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A Comparative Study between the Traditional Banking and Mobile Phone Banking

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Abstract

Mobile phone banking is a new system of banking in the country and as such most of the network operators are now engaging and using it. Mobile phone banking is banking using mobile phone devices to transact businesses in the country. Today the internet is considered a mature medium, despite its relative newcomer status. The internet is more accessible to more people globally than any other medium except television. Most people now access the internet in Ghana than previously and due to this some firms are embarking on e-marketing to compete in the world. Now people can access the internet at any place and anywhere with the help of the network operators using their cell phones. Some of the objectives set for this research are to determine the type of documentations required before one can access his/her money and to identify where and when the recipients could access their monies. During the research it came out that customers need a form of identification and a secret code before they can access their monies and also the respondents are of the opinion that the mobile phone banking is easy and convenient and they spend less time accessing their monies. It was recommended that the network operators should educate the general public about the merits and demerits of the new technology as well as equipping their outlets with the state-of-the-art equipments.

Keywords: Access, Charges, Perception, Phone banking, Reliability.

Contents

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1. Introduction

The financial services sector in Ghana is growing at a faster rate and due to this many foreign banks are establishing their branches in the country. This has increased competition among the banks and the central bank has now revised the minimum capital required by the banks to operate in the country to 60 million Ghana cedis. Banks in the country try to meet the requirement before the deadline. Banks are also merging and others are acquiring their competitors, for example Ecobank acquired The Trust Bank and UT bank also acquired BIC bank. In the recent past years the informal sector in the country was not saving or depositing monies with any bank but now it has changed because the banks are educating the people and creating the awareness of the importance of banking. The bankers are becoming more creative and innovative in their daily activities with the introduction of Automated Teller Machine (ATM), Cashless account, Internet banking, Deposit and withdrawal text messages, Cell phone banking, and others.

Some banks have been using internet banking for a while in the country (Polatoglu and Ekin, 2001; Black *et al.*, 2002; Gerrard and Cunningham, 2003) and now they are using mobile banking in their outlets (Brown *et al.*, 2003; Luarn and Lin, 2005). Most people now access the internet in Ghana than previously and due to this some firms are embarking on e-marketing to compete in the world. Now people can access the internet at any place and anywhere with the help of the network operators using their cell phones. The cell phones are being used for many business transactions in the country today and the usage of the cell phones has grown tremendously. Mobile users represent a huge market in the country and business owners could target them. The business owners can segment the mobile phone market with their products or services and based on that identify the products or services that the various segments need or want.

Mobile marketing connects businesses and each of their customers (through their mobile devices) at the right time and at the right place with the right message and requires the customer's explicit permission and/or active interaction. The mobile phone is one of the devices used by people to transmit messages or information to the other party. The mobile phone is making communication to be easy, cost-effective, time savings and stress free (Karjaluoto *et al.*, 2002). In Ghana today, almost every household is using a mobile phone of a suit and is changing the way people communicate and conduct business in the country. Some Ghanaian are inclined to their mobile phones of which they cannot ignore for even a second.

This research focus on the New Juaben Municipality where a lot of businesses are now locating to conduct business. In Ghana there are six network operators and fortunately all these firms are found in the New Juaben Municipality and they are MTN, Vodafone, Tigo, Globacom, Airtel and Expresso. MTN is the market leader followed by Vodafone, Tigo, Airtel, Globacom and Expresso. In Ghana with the exception of Expresso and Globacom the rest of the network operators are offering mobile phone banking.

There are a lot of factors influencing the adoption of a new technology in the world and some of these factors are newness, trialability, perception, security, complexity, reliability, convenient, accessibility, and cost implication. This study aims to compare the mobile phone banking to the traditional way of banking on the bases of perception that consumers hold about this new phenomena.

The research was set out to achieve the following objectives;

- To determine the type of documentations required before one can access his/her money;
- To identify where and when the recipients could access their money;
- To determine whether consumers have a favorable or unfavorable perception about mobile phone banking.

Based on the objectives of the study, the following research questions were set;

- Which types of documents are required by the network operator before the recipient could access his/her money?
- Where and when could the recipients access their money?
- Do consumers have a favorable or unfavorable perception about mobile phone banking?

