Convenience of Digital Financial Services and Financial Inclusion amid Commercial Banks in Kajiado County

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Authors’ contributions

This research work was carried out in collaboration between both authors. Author JMM designed the study, performed statistical analysis, wrote the protocol, wrote the first draft of the manuscript, edited and made all the corrections. Author COO supervised all the processes involved in preparing the manuscript. Both authors read and approved the final manuscript.

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ABSTRACT

Despite the expansive banking infrastructure in Kenya, there is a problem bedeviling the Kenya financial sector for a long time. More precisely, there is low access to financial services and products in the presence of digital banking is associated with poor accessibility to financial services. Despite a vast array of empirical literature on digital banking for financial inclusion, little has been done in Kenya about convenience of digital financial services and financial inclusion, hence this study which linked between convenience of digital financial services and financial inclusion in Kajiado County. This research employed descriptive research design with the 323 Kenya commercial banks outlets in Kajiado County as its target population. From this population, a sample size of 179 elements was obtained using Yamane formula. These respondents were selected using stratified proportionate random sampling. The data gathered from primary sources was obtained using a structured questionnaire was administered using drop and. This research used quantitative analysis approach in its analysis to produce descriptive statistics and ordinal logistics regression statistics. The study concludes that at 5% significance level, there is statistically significant effects.

Cost effective process of operations, pricing of transactions (money related consideration),

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affordability of digital connectivity, ease and effectiveness of connectivity of the digital devices, digital finance mechanisms, and availability of digital finance jointly on financial inclusion in Kajiado County.

Keywords: Affordability; availability; commercial banks; connectivity; convenience; digital finance; digital mechanisms; financial inclusion; pricing.

1. INTRODUCTION

An estimated 69% of the world adult population; 3.8 billion people, are financially included in the banking sector [1]. As the world registers an estimated 20% of its adults (2.5 billion) as being financially excluded, the issue of financial exclusion is equally occurring especially in the larger part of Asia and most of the Latin America countries [2]. While there is no access to bank accounts to about 55 per cent of the adult population in Southeast Asia (excluding China), Cambodia and Myanmar are reporting up 80 per cent the adult population without bank accounts [3]. Although financial inclusion in Africa remains limited, financial structures in sub-Saharan Africa have increased in depth and coverage over time [4]. However, compared to other developing economies, globally, access to financial system is shallower in sub-Saharan Africa. As regards financial inclusion, only an estimated 20 percent of the African population possess individual bank account while in developed economies 92% of its population banked 38% in undeveloped economies are banked [5]. The exclusion of such individuals and businesses from the structured financial system means that they must rely on unregulated channels which are normally highly expensive and unreliable [6]. Relying on informal structures leads to the people paying heavy penalties when accessing financial products and obtaining these financial products at very expensive rates. This consequently hinders such a population from participating in economic development of a country. The low level of banked population is attributed to high level of financial illiteracy and underdevelopment.

Accordingly, the banking industry in adopting digital channels including; M-Banking, banking agency and Internet banking (I-Baking) to significantly accelerate financial inclusion and outreach [7]. This scenario is commonly encountered among North America banks, European banks and Asia-Pacific banks and banks in Latin America [8]. Adoption of digital banking M-banking and I-banking has grown significantly and its potential has been developed to achieve universal financial access. Sub-Saharan African is equally enjoying services from these digital financial services; significantly increasing the penetration of registered bank accounts from 12% to 21% from 2014 to 2017 and increasing outreach to a record 338 million bank accounts as per the year 2017 statistics [1]. Cash and digital credit facilities are rapidly ballooning in the African banking markets, and especially in Kenya and it neighbors prominently Tanzania and Uganda as well as parts of West Africa. The expansion of this financial services has inevitably translated to greater financial inclusion. Prominently, mobile money accounts have almost doubled its penetration in Africa since the year 2014(The Global Index Database, 2017).

