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Cash Mobilization in Ghana: An Empirical Evaluation of the Effectiveness of E-Zwich Smart Card

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ABSTRACT

Over the years there has been a progression of value transfer systems starting from barter, through bank notes, payment orders, cheques and later Credit Cards (Asokan *et al.*, 2000). This has finally evolved into electronic payment on the Internet. This research therefore assesses the adoption of cash mobilization system using e-zwich payment system in Ghana. The population for the research was clients and merchants of E-zwich in the Kumasi Metropolis. The population included staffs of the various banks in the Metropolis that have E-zwich services. A sample size of sixty (60) clients and five (5) staff each from five (5) Banks and twenty (20) merchants were selected. It was found among others that, merchants are raising concerns with buying and loading of credit units unto the POS device, unavailability of thermal roll on the market and network connectivity issues while performing "profile download" – a very important activity before transactions can occur on the POS device. Compounding to the issues, clients are also facing the unavailability of enough merchants in the Metropolis while most of the small available merchants they visit do not have their POS systems working effectively. However, it is recommended among others that, the revolution of the e-zwich system should be targeting teenagers and young adults who receive transfers from their parents or guardians and possess a sizeable amount of money but are often ineligible to open a bank account which will allow a greater proportion of funds to remain within the banking system until they are spent.

Key Words: E-zwich, Electronic Payment Systems, GhIPSS, ATM, Mobilizing, Unbanked

INTRODUCTION

Modern electronic payment systems have become a significant element in all trade and commerce activities globally. The scope of electronic payments extends from under one dollar to multi-million dollar transactions. Despite the benefits that electronic payment systems has brought to other economies such as the western developed countries, economies in Africa, which are still in the early stages of applying electronic payment systems are yet to experience its maximum economic and operational impact (Ackorlie, 2009).

Unlike the developed world, electronic payment systems are rare in developing countries like Ghana because they have been slow to restructure and adapt to the new global economic reality resulting in lost opportunity and diminished competitiveness. Implementing cash mobilization system in a developing nation where majority of citizens are used to cash and cheque based transactions require a lot more effort. This research therefore intends to assess the adoption of cash mobilization system using the e-zwich payment system in Ghana.

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In April 2008 the Bank of Ghana (BOG) launched through its subsidiary, Ghana Inter-bank Payment Settlement System (GhIPSS), a new electronic payment system called the national switch (or the e-zwich). The e-zwich is to allow the establishment of a common platform for all payment transactions in the country. It will have the capacity to deal with transactions that take place online (in places with telephone services) and offline (i.e. where telephones are not present, e.g. rural areas) (Baah-Wiredu, 2007). Baah-Wiredu expressed the view that this new national switch and smartcard project will serve as the vehicle to transform Ghana from a predominantly cash economy to an economy dominated by electronic transactions using modern state of the art technology.

The introduction of the e-zwich falls within the key objectives of the Ghana Inter-bank Payment Settlement System. GhIPSS is required to liaise with the banks and non-bank financial institutions to improve on the payment systems in the country by:

- Providing a range of technology driven solutions and associated services, which will support and contribute to the general efficiency of the Ghanaian payment systems; and
- Providing affordable and convenient access to banking services for all residents in Ghana

GhIPSS presents the e-zwich as an electronic cash payment system for very efficient, fast and secure way of paying for goods and services throughout the country. For the implementation of the e-zwich, GhIPSS has deployed the Universal Electronic Payment System (UEPS) technology. The UEPS utilizes a smart card technology to provide a fully integrated payment, switching and settlement system that is suitable for multiple applications, products and services. The technology is expected to meet the requirements of the banked, un-banked and under-banked populations. It should also allow for a secure national system that manages the flow of funds between customers, merchants and financial service providers. Customers are able to perform transactions “online” and “offline” in underdeveloped areas due to lack of communications infrastructure.

All transactions are expected to occur between a client card and a merchant card or a bank tellers’ card at a Point of Sale (POS) terminal or an Automated Teller Machine (ATM). In the case of the POS terminal, either a merchant card or a teller card (depending on where the transaction is taking place i.e. either at a bank or a merchant premise) together with a SIM card is inserted in the POS. The customer, then slots the client card in the POS, if validated then transactions proceeds.

