Influence of Internet Banking on Uptake of Products and Services in Commercial Banks in Kenya

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ABSTRACT*: Internet banking is a technology-based method of delivering banking services remotely via the World Wide Web. It makes use of computers and other intelligent gadgets. The study investigated the influence of Internet banking strategy on the uptake of bank products and services in Family Bank. The study utilized Secondary data acquired from Family Bank and Annual reports from the Central Bank of Kenya, while Primary data was collected using questionnaires. The diffusion of innovation theory guided the study. Descriptive research was adopted in the study, and a sample of 384 was arrived at using Fischer's formula. The quantitative data were analyzed using descriptive and inferential statistics. The descriptive statistics showed that the mean of the products and services consumed through this platform was 5. This indicated that the respondents strongly agreed that internet banking influenced the uptake of bank products and services. The study recommends that to comfortably use internet banking, bank should identify a technologically savvy market niche and markets this product. Further, it recommends that a study should be conducted to establish the cost-effectiveness of the Internet banking strategy.*

Keywords: *Internet Banking, Strategy, Uptake, Savvy, World Wide Web*

I. INTRODUCTION

1.0 Background of study

Internet banking is a technology-based method of delivering banking services remotely via the World Wide Web. It makes use of computers and other intelligent gadgets. (1) Using the login information provided by the bank, registered customers can access the bank's website and log in. This makes it possible for customers to do both financial and non-financial transactions online. Online banking is another name for this type of banking. Customers can conveniently obtain bank products and services with this strategy because it is offered around the clock. In this strategy, time-wasting is minimized, the cost of services like statements is decreased, and the bank's operating expenses are decreased (1). Online banking is also known as a web-based service that enables users to conduct safe financial transactions 24/7.According to (2). The steadily increasing percentage of people utilizing the internet is the main reason banks are able to provide this method. According to (3), by 2010 financial institutions in Eastern Africa had adopted this strategy. To remain competitive and tap into new market sectors, most well-known Kenyan banks now provide internet banking services.
Family Bank provides internet banking at the retail and corporate levels so that customers can perform allowed transactions based on the requested access level (4). The bank gathers information such as the account holder's personal information to prevent fraud. When signing on a corporation's behalf, signatories must provide complete identification and indicate whether they have View, Approve, Input, or Full Access rights. This study has to look at how these safeguards and procedures affect the use of banking products and services in Kenya because the bank has made steps to protect it from intellectual and legal responsibilities associated with the

utilization of their outsourced online banking systems. The prevalent perception that the younger clientele (those between the ages of 24 and 45) were more familiar with electronic banking was confounded because they were informed about internet banking services. (3). This study analyzed the current market to see if this observation still holds. Despite its apparent usefulness to banks' earnings, a different study examining how clients of 30 financial institutions in Nairobi utilized online banking discovered that balance inquiries were the most popular use and paying bills was the least prevalent (5).
Using mobile money transfer synergies, banks have increased the cash flow portfolio available through internet banking services (6). For instance, using M-pesa pay-bill numbers and purchasing products and services have increased smartphone users' need for internet banking and the amount of money flowing between the bank and their clients' mobile phones. To increase uptake across the nation, this study pinpointthe locations where the target bank's distribution strategy may be made more effective. According to (7), the benefits of utilizing these tactics include minimal operational expenses since cash deposits and withdrawals don't require physical agents. Lower ledger and third-party fees result in increased bank profitability. The method is also incredibly practical because it allows customers to access their accounts even while they are abroad. The family bank disclaims responsibility for any damage that results from using networks outside of the nation, nonetheless. Lastly, the 24/7 accessibility of internet banking fosters business continuity even when banks are closed, speeding up economic activity, investments, and wealth generation, which improves the economy.