2. Literature Review

Consumers are mindful of new technology and its effects on their daily activities and businesses at large. In the past the traditional way of banking was appreciated by the consumers and they were happy with it until the introduction of new ways of banking like automated Teller Machines, internet banking, mobile phone banking, mobile banking, TV banking, etc. Mobile phone banking is the transaction of any banking activity with the aid of a mobile phone at the convenience of the consumer. The portals of the banks should be more secure, provide information for the consumer and the system should be user friendly so that the consumers would be encouraged to use the system always to transact business (Singh and Kaur, 2012).

With new technology the adoption rate is mostly slow and because of this, the mobile phone operators should educate and inform the consumers about the benefits of the system and how friendly it is for them to use. For one to access his/her money at the network operator's outlet a form of identification is needed, otherwise the money would not be given to the recipient (Ahamed *et al.*, 2011). This in a way will prevent unauthorized people to get access to the money or system and this could be done by authenticating the identity of the recipient before accessing the money (Lin, 2011). He further added that Identity and security are of concerns to both the consumers and operators.

Location is a key determinant of success of a business (Chou *et al.*, 2008) and should be considered by the network operator. Where to access the money is very important for the recipient and the sender and based on the location of the network operator people could accept this new technology. Location is appropriate for transacting business (Agyeman and Bekoe, 2014) and some are better than others in terms of patronage and traffic (Peters *et al.*, 2007) at the place. If the recipient and the sender can get access to the network operator at different locations, then it could encourage the people to adapt the new technology and become loyal to the network operator (Chou *et al.*, 2008; Ramanathan and Ramanathan, 2011).

The day and time of accessing monies are an important issue for the operator, the sender and recipient. Some of the senders and recipients wish to get their monies 24/7hours and apart from that both the sender and the recipient

would like to spend less time at the operator's outlet. The recipients are less tolerable when the service is unreliable and they spend a lot of time at the operator's outlet. The customers will be frustrated when they spend more than 15 minutes at an outlet and they will be happy if they are served within 2-3 minutes (Naik *et al.*, 2010). They further added that staff should be trained on processing transactions and the firm should provide sufficient checkout personnel to serve the customers within the first two or three minutes.

Perception is the way in which motivated individuals perceive a given situation that determines precisely how they will behave (Gilligan and Wilson, 2007). Individuals may perceive the same product/service in different ways. Based on our experience and exposure are will form a perception about a service/product and this will influence our decision whether to purchase that service/product or not. The cost involved in accessing a service is very important for the consumer because if the cost is high, it may prevent people from consuming that service and the service provider will lose his/her business to competitors in the market and vice versa.

Competition demands that firms seek to satisfy consumers' needs at lower prices and this will enable the firm to achieve market superiority (Evans and Lindsay, 2011). The service charges should not be too high for the users of the service because if the service charges are high the new technology or service will not be patronized by the users.

Singh (2011) found that phone banking is good and easy to operate than the traditional way of banking. The service rendered by the service provider should be good and appreciated by the customers and also the service should be quick and the service provider should create value added services to the customer in terms of security at the place, location of the place (Singh and Kaur, 2012) attitude of members of staff and the type of service provided by the organization. A survey conducted in U.S found out that mobile banking is easy and convenient to the respondents and about 60% also cited lack of confidence in the protection of their personal data as a threat (Jackie, 2012). There is a high possibility that if the consumers of the technology view it as easy and convenient than they will be willing to adapt it and even recommend it to others to do same. Because of this the service provider should encourage the customers to use the service by providing the necessary information needed and any assistance the customers will require.

The service providers should be able to deliver on their promise and there should not be delayed and unreliable services. The reliability of the staff and machines are paramount to service delivery and adoption of a technology. There should be punctual service delivery to encourage the customers to use their facilities. The product or service should be able to perform to expectation over time and this will encourage people to adopt the new technology in the market (Evans and Lindsay, 2011). Reliability of the service should be high not low and this could enable the firm to gain a competitive advantage over other competitors.