However, Moving from a society where 90% of cash is held outside of the banks to a cashless society is a big change and challenge. It is an enormous challenge for the government, financial institutions, individuals and other stakeholders responsible for making this system achieve its economic benefits. Nevertheless, it has been realized that the E-zwich system that is used as the medium for mobilizing cash from the unbanked has some downfalls. Some of the complaints are that there was no design of a separate platform for the e-zwich project and this creates the inconvenience of having units run out or expiration of the units on the SIM card. This always creates problems of connectivity. Another issue is that GhIPSS has not intensified its education to the general public about the benefits and importance of the e-zwich smart card system. The cost implications if not checked can lead to the failure of the project since most banks will back out of the e-zwich project. It is for this reason that this study seeks to evaluate the effectiveness of the E-zwich in the mobilization of cash from the unbanked. Hence, the specific objectives of the study are: To assess how effective the e-zwich has been in the mobilization of cash; to assess clients satisfaction with the e-zwich system and to identify the challenges that stakeholders encounter with the e-zwich system.

REVIEW OF RELATED WORKS

Mobilizing Cash from the Unbanked

Ackorlie (2009) indicated that as many as 80 per cent of Ghana's population neither has nor operate a bank account, although the majority of the "un-banked" are economically active in either the formal or informal sectors of the economy. This is the case for most African and developing nations. The term unbanked means the person does not have a checking or savings account.

Commonwealth Business Council (2004) indicated that more than two billion individuals age 15 and over are unbanked. They emphasized that electronic payment systems can help the unbanked join the banking system with significant benefits to them and to the societies in which they live Large percentage of business assets held in the informal economy of many developing countries reduce the size and productive capacity of their total official economies. A cash based society is a diminished society. The informal economy runs on cash outside of the banking and official economic systems. When cash remains outside the banking system, the possibilities for supplying productive capital to the economy are muted. There is a direct correlation between a specified shift of currency into lendable reserves and increases in GDP. Bringing cash into the banking system generates an equal increase in bank reserves, enabling banks to facilitate more consumer and commercial loans, thereby stimulating business growth and consumption.

Anderson-Porisch (2006) however believes that, the unbanked in the society have reasons and gave the following as some of the reasons for the unbanked;

- Lack of understanding of the banking system and expectations for having a bank account
- Past negative banking experience
- Lack of appropriate identification and/or documentation needed to open a bank account
- Unstable living situation
- Cultural conflict including bank practices that varies with personal beliefs.

Using E-payments to mobilize Cash

The emergence of credit, debit and prepaid card systems gives the unbanked an important option for bringing cash into the formal economy. Prepaid cards are particularly interesting, because the funds are actually on deposit at a regulated financial institution, but the process of establishing and managing accounts is much more cost effective and less risky than traditional debit accounts for smaller levels of deposit (Commonwealth Business Council, 2004).

The Commonwealth Business Council (2004) argues that payroll, pension and benefit cards can be effective entry-level instruments for banking and subsequent mainstream financial services, since they allow a greater proportion of funds to remain within the banking system until they are spent. Teenagers and young adults are often ineligible to open a bank account. But because of transfers from their parents or guardians, they may possess a sizeable amount of money. Prepaid card products for young people can teach them vital money skills, while keeping their funds in the banking system. One such solution is a re-loadable prepaid card that features financial literacy tools and allows parents or guardians to monitor transactions online (Commonwealth Business Council 2004). This has been used in the US, Brazil, Mexico, Puerto Rico, Indonesia and Jordan.

In banking the unbanked, financial institutions that are part of an international payment system can issue prepaid cards to customers, including those who currently do not have a

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banking relationship, enabling them to receive funds safely and conveniently. Depending on the type of card, recipients can withdraw cash at an ATM, or buy goods and services at merchants (Commonwealth Business Council & Visa, 2004).

In developing countries, remittances represent the primary source of foreign exchange and generate a significant engine for consumer spending. Ghana being a developing country is no exception. Foreign remittances to Ghana is huge, however, a chunk of these remittances are held in cash and circulate within the informal economy and therefore being kept outside the banking system. These remittances do not contribute strongly to formal economic growth. It is obvious that the active population is now hurting under the burden of inconveniences and constrictiveness of having to endure heavy, cumbersome and usually unsafe cash-based payments in their day-to-day affairs and transactions (Ackorlie, 2009). The use of any electronic transaction as a common platform for the financial sector would reduce physical circulation of cash.

The use of Information Communication Technology (ICT) products to simplify and speed up financial transactions has become part of everyday life in the developed world, whereas several parts of Africa had no such experience (Ackorlie, 2009). The use of the electronic transactions system to do business is indeed not common in Africa. In the advanced economies, physical circulation of cash is limited because most people use electronic means to buy and pay for goods and services. The physical handling of money currencies is therefore reduced and the advantage here is that the government does not spend huge sums of money to print new currencies to replace worn out ones.