Kenya has pioneered an interesting money-related assessment cycle by proliferating contracts for cell phone installments. According to M’Amanja [9] Kenya has greatly appreciated and implemented developments related to digital money to improve the reach of electronic cash transactions and hence decrease the cost of exchanges. More so, the new banking policy in Kenya has facilitated major penetration into banking financial service [10,11,12]. Digital financial services capture; funds transfer, payments of bills, money remittances across borders, individual savings, and other innovations such as savings, Pay-As-You-Go (PAYG), and credit offering. However, the convenience of digital financial services has adversely affected the financial inclusion among CBs in Kajiado county in terms of; cost effective process of operations, pricing of transactions (money related consideration), affordability of digital connectivity, connectivity of the digital devices, digital finance mechanisms, and availability of digital finance. While Van Cooten [13] found that Nairobi, a FinTech hub, facing challenges of poor access to data and information, highly constraining financial inclusion and hence financially excluding the BoPs and especially the financially illiterate, Niazi, Rouse and Kramer (2019) indicated that financial inclusion is being strangled by failure to fully understand the most effective design and delivery mechanisms of financial products/
services. Beck (2015) established that the poor found the cost of having a bank account, maintenance costs and fees for withdrawing cash as being extremely expensive with respect to their income levels. Accordingly, Shofawati [14] shows that there is need to improve the digital finance mechanisms so as to ensure they are simple, cost effective, and secure in which case it will increase the financial inclusion. The digital platforms should reliable and readily accessible. Convenience of digital financial services requires introduction and incorporation of new digital financial strategies and ensuring that they are accessible [15]. Importantly, the objective of the digital convenience of DFS is to ensure that client demands are met [16]. Although there is sufficient documentation on digital financial services (DFS) as a podium for booming financial inclusion, this concept is still in its embryonic stage in Kenya. This places demand on researcher to explore the viability of DFS as a vehicle for spurring financial inclusion in Kenya.

1.1 Statement of the Problem

In Kenya, an estimated 61.6% of its population is still unbanked [17]. The low access to financial services and products in the presence of digital banking is associated with poor accessibility to financial services, which has been identified as a problem bedevilling the Kenya financial sector for a long time [18]. More, stakeholders have unanimously agreed that financial services access is limited in Kajiado County (Kenya Bankers Association, 2019). The increasing household poverty might adversely affect the county’s economic growth [19]. Despite a vast array of empirical literature on digital banking for financial inclusion, little has been done in Kenya about convenience of digital financial services and financial inclusion [20]. Thus, there is insufficient validly reliable information on the link between convenience of digital financial services and financial inclusion in Kajiado County to denied the population in the county valuable information for prompting financial inclusion. Accordingly, this study was availed to produce sufficient information for helping perfect the prevailing financial exclusion.

1.2 Empirical Review

While Durai and Stella (2019) found that the service positively influences financial inclusion, Moore, Shofawati [14] shows that there is need to improve the digital finance mechanisms so as to ensure they are simple, cost effective, and secure in which case it will increase the financial inclusion. The digital platforms should reliable and readily accessible. Sindani, Muturi and Ngumi’s study [21] found that financial distribution channels have effect on financial inclusion as Kimiri [22] show that the cost of financial intermediation by Financial Technology (Fintech) was low which enhanced cheaper delivery of services and products. Mbama [25] established that bank customers are nowadays are equally enjoying digital banking when they get superior service accessibility. As Blythin and Cooten [23] found that FinTech would certainly promote admittance to enjoying financial products/services by many previously excluded Kenyans, Van Cooten [13] found that FinTech hub in Nairobi was facing challenges of poor access to data and information, highly constraining financial inclusion and hence financially excluding the BoPs and especially the financially illiterate.

2. RESEARCH METHODOLOGY

2.1 Research Design

This study opted for adopting the descriptive research while considering the various research designs. This was informed by descriptive research design’s ability of effectively provide comprehensive understandings of the problem under investigation and accurately describing all the variables at hand, which was required in this study. This study required comprehensively describing the characteristics of existing phenomenon; convenience of digital financial services coupled with its relation to and financial inclusion.).