3. Methodology

This section looks at the research methodology of the study and shows how the study was conducted. The population for this research is 183,727 that is the total population for the New Juaben Municipality (www.statsghana.gov.gh). Out of this 399 people were sampled for the study. The total sample was gotten by using the formula $\frac{N}{1+N(e^2)}$, where N is the number of the population; e is tolerable error of 0.05.

$$n = \frac{183,727}{1+183,727\ (0.05)^2} = \frac{183,727}{1+459.3175} = \frac{183,727}{460.3175} = 399.13$$

For the research to be successful the researcher designed questionnaires which were pilot tested on some selected people in the New Juaben Municipality. The test was successful and some changes were made to the questionnaire to overcome ambiguities. The researcher employed the services of two research assistants and they were given training on how to administer questionnaires and the training lasted for a day. After the questionnaires were finally administered to the respondents and it was collected the same day. Because the mobile phone banking is new in the country a lot of people are not using it and due to this both the accidental sampling and snowball sampling methods were employed. The research assistants and the researcher met people on Koforidua Polytechnic campus and the Koforidua township and administered the questionnaires to them and the respondents referred us to some of their friends, colleagues and relatives who were using the mobile phone banking. With the questionnaire administered 70% were retrieved and used for the analysis.

The mix research method was employed by the researcher for gathering data. That is both qualitative and quantitative methods were employed. Survey method was used for the research and this is seen from the use of questionnaire. The questionnaire was grouped into personal information and information on mobile phone banking. The data analysis was done by the use of Statistical Package for Social Science (SPSS) version 17. The SPSS generated tables and percentages for the analysis to be done.

4. Discussion of the Results

The data were analyzed and meanings were added to it to enable the researcher to complete the research and make recommendations.

During the research it was evident that 32.8% of the respondents were males and 67.2% were females. The female respondents were more than their male counterpart and this is due to the fact that the females dominate in the research area with a population of about 51% of the total population. 90% of the respondents were between the age ranges of 18-25 years, 8% were between 26-33 years and 2% were also between 42-49 years. Most of the respondents were the young adult in the township. 4.7% of the respondents were Senior High School graduates who are about entering into the tertiary institution, 95.3% were tertiary students. This means that most of the respondents are educated and understood the mobile money system in the country.

From the data 66.7% of the respondents were users of MTN, 12.7% also used Vodafone, 7.2% were Tigo users, 6.2% used Globacom, 2.1% used Expresso, 3.1% were users of Airtel and 2.1% also used all the networks. Most of the respondents used MTN and is not surprising because the MTN network is the market leader in the country.

Again, 7.4% of the respondents bank with UT-bank, 24.1% ADB, 2.7% for Barclays, 1% for Cal bank, 5.4% for Fidelity, 1.3% also for First Allied saving and loans, 32.8% for GCB, 4% for HFC, 8.4% for Merchant, 2% for NIB, 1.3% for Opportunity bank, 2.7% for SG-SSB, 2.3% for Stanbic, 2.7% for Unibank, 1% for both HCF and Fidelity banks and HFC and GCB respectively. This means that most of the banks in the country are using the mobile phone banking.

Respondents were asked whether they need an account with the network operator before they can access their monies, 28.4% of the respondents strongly agreed that they need an account with the network operator, 36.8% agreed, 7% were neutral, 25.4% disagreed that they need an account with the network operator and 2.3% strongly disagreed that they need an account. In conclusion most of the respondents are of the opinion that you should have account with the network operator before they access their monies.

From note 1 Table 1 42.8% of the respondents strongly agreed that the mobile phone banking is more convenient than the traditional way of banking, 44.1% agreed, 8.7% were neutral, 1% and 3.3% disagreed and strongly disagreed respectively to the opinion that mobile phone banking is more convenient than the traditional way of banking. This means that majority of the respondents are of the opinion that mobile phone banking is more convenient than the traditional way of banking. This view agrees with the assertion made by Jackie (2012) that the system should be convenient to use by the customers.

Again, 11.4% of the respondents strongly agreed that anytime the network is down they could still access their monies, 27.1% agreed to the question, 8.4% were neutral, 41.1% and 12% disagreed and strongly disagreed respectively that they could access their monies when the network system is down. It could be concluded that most of the respondents are of the view that they cannot access their monies anytime the network system is down.