Benefits of Electronic Payments

Fiallos & Wu (2005) emphasized that the arrival of the internet has taken electronic payments and transactions to an exponential growth level. Consumers could conveniently purchase goods from the internet. Digital money has significant benefits for financial institutions, banks and e-merchants. Digital Money is an electronic payment technology, which can provide anonymous flexible electronic payment, like paper cash, but with added security requirements needed for internet transactions. Lee *et al.* (2003) also indicated that a secure electronic cash system can guarantee anonymity of legitimate users but also provides traceability about illegally issued cash or laundered money. If illegal activity did take place, it can cancel anonymity of the digital cash in order to protect the bank. Lee *et al*. (2004) added that since digital money can trace double spending, and double spending protects content by exposing the double spender's identity, digital cash is a full proof way of guarding against illegal redistribution of intellectual property and materials.

Accordingly, electronic payments can thus lower transaction costs stimulate higher consumption and GDP, increase government efficiency, boost financial intermediation and improve financial transparency. She further added that Governments play a critically important role in creating an environment in which these benefits can be achieved in a way consistent with their own economic development plans.

Humphrey *et al*. (2001) also emphasize that the introduction and use of electronic payment instruments holds the promise of broad benefit to both business and consumers in the form of reduced costs, greater convenience and more secure, reliable means of payment and settlement for a potentially vast range of goods and services offered worldwide over the internet or other electronic networks. One such benefit is that electronic payments enable bank customers to handle their daily financial transactions without having to visit their local

bank branch. Electronic payments products could save merchants time and expense in handling cash.

Rapid technological advances have introduced significant changes in the global economic and business environment. The banking industry is constantly responding to changes in customer preferences and needs; increasing competition from information technologies advances, channel strategies, and government deregulations of the financial service sector (Byers and Lederer, 2001). In the banking industry, bank branches alone are no longer sufficient to provide banking services to cater the needs of today's sophisticated and demanding customers. Success or failure of many retail banks is dependent upon the capabilities of management to anticipate and react to such changes in the financial marketplace. In the search for sustainable competitive advantages in the competitive and technological financial service industry, banks have recognized the importance to differentiate themselves from other financial institutions through distribution channels. This has resulted in banks developing, and utilizing new alternative distribution channels to reach their customers (Thornton and White, 2001).

The provision of banking services through electronic channels (e-channels) namely Automated Teller Machines (ATM)s, Personal Computer (PC) banking, Telephone banking, internet banking and banking kiosks have provided an alternative means to acquire banking services more conveniently.

Definition of electronic banking

Daniel (1999) defined electronic banking as the provision of information or services by a bank to its customers, via a computer or television. In its very simplest form, electronic banking can mean the provision of information about the bank and its products via a page on the World Wide Web (WWW). A more developed service is one that provides customers with the opportunity to gain access to their accounts and execute transactions or to buy products online via the Internet.

Stakelbeck (2005) also defined e-banking as an electronic channel used to provide retail and commercial banking products and services to customers and stated further that e-banking delivery channels can be divided into three distinct categories: informational, electronic transfer and electronic payment. Using an information channel, a bank provides general purpose information, usually via a proprietary website, to existing or prospective customers. An electronic transfer channel allows a customer to electronically submit loan or deposit applications online, while an electronic payment channel facilitates traditional payment entry, settlement and distribution options. Some products and services offered by e-banking channels include: balance inquiries, transaction information, funds transfer, bill payment and presentment, cash management and loan applications.

Electronic banking adoption

Mukherjee and Nath (2003) indicated that there is a positive relationship between perceived trust and customers' commitment in online banking transaction. They emphasized that the future commitment of the customers to online banking depends on perceived trust. According to them, perceived trust is one of the important factors for customer intention. Evidently, Gummerus *et al.* (2004) mentioned that lack of trust has been one of the most significant reasons for customers not adopting online services involving financial exchanges. Reichheld and Schefter, (2000) suggested that online customers generally stay away from vendors whom they do not trust. A lack of trust may be the most significant long-term barrier for realizing the full potential of electronic commerce. Trust is a dynamic process that must be built over time.
Sathye (1999) showed that security concerns and lack of awareness about electronic-banking and its benefits stand out as being the obstacles to the adoption of e-banking. This shows that

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security and benefits issues are very important factors for customer satisfaction. Customers tend to be less satisfied if the service appears to have less security and benefits to them. This situation indirectly gives a negative impact on the e-service adoption.

The added value in electronic banking, according to Daniel (1999), was convenience, sales orientation and lower costs. Cooper (1997) emphasized that to adopt consumers must become aware of the new brand. An important characteristic for any adoption of innovative service or product is creating awareness among the consumers about the service/product.

