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Effectiveness of Commercial Banks' Strategies on the Frequency of Customers' ATM Card Usage: A Case of Commercial Banks in Embu West District, Kenya

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Abstract: The emergence of Automated Teller Machines (ATMs) has caused the greatest transformation in the banking industry. Its introduction significantly revolutionized the practice of banking by availing accessibility on a 24-hour day basis and reducing substantially the number of bank tellers. Despite this transformation and 23 years after the first ATM was introduced in Kenya, the ATMs have not achieved full adoption. The ATM usage stands at 13.4% nationally. This study therefore sought to explore the effectiveness of strategies applied by commercial banks in Kenya so as to achieve the full adoption of ATMs by customers. The exploratory research design was used in this study with a target population of 128,458 bank customers. Stratified random sampling was used to get a sample size of 384 bank customers and census survey was conducted for the 8 bank managers in the 8 commercial banks of Embu West district. Data collection was done using two sets of questionnaires; one for the bank managers and another one for the bank customers. The tools were pre-tested at Chuka town in Meru South district on 19 bank customers and 4 bank managers. The pre-test obtained a reliability coefficient of 0.7483 on customers' questionnaire and 0.7128 on bank managers' questionnaire. The two set of questionnaires were thus considered reliable because the reliability coefficient exceeded 0.70. Data analysis was done using the descriptive and inferential statistics. The results obtained from the study implied that commercial banks' strategies of accessibility, security, cost reduction, advertising, added benefits and market segmentation were significant in influencing customer usage of ATM cards. These findings would be useful in strategy evaluation by bank managers in improving the management of the ATM delivery channels.

Keywords: Automated Teller Machines, Commercial Banks Strategies, Frequency of Customer ATM Usage

1. Background Information

The history of the development of ATMs goes back 50 years ago when the first electronic cash machine was installed in London, United Kingdom on 27th June 1967, by Barclays Bank. In 1968 the networked ATM was pioneered in Dallas, Texas, USA. Their use spread widely in the UK from 1973. Networked ATMs means that they enable people to withdraw and deposit money from machines not belonging to the bank where they have their account or in the country where their accounts are held (enabling cash withdrawals in local currency). Some examples of interbank networks include, Visa, MasterCard, PLUS, and Cirrus [1]. It was not until 1987, that the first ATM was introduced in the Kenyan banking industry by Standard and Chartered Bank.

An ATM has become an increasingly important delivery channel in the banking sector. Looking through the last 10 years it has been established that, by the year 2000, Kenya had only 230 ATMs. The number grew to 1979 by the year 2010, and 2718 by the year 2015 [29]. This growth rate is far behind the fast growing population to whom the ATM services are targeted. The adoption of ATM technology is still low in Kenya despite the 50 years of existence of this technology since its inception. According to [9], survey titled the

Dynamics of Kenya's changing financial landscape, ATM usage stands at 13.4% nationally. This was a survey done on Kenyans aged 18 years and above. It shows that a huge opportunity exists for Kenyan banks to reach out and convince the 86.6% of Kenyans who do not use ATMs to adopt it. The growth and penetration of ATMs has been slow among banks. This slow penetration and hence usage is evident from congestion and long queues witnessed in most Kenyan banks as customers deposit and withdraw from over the counter. Therefore, there is a need for Kenyan banks to address why there is such a low adoption rate and hence formulate appropriate strategies to address these gaps.

2. Literature Review

2.1. Market Segmentation Attributes Affecting Usage

Market segmentation is the process of placing buyers in a product-market, into subgroups so that members of each segment display similar responsiveness to a particular positioning strategy (Cravens & Piercy, 2006). So, segmentation is an identification process aimed at finding subgroups of buyers within a total market. Segmentation identifies customer groups within a product market, each containing buyers with similar value requirements. Customer satisfaction can be improved by providing a value offering that matches the value proposition considered important by the buyer in the segment and according to the characteristics of consumer markets. Banks use the demographic and psychological characteristics of the markets to segment their customers. Demographics like age, gender, income, nature of employment, education level and lifestyle form a very good basis for segmenting markets.