2.2 Target Population

As explained and brought forth by numerous writers, scientists, academicians as well as scholars, target population implies the whole group of subjects either people, items, which are possessing similar features (characteristics). In this analysis, target population 323 licensed KBC Mtaani outlets Kenya commercial bank outlets in Kajiado.

2.3 Sampling Procedures and Techniques

Sampling is a practice of obtaining fewer observations from the entire population to represent the whole population. The study
sample size of 179 respondents was obtained using formula suggested by Yamane (1967). The respondents were selected using stratified proportionate random sampling.

2.4 Research instruments

In this study, the analysis used primary data gathered using a structured questionnaire which were administered to the respondents through drop and pick up technique. The study embraced a 5-point Likert scale (1 - 5) for assisting converting the qualitative responses into quantitative values [24] (Kothari, 2012).

The tool was pretested for validity (by means of content validity) and reliability (adopting Cronbach’s Alpha internal consistency).

2.5 Data Analysis

Using IBM SPSS statistics version 24 software, the data was analysed using quantitative analyses to produced descriptive analysis for establishing the properties of variables. These descriptive statistics included; frequency, percentages, means as well as standard deviations. The results obtained were presented using tables and figures will they were interpreted accordingly. After successfully carrying out quantitative analysis, the study performed an inferential analysis using ordinal logistics regression.

3. RESEARCH FINDINGS AND DISCUSSION

Guided by the objectives, the research analysed data collected using the questionnaire form the 137 participants using quantitative approach to obtain descriptive for establishing the properties of the variables and for each IV establishing how it relates to the dependent variable (DV), financial inclusion among commercial banks in Kajiado county. These descriptive statistics included means as well as standard deviations. The results obtained were presented in tables were interpreted accordingly.

In that the questionnaire measured on a 5-point Likert Scale (1-5); strongly Disagree = 1; disagree = 2; neutral = 3; agree =4; strongly agree = 5, was analysed to produced mean (M) and standard deviation (SD) with decimal points (fractions), the results were transformed into scales strongly Disagree = 1-1.8: disagree= above 1.8-2.6: neutral = above 2.6 - 3.4: agree = above 3.4-4.2: strongly agree = above 4.2-5.

3.1 Financial Inclusion among Kajiado County CBs

In advance the research assessed the financial inclusion among CBs in Kajiado county to establish the level. After this analysis, the study returned the contents in Table 1.

While assessing the status of financial inclusion among CBs in Kajiado county, the study produced results in Table 1 which show that they disagreed to the assertion that the ratio of the bank account to the population of adults in the area is very high (M= 2.21; SD = 1.31) implying it was not exceeding 75% as they also disagreed to the sentiment that all the bank account in their bank were active (M= 2.09; SD = 0.84). Further, they disagreed to the assertion that the customers easily adapted to their digital banking services (M= 2.39; SD = 0.86). Overall financial inclusion among commercial banks in Kajiado county was shown to be low (M= 2.23; SD = 1.00).

3.1.1 Effects of convenience of digital financial services on financial inclusion

This research assessed objective three; determine the effects of convenience of digital financial services on the financial inclusion among commercial banks in Kajiado county which produced Table 2.

Assessment of convenience of digital financial services as affecting financial inclusion is shown in Table 2, where the participants showed that the effects on effective process of operations on financial inclusion among commercial banks in Kajiado county was moderate (M= 3.29; SD = 0.96) and that financial inclusion among commercial banks in Kajiado county was impacted by pricing of transactions highly (M= 3.48; SD = 0.91). Affordability of digital connectivity was shown to moderately influence the financial inclusion among commercial banks in Kajiado county (M= 3.33; SD = 0.93) while connectivity of the digital devices for ensuring customers to communicate with ease and effectively would moderately affect financial inclusion among commercial banks in Kajiado county (M= 3.34; SD = 0.89). While financial inclusion among commercial banks in Kajiado county would be highly affected by digital finance mechanisms (M= 3.65; SD = 0.89), availability of digital finance was shown to moderately influence financial inclusion among commercial banks in Kajiado county (M= 3.34; SD = 0.89).
overall, the effects of convenience of digital financial services on financial inclusion among commercial banks in Kajiado county was shown to be high ($M=3.41; SD = 0.91$).