Electronic banking in Ghana

Electronic banking is playing an increasingly important role in the banking sector, and thus have gained quite a lot of attention in academic literature lately. Over time, technology has increased in importance in Ghanaian banks. Traditionally, banks have always sought media through which they would serve their clients more cost-effectively as well as increase the utility to their clientele. Their main concern has been to serve clients more conveniently, and in the process increase profits and competitiveness. In Ghana, the earliest forms of electronic and communications technologies used were mainly office automation devices. Telephones, telex and facsimile were employed to speed up and make more efficient, the process of servicing clients. For decades, they remained the main information and communication technologies used for transacting bank business. Later in the 1980s, as competition intensified and the personal computer (PC) got proletarian, Ghanaian banks begun to use them in back-office operations and later tellers used them to service clients. Advancements in computer technology saw the banks networking their branches and operations, thereby making the one-branch philosophy a reality. Barclays Bank (Gh.) and Standard Chartered Bank (Gh.) pioneered this very important electronic novelty, which changed the banking landscape in the country (Abor, 2004).

The clearing and payment system in Ghana was for a long time manual. Inter-bank transfers took a long time to be cleared and electronic payment systems were largely non-existent. The economy was, and is still, cashbased and heavily segmented. The network of banks developed individual products like ATMs and debit cards for their respective customers, but there wasn't much use of them. For instance, the SG-SSB Bank (a commercial bank, then called SSB) issued and operated the Sika Card for the payment of goods and services by its customers. Further, domestic money transfers were, until recently, largely non-existent. Foreign money transfer schemes such as Western Union Money Transfer and MoneyGram dominated the money transfer system of Ghana: they focused on and funneled foreign exchange into Ghana (Hesse, 2010).

E-zwich electronic clearing and payment system

According to Hesse (2010), Ghana has long recognised that modernizing the banking and financial sector and reducing the cost of doing business is a given for attracting the investment needed for rapid economic growth and has consistently designed policies to modernise the sector. The Bank of Ghana (BOG), the regulator of the banking and financial sector, rolled out the e-zwich, a national payment and settlements system that creates an electronic clearing house for all banking and financial institutions, as well as a biometric smartcard which is a very secure way of paying for goods and services. It is the first of its kind in the world on such a scale and is another first for Ghana.

The e-zwich is an electronic clearing and payment system designed to establish a common platform and thereby link the payment systems of all banking and financial institutions in Ghana. It is an innovative and very secure way of paying for goods and services throughout

Ghana. It anchors on biometric (fingerprint) identification technology and allows smartcard holders to perform business and financial transactions such as fund loads and transfers, and payments for goods and services including bills, both online and offline. These can be done at any e-zwich point of sale (POS) or ATM across Ghana. Unique to the e-zwich is the biometric feature which reduces the need to use figures for purposes of identification while guaranteeing the security safeguards of traditional banking. All the cardholder requires to authenticate a transaction is his or her fingerprint. This eliminates the problem of identifying theft associated with card transactions authenticated through the use of PINs. Also, a person does not need to be a customer of a bank or have an account with a bank to have the e-zwich smartcard. To facilitate the smooth implementation of this project a private company, the Ghana Interbank Payment and Settlement System (with the banks on its governing board) has been set up to manage the payment and clearing system (Hesse, 2010).

Advantages of e-zwich

Hesse (2010) emphasize that the system has a number of advantages over traditional bank accounts, and stated some of the advantages as;

- The e-zwich is much easier to obtain than a traditional bank account. All one requires to obtain the e-zwich smartcard is one's fingerprints and any photo identification such as a passport or driving license.
- A cardholder can perform all transactions associated with a traditional bank account: paying for goods and services, money transfers, cash withdrawals, bill payments, receiving salaries and pensions at any e-zwich POS terminal in Ghana.
- The informal section of the population who previously could not benefit from banking and financial services, thus creating a dual economy, now has access.
- Ghana is on the verge of developing a cashless economy, or reducing the use of cash to the barest minimum, as the e-zwich cardholder can access any service without the need to carry cash.
- The e-zwich has introduced cell-phone banking.

METHODOLOGY

The choice of research approach is based on the problems envisaged or known and questions of the study. Various approaches can be used to study a problem. According to Saunders *et al.* (2000), the most often used approaches are exploratory, descriptive and explanatory. Hence, descriptive approach has been employed to describe the effectiveness of the E-zwich in the mobilization of cash in Ghana. Descriptive approach was used because according to Zikmund (2000), it involves the collection of original data for analysis with the main purpose of establishing a factual picture of the object of study.