2.2. Demographics

Various research studies have been conducted to find out whether demographic factors such as age, income, level of education affect the rate of adoption of new technologies. Research by [25] on the consumers choice of a payment system, found that demographic factors such as age, income, level of education, gender much influenced the choice of/and adoption of electronic system of payment. In general, older consumers were less likely than the younger generations to use ''new fangled'' devices such ATMs and debit cards. On the same, demographic factors have also been found to be associated with adoption of different banking channels, especially internet banking [22]; [4]; [13]. Generally, more males than females tend to use internet banking [3]. According to [3] findings in Turkey, it shows that mid-aged consumers are more likely than younger or older consumers to use internet banking. Customers who are younger, more educated, and wealthier are more likely to use internet banking [22]; [13]. Those who belong to the upper middle class and have high-level occupations are more likely to use internet banking [12]; [13]. In Italy, younger consumers more than older consumers like to use ATMs [8]. In Saudi Arabia, adoption of tele-banking is negatively associated with age and positively associated with income and educational level [4]. Contrary to this, [15] found in his research on the underlying factors to the adoption of electronic banking in Estonia, that the Internet bank users lived in different regions and belonged to all income and professional groups. Somewhat surprisingly no remarkable differences existed among the different age groups.

2.3. Consumers' Perceptual Profiles Affecting Usage

In his study, [22] found that Retail bank consumers' perceptual profiles are seen as providing bank managers with a much more useful strategic alternative than consumer demographic profiles. This was on his study titled: predicting Automated Teller Machine Usage -the relative importance of perceptual and demographic factors. The overall aim of this study was to discriminate users and non-users of Automated Teller Machines (ATMs) using both demographic characteristics of respondents as well as their perceptions of ATM attributes, with a view to assessing the relative importance of these predictor variables.

The implications of such findings are important for electronic bank marketers, particularly with regard to the task of devising carefully targeted strategies, aimed at maintaining and boosting the use of electronic retail banking service outlets. Recent marketing literature, particularly from the USA, reflects this need. However, much of the resulting research has concentrated on providing evidence of the association between consumers' usage patterns of ATMs and their demographic profiles [11] and, much later, consumer psychographic profiles [26].

No doubt the information gained from such associations is useful, particularly in assisting electronic retail banking managers to determine, in the first instance, "who" their customers are. However, the prevalence of significant consumer resistance to and rejection of automated tellers [20]; [26]; [28] suggests that research questions may need to be pitched beyond the immediate horizon of demographic and psychographic profiles and, instead, address the questions of how users and, indeed, non-users view these innovations and why.

Despite the fact that it is widely acknowledged that perceptual variables are far more successful as predictors of the purchase outcome than consumer personal characteristics, very few studies have been conducted that attempt to associate perceptual variables with ATM usage. Consequently strategic questions, such as how retail bank consumers perceive ATM technology and how far they accept this innovation as one which can fully and satisfactorily replace human tellers in all the banking services handled by the innovation, have remained largely unanswered. Additionally, the banks strategic responses to these perceptions and their effectiveness have not been thoroughly explored. This study therefore tries to fill this gap by measuring the effectiveness of the commercial bank's strategic responses to the ATM adoption problem from the customers' view point. The findings would really be important in informing strategy formulators on how to design effective strategic responses that match customers' needs and behaviours.

2.4. Cultural Factors

Any study focusing on technological adoption cannot be complete without looking at the effects of culture on adoption process. Technological adoptions vary from one place to the other because of differences in cultural contexts. Various studies have been done on the process of ATM adoption over the last 30 years. In early eighties, the most important factor to predict the ATM usage was the location convenience [24]. The factor became less important as the ATM diffusion increased. Age is generally considered the most important personal factor to predict the ATM adoption. ATM usage has been lower among the elderly than with the other age brackets [2]. This has been associated with general resistance towards technology typical of elderly people and to specific difficulties in learning and using new technologies.

Hoffstede (2001) has provided a very useful model of analyzing the cultural impact on technological innovations. Through his Hoffstede's National Culture Dimension model, he provided five value dimensions to examine culture as provided in the Table 1.