The research revealed that the convenience of digital financial services had a significant impact on financial inclusion among commercial banks in Kajiado county. These findings are consistent with those found in the Mbama [25] research, which found that customers perceive the value of digital banking services in terms of enjoyability, utility, timeliness, cost reduction (saving), and ease of living. As a result, banks that want to improve their clients’ experiences should provide services that provide value, are accessible, are enhanced, and include functional as well as security features. Furthermore, Radcliffe and Voorhies [26] discovered that innovation encourages disadvantaged individuals to use traditional banking services. According to Ngango et al. [27]), advancements in services such as real-time electronic and Internet transfers have considerably enhanced financial performance as indicated by productivity growth, decreased operational costs, and efficiency. In the current study, it was discovered that the impacts of effective process of operations on financial inclusion among CBs in Kajiado county were moderate, but pricing of transactions had a significant influence on financial inclusion among commercial banks in Kajiado county.

Thus, affordability of digital connectivity has been shown to moderately influence financial inclusion among commercial banks in Kajiado county, as connectivity of digital devices for ensuring customers’ ease and effectiveness has also been shown to moderately influence financial inclusion among commercial banks in Kajiado county. Although digital finance methods had a significant impact on financial inclusion among commercial banks in Kajiado County, the impact of digital finance availability on financial inclusion among commercial banks in Kajiado County was modest. Blythin and Cooten [22] revealed that FinTech will undoubtedly encourage many previously excluded Kenyans to get access to financial products/services. According to Van Cooten [13]'s research, Nairobi has problems such as limited access to data and information, which severely limits financial inclusion and hence financially excludes the poor and notably the financially illiterate. Withdrawing cash is seen as excessively costly in comparison to their earning levels. As a result, Shofawati [14] argues that there is a need to develop digital banking systems so that they are easy, cost effective, and safe, which would promote financial inclusion.

### 3.2 Inferential Analysis

The study used ordinal logistics regression for inferential analysis to produce Table 3. The dependent variable had three indicators; ratio of the bank account, active bank accounts, and ease of adapt of digital banking services, in which case the analysis evaluated the relation of each of the indicators of the dependent variable to all the indicators of each independent variable.

In seeking to establish the relationship between convenience of digital financial services and financial inclusion among commercial banks in Kajiado county, the study tested the hypothesis

$$H_0: \text{There is no statistically significant effect of convenience of digital financial services on financial inclusion among commercial banks in Kajiado county}$$

On carrying out logistic regression analysis, the results illustrated in Table 3 were obtained.

These results show that the probability value (p-value) for the entire model on relationship between convenience of digital financial services and high ratio of the bank account to the population of adults was 0.000 indicating that there is a significant reduction in the chi-square statistics ($p<.005$). The chi-square statistic ($\chi^2(9) = 368.12$) is an indication of a significant prediction model. So, the this is a good model. In that Nagelkerke $R^2$, was 0.481, the model can account for 48.11% of the variance in high ratio of the bank account to the population of adults is determined by convenience of digital financial services.

The results on the relationship between cost effective process of operations and high ratio of the bank account to the population of adults, (p-value = 0.007) explaining that p-value was not higher than 0.05, indicating that the interaction was significant. On the relationship between pricing of transactions and high ratio of the bank account to the population of adults (p-value = 0.000), it was observed that the p-value was less than 0.05 which implies that the interaction was significant. The results on the relationship...
Table 1. Formal financial inclusion in Kajiado county

<table>
<thead>
<tr>
<th>Financial inclusion among commercial banks in Kajiado county</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ratio of the bank account to the population of adults in the area is very high (above 75%)</td>
<td>2.21</td>
<td>1.31</td>
</tr>
<tr>
<td>All the bank account in our bank are active</td>
<td>2.09</td>
<td>0.84</td>
</tr>
<tr>
<td>Our customers easily adapt to our digital banking services</td>
<td>2.39</td>
<td>0.86</td>
</tr>
<tr>
<td>Financial inclusion among commercial banks in Kajiado county</td>
<td>2.23</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Source: Research data (2021)*