The study therefore used primary data. The primary source of data was gathered from interviews with bank staff and E-zwich merchants as consent was sought from the managers of the various entities that the research was conducted. Questionnaires were also administered to clients. Questionnaire administration provided immense opportunities because it produced valuable data and provided insight into issues that otherwise would have been difficult to gather using other methods. The interview was also useful and highly flexible and gave an opportunity to repeat and explain questions to the respondents, which ensured that the questions were perfectly understood by the respondents. It also offered an opportunity for further and instant probing on responses that were not clear or conclusive enough.

The population for the research was clients and merchants of E-zwich in the Kumasi Metropolis. The population also included staff of the various banks in the Metropolis that have E-zwich services. The study was narrowed to the Kumasi Metropolis. It is important to note

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that even within the metropolis there are many E-zwich clients and so there was the need to take a sample of respondents from which basic generalizations could be deduced. Saunders *et al*. (2007) defined a sample as a subset of some part of a larger population, a population being any complete group of people or companies that share some set of characteristics. In order to arrive at an appropriate sample size for the research random sampling procedure was used to arrive at a sample size of sixty (60) clients. Five (5) staff each from Prudential Bank, Merchant Bank, Standard Chartered Bank and Amalgamated Bank was selected for the interview. The respondents were those who were responsible for E-zwich operations in the banks. The researcher therefore adopted the purposive sampling method to select the bank staff for the interview. In all twenty (20) bank staff were selected and twenty (20) merchants were randomly selected to assess the current state of operations of the E-zwich, and the challenges that confront the merchants.

The data analysis was done using Statistical Package for Social Sciences (SPSS) software to summarize the data and create appropriate tables, charts and graphs to examine the relationships among the variables.

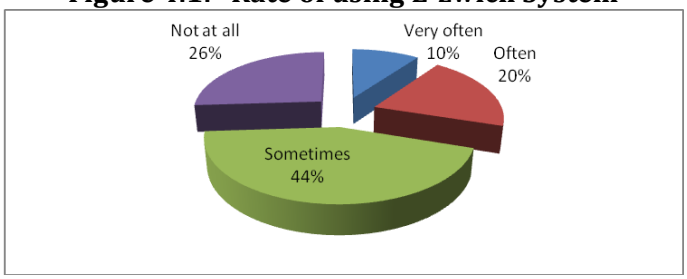
RESULTS AND DISCUSSION

This section presents the results and discusses the data collected with the appropriate tools and techniques. All the questionnaires were completed and submitted for a 100% rate of response.

Rate of using E-zwich System

In trying to find out how often clients of e-zwich use the facility; the responses are shown in figure 4.1. In this figure, 10% of the respondents indicated they intensely use the e-zwich system. Twenty percent (20%) agree that they regularly use the service, while 44% indicated that they use the services but not as regular. Twenty six percent (26%) of the respondents on the other hand do not use the e-zwich services at all. The responses gathered shows that 70% of the clients do not often use the e-zwich services. In that case, we wanted to know what were the factors discouraging the clients of the facility from using it. We therefore furthered our quest to understanding the situation through our interview with the staff of the banks which revealed that most of the clients have enrolled but have not loaded funds on the card. This is because the clients, according to the interviewees, are skeptical about the success of the system. They continued that, even those who first acquired and loaded money on it, after facing some challenges decided not to reload funds unto their e-zwich card again. Due to these concerns, staff rated the e-zwich service as not being effective.

Figure 4.1: Rate of using E-zwich System



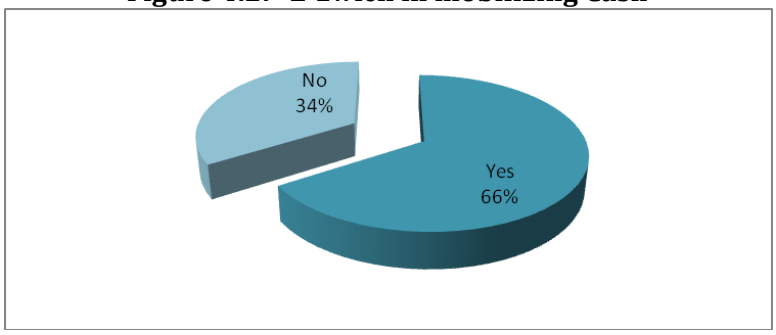
Source; Researchers' field work, 2013

The use of E-zwich in mobilizing Cash

While we were still contemplating with the ineffectiveness of the usage of the e-zwich facility by the clients as has been indicated, we wanted to know from the clients whether the facility is a good tool for mopping up or mobilizing cash which hitherto were not captured by the traditional financial mobilization processes. Hence, in Figure 4.2, when the respondents were

made to indicate whether e-zwich helps in mobilizing cash, 66% answered in the affirmative but 34% indicated otherwise. Indeed, with this response, we are optimistic that the facility is not that bad, but needs measures to strengthen its operational activities.