There are several drawbacks to the online banking strategy, such as the potential for clients to develop reckless spending patterns, given the ease with which they may access credit and debit tools from anywhere at any time. This is bad for bank customers who sign up for the channel without being taught appropriate spending habits. (8) opines that banks indemnify themselves from responsibility for any losses or injury due to a consumer using internet banking on their account. The customer has little say over the security of the data because most online banking platforms are purchased and maintained by a third party. Fraudsters can coerce account holders into making fraudulent money transfers to other platforms that allow for simple withdrawals; internet banking users are susceptible to fraud and physical theft (8).

1.1Statement of the problem

The banking industry has become increasingly aggressive over time, which has led Commercial banks and other financial institutions to compete for customers fiercely. To enhance productivity, convenience and competitiveness, commercial banks have developed an internet banking distribution strategy and committed resources to support it. Due to these factors, commercial banks are ruthlessly competing to win market share and maintain customer loyalty (9). Distribution techniques recently adopted by banking institutions have resulted in ruthlessly competition to win market share and maintain customer loyalty (9).According to (10), internet banking make it simple for customers to access services because more services and items can thus be accessed throughout the day as opposed to the conventional branch distribution strategy. The purpose of commercial banks adopting internet banking distribution strategy is to enable customers to access various services remotely without having to travel to visit physical branches (11). (12) Discovered that the use of internet banking gave commercial banks a competitive advantage. The study also found that consumers needed to learn more about the products and services provided via internet platforms. The study left a gap because it needed to look at how the uptake of products and services was affected by the e-banking approach, a gap this study aimed to close.
Family Bank Limited uses digital distribution strategies to increase uptake of its products and services. Despite the availability of Internet banking strategy, customers prefer visiting the banking halls while others defer transactions to later dates rather than using Internet Banking to access offered products and services, which affects the level of uptake. This prompted the study to investigate the influence of internet banking distribution strategies on the uptake of bank products and services in Kenya.

1.2 Objective of the study

To analyze the influence of Internet Banking onuptake of products and servicesin Family Bank Ltd.

1.3Research hypothesis

H_{01}: There is no statistically significant influence of internet banking on the uptake of the bank products and services in Family Bank Ltd.

II. LITERATURE REVIEW

2.1Theoretical review

2.1.1 Diffusion of Innovation Theory

This theory was created in 1995 by Everett M. Rodgers (13). The theory explains how and why new ideas and technologies are created, as well as how quickly they are accepted in society. According to this theory, innovation can be defined as anything that is novel to the public and is either created by a group or an individual for reception by society in place of formerly utilized concepts. In order to determine whether a new concept or invention will be successful, Rodgers discusses the patterns of technology adoption. This depends on how ideas are disseminated at different social levels and whether they are accepted or rejected. Although improvements may be beneficial, not all are welcomed by the public and sometimes it takes longer for a new idea to catch on. This depends on how a bank feels about a specific technology or concept. The Bank implements a given invention once it is determined that it is beneficial.

The theory also looks into what motivates someone to adopt innovative concepts, technologies, or ways of doing things. It clarifies when, why, and how quickly innovation can be adopted by a particular community or social system. The theory also outlines what must be done to increase the rate at which people adopt new concepts and assimilate them into their daily lives. According to Rodgers (14), adoption is defined as changing one's behaviour from the past. According to the theory, for an individual or community to adopt a concept, they must first believe it to be novel and essential to them. This causes the notion to spread to a large population and become accepted. The theory also explains why some individuals are more prone than others to adopt innovation. They are divided into four groups: innovators, early adopters, early majorities, and lastly laggards.

According to (15), these groups are categorized by adoption rates. The first category includes the risk-takers who test a novel concept as soon as they become informed of it, regardless of the danger. These people have strong social ties, are willing to learn new things and enjoy doing so. This makes up about 2.5% of people who use a new product. Due to their high income, members of this class are not discouraged by the degree of risk involved in implementing a new product. People regarded as leaders in their communities make up the early adopters category. They are relatively early adopters of new concepts, albeit they are cautious. Before deciding, other individuals who want to adopt a product or service consult with them first. Social closeness for this group is about 13.5%.