Table 2. Convenience of digital financial services and financial inclusion

<table>
<thead>
<tr>
<th>Convenience of digital financial services</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost effective process of operations</td>
<td>3.29</td>
<td>0.96</td>
</tr>
<tr>
<td>Pricing of transactions (money related consideration)</td>
<td>3.48</td>
<td>0.91</td>
</tr>
<tr>
<td>Affordability of digital connectivity</td>
<td>3.33</td>
<td>0.93</td>
</tr>
<tr>
<td>Connectivity of the digital devices for ensuring customers to communicate with ease and effectively</td>
<td>3.38</td>
<td>0.90</td>
</tr>
<tr>
<td>Digital finance mechanisms</td>
<td>3.65</td>
<td>0.89</td>
</tr>
<tr>
<td>Availability of digital finance</td>
<td>3.34</td>
<td>0.89</td>
</tr>
<tr>
<td>Convenience of digital financial services</td>
<td>3.41</td>
<td>0.91</td>
</tr>
</tbody>
</table>

*Source: Research data (2021)*
Table 3. Logistic regression results

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Regression coefficient</th>
<th>p-value</th>
<th>Model p-value</th>
<th>Model Chi-Square</th>
<th>Nagelkerke R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>High ratio of the bank account to the population of adults in the area</td>
<td>Cost effective process of operations</td>
<td>-1.900</td>
<td>0.000</td>
<td>0.000</td>
<td>368.12 df=194</td>
<td>0.4811</td>
</tr>
<tr>
<td></td>
<td>Pricing of transactions (money related consideration)</td>
<td>-3.129</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordability of digital connectivity</td>
<td>1.785</td>
<td>0.026</td>
<td>0.567</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ease and effectiveness of connectivity of the digital devices</td>
<td>0.839</td>
<td>0.567</td>
<td>0.070</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital finance mechanisms</td>
<td>-1.240</td>
<td>0.070</td>
<td>0.044</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability of digital finance</td>
<td>2.949</td>
<td>0.044</td>
<td>0.4811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All the bank account in our bank are active</td>
<td>Cost effective process of operations</td>
<td>-0.489</td>
<td>0.465</td>
<td>0.024</td>
<td>452.66 df=194</td>
<td>0.2384</td>
</tr>
<tr>
<td></td>
<td>Pricing of transactions (money related consideration)</td>
<td>-2.313</td>
<td>0.013</td>
<td>0.009</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordability of digital connectivity</td>
<td>2.254</td>
<td>0.009</td>
<td>0.075</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ease and effectiveness of connectivity of the digital devices</td>
<td>0.641</td>
<td>0.675</td>
<td>0.036</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital finance mechanisms</td>
<td>1.572</td>
<td>0.036</td>
<td>0.221</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability of digital finance</td>
<td>1.836</td>
<td>0.221</td>
<td>0.3786</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our customers easily adapt to our digital banking services</td>
<td>Cost effective process of operations</td>
<td>-2.198</td>
<td>0.002</td>
<td>0.000</td>
<td>1829.74 df=141</td>
<td>0.3786</td>
</tr>
<tr>
<td></td>
<td>Pricing of transactions (money related consideration)</td>
<td>-0.308</td>
<td>0.728</td>
<td>df=141</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordability of digital connectivity</td>
<td>-2.588</td>
<td>0.003</td>
<td>0.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ease and effectiveness of connectivity of the digital devices</td>
<td>0.197</td>
<td>0.900</td>
<td>0.987</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital finance mechanisms</td>
<td>0.013</td>
<td>0.987</td>
<td>0.617</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability of digital finance</td>
<td>0.706</td>
<td>0.617</td>
<td>0.3786</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research data (2021)
between affordability of digital connectivity and high ratio of the bank account to the population of adults (\(p\)-value = 0.026) expose \(p\)-value that was not higher than 0.05 which implies that the connection was significant. The relationship between ease and effectiveness of connectivity of the digital devices and high ratio of the bank account to the population of adults was shown to be insignificant since \(p\)-value = 0.567, which was exceeding 0.05. The results on the relationship between digital finance mechanisms and high ratio of the bank account to the population of adults (\(p\)-value = 0.070) expose \(p\)-value that was higher than 0.05 which implies that the connection was insignificant. The relationship between availability of digital finance and high ratio of the bank account to the population of adults was shown to be significant since \(p\)-value = 0.044, which was not exceeding 0.05.

