

THE ROLE OF INFORMATION TECHNOLOGY IN BUILDING CUSTOMER LOYALTY IN BANKING: (A CASE STUDY OF AGRICULTURAL DEVELOPMENT BANK LTD., SUNYANI)

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ABSTRACT: *The banking industry is constantly facing increasing competition partly due to financial liberalization and technological developments. To survive in an environment of intense competition more Banks have adopted technology – based service options in order to provide excellent customer service to enhance customer loyalty. However, it is becoming increasingly difficult for Agricultural Development Bank Ltd. in Sunyani to satisfy and retain its customers, who are often demanding improved quality services. Failure of the Agricultural Development Bank in Sunyani to efficiently adopt information technology like ATMs, branch networking, etc in the delivery of banking services has slowed down the processes of delivery of banking services leading to queuing and unnecessary service failures which may make it difficult to satisfy and retain the customers. The purpose of the research was to investigate the role of information technology in the development of loyalty in banking. Empirical data for the study were collected through interviews and questionnaires. The results of the study indicate that despite the introduction of IT in service delivery by the Agricultural Development Bank Ltd. in Sunyani, service quality is still low. However, IT has played the role of enhancing customer loyalty by making banking services more personalized, convenient and time–saving. The management of Agricultural Development Bank Ltd. in Sunyani needs to concentrate much of its efforts in terms of time and financial resources to provide quality services by improving the perceived performance of the electronic banking facilities so as to enhance customer loyalty.*

KEYWORDS: *Loyalty, Technology, Customer, Information, Development, E-Zwich*

BACKGROUND OF THE STUDY

The banking industry has undergone many changes during the past decade as result of changes in customers` preferences and needs, increasing competition from non-banks, changes in demographic and social trends, information technologies advances, channel strategies and government deregulations of the financial service sector. In search for sustainable competitive

advantages in the competitive and technological financial industry, banks have recognized the importance of differentiating themselves from other financial institutions through distribution channels. This has resulted in banks developing, utilizing new alternative distribution channels by using information technology. These developments in technology have resulted in new delivery channels for banking products and services. Information technology (IT) involves modern handling of information by electronic means, which involves its access, storage, processing, transporting or transfer and delivery. Information technology (IT) developments in banking industry have sped up communication and transactions (Giannakoudi, 1999).

It is argued that IT affects financial institutions by easing enquiry, saving time, and improving service delivery. In recent decades, investment in IT by Ghanaian banks has served to streamline operations, improve competitiveness and increase the variety and quality of services provided. The implementation of information technology and communication networking has brought revolution in the functioning of banks in Ghana. Information technology enables electronic channels to perform many banking functions that would traditionally be carried out over the counter (Giannakoudi, 1999). Paper cheques are gradually being supplemented with electronic images, permitting greater storage capacity, reducing costs and improving customer services (Rose and Hudgins, 2005). The evolution of electronic banking, such as internet banking from electronic commerce, has altered the nature of personal –customer banking relationships and has many advantages over traditional banking delivery channels. This includes an increase in customer base, cost savings, mass customization and product innovation, marketing and communications, development of non-core businesses and the offering of services regardless of geographical area and time (Giannakoudi, 1999). Many banks are making huge investment in technology to maintain and upgrade their infrastructure, in order not only to provide new electronic information-based services, but also to manage risks positions and pricing.

These developments may ultimately change the competitive landscape in financial services. The search for quality services by the banks has made it crucial for banks to use IT in their operations. Quality has come to be recognized as a strategic tool for attaining operational efficiency and improve business performance (Babakus and Boller, 1999). Service quality has been found to have profound input on customer satisfaction and loyalty as a whole. It is argued that satisfaction and service quality are prerequisite for customer loyalty. Highly satisfied customers or even delighted customers are more likely to become loyal to the firm. Customer loyalty in service industries has received attention in both marketing and management theory and practice. Not only does customer loyalty acts as a barrier to customer switching behaviour but also acts as a development of a sustainable competitive edge. Besides, organizational goal of creating customer loyalty is mainly to increase their profits, since loyal customers have direct value on a company's profitability.