The early majority is a group that rarely takes the lead but adopts new products at a slightly higher rate than normal. These people are respected by their peers because they are involved in societal matters. This group, which makes up 34% of the population, does not like to take unwarranted chances and wants to be certain that a product will be successful once they accept it. The late majority is made up of skeptics (15). When the majority of society has used a product and found it successful, they are willing to accept it. Due to social or economic pressure, this group cautiously embraces products or services. 34% of people are considered to be the late majority. The laggards making 16% make up the last category. They are constantly wary of change and steadfastly oppose it until it becomes customary.

The Diffusion of innovation, as it has been explained, helps individuals and organizations assess the rate at which new technology will spread throughout a society or how adaptable it is. With this in mind, the theory works mainly for innovators and marketers. When considering an innovation, the innovator has to ensure the

product will be beneficial and adaptable to society. Using the diffusion of innovation theory, the innovator can test the product's applicability and adoption from the early adopters, the laggards, the late majority, and the early majority 16). If the theory runs, it shows that the innovation is likely to be adopted by all players, and then there are higher chances of the innovation being successful. The diffusion of Innovation theory also benefits marketers as it helps them identify the right audience for the products they are marketing. Not all products are likely to be adopted by the entire society. The theory helps banks analyze the adoption of products by different groups.The group that seems to have all the key players in the theory shows the right target audience. Factors such as the setting of the society as urban or rural, the level of education, and the cost of a product play a vital role in adopting a technology.

The first criticism of the theory is the assumption that technologies are discreet packages and, therefore adopted for the same reasons by the different players. It is erroneous to assume that innovations or technology are a discreet package; therefore, their use cuts across all (17). Concerning the diffusion theory, the early adapter would have been using the accessibility of the internet as a selling point for the purchase of mobile phones. However, the late adapters may choose not to go for that option as it is not what they need a phone for.
The theory also operates on the assumption that adaption is based on the availability of information concerning a particular innovation. Therefore, if all the early adopters work on giving as much information as possible on technology, individuals will be swayed to adopt the technology in question. However, this is not the case in several circumstances. Sometimes, individuals purchase or adopt certain technologies for strategic reasons. In some cases, the laggards are not the last to adapt due to lack of information, but since they do not believe in the innovation or its importance
In conclusion, the theory does shed light on how innovation is adopted in an organized and perfect society. However, such societies do not exist; therefore, adoption is not as smooth and organized. Sometimes, the laggards put new technology to better use than the early adapters. Sometimes, technology is embraced all at once or rejected altogether. Other factors that affect innovation adoption are not covered under the diffusion of innovation theory. Therefore, the theory should be used in collaboration for accurate analysis. Despite the shortfalls, the theory explains how society accepts technology (15). The study referred to the diffusion of innovation theory postulates because once the banks develop innovation; they present it to their customers. These customers consist of the people who will accept the technology in different timelines, as is pinned in the theory. The distribution of services using the internet banking strategy by Family Bank Limited is guided by the theory because it has customers who are accepting internet banking at different timelines.