On the logistic results for relationship between convenience of digital financial services and all the bank account in our bank are active was 0.024 indicating that there is a significant reduction in the chi-square statistics (\(p<.005\)). The chi-square statistic \(\chi^2(9) = 452.66\) shows that the model is significant in prediction. So, the model is a good one. In that Nagelkerke \(R^2\), was 0.2384, the model can account for 23.84% of the variance in all the bank account in our bank are active is determined by convenience of digital financial services.

The results on the relationship cost effective process of operations and all the bank account in our bank are active are immediately translated to action, (\(p\)-value = 0.465) shows that the \(p\)-value that exceeded 0.05 which implies that the relationship was insignificant. On the relationship pricing of transactions and all the bank account in our bank are active (\(p\)-value = 0.013) shows that the \(p\)-value was less than 0.05 which implies that the relationship was significant. On the relationship affordability of digital connectivity and all the bank account in our bank are active (\(p\)-value = 0.009) showing that the \(p\)-value was less than 0.05 which implies that the relationship was significant. The results on the relationship between ease and effectiveness of connectivity of the digital devices all the bank account in our bank are active (\(p\)-value = 0.675) shows that the \(p\)-value that was greater than 0.05 which implies that the relationship was insignificant. The results on the relationship between digital finance mechanisms and all the bank account in our bank are active (\(p\)-value = 0.036) expose \(p\)-value that was less than 0.05 which implies that the connection was significant. The relationship between availability of digital finance and all the bank account in our bank are active was shown to be insignificant since \(p\)-value = 0.221, which was exceeding 0.05.

The logistic results for relationship between convenience of digital financial services and customers easily adapt to our digital banking services was 0.000 indicating that there is a significant reduction in the chi-square statistics (\(p<.005\)). The chi-square statistic \(\chi^2(9) = 1829.74\) shows that the model is significant in prediction. So, the model is a good one. In that Nagelkerke \(R^2\), was 0.3786, the model can account for 37.86% of the variance in customers easily adapt to digital banking services is determined by convenience of digital financial services.

The results on the relationship cost effective process of operations and customers easily adapt to our digital banking services (\(p\)-value = 0.002) shows that the \(p\)-value was less than 0.05 which implies that the relationship was significant. On the relationship pricing of transactions and customers easily adapt to our digital banking services (\(p\)-value = 0.728) shows that the \(p\)-value was greater than 0.05 which implies that the relationship was insignificant. The results on the relationship between affordability of digital connectivity and customers easily adapt to our digital banking services (\(p\)-value = 0.003) shows that the \(p\)-value that was less than 0.05 which implies that the relationship was significant. The results on the relationship between ease and effectiveness of connectivity of the digital devices and customers easily adapt to our digital banking services (\(p\)-value = 0.900) shows that the \(p\)-value that was greater than 0.05 which implies that the relationship was insignificant. The results on the relationship between digital finance mechanisms and customers easily adapt to our digital banking services (\(p\)-value = 0.987) expose \(p\)-value that was higher than 0.05 which implies that the connection was insignificant. The relationship between availability of digital finance and customers easily adapt to our digital banking services (\(p\)-value = 0.617) expose \(p\)-value that was higher than 0.05 which implies that the connection was insignificant. These findings agree to Durai and Stella (2019) that the low service charge and precise timing has important implications for the use of mobile wallets (apps), and found low service positively influences the access to financial service. Thus, the effect of digital finance service convenience on financial inclusion of is significant.
4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

While concluding the research poses that at 5% significance level, convenience of digital financial services has a statistical positive significant effect on financial inclusion among commercial banks in Kajiado county.