Problem Statement

The development of customer loyalty is one of the most important issues banks face today. This is due to the increase in competition in the banking sector as never before. Satisfying and retaining customers are vital to the Agricultural Development Bank Ltd. in Sunyani in this era of competition. It is often argued that satisfied customers are more likely to return and form emotional

ties with the company. It has however, become increasingly difficult for Agricultural Development Bank Ltd. in Sunyani to satisfy and retain its customers, who are often demanding better and improved quality services. Failure of the bank to efficiently adopt information technology has resulted in the slowdown of processes of delivery of banking services, unnecessary queues and service failures which has made the bank to lag behind the other banks in the industry. Sometimes, processing of workers' salaries and other services are delayed unduly or postponed at the cost of its customers. Additionally, customers queue for a longer time in the banking hall in accessing services particularly during peak periods such as, when salaries are due for payment and also during Christmas periods. At the same time, customer satisfaction levels are at all time low, dragging the bank's image, credibility and staff morale down. This has had negative impact on its profitability and hence its survival in the industry. The Agricultural Development Bank Ltd. in Sunyani does not have enough Information Technology infrastructures to cope with the customers' demand for excellent banking services leading to long queues and service failures which has potentially negative effect on customer loyalty.

Research Questions

Based on these objectives the study will address the following;

- What is the level of service quality in Agricultural Development Bank Ltd. in Sunyani?
- What is the level of customer satisfaction to electronic banking in Agricultural Development Bank Ltd. in Sunyani?
- How can Information Technology be used to enhance customer loyalty in Agricultural Development Bank Ltd. in Sunyani?
- What are the problems facing Agricultural Development Bank Ltd. in Sunyani in adopting IT in its service delivery?

Purpose of the Study

The study will help the management of Agricultural Development Bank in Sunyani to identify the quality of its electronic banking services. This will enable the management to know the expectations of the customers in order to provide ideal electronic banking services. The study will also help management to become aware of how feasible it is to use Information Technology to build customer loyalty and its impact on the growth and profitability of the bank. Furthermore, the research will help to establish the relationship between service quality and customer satisfaction and hence the future purchases' intentions of the bank's customers. This will help the management of the Agricultural Development Bank in Sunyani to ascertain the growth of the bank. Again, the study will bring to fore the problems facing the bank in providing electronic banking services. This will make the customers appreciate the efforts of management by providing electronic banking services to them. The study would be useful to both local and foreign investors who would want to invest in banking to become aware of ideal electronic banking services and how Information Technology can be used to enhance the loyalty of their customers. Finally, the study will provide useful information for further research into some areas that will advance knowledge in the banking sector.

RESEARCH METHODOLOGY

The research design adopted for this study was a descriptive case study. Case study involves an empirical investigation of a particular contemporary phenomenon within its real life context (Robson, 2002). The purpose of the research is to investigate the role of IT in enhancing customer loyalty in banking, a case of Agricultural Development Bank Ltd. in Sunyani. The population of the study consisted of the managers, employees and the customers that regularly use electronic banking, especially, ATMs, E-zwich, etc in the Agricultural Development Bank in Sunyani branch. The sample size of the study consisted of one hundred and twenty-eight (128) electronic banking customers, two (2) employees and the branch manager. The 128 respondents were obtained by using systematic sampling technique. Systematic sampling allows the researcher to select the sample at regular intervals from the total population or the sample frame. Both primary and secondary data were used. Primary data was collected through interviews and administration of questionnaires. Websites, journals, articles, books and reports from the industry provided secondary source of data. Purposive and systematic sampling techniques were employed to sample respondents that provided empirical data. To improve the credibility of the data, issues involving reliability and validity were observed. The empirical data was quantified by applying statistical analysis to determine the relationships between one set of data and another.

Limitations of the Research

There were several difficulties encountered during the study. Among the limitations was getting access to some information in the Sunyani branch of Agricultural Development Bank which was described by the bank as confidential.