Table 1. *Hofstede's National Culture Dimension Model.*

Value Dimension	Description
Power distance	The extent to which the weaker members of the society accept inequality in power distribution.
Uncertainty avoidance	The extent to which the society feels uncomfortable with uncertainty and ambiguity.
Individualism/Collectivism	Individualistic cultures expect individuals to look after themselves; collective cultures expect group members to support each other.
Masculinity/Femininity	Masculinity stands for a society where gender roles are clearly distinct; femininity for a society where social gender roles overlap.
Long/Short term orientation	Long term orientation encourages virtues oriented towards future rewards. Short term encourages virtues related to present rewards.

A study titled, "ATM's adoption in developing countries: Déjà vu or not'', done in Mumbai, India, found out four main reasons for non use of ATMs; lack of need, safety concerns, preference for human contact and feeling of inadequacy [5]. Lack of need implies a situation where people have a feeling of being organized enough not to require banking services out of hours, not giving enough importance to saving time and no opportunity due to lack of personal earnings. This aligns well with [10] model of people with a long/short term orientation dimension, where this type of culture encourages virtues related to current rewards. Preference for human contact means inclination for dealing with people rather than machines and general dislike towards technology, resulting in less technology use. This reason was particularly important for elderly people. [5] also found that safety concerns which include physical safety, fear of robbery and lack of control over transaction were reasons why there was low ATM adoption. Others reasons were concern over card security, ATM malfunctioning and fear of spending too much. They also found that fear of not being able to use the ATM was critical which was aggravated by fear of appearing foolish in public as a result of failing to use the machine.

2.5. Theoretical Framework

Technology adoption and diffusion are two interrelated concepts. Adoption is the process by which an individual becomes committed to continued use of an innovation. It occurs at the micro level, being the individual's decision process leading to adoption or rejection [21]. Diffusion occurs at the macro level, being the process by which adoption spreads through a specific culture.

Since the mid-eighties, a number of relevant studies have been done and have concentrated on identifying the conditions or factors that could facilitate IT adoptions. A number of models have been proposed to predict the system use and assess the market potential of emerging technologies. A widely accepted and robust tool is the Technology Acceptance Model (TAM) [7]. It was designed to understand the effect of external variables (e.g. interface design and training) on user acceptance of technology. TAM suggests that perceived ease of use and perceived usefulness are two most important factors in explaining technology use, which is the single best predictor of actual system usage. The role of attitude in this model is controversial. Some studies suggest that the impact of beliefs on intention is completely mediated by attitudes towards the behavior; others exclude the attitude construct because it does not mediate the effect of perceived usefulness of an intention. This discrepancy can use a technology despite a negative attitude because it is useful; while in a personal context, the role of attitude becomes more relevant.

Similarly, the type of technology affects behavioral predictors of use. An extension of the TAM model has been proposed to explain acceptance and use of ATMs [17]. Two specific factors were found to complement the influence of the perceived ease of use and usefulness of ATMs usage in Britain. These factors are the perceived level of privacy and personal space. Empirical studies have however demonstrated that TAM does not hold equally well across cultures [27]. The model focused on email adoption in the US and Switzerland but not in Japan, where cultural tendencies towards greater power distance, higher uncertainty avoidance and collectivist orientations tend to dissociate usefulness from use.

The Theory of Diffusion of Innovations according to [21] is a theory of how, why, and at what rate new ideas and technology spread through cultures or through a social system. Rogers identified five characteristics or attributes of innovations that affect the rate at which innovations are adopted (and ultimately their usage patterns): their relative advantage, compatibility, complexity, divisibility (trialability), and communicability (observability). According to Rodgers, relative advantage is the degree to which an innovation is seen as better than the product it supersedes, or competing products; the greater the perceived advantage the faster the rate of adoption. Compatibility is the degree to which an innovation is perceived to be consistent with the existing rules, experience and needs of potential adopters. The extent to which the innovation fits the existing skills, equipment,

procedures and performance criteria of the potential adopter is important and relatively easy to access. Complexity is the degree to which an innovation is perceived as being difficult to understand or use. Innovations which are simpler for potential users to understand will be adopted more rapidly than those which require the adopter to develop new skills and knowledge. In explaining the fourth attribute of trialability, Rodgers alludes that an innovation that is trialable represents less uncertainty to potential adopters, and allows learning by doing. Rodgers also finally agrees that people easily learn by observing and he says that the easier it is for others to see the benefits of an innovation, the more likely it will be adopted. It is assumed that innovations spread as potential adopters come into contact with existing users of an innovation.