2.2 Empirical literature

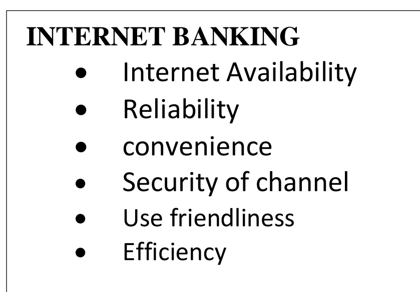
(18) Researched the impact of e-banking on customer satisfaction in Nigeria. They discovered that most Nigerians were skeptical of the advancements in banking technology. The study also revealed that many clients continue to favor branch banking. The survey also discovered that the quality of these e-banking tactics did not satisfy the users. This was demonstrated by the number of users who enrolled for this service yet continued to frequent the banking halls. (19) carried out a study to determine the influence of e-banking on the financial performance of commercial banks performance. The research aimed to ascertain whether any connection existed between Internet banking and bank financial performance. The profit after taxes was used to gauge performance. ATMs, bank cards issued to clients, point-of-sale cards issued, and mobile and online banking use were among the independent variables. The study used CBK annual reports to obtain secondary data. It found that Internet banking significantly impacted the lucrativeness of commercial banks operating in the Republic of Kenya.
Aduda and Kingoo (20) researched the relationship between Kenyan banks' performance and online banking. It aimed to determine whether investments made on these platforms altered how well Kenyan banks performed. Both descriptive and inferential research designs were utilized in the study to analyze the data. According to the study, e-banking and banks' performance are closely related. The study was limited because it only involved some banking institutions available in Kenya. (21) studied how Internet banking affected commercial banks' performance. The study found that banks' financial performance improved after adopting internet banking. The

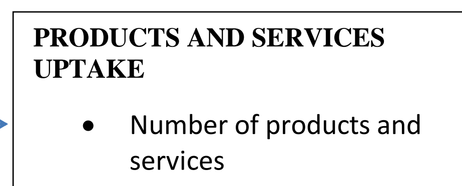
survey also discovered that internet banking led to more people using commercial banks' products and services. The study recommended the Internet banking distribution strategy for use by commercial banks to boost overall performance.

Cheruiyot (22) researched on the impact of internet banking on the financial performance of commercial banks in Kenya. He measured the internet variable using banking intensity derived from web feature data from bank websites. The study observed from the multiple regressions that the profitability and offering of Internet banking had a significant association with the performance of commercial banks.

2.3Conceptual framework

Independent Variable **Dependent Variable**





III METHODOLOGY

The data collection, measurement and analysis to answer the research questions are guided by the study designs. These are strategies for the methods, technologies, and people employed to collect data (23). The study employed descriptive and correlation study designs. The two designs were relevant in this study because correlation was used to test the relationship value among the study variables. This was done to ensure the correlation coefficient did not exceed 0.8 to avoid the problem of Multicollinearity. The descriptive research design was applied because the research described the study variables without altering their current state and characterized the phenomenon as it exists currently.

These include convictions, realities, truths, and observations (24). This study made use of the positivism research philosophy. According to this concept, knowledge is founded on facts. (25) assert that the characteristics of knowledge are drawn from objective reality and statistically examined to provide conclusions or correlations between variables. According to the positivism research philosophy, knowledge is valid if it is informed by values of reason and data gathering and measurement using quantitative and statistical techniques to develop theoretical models that can be applied to comparable circumstances. The research was carried out in Family BankLimited in Mt Kenya region, comprising of 23 branches. This area was chosen because it constitutes customers engaging in various income-generating activities ranging from agriculture, business and employment who visited branches.

A sample of 384 was drawn from the target population using Fischer formula. According to (26),the formula for determining sample size for populations greater than 10,000 is given by $n = \frac{z^2 pq}{d^2}$ Where n = this forms the desired sample size for populations greater than ten thousand. z = this represents the required standard deviation of 1.96. This is a 95%confidence level. P =represent the part of the target population estimated to have measured characteristics. q = 1-p thus (1-0.5) = 0.5. d = this is the statistical significance required (accuracy = 0.05 level desired).Having no estimate available of the proportion in the target population assumed to have the characteristic of interest, 50% or 0.5 will be used in the equation to get the sample size. Thus $n = \frac{(1.96)^2 \times (0.50) \times 0.50}{0.05^2}$ this formula gives n to be 384, but the researcher assumed a non-response rate of 5

$n = 384$

%.