Figure 4.2: E-zwich in mobilizing Cash

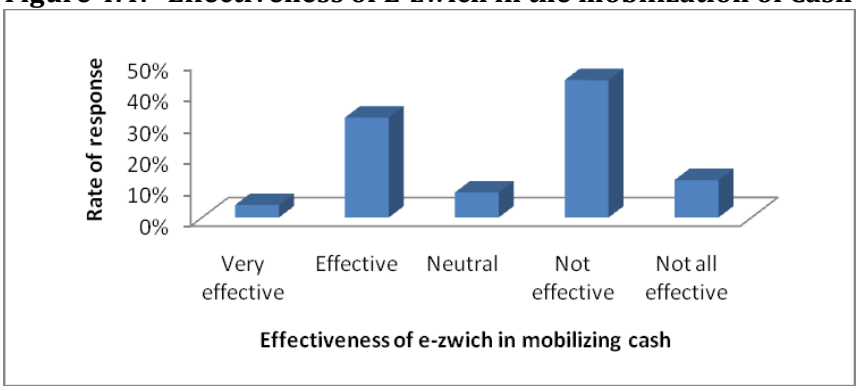


Source; Researchers' field work, 2013

Effectiveness of E-zwich in the mobilization of Cash

When the clients, in Figure 4.4 were made to state how they see the effectiveness of the e-zwich in the mobilization of cash, 4% indicated that it has been very effective, with 32% indicating that it has been effective. Whilst 8% were neutral in their response, 44% of the respondents indicated that it has been ineffective in mobilizing cash. On the other hand 12% of the respondents emphasized that the e-zwich has not been effective at all in the mobilization of cash. Agreeably, the responses gathered indicate that majority of the clients perceived the e-zwich system as ineffective.

Figure 4.4: Effectiveness of E-zwich in the mobilization of Cash



Source; Researchers' field work, 2013

Merchants in the Metropolis

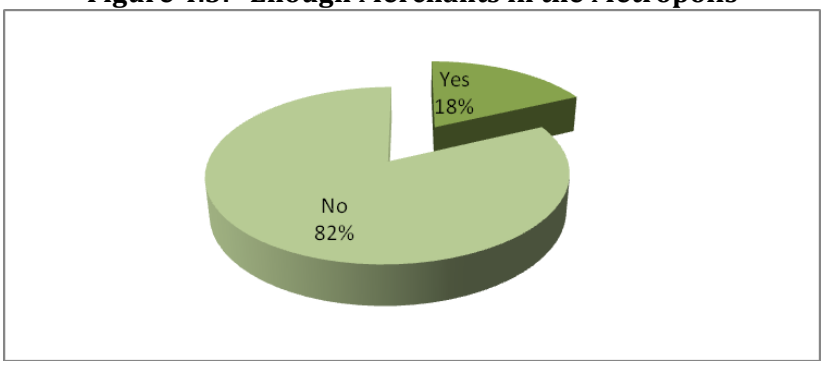
Having understood that, it is indeed important tool for cash mobilization, we wanted to find out some of the factors affecting its usage. One of such factors is the availability of merchants within the metropolis through whom the e-zwich services are being provided. It is of immense importance because if the Kumasi Metropolis cannot boast of many such merchants, how then can the program be extended to the rural communities where the e-zwich is much needed for cash mobilization. Hence in Figure 4.3, 82% of the respondents were of the view that there are not enough merchants in the Metropolis. The study revealed that most of services that the e-zwich adverts claim to have in place, are not working. The merchants were supposed to provide these services but they were refusing to. Their reasons were that, they were not sure they were going to get their money back and would not have to go through the hassle with GhIPSS or the banks for their monies. Majority said that they had been advised by their accountants not to provide any other service apart from accepting payment. As a concern, the merchants emphasized that GhIPSS should intensify the education campaign about the e-zwich system since patronage is very low. Interview with the merchants revealed that the number of people using the e-zwich system in a day was very small. The users also alluded that, usually

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merchants they visit do not have their POS device working effectively. Some of the merchants visited indicated that POS devices given to them were not functioning well and have been taken back by their banks. One major issue almost all shop owners complained about is network connectivity. They said that the network can be so bad that sometime they will have to take the POS's out of the shops to perform a transaction and profile download. 'This is wastes of time and very inconvenient', one frustrated merchant indicated.