LITERATURE REVIEW

Information Technology

Information Technology (IT) involves the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware. Information Technology deals with the use of electronic computers and computer software to convert, store, protect process, transmit, and securely retrieve information (http://www.en.wikipedia.org/information_technology). Furthermore, it can be described as the combination of computer and communication technologies that assist to produce, manipulate, store, communicate, and /or to disseminate information. However, it is argued that information technology has expanded farther than the conventional personal computer and network technologies to include integration of other technologies such as the use of cell phones, televisions, etc (Laudon and Laudon, 2000). Information system includes a set of inter-related components that collect, process, store, and distribute information. Information system collects raw data (input) converts or manipulates the raw data into a more meaningful form(process) and finally transfers the processed information to people who need them(output). Information technology infrastructure consists of computer hardware, software, storage and communication technologies, and network (Giannakoudi, 1999).

Technological Innovations in Banking

Technological innovations have been identified to contribute to the distribution channels of banks. The electronic delivery channels are collectively known as Electronic Banking (Abor, 2005). Electronic Banking is really not one technology, but an attempt to merge several different technologies. Each of these evolved in different ways, but in recent years groups and industries have recognized the importance of working together. The various electronic delivery channels are discussed below.

Automated Teller Machines (ATMs)

ATM combines a computer terminal, record-keeping system and cash vault in one unit, permitting customers to enter the bank's book keeping system with a plastic card containing a Personal Identification Number (PIN) or by punching a special code number into the computer terminal linked to the bank's computerized records 24 hours a day. Once access is gained, it offers several retail banking services to customers. They are mostly located outside banks, and are also found at airports, mails, and places far away from the home bank of customers. They were introduced first to function as cash dispensing machines. However, due to advancements in technology, ATMs are able to provide a wide range of service, such as making deposits, funds transfer between two or more accounts and bill payments. Banks tend to utilize this electronic banking device, as all others for competitive advantage (Abor, 2005).

Telephone Banking

Telebanking (Telephone banking) can be considered as a form of remote or virtual banking, which is essentially the delivery of branch financial services via telecommunication devices where the bank customers can perform retail banking transactions by dialling a touch-tone telephone or mobile communication unit, which is connected to an automated system of the bank by utilizing Automated Voice Response (AVR) technology (Ige, 1995).

Personal Computer Banking

PC-Banking is a service which allows the bank's customers to access information about their accounts via a proprietary network, usually with the help of proprietary software installed on their personal computer. Once access is gained, the customer can perform a lot of retail banking functions. The increasing awareness of the importance of computer literacy has resulted in increasing the use of personal computers. This certainly supports the growth of PC banking which virtually establishes a branch in the customers' home or office, and offers 24 – hour service, seven days a week (Yasuharu, 2003).

Internet Banking

The idea of internet banking is to give customers access to their bank accounts via a web site and to enable them to enact certain transactions on their accounts, given compliance with stringent security checks. Internet Banking used to provide traditional (banking) services over the internet. Service delivery is informational (informing customers on bank's products, etc) and transactional (conducting retail banking services), (Essinger, 1999).

Networking

Networking of branches is the computerization and inter-connecting of geographically scattered stand-alone bank branches, into one unified system in the form of a Wide Area Network (WAN) or Enterprise Network (EN);for the creating and sharing of consolidated customer information/records(Abor,2005).

Electronic Funds Transfer at Point of Sale (EFTPOS)

An Electronic Funds Transfer at the Point of Sale is an on-line system that allows customers to transfer funds instantaneously from their bank accounts to merchant accounts when making purchases (at purchase point). An EFTPOS use a debit card to activate an Electronic Fund Transfer Process, (Chorafas, 1998)

Electronic Zwich (E-Zwich) Banking

Electronic Zwich, a name for National Switch, is a generic name for the Universal Electronic Payment System. E-Zwich is an electronic clearing and payment system design to link the payment systems of all banking and financial institutions in Ghana. It provides a common platform for most retail payment transactions in Ghana through integration of all existing bank switches thereby enabling the interoperability of all ATMs and Point of Sale (PoS) systems. E-Zwich anchors on biometric (fingerprint) identification technology and allows smartcard holders to perform business and financial transactions including payment for goods and services, money transfers, cash withdrawals, bills payments, receiving salaries and pensions, both online and offline. The E-Zwich is compatible with the ATMs of all banks, as well as with any E-Zwich Point of Sale terminal. 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. All that the cardholder requires to authenticate a transaction is the fingerprint (<http://www.iflr1000.com/LegislationGuide/192>).

