: ICFAI University Press; 2011.
13. Musiime A, Malinga R. Internet banking, consumer adoption and customer satisfaction. African Journal of Marketing Management. 2011;3(10):261-269.
14. Wang, J. Encyclopedia of business analytics and optimization. IGI Global. 2014.
15. Islami X, Mulolli E, Mustafa N. Using management by objectives as a performance appraisal tool for employee satisfaction. Future Business Journal. 2018;4(1):94-108.
16. Tonchia S, Quagini, L. Performance measurement: Linking balanced scorecard to business intelligence; 2010. DOI: 10.1007/978-3-642-13235-3
17. Drucker P. Managing for results. Routledge; 2012.
18. Gabor D, Brooks, S. The digital revolution in financial inclusion: International development in the fintechera. New PoliticalEconomy. 2017;22(4):423-436.
19. Dermish A, Kneiding C, Leishman P, Mas I. Branchless and mobile banking solutions for the poor: A survey of the literature. Innovations: Technology, Governance, Globalization. 2011;6(4):81-98.

20. Zhelyazkova V, Angelakis P. Alternative distribution channels In the Bulgarian Banking Industry: Analysis of the status and major Developments. Economy and Business; 2014. ISSN:1314-7242
21. Chebii, M. Kenya Commercial Bank and SME banking alternative channels; 2013. Available:<http://smefinanceforum.org/post/kenya-commercial-bank-and-smebanking-alternative-channels-by-milkah-chebii-from-kcb>
22. Mugenda OM, Mugenda AG. Research Methods; Quantitative & qualitative approaches. Nairobi: Acts Press; 2003.
23. Kothari CR. Research methodology: Methods and techniques. 2nd Edition, New Age International Publishers, New Delhi; 2004.
24. Babbie E. The practice of social research. 8th Ed. Belmont C A: Wads Worth Boeck University; 1998.
25. Sujud Hiyam, Hachem, Boutheina. (Effect of bank innovations on profitability and Return on Assets (ROA) of Commercial Banks in Lebanon. International Journal of Economics and Finance. 2017;9:35. DOI:10.5539/ijef.V9n4p35.
26. Zimucha T, Zananwe N, Chimwayi K, Chakwizira E, Mapungwana P. An evaluation of the effectiveness of e-banking security in Zimbabwe: A case study of Zimbabwean Commercial Banks; 2012.
27. Gündoğdu A, Taşkin FD. Analysis of the relationship between financial innovation and the performance of Turkish banking. International Review of Economics and Management. 2017;5(3):16-32.
28. Ocharo W, Muturi W. Effect of alternative banking channels on profitability of commercial banks a case study of commercial banks in Kisii County, Kenya. International Journal of Economics, Commerce and Management United Kingdom. 2016;4(4):12-19.
29. Aluoch KO, Odondo A, Ndede CO. Effect of alternative financial delivery channels on performance of commercial banks: A survey of commercial banks in Kisumu city, Kenya. International Journal of Economics, Commerce and Management. 2018;6(8):227-256.
30. Adaramola AO, Kolapo FT. Assessment of bank technology machine and mobile banking as market strategies to raising performance of banks in Nigeria. Journal of Economics and Behavioral Studies. 2019;11(3):108-115.
31. Harelimana JB. Impact of mobile banking on financial performance of Unguka microfinance bank Ltd, Rwanda. Global Journal of Management and Business Research; 2017.

© 2020 Carlos and Ronald; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/55854>