From note 1 Table 2 43.8% of the respondents strongly agreed that the documentation required for transferring monies using the mobile phone banking is easier than the traditional way of transferring monies, 50.8% agreed that it is easier using the mobile phone banking, 1.3% neutral, and 4% disagreed that transferring monies using the mobile phone is easier than the traditional way of transferring monies. It could be deduced from the above that transferring monies using the mobile phone is easier than the traditional way of banking. This view agrees with the assertion made by Jackie (2012) that the system should be easy and convenient to use by the customers.

It was evident that 43.1% of the respondents strongly agreed that they need a form of identification before they can access their monies, 39.5% agreed to it, 5% were neutral, 9.4% and 3% of the respondents disagreed and strongly disagreed respectively that they need a form of identification before they could access their monies. This means that most of the respondents believe that they need a form of identification before they can access their monies. This opinion supports the view of Ahamed *et al.* (2011) who are of the opinion that a form of identification is needed before they can access their monies.

It was clear that 61.2% of the respondents strongly agreed that they need a secret code before they could access their monies, 35.1% agreed, 1.7% and 2% disagreed and strongly disagreed respectively that they need a secret code before they can access their monies. In conclusion majority of the respondents are of the opinion that they need a secret code before they can access their monies. This assertion agrees with Lin (2011) who is of the view that before one could access his/her money or the system of the organization they need identity and security code.

It came to light that 43.5% of the respondents strongly agreed that can access their monies from any outlet of the network operator, 39.8% agreed, 5.7% were neutral, 8.7% and 2.3% disagreed and strongly disagreed respectively that they can access their monies at any of the operator's outlet. This means that people can access their monies at any of the operator's outlet throughout the country. This also agrees with the assertion (Chou *et al.*, 2008; Ramanathan and Ramanathan, 2011) made that as people can access their monies at anywhere the network operator operates it will make the people adapt the new technology and become loyal to the organization.

Also, 46.2% of the respondents strongly agreed that they could access their monies anytime of the day, 34.1% agreed, 1% were neutral, 14.7% and 4% disagreed and strongly disagreed respectively that they can access their monies anytime of the day. It can be concluded that most of the respondents believe that they can access their monies anytime of the day.

Again, 47.5% of the respondents strongly agreed that they do not need a cheque before they can access their monies, 28.1% agreed to it, 17.5% and 7% of the respondents disagreed and strongly disagreed respectively that they do not need a cheque before accessing their monies. In conclusion majority of the respondents are of the opinion that they do not need a cheque before they could access their monies from the network operator.

From note1 Table 3 26.4% of the respondents strongly agreed they need not to sign any document before accessing their monies, 40.5% agreed to it, 3% were neutral, 24.1% and 6% of the respondents disagreed and strongly disagreed that they need not sign any document before accessing their monies. This means that most of the respondents do not need to sign any document before accessing their monies.

During the analysis 49.5% of the respondents are of the view that they spend less at the network operator's outlet, 30.4% agreed to it, 5.7% were neutral, 11.7% and 2.7% of the respondents disagreed and strongly disagreed respectively that they spend less time at the network operator's outlet. In a nutshell most of the respondents spend less time at the network operator's outlet than the traditional banking outlet. Again from the interaction we had with the customers it came out that they spend less than 5 minutes at the operator's outlet. This assertion agrees with the opinion of Naik *et al.* (2010) who are of the opinion that customers will be frustrated if they spend more than 15 minutes at a place to receive a service and will be glad if they are served within 2-3 minutes.

It was evident that 26.1% of the respondents strongly agreed that there is no cost implication when they withdraw their monies, 33.8% agreed to it, 3% were neutral, 30.8% and 6.4% disagreed and strongly disagreed respectively that there is no cost implication when they withdraw their monies from the network operator. This means that most of the respondents are of the opinion that there is no cost implication whenever they withdraw their monies.