Information Technology in Banking

During the last two decades the financial sector has developed rapidly in terms of size, industry structure and variety of consumer and business-to-business products and services. Technological developments and financial liberalization (deregulation) are viewed as the main forces influencing the financial sector's development (Gardener et al., 1999).Electronic commerce is now thought to hold the promise of a new commercial revolution by offering an inexpensive and direct way to exchange information and to sell or buy products. This evolution in the market place has set in motion the evolution of electronic banking, such as internet banking, ATMs etc in banking sector to the demands of the electronic market place.

Innovations in information processing, telecommunications and related technologies are collectively known as Information Technology (Coombs et al., 1987).The information technology revolution in the banking industry distribution channels began in the early 1970s, with the introduction of the credit cards, the ATMs and ATMs networks. This was followed by telephone banking, cable television banking in the 1980s and in the early 1990s (Giannakoudi, 1999). In Ghana, the earliest forms of electronic and communications technologies used by the banks were mainly office automation devices such as telephones, telex and facsimile to speed up and make

more efficient the process of servicing clients. As competition intensified coupled with advancement in computer technology many banks in Ghana are currently offering internet banking, ATM banking, telebanking, E-Zwich banking, personal computer banking and using various electronic cards to entrench one-branch philosophy in the country. The introduction of information technology in service delivery has had a remarkable influence on growth of service delivery options and a profound effect on service marketing. The evolution of electronic banking such as internet banking from e-commerce has altered the nature of personal –customer banking relationship and many advantages over traditional banking delivery channels. This includes an increased customer base, cost-saving, mass customization and product innovation, marketing and communications, development of non-core business and the offering of services regardless of geographical area and time (Giannakoudi, 1999).

Conceptualization of Electronic Banking

There has been many studies identifying the key service quality factors in the traditional banking environment, where the interaction between employees and customers is the main communication channel (Jun and Cai, 2001). However, there are few studies that have investigated electronic service quality attributes in banking (Jun and Cai 2001; Joseph and Stone, 2003; Zeithaml et al., 2005; Ribbink et al., 2004). It is also observed that currently there exists no generally accepted model of electronic banking service quality. Dabholkar (1996) argued that the categorization of technology-based services delivery options may be applied to industries employing technology-based services. The first classification in this categorization is based on who uses technology to deliver what service. That is, person-to person, where the employee uses technology or consumer to technology, such as the use of an ATM. The next categorization looks at the location, where the service is delivered. For example, firms physical surroundings, homes or office using PC computers. The final categorization involves the ability to identify the various levels of contact the customer will have with service operations either directly (face-to-face) or indirectly (such as in the case of telephone banking). In relation to banking, it can be identified that the service delivery components of ATM, internet banking and telephone banking are representative for the three categories of technology-based service discussed. Furthermore, a number of marketing scholars identify these three delivery channels for retail banking (Joseph et al., 1999; Joseph and Stone, 2003). Electronic channels have many names in the literature such as innovative distribution channels, online banking, technology intensive delivery system or electronic delivery channels, (Wong, 1998; Daniel, 1999). Electronic channels can be described as methods of delivering service products using electronic media such as telephone, internet and ATM (Hway-Boon and Yu, 2003). Telephone banking provides services such as account balances, instruction to issue bank cheques, account payments. While ATM, the most frequently used electronic channel, allows customers to perform their main banking transactions, such as deposits and withdrawals, 24 hours a day (Davies et al., 1996). Furthermore, internet banking allows consumers to check account balances, conduct credit card payments / transfers, transfer funds and account payments (Jun and Cai, 2001).