Rogers further developed his theory to show the stages which an innovation passes through on its journey to adoption. He identified five stages which an innovation passes through as, knowledge, persuasion, decision, implementation and confirmation. In the first stage of knowledge, the individual is first exposed to an innovation but lacks information about the innovation. It should be noted that during this stage of the process the individual has not been inspired to find more information about the innovation. It is in the second stage of persuasion that the individual is interested in the innovation and actively seeks information/detail about the innovation. In the third stage of decision, the individual takes the concept of the innovation and weighs the advantages/disadvantages of using the innovation and decides whether to adopt or reject the innovation. Due to the individualistic nature of this stage, Rogers notes that it is the most difficult stage to acquire empirical evidence. In the implementation stage, the individual employs the innovation on a varying degree depending on the situation. During this stage the individual determines the usefulness of the innovation and may search for further information about it. The final stage is confirmation. Although the name of this stage may be misleading, in this stage the individual finalizes their decision to continue using the innovation and may use the innovation to its fullest potential.

3. Methodology

The research design was exploratory, because its purpose was to evaluate the effectiveness of commercial banks' strategies on customer ATM usage. The purpose of this study is to explore and therefore allows for flexibility. [16]says that a flexible research design which provides opportunity for considering many different aspects of a problem is considered appropriate if the purpose of the research study is that of exploration. It can be used when collecting information about people's attitudes, opinions, habits or any of the variety of education or social issues [19]. The location of the study was Embu West district in Eastern province and lies in the south eastern slopes of Mount Kenya. Embu West district has 8 commercial banks all situated in Embu town.

The suitability of Embu West as an area of study was that it has a combination of local, international and multinational banks which have different strategies in pushing customer ATM usage. The population of the study was 8 commercial bank managers and 128,458 customers which gave a total of 128,466. Table 2 provides the number of banks and customers in each bank.

Table 2. *Distribution of Account Holders in Various Commercial Banks in Embu West District.*

Bank	Branches	No. of account holders
Barclays Bank	1	8,119
Consolidated Bank	1	6,153
Co-operative Bank	1	10,188
Equity Bank	1	62,070
Family Bank	1	18,635
Kenya Commercial Bank	1	8,129
K-Rep Bank	1	11,596
National Bank	1	3,568
Total	8	128,458

Source: Bank Managers

Two sampling techniques were used; stratified random sampling and census survey. The goal of stratified random sampling is to achieve desired representation from various subgroups in the population [19]. The population was divided into 8 strata with each subgroup representing customers of a particular bank. The number of customers selected from each bank was proportionate to the relative number of customers for each bank in the target population. This was to give customer in each stratum an equal chance of being selected and also to have proportionate representation in the sample. The sample size for this study was 384. According to [14], the criteria for determining sample size from a finite population is based on a table of which any population of 100,000 and above has been identified to be 384. In addition to this, the researcher conducted a census survey on all the 8 bank managers. This was to ensure that the study captured views from customers of all commercial banks in Embu West district. The questionnaires for customers were issued randomly to the customers as they entered the banking halls and the ATM lobbies until the required sample size was achieved as per the sampling matrix in Table 3.