Merchants are one of the critical stakeholders of the e-zwich project. The research showed that merchants' concerns seemed not to have been addressed adequately. These include buying and loading of credit units unto the POS device, unavailability of thermal roll on the market, network connectivity issues while performing "profile download" – a very important activity before transactions can occur on the POS device. So while GhIPSS seem to think that the e-zwich project has been a success, most of the merchants did not share this positive opinion.

Figure 4.3: Enough Merchants in the Metropolis

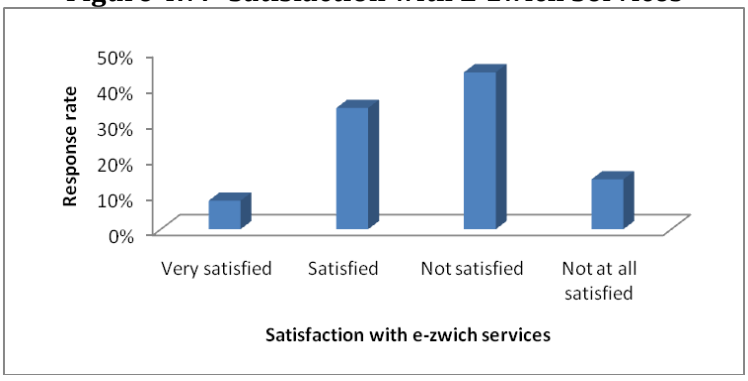


Source; Researchers' field work, 2013

Satisfaction with E-zwich Services

In the wave of the challenges the project is facing, we still though it wise to find out the level of satisfaction of the users. We did that because, according to Oyewole (2001), customer satisfaction leads to favorable word-of-mouth publicity that provides valuable indirect advertising for an organization. In Figure 4.7, 8% responded that they were very satisfied whilst 34% indicated that they were satisfied. Forty four percent of the respondents indicated that they were not satisfied. On the other hand 14% of the respondents were not at all satisfied with the services provided by the e-zwich. The responses indicate that more than half of the respondents were not satisfied with the services provided by e-zwich system.

Figure 4.7: Satisfaction with E-zwich Services



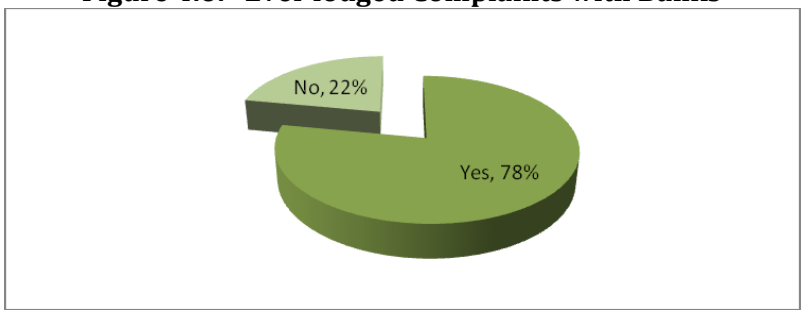
Source; Researchers' field work, 2013

Complaints lodged with Banks

Since these users are not satisfied, the right thing to do was to complain to authorities involved in the setting up of the project. When the respondents were asked whether they had ever

lodged a complaint with the banks 78% responded that they had, while 22% showed different opinion.

Figure 4.6: Ever lodged Complaints with Banks

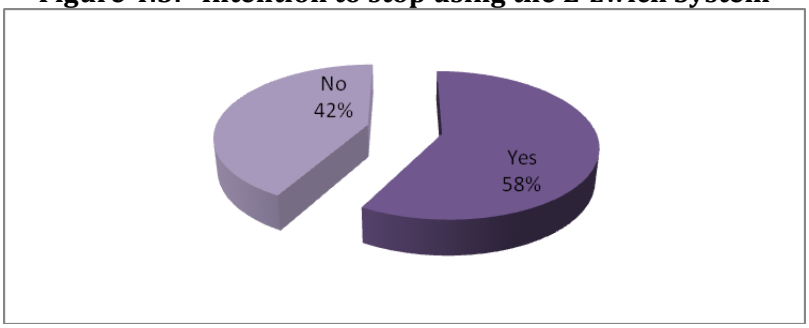


Source; Researchers' field work, 2013

Intention to stop using the E-zwich system

On the issue of respondents' intention to ever stop using the e-zwich system, 58%, as depicted in Figure 4.5, indicates that they have the intention to stop using the facility. This development, we think is inimical to the health of the country's economy. The implementation of e-zwich although have challenges, it is a step in the right direction for national development. Therefore it needs a concerted effort to avert the negative trend.