Challenges of Adopting Information Technology in Banking

Today, all types of business, both large and small are using information technology to conduct business electronically to achieve new levels of efficiency and competitiveness. It is widely

recognized that information technology is essential because most organizations need information technology to survive and prosper. However, creating a digital firm and obtaining these benefits is a long and difficult journey for most organizations. Meeting the business and technological challenges of today's digital economy requires redesigning the organization and building a new information architecture and information technology infrastructure. There is a relatively high cost associated with investments in redesigning the organization and acquisition of information technology infrastructure. The actual cost involved in acquiring technology resources includes original cost of computers and software, hardware and software upgrading, maintenance, installation, technical support and training.

Inadequate or lack of management support and commitment to adoption of information Technology in the delivery of banking services can pose a challenge. Support and commitment of management at the various levels to the adoption of Information Technology can be perceived more positively by both users and the technical information service staff. Management backing will ensure that the project receives sufficient funding and other resources to become successful. Security concerns are of paramount importance to firms with extensive networking and electronic transactions with individuals or other businesses outside the organization's boundaries. Networks present end-users, hawkers, and thieves with many points of access and opportunities to steal or modify data and cause physical damage to the information systems.

Lack of capacity and scalability of the bank's information infrastructure can lead to frequent break downs. Capacity considers the maximum number of users that the system can accommodate at one time, the impact of existing and future software applications, and performance measures such as minimum response time for processing business transactions. Scalability refers to the ability of a computer or the system to expand to serve a large number of users without breaking down. Electronic commerce and business call for scalable IT infrastructure that has the capacity to grow with the business as the size of a Website and the numbers of customers increase (Laudon and Laudon, 2000). Low level of development and small per capita income pose another challenge. Most people in Ghana do not have personal computers and access to the internet. Again, most people in developing countries can scarcely read, let alone use the internet. And most of those who are literate do not have access to the internet.

Excluding South Africa, there is one internet host for every 80,000 people in the Sub-Saharan Africa(http://ro.untad.org/ecommerce/event_docs/kathmandu_background.pdf). Another challenge is the reluctance on the part of the bank to network with other enterprises in the industry. Potentially, banks can cut costs significantly, reduce risks and create a large pool of competitive knowledge and expertise by joining forces with other players in the industry. Other challenges are perceived customer readiness and lack of familiarity of the customers with even traditional forms of electronic commerce such as telephone sales, digital cards etc.

Customer Satisfaction

Customer satisfaction with a company's products or services is often seen as the key to a company's success and long-term competitiveness. It is believed that customer satisfaction is

central determinant of customer retention. According to Gummerus et al., (2004) customer satisfaction is positively related to loyalty and criterion for a company's past, current and future performance. The terms quality and satisfaction are sometimes used interchangeably. However, researchers and practitioners believed that perceived service quality is but one component of customer satisfaction. The concept of satisfaction is typically described as post-choice evaluation judgments concerning a specific purchase decision. Satisfaction is seen as an attitude or evaluation that is formed by customers comparing their pre-purchase expectations of what they would receive from the product to the subjective perceptions of the performance they actually did receive (Oliver, 1980). Lovelock and Wirtz (2004) also described satisfaction as an attitude like judgments following a purchase act or a series of consumer product interactions. According to Kotler and Keller (2009) satisfaction is also person's feelings of pleasure or disappointment that result from comparing a product perceived performance (outcome) to his expectations. Lin (2003) defined customer satisfaction as the outcome of cognitive and affective evaluation of the comparison between expected and actually perceived performance which is based on how customers appraise delivery of goods and services. Yi (1990) described satisfaction as a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product or services. Most studies of customer satisfaction are based on the theory of confirmation and disconfirmation of pre-consumption expectations of customers. Thus, consumers compare their expectations prior to consumption of the service or product to the product or service performance. The resulting judgment is labelled negative disconfirmation if service is worse than expected, positive disconfirmation if better than expected and simple confirmation if as expected (Oliver et al., 1997). A perceived performance which is less than the expected leads to dissatisfaction, and that meets or exceeds expectations indicates satisfaction. Expectations are based on customers past buying experiences, opinions of friends and associates, and marketers and competitors' information and promises. Research into customer satisfaction is however, based on the assumption that customers are dealing with services that are high in search or experience attributes (Lovelock and Wirtz, 2004). It is suggested that customer satisfaction is an antecedent of service quality and that service quality exerts greater influence on purchase intentions than do customer satisfaction (Bitner 1990; Bolton and Drew, 1991). However, research carried out by Parasuraman et al., (1994) and Cronin and Taylor (1994) point out that service quality is antecedent of customer satisfaction and appears to be a richer construct for predicting purchase intentions under the assumption that consumers do not always purchase the highest "quality" product due to cost, budget, availability, and other constraints. The authors suggested that service providers need to emphasize total customer satisfaction programs over strategies centring solely on service quality. They recommended strategies such as convenience, prices or availability which may enhance satisfaction while not actually affecting consumers' perception of service quality. Customer satisfaction levels can be tracked through periodic surveys, mystery shopping, monitoring customer loss rate and competitor's performance in the industry (Kotler and Keller, 2009).