From note 1 Table 4 58.2% of the respondents strongly agreed that mobile phone banking is quick and faster than the traditional way of banking, 39.8% agreed to it, 1% of the respondents were neutral and disagreed

respectively that mobile phone banking is quick and faster than the traditional way of banking. In conclusion majority of the respondents are of the view that mobile phone banking is quick and faster than the traditional way of banking. This assertion agrees with Singh and Kaur (2012) who are of the opinion that the service rendered should be quick for the customers.

It was clear that 39.5% of the respondents strongly agreed that the mobile phone banking is better than the traditional way of banking, 53.2% agreed to it, 2% were neutral, 2.3% and 3% of the respondents disagreed and strongly disagreed respectively that the mobile phone banking is better than the traditional way of banking. This means that the mobile phone banking is better than the traditional way of banking in the country. This opinion agrees with the assertion made by Singh (2011) who is of the opinion that mobile phone banking is good and easy to use.

Again, 38.8% of the respondents strongly agreed that mobile phone banking is secure and safer than the traditional way of banking, 41.8% agreed to it, 13% were neutral, and 6.4% disagreed that mobile phone banking is more secure and safer than the traditional way of banking. In conclusion mobile phone banking is more secure and safer than the traditional way of banking.

It was evident that 41.1% of the respondents strongly agreed that they prefer the mobile phone banking to the traditional way of banking, 52.2% agreed to it, 5.4% were neutral and 1.3% disagreed that they prefer the mobile phone banking to the traditional way of banking. This means that most of the respondents prefer the mobile phone banking to the traditional way of banking.

5. Conclusion and Recommendations

During the research it came to light that most of the banks and network operators are engaged in the mobile phone banking and is more convenient in terms of time and accessing of monies from the outlet. The respondents were uncertain about accessing their monies when the network operator's system is down. Also, the documentation required before the recipients could access their monies is less but they need a form of identification as well as a secret code to access their monies.

Again, it came to light that customers could access their monies at any of the outlet of the network operator and no need for a cheque before the monies could be accessed. Apart from that there is no need for a signature and they spend less time at the place where they receive their monies.

Also, it was evident that the mobile phone banking is quick, fast and better as compared to the traditional way of banking and is more secure and safe to use the mobile phone banking. It has become the preferable way of transferring and receiving monies amongst a selected few in the town.

Below are the recommendations made:

The acceptance of new ways of transacting business from the traditional way is not an easy task for both the firms and the customers. For the new technology to be accepted by the customers the firms should educate the general public about the merits and demerits of the system in relation to the traditional way of banking.

The network operators should man the place with qualified personnel and training should be given to them so that they can serve the customers well.

The network operators should be able to equip their outlets with the state-of-the-art equipments to enable them serve the customers well and on time.

The process involved in accessing money should not be cumbersome to the customers and always make sure that the customers spent less time at the outlet when accessing their monies.

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Note-1.

Table-1. Mobile phone banking is more convenient than the traditional way of banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	128	42.8	42.8	42.8
	Agree	132	44.1	44.1	87.0
	Neither agree nor disagree	26	8.7	8.7	95.7
	Disagree	3	1.0	1.0	96.7
	Strongly disagree	10	3.3	3.3	100.0
	Total	299	100.0	100.0	

Source: field survey, 2015

Table-2. Transferring money using the mobile phone is easier in terms of documentation than the traditional money transfer by the bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	131	43.8	43.8	43.8
	Agree	152	50.8	50.8	94.6
	Neither agree nor disagree	4	1.3	1.3	96.0
	Disagree	12	4.0	4.0	100.0
	Total	299	100.0	100.0	

Source: field survey, 2015

Table-3. You need not to sign any document before you access your money

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	79	26.4	26.4	26.4
	Agree	121	40.5	40.5	66.9
	Neither agree nor disagree	9	3.0	3.0	69.9
	Disagree	72	24.1	24.1	94.0
	Strongly disagree	18	6.0	6.0	100.0
	Total	299	100.0	100.0	

Source: field survey, 2015

Table-4. Mobile phone banking is quick and faster than the traditional banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	174	58.2	58.2	58.2
	Agree	119	39.8	39.8	98.0
	Neither agree nor disagree	3	1.0	1.0	99.0
	Disagree	3	1.0	1.0	100.0
	Total	299	100.0	100.0	

Source: field survey, 2015