Figure 4.5: Intention to stop using the E-zwich System



Source; Researchers' field work, 2013

Challenges that Stakeholders encounter

When staffs of the banks were interviewed, their concerns included the high cost of the POS device and the need to intensify education of the general public on the benefits of the e-zwich project. The POS device is expensive, and this was found to account for the non-availability of the device at all the premises of the banks and merchants. Another issue that came to light was that of ATMs. Almost all banks in Ghana had procured their own mainstream ATMs and the associated ATM cards before the e-zwich project was launched. It is therefore understandable that the banks have serious issues with the deployment of the e-zwich ATMs which requires further investments.

Staff also indicated that clients request for the Visa cards more often since they can be used worldwide. Staff further indicated that the e-zwich ATM currently installed is only e-zwich compatible and cannot accept both e-zwich card and the mainstream ATM.

It was realized from the study that currently most banks are running their own money transfer products where all the commission goes to them and is relatively less expensive. Due to these concerns, when the banks were asked to rate the success of the project, most of the respondents rated the e-zwich project as ineffective.

Interview with merchants revealed that the concerns of merchants seemed not to have been addressed adequately. These include buying and loading of credit units unto the POS device,

unavailability of thermal roll on the market and network connectivity issues while performing "profile download" – a very important activity before transactions can occur on the POS device.

CONCLUSION AND RECOMMENDATIONS

Infrastructure is necessary for the successful implementation of electronic payments. For electronic payments to be successful there is the need to have reliable and cost effective infrastructure that can be accessed by majority of the population. A network that links banks and other financial institutions for clearing and payment confirmation is a pre-requisite for electronic payment systems. Poor communication infrastructure is one of the reasons that hinder the e-payment system in Ghana.

Several electronic payment systems have been introduced into the country in recent times with the most significant being e-zwich smart card payment system, a national domestic smart card payment system meant to reduce the large amount of cash held outside the banking system. Though, about two-thirds of the clients stated that e-zwich helps in mobilizing cash, more than half of the respondents also indicated that, the e-zwich system is ineffective and more than half of the respondents were not satisfied with the services provided by e-zwich system. Again, banks are looking at the huge expenditure against non-existent benefits being derived from the project, with some even contemplating withdrawing from the e-zwich project.

The merchants are raising concerns with buying and loading of credit units unto the POS device, unavailability of thermal roll on the market and network connectivity issues while performing "profile download" – a very important activity before transactions can occur on the POS device. Compounding to the issues, clients are also facing the unavailability of enough merchants in the Metropolis while most of the small available merchants they visit do not have their POS systems working effectively.

In developing countries, remittances represent the primary source of foreign exchange and generate a significant engine for consumer spending. Ghana being a developing country is no exception. However a chunk of these remittances are held in cash and circulate within the informal sector of the economy and therefore being kept outside the banking system. These remittances do not contribute as strongly to formal economic growth as they could. It is recommended that financial institutions issue e-zwich cards to recipients of remittances as that could keep some of their monies with financial institutions.

Banked or un-banked, it is obvious that the active population is now hurting under the burden of the inconveniences and constrictiveness of having to endure heavy, cumbersome and usually unsafe cash-based payments in their day-to-day affairs and transactions. The use of Information Communication Technology (ICT) products to simplify and speed up financial transactions has become part of everyday life in the developed world, whereas several parts of Africa had no such experience. The use of any electronic transaction as a common platform for the financial sector would reduce physical circulation of cash. The government should therefore use the available resources to intensify the use of the e-zwich system as this would reduce the physical handling of money currencies. The advantage here is that the government would not spend huge sums of money to print new currencies to replace worn out ones.

Nonetheless, trust is very critical to ensuring acceptance from users. E-payment and e-banking applications represent a security challenge as they highly depend on critical ICT systems that create vulnerabilities in financial institutions and businesses which can potentially harm customers. It is imperative for banks to understand and address security concerns in order to leverage the potential of ICTs in delivering e-banking applications.

E-zwich can be effective entry-level instrument for teenagers and young adults who receive transfers from their parents or guardians and possess a sizeable amount of money but are often ineligible to open a bank account which will allow a greater proportion of funds to remain within the banking system until they are spent. It is recommended GhIPSS to intensify the education of the general public about the benefits and importance of the e-zwich smart card system.

Lastly, as the Bank of Ghana is a major stakeholder, it should find ways of minimizing the cost of the e-zwich for the Banks. It is strongly believed that the cost implications if not checked can lead to the failure of the project since most banks are likely to back out of the e-zwich.

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