Information Technology and Customer Loyalty

Traditionally, service encounters have been characterized by low technology and high face-to-face contact. This has made delivery of high quality services a challenging task. In today's intensified

competitive economy, providing excellent customer service plays a vital role in a company's success because of its obvious relationship with customer satisfaction and loyalty. Creating satisfied and loyal customers is a critical matter for many banks survival (Gould, 1995). The creation of customer satisfaction and hence loyal customers is one of the most problems banks face today. To deal with this, banks are making huge investments in electronic delivery channels like ATMs, internet, telephones, etc in an attempt to not only to attract and satisfy customers but also to create long term relationship with these customers. Advances in technology have changed the way many services are now delivered with particular emphasis on self-service options and in the provision of enhanced services. The focus of much of this change has been with a view to improving performance by increasing the quality and productivity of the services. Good service quality is the main factor that will determine, in the future, whether the business will fail or survive. Better service quality typically can help to get higher market share and better returns (Drennan and McColl- Kennedy, 2003). The majority of customers are now more than ever preferring to opt for technology-based services over that of employee. Information technology offers greater customization and flexibility in that it can adapt and adjust the service options according to customers' needs and wants. It has been argued that information technology can revitalize customer service by moving a firm and its products closer to the customer, and gaining access to customer's home or work place which increase the potential for one – to – one relationship. Internet banking and other completely new services that add value to existing products by substituting or complementing personal interactions with service staff are by means of information technology (Jun and Cai, 2001). Promoting quick responses, just – in – time deliveries of services in electronic market places improve information sharing between the bank and its customers. The nature of service organization has been given a new phase. Technology-based services have made new services delivery available to organizations, making customer participation more widely possible. This change has been influenced by the development of storage and speed of data transfer, particularly in electronic funds transfer known as EFPOS. Accessibility has been extended through technological developments as well as the introduction of new service delivery methods that allow customers to do business with service firms from home and office. The combined services of automated and human tellers have saved customers 'time' in service delivery as alternative to queuing in the banking hall. According to Leow (1999) telebanking provides increased convenience, expanded access and significant time-saving to customers. It is argued that doing business electronically does not only reduce cost but tremendously affects the speed and efficiency of the transactions. Electronic banking services are believed to be superior to those delivered through the traditional banking because of its convenience, speed, relatively low cost, high degree of customization and/ or personalization. It is argued that self- service technologies like internet, ATM etc are characterized by flexibility, convenience of location, greater control over service delivery, higher perceived level of customization, fun, enjoyment and even spontaneous delight of customers (Lovell and Wirtz, 2004). It is further argued that by designing a virtually failure- proof web site creates loyal users and positive word of mouth. Weatherall et al., (1984) state that customers are thought to have a positive perception of technology-based service attributes since they believe technology will deliver a fast and more efficient service than that of employee. Bateson (1984) also mentioned efficiency and speed as highly important attributes of technology-based services.