The secondary data was collected from the Central Bank of Kenya and Family Bank Annual reports and Primary data was collected using questionnaires. To make sure the instrument was valid; it was submitted to Murang'a University of Technology supervisors for evaluation. Pre-testing was conducted on 38 respondents which formed 10% of the sample and edited where errors were noted to ensure content and construct validity.
The study tested reliability by Computing Cronbach's alpha to ensure the instrument had all essential items and eliminated the unwanted ones. The Cronbach's alpha value of 0.672 was generated indicating acceptable reliability (27).The study considered ethical issues such as confidentiality, rights to withdraw from research and explanation of the purpose of the research to respondents. The data was entered in Statistical Package for Social Sciences tool and analyzed to establish descriptive statistics such as frequencies, means and inferential statistics which included the regression model as well as calculate bivariate statistics such as means and the standard deviations.

IV RESULTS AND DISCUSSIONS

4.1Response rate

Table 1: Response rate

Response	Frequency	Percentage
Responded	354	92%
Not responded	30	8%
Total	384	100%

The research administered 384 questionnaires on drop and pick for some respondents and others administered in terms of interview. The questionnaires which were fully responded were 354, making a response rate of 92% (Table 1). According to(26).a response rate above 80% is good enough for research work.

4.2 Internet banking usage

Table 2: Internet banking usage

Total response rate	Internet banking users	Percentage of Internet Bankingrespodents
354	11	3%

Internet banking was used by 3% of users, which represented 11 of 354 total respondents. This finding shows that the Internet banking strategy has not reached the climax of adoption among customers, and ways to improve on the uptake of this strategy should be formulated. Once the adoption of the strategy is improved, it will significantly increase the uptake of products and services offered in the strategy.

4.3Descriptive statistics for Internet Banking

Table 3: Descriptive statistics

Internet banking statement	n	Mean	Standard Deviation
Convenience	11	5	0
security	11	5	0
User friendliness	11	5	0
Reliability of agents	11	5	0
Cost effectiveness of agent	11	5	0
Average	**11**	**5**	**0**

The study established, as indicated in Table 4.3, that out of 354 customers, only 11 accessed internet banking services, indicating that the majority of customers were not registered for internet banking service. The customers who reported to have used it have used three services. In all the parameters for internet banking, the average rating of internet banking influence on services uptake was 5. This shows that they all agreed that internet banking affected the uptake of services. This finding agrees with the findings of (18). They conducted a study on how Nigerian consumers were affected by e-banking. They discovered that the majority of Nigerians were skeptical of the advancements in banking technology. The study also revealed that a lot of clients continue to favor branch banking. The survey also discovered that the quality of these e-banking strategies did not satisfy the users.

This was shown by the high number of clients who were registered to use these services but still opted to visit the banking halls for the same services. In the current study, the customers who used this distribution strategy were indeed relatively low compared to the other three strategies at 3%. This calls for the bank's management to enlighten customers about the advantages of using this platform. The products and services on this platform are diverse and tailor-made to enable customers to conduct most transactions outside the banking hall. The customers using this platform are tech-savvy because it entails using the bank website to log in and navigate various offerings. This was the reason that a low number of customers adopted the strategy. The management should develop a market niche with technologically savvy people, such as colleges and Universities, to increase uptake. A study should be conducted to establish the cost-effectiveness of Internet banking.

V CONCLUSIONS AND RECOMMENDATIONS

The study investigated the influence of internet banking on the uptake of the bank's products and services. The descriptive statistics showed that the mean of the products and services consumed through this platform was 5. This indicated that the respondents strongly agreed that internet banking influenced the uptake of bank products and services. The study recommends that the institution may conduct aggressive marketing activities to sensitize the customers about this strategy. The sample interviewed included internal customers; only 3% of the respondents had used the strategy. The study recommends that the institution conduct internal training for the staff so that they may pass the knowledge to the customers they interact with at service desks. Once the internal customers are informed about the strategy, they will likely use it and also train the customers. These customer engagements will result in increased uptake of internet banking strategy. To comfortably use Internet banking, one has to be technologically savvy; therefore, the research recommends that the bank identifies a market niche (Universities, Colleges, and Schools) and market this product to them.

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