Table 3. *Sampling Matrix.*

Bank	Number of Account Holders	Proportion	Sample Size
Barclays	8,119	6.32%	24
Consolidated	6,153	4.79%	18
Co-op Bank	10,188	7.93%	31
Equity Bank	62,070	48.32%	185
Family Bank	18,635	14.51%	57
KCB	8,129	6.33%	24
K-REP	11,596	9.03%	35
NBK	3,568	2.78%	10
Subtotal	128,458	100.00%	384
Bank managers	8	census	8
Total	128,466		392

Source: Bank Managers and Self

This study involved collection of primary data. Two questionnaires were developed for this study. One questionnaire was for the bank managers and the other for the bank customers. The questionnaires had both open ended and closed ended questions. The questionnaires for customers

consisted of two sections: the first section aimed to collect customers' bio data, the second section had questions relating to influences by banks' strategies on advertising, pricing, accessibility and security. The questionnaires to the bank managers had two sections with the first section aiming to collect bank specific data and the second was on strategies. The questionnaires for customers were administered at the entrance to the banking halls and the ATM room entrances where customers queue for banking services. The questionnaire for managers was administered in the bank manager's offices. Before application, the questionnaires were pretested on a small sample of 19 customers which was 5% of the sample that was targeted in this study. A Pretest sample of between 1% and 10% of the study sample is recommended [19]. This pre-testing helped check on, reliability and validity of the instruments. The instruments were piloted in Chuka town of Meru South District. The choice of Chuka town for the pilot was suitable because it has a lot of similarities with the Embu west district. A total of 4 bank managers were included in the pilot i.e. managers for KCB, Barclays bank, Co-operative bank and Equity bank.

The Reliability of questionnaires was tested by use of the Cronbach Reliability coefficient. Data collected from the pilot samples was coded, edited, classified and input in the computer via Statistical Package for Social Sciences (SPSS) for analysis. The Cronbach Reliability coefficient was used and found a reliability coefficient of 0.7483 for customers' questionnaires and 0.7128 for managers' questionnaires. A coefficient of 0.70 or more implies that there is a high degree of reliability of the data [19] and thus the instruments were considered to be reliable. Once the instruments were administered, data collected was coded, edited, organized and cleaned. It was then keyed in the computer for analysis. Descriptive statistics were used mainly in the form of frequencies, percentages and graphs. Inferential statistics mainly the Chi square and Factor analysis were used. These were facilitated by use of Statistical Package for Social Sciences (SPSS) version 11.5.

4. Results and Discussions

4.1. Frequency of Customer ATM Usage

ATM usage is the ultimate measure of adoption. The study sought to find out effectiveness of commercial banks' strategies in influencing the frequency of ATM usage by customers. These strategies are influence of transaction cost, advertising, accessibility to the ATM, provision of physical security, compulsory usage and market segmentation. Data was analyzed and presented in frequency tables and cross tabulations in the subsequent sections.

The study also sought to find out the overall ATM card acquisition as compared to the overall usage. This will enable us to know the actual level of usage of the ATMs. The findings are presented in form of cross tabulation of acquisition of ATM cards against usage and presented in Table 4.

Table 4. *Cross Tabulation for ATM Card Acquisition and Usage.*

ATM Aquisition		ATM card Usage		Total	Over all usage
		Yes	No		
ATM Card Acquisition	Yes	250	49	299	83.6%
		83.6%	16.4%	100.0%	83.6%
	No	0	85	85	0.0%
		0%	100%	100.0%	0.0%
Total		250	134	384	65.1%

The results of the findings in Table 4 indicate that ATM usage among the customers with cards stand at 83.6%. This implies that despite some people having the ATM cards they still do not use it. This can be attributed to the issue of trust, knowledge and information gap of people and resistance to use. The findings also reveal that the overall usage of ATMs stand at 65.1% among all the account holders in the commercial banks. This figure combines those who have not acquired the ATM cards and those who have acquired but still do not use. This level of usage indicates a positive trend when compared to the findings by [9] which indicated usage at 57%. This can be attributed to banks aggressiveness in pushing their strategy and also entry of more youthful customers into the banking system who are technologically savvy and would therefore easily acquire ATM cards and use ATMs. It can also be attributed to the banks loading more uses over the ATM such that certain transactions like payment of utility bills and third party payments like M-Pesa can now be done using the ATM.