The study reveals that at 5% significance level, convenience of digital financial services significant effect on high ratio of the bank account to the population of adults and account for 48.11% of the variance in high ratio of the bank account to the population of adults. The significant indicators in the case are; cost effective process of operations (p-value = 0.007), pricing of transactions (p-value = 0.000), affordability of digital connectivity (p-value = 0.026), and availability of digital finance (p-value = 0.044) while ease and effectiveness of connectivity of the digital devices (p-value = 0.567) and digital finance mechanisms (p-value = 0.070) are insignificant.

It was revealed that at 5% significance level, convenience of digital financial services significantly affects the DV indicator that all the bank account in our bank are active, accounting for 23.84% of the variance in all the bank account in our bank are active. In this case, the significant variables are; pricing of transactions (p-value = 0.013) affordability of digital connectivity and all the bank account in our bank are active (p-value = 0.009) and digital finance mechanisms (p-value = 0.036); while cost effective process of operations (p-value = 0.465) ease and effectiveness of connectivity of the digital devices (p-value = 0.675), and availability of digital finance (p-value = 0.221) are insignificant.

The study reveals that at 5% significance level, convenience of digital financial services has a positive significant effect on customers easily adapt to digital banking services contributing 37.86% of the variance in customers easily adapt to digital banking services. The significant variables in this relationship are; cost effective process of operations (p-value = 0.002), and affordability of digital connectivity (p-value = 0.003) and those which are insignificant include; pricing of transactions (p-value = 0.728) ease and effectiveness of connectivity of the digital devices (p-value = 0.900) digital finance mechanisms (p-value = 0.987) and availability of digital finance (p-value = 0.617).

4.2 Recommendations

The study suggested policy recommendation and recommendation for further study. This is because the financial inclusion among CBs in Kajiado is moderate and the prevailing status of affairs requires to be ameliorated this using effective strategies. Thirdly, the research recommends that CBs in Kajiado county should considers convenience of digital financial services by offering simple, cost effective, and secure services to their customers. The process should be effective process while the transactions costs are low to be conveniently afforded by the BoPs. Meanwhile they should have stable networks that are ensuring reliable connectivity of the digital devices.

4.2.1 Recommendations for Further Study

This study relied on primary data collected from Kajiado county KCB outlets; leaving other commercial banks. So, the same study should be done among all banks in Kajiado county.

4.2.2 Contribution of the Study

The findings might be of excessive worth to innumerable participants in the banking industry including; commercial bank policy makers, management, public, scholars/academics, and researchers with interest in the banking industry. Through the study findings, policymakers could gain a better understanding of features and prepare emerging digital banking approaches by educating policy making in line with new trends to ensure a key pillar of Kenya's economic development.

Manager of CBs in Kajiado County might find the study helpful in estimating the ways in which important financial inclusion is to increase their income for their digital banking strategy. Banks ' management would gain greater understanding of the significance of the digital banking strategy by connecting digital banking approaches with banking financial inclusion.

The study results would be helpful to the public, in particular to low-income and poor people, where it allows more people to be informed on the ways they might enjoy formal financial services. Digital banking techniques are important for the public as they improve the security of their cash and are more convenient than storing cash at home.
The study findings identified how various digital banking approaches among the Kajiado County commercial bank would help improve the county's financial inclusion, adding information to the existing array of knowledge.

Researchers would use the study findings for referencing other related research topics in their future research work on digital banking strategies and financial inclusion. It would also be used by researchers who have different challenges in their arguments about expanding digital banking strategies with respect to the financial inclusion of banks in another region. Therefore, the findings will serve as a wake-up call for both digital banking approaches and financial inclusion of the BoPs, especially those residing in Arid and Semi-Arid Land (ASAL) regions in presenting critical analysis of different digital banking strategies for financial inclusion. Likewise, potential researchers might think the results of the study add value to their future inquiry into the relation to DFS and financial inclusion. Hence, the thesis is a good point of reference for prospective scholars.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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