4.2. Influence of Transaction Costs on Frequency of ATM Usage

Findings from this study showed that all banks sampled have placed transaction charges lower at the ATM than over the counter. Transaction cost, which is the cost of banking, is thought to have an impact on usage of ATM services. This study sought to find out whether the lowered transaction cost over the ATM influenced decision and frequency to use the ATM card. The cost of providing services at the ATM by commercial banks is lower since it is automated, done only with minimal human intervention at the functional support level.

It has been established that employee costs account for over 50% of the total operating costs in any organization. The employee costs keep on going up and the only way businesses can reduce these costs is through automation of their services. This was well achieved with the introduction of the ATMs, which enabled banks to pass on these benefits to the customers through lower transaction charges over the ATMs.

From the findings of the study, it was found out that the widest difference between the over the counter withdrawal charges and ATM withdrawal charges was at Barclays bank where it charges sh. 300.00 and sh. 30.00 for over the counter and ATM respectively with Equity bank having the narrowest difference at sh.50.00 and 30.00 for over the counter and ATM withdrawal charges respectively.

When the data was analyzed and subjected to Chi square and p-value tests to determine the relationship between lowered transaction costs at the ATM and frequency of use, it was found that the computed Chi-square statistic=157.181 and p-value= 0.0000 implied that a significant relationship exists

between the cost of doing transactions and the decision to use the ATM card. This therefore means the lowered cost of transacting at the ATM significantly influences the customers' frequency of using the ATM. The findings on transaction costs versus frequency of usage are presented in Table 5.

Table 5. *Influence of Cost on Frequency of ATM Card Usage.*

Usage	Influence of transaction cost on ATM card usage					Total
	VHI	HI	FI	SI	NI	
Yes	116	51	22	12	54 21.2%	255
	45.5%	20.0%	8.6%	4.7%		100.0%
No	16	0	0 0.0%	0 0.0%	113	129
	12.4%	0.0%			87.6%	100.0%
Total	132	51	22	12	167	384

Chi-square statistic=157.181, p-value=0.000

The results in Table 5 presents the findings that majority of the respondents 45.5% and 20% were very highly influenced and highly influenced respectively by the cost of doing transactions in their decision to frequently use the ATM card. This is could be attributed to the fact that in 3 out of the 8 banks sampled, transacting over the counter was charged 5 to 8 times more than the same transaction over the ATM. However, 21.2% of the respondents were not influenced by cost in their decision to use the ATM card. This could be attributed to the fact that other strategies by the banks such as advertising, Accessibility and security were key influencers to some people than lowered costs of transacting over the ATM.

4.3. Influence of Advertising on Frequency of ATM Usage

Advertising is communication intended to persuade consumers to take some action towards a certain product. Although advertisements are usually considered as 'invitation to treat' they have a great deal of influence in shaping consumer perceptions. This study therefore sought to find out the influence of advertisements on ATM on the customers' decision to frequently use the ATM card.

Advertisements can be quite attractive if the right media is used. Data from all the 8 bank managers collected showed that all the banks advertise in one medium or the other. The following media were used by all banks in the order of the most frequently used: Newspapers, Television, radio, bill boards, posters and digital screens. The effectiveness of an advertisement largely depends on the reach effect and relevance of the message being conveyed

When the Chi-square statistic and p-value were used to analyze the relationship between advertising and decision to frequently use ATM card by customers, the results of the computed Chi-square statistic=119.176 and p-value=0.0000 implied that a significant relationship exists between advertising and decision to frequently use ATM by customers. The findings are presented in Table 6.

Table 6. *Influence of Advertising on Frequency of ATM Card Usage.*

ATM usage	Influence of Advertisement on ATM card usage					Total
	VHI	HI	FI	SI	NI	
Yes	32	76 29.9%	26 10.2%	44 17.3%	76	254
	12.6%				29.9%	100.0%
No	0 0.0%	5 3.9%	0 0.0%	11	113	129
				8.5%	87.6%	100.0%
Total	32	81 21.1%	26	55 14.4%	189	383
	8.4%		6.8%		49.3%	100.0%

Chi-square statistic=119.176, p-value=0.000

The results of the findings on the influence advertising had on the customers' decision to frequently use the ATM card are presented in Table 6. It shows that 12.6% of respondents and 29.9% and 10.2% said they were very highly, highly influenced and fairly influenced respectively. This shows that advertising influenced majority of the respondents into using the ATM card. However, 29.9% of the respondents said that advertising did not influence them in their decision to frequently use the ATM card. Which means that 29.9% use ATM card but their decision to use was not influenced by the advertisements from banks but most likely use the ATM on a need to use basis. The findings imply that majority were influenced by advertising to frequently use the ATM card.

4.4. Influence of Accessibility to the ATM on Frequency ATM Usage

The main strategic intent by banks of introducing the ATMs was to present convenience and increase accessibility to the bank by customers outside the branch banking hours. This study sought to find out whether accessibility to the ATM influenced customers into using their ATM cards more frequently. These findings are presented in Table 7.

Table 7. *Influence of Accessibility to ATMs on Frequency of ATM Card Usage.*

Usage	Influence of Accessibility on ATM card usage				Total
	VI	HI	FI	NI	
Yes	137	74 29.0%	28	16	255
	53.7%		11.0%	6.3%	100.0%
No	11	0 0.0%	6 4.7%	112	129
	8.5%			86.8%	100.0%
Total	148	74 19.3%	34	128	384
	38.5%		8.9%	33.3%	100.0%

Chi-square statistic=253.450, p-value=0.000

The findings in Table 7 show that a total of 93.7% constituting 53.7%, 29.0% and 11.0% of very highly influence, highly influenced and fairly influenced respectively of the respondents said that their decision to use the ATM card was influenced by accessibility. This is a very strong influence and a message to the bank strategists that they need to increase more accessibility to the ATMs. It is worth noting that 8.5% of the respondents who have the ATM card and do not use it were influenced by accessibility not to use. This is the category of respondents who do not have financial discipline and cannot resist the temptation of 24 hours accessibility of the ATMs. So they keep the card away or stop from using it.

4.5. Influence of Security at the ATM on Frequency of ATM Usage

The study sought to find out whether provision of physical security at the ATM had an influence on the usage of ATM card. The customers need to be assured of their physical security and safety when transacting. All the 8 bank managers confirmed they provide physical security at

the ATMs. The banks usually secure their ATMs by providing a security guard, building strong walls and installing surveillance cameras around the ATM room.

The Chi-square statistic and P-value tests were used to analyze whether a relationship exists between the provision of physical security at the ATMs and decision to frequently use the ATM card. The Chi-square statistic=219.088 and pvalue=0.0000 imply that a significant relationship exists between the provision of physical security at the ATM and decision to frequently use the ATM card. The findings are presented in Table 8.

Table 8. *Influence of Security on Frequency on Usage.*

Usage	Influence of Security on the ATM card usage					Total
	VHI	HI	FI	SI	NI	
Yes	89 35.0%	45 17.7%	81 31.9%	12 4.7%	27 10.6%	254 100.0%
No	5 3.9%	5 3.9%	6 4.7%	0 0.0%	113 87.6%	129 100.0%
Total	94 24.5%	50 13.1%	87 22.7%	12 3.1%	140 36.6%	383 100.0%

Chi-square statistic=219.088, p-value=0.000

The results of the findings presented in Table 8 show that physical security at ATM machines was a major consideration for ATM usage as 35.0% of the respondents were very highly influenced, 17.7% were highly influenced and 31.9% fairly influenced. However a total of 12.5% of the respondents who do not use the ATM card were influenced by the presence of physical security at the ATMs not to use. These are the respondents who have fear and feel intimidated by the presence of security guards at the ATMs. This can be attributed largely to ignorance and lack of exposure by some customers.

4.6. Influence of Compulsory Usage on Frequency of ATM Usage

The study sought to find out whether the imposition of compulsory usage of ATM card by banks influences customers' decision to frequently use the ATM card. Compulsory usage is a strategy applied by some banks to increase usage of ATM card.

In their quest to have the card adopted by a majority and to quickly gain critical mass usage, 4 out of the 8 banks sampled adopted a strategy to make the usage of ATM compulsory for their customers, such that if a customer wishes to withdrawal over the counter an amount that can be dispensed at the ATMs, then they are referred to the ATM. However, though compulsory acquisition may be successful as a strategy, compulsory usage may not be fully achieved because adoption of a technology is a process.

The Chi-square statistic and p-value test was used to analyze the relationship between the imposition of compulsory usage by banks and the customers' decision to use the ATM card. The computed Chi-square statistic=49.931 and p-value statistic=0.000 imply that a significant relationship exists between the imposition of compulsory usage by banks and customers' decision to use the ATM card. The findings are presented in Table 9.

Table 9. *Influence of Compulsory Usage on frequency of ATM usage.*

Usage	Influence of compulsory to usage in their bank frequency of ATM usage					Total
	VHI	HI	FI	SI	NI	
Yes	31 12.2%	21 8.2%	21 8.2%	37 14.5%	145 56.9%	255 100.0%
No	5 3.9%	0 0.0%	0 0.0%	6 4.7%	118 91.5%	129 100.0%
Total	36 9.4%	21 5.5%	21 5.5%	43 11.2%	263 68.5%	384 100.0%

Chi-square statistic=49.931, p-value=0.000

The findings in Table 9 show 12.2%, 8.2% and 8.2% were very highly influenced, highly influenced and fairly influenced respectively by their banks making it compulsory for ATM usage. The findings also show that majority of the respondents at 56.9% were not influenced by their banks making it compulsory to transact using the ATM card. Although it is compulsory to use the ATM card, their decision to use the ATM card was not influenced by this fact. This finding therefore means that the customers would naturally choose to use the ATM, and thus the bank does not require making the use of the card compulsory for its customers.

Table 10. *Market Segmentation Strategy by Banks.*

	Market segmentation attributes influencing banks' strategy.					Total
	VHI	HI	FI	SI	NI	
Age	7(87.5%)	1 (12.5%)	0	0	0	8(100%)
Gender	1 (12.5%)	2 (25.0%)	1 (12.5%)	0	4 (50%)	8(100%)
Education level	2 (25.0%)	4 (50%)	1 (12.5%)	1 (12.5%)	0	8(100%)
Income level	2 (25.0%)	1 (12.5%)	5 (62.5%)	0	0	8(100%)
Nature of employment	1 (12.5%)	1(12.5%)	3(37.5%)	3 (37.5%)	0	8(100%)

4.7. Market Segmentation and ATM Usage

Market segmentation involves categorizing the market into various subgroups with members of each subgroup having similar characteristics such that the same marketing strategy will be applied to serve them. The study sought to find out whether commercial banks use market segmentation in targeting customers for ATM card acquisition and usage. The findings are presented in Table 10.

The findings presented in Table 10 show the various population demographic segments that commercial banks use in targeting customers for ATM card usage. The characteristics looked at were age, gender, education level, income level and nature of employment. The segments are important for the bank in formulating marketing strategies like advertising. All the characteristics had high influence on the banks' strategies save for gender which 50% of the bank

managers said did not influence their strategy. Age had the highest score with 87.5% of the bank managers saying that their segmentation strategy is very highly influenced by age. This implies that segmentation strategy is an effective method of increasing ATM card usage.

5. Conclusion

In conclusion, the study established that banks had effective strategies in promoting usage of ATM cards. The Chi-square test performed on all the bank strategies to improve usage of ATMs showed that a significant relationship existed between the bank strategies and usage of ATM cards. The decision criteria for confirming whether a significant relationship existed or not between the independent and dependent variables were informed by the pvalue. The p-value shows the probability of existence of a relationship, based on the set significance level of 5%. If pvalue was > 0.05 then it meant that no significant relationship existed between the variables. If the p-value was <0.05 it meant existence of a significant relationship. In this study, all the variables subjected to the chi-square produced p-value of less than 0.05, which implied that the null hypotheses developed were rejected and consequently the alternative hypothesis accepted as: There is significant relationship between commercial banks' strategies and the frequency of customer ATM usage. However, the banks also need to focus their strategies to customers who are not using the ATM card.

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