RESEARCH FINDINGS, ANALYSIS AND DISCUSSIONS

3.1 Electronic Banking Delivery Channels used by the Agricultural Development Bank in Sunyani.

The table below shows the electronic banking delivery channels used by the Agricultural Development Bank Ltd. in Sunyani in service delivery.

Table 3.1: Electronic banking delivery channels used by the bank

Electronic Banking Delivery Channels		
ATM	Network	E-zwich

Source: Field Survey, 2009

The results from the table 3.1 show that the bank was using ATM, E – Zwich and Network banking facilities to provide banking services. This further indicates that Agricultural Development Bank Ltd. in Sunyani is using fewer electronic banking facilities in service delivery.

Customer Satisfaction Levels to Electronic Banking in the Agricultural Development Bank Ltd. in Sunyani

The table below shows the responses of the respondents with respect to all the experiences to electronic banking services being satisfactory.

Table 3.2: All my experiences with electronic banking services have been satisfactory.

Respondents	Frequency	Percentage
Strongly Disagree	8	9.3
Disagree	21	24.4
Neutral	12	14.0
Agree	37	43.0
Strongly Agree	8	9.3
Total	86	100

Source: Field Survey, 2009

The results from the table 3.2 above indicate that out of the total of 86 respondents, 9.3% strongly disagreed that electronic banking services in the Agricultural Development Bank Ltd. in Sunyani were satisfactory, 24.4% disagreed, 14.0% remained neutral, 43.0% agreed and 9.3%strongly agreed. n other words, 9.3% of the respondents were very dissatisfied with the electronic banking services in the bank, 24.4% were dissatisfied, and 14.0% were neither satisfied nor dissatisfied, 43.0% were satisfied and9.3% were very satisfied. The results further indicated that 52.3% customers were satisfied, 14.0% were neither satisfied nor dissatisfied and 33.7% of the respondents were dissatisfied with electronic banking services in the bank.

Correlation between Overall Customer Satisfaction and Perceived Performance of Electronic Banking.

The table 3.3 below shows the relationship between the overall customer satisfaction and item scales of perceived performance of e-banking service quality and the t-statistic to test the statistical significance between the variables. The results of the correlation co-efficient showed that there were fairly weak but positive relationships between electronic banking customers' satisfaction and the individual perceived performance of electronic banking since the values of the correlation co-efficient are positive but less than one. This indicates that the perceived performance did not much improve the overall satisfaction of the customers. However, the probabilities of the correlation co-efficient of perceived performance of P1, P9, P12, P13, P16, P15 and P18 and electronic banking customers' satisfaction occurring by chance alone were more than 0.05 and therefore the relationships were not statistically significant. However, the rest of the perceived performances of electronic banking were statistically significant with customers' satisfaction.

Table 3.3: Pearson correlation coefficients of perceived performance of e-banking with overall customer satisfaction

Perceived Performance of Electronic Banking	Correlation Co-efficient	Test-Statistic
P1. Accurate records	0.202	0.062
P2. Accurate transactions	0.259	0.016
P3. Convenient hours of operations	0.403	0.000
P4. Easy to use	0.343	0.001
P5. Short waiting time	0.282	0.009
P6. Complete transactions quickly	0.296	0.006
P7. Educate on how to use	0.246	0.022
P8. Connects immediately	0.382	0.000
P9. All banking needs included in the menu	0.161	0.140
P10. Up to date information	0.340	0.001
P11. Secure locations	0.255	0.018
P12. Conveniently located	0.202	0.064
P13. Special services for elderly / disables	0.114	0.302
P14. Additional options	0.158	0.151
P15. Personalised	0.213	0.051
P16. Feedback service	0.098	0.374
P17. Satisfy complaints immediately	0.390	0.000
P18. Friendly environment whilst waiting such as Music	0.058	0.594
P19. Friendly environment whilst waiting such as Advertising	0.241	0.025

*Correlation is significant at 0.05 levels (2- tailed).

Source: Field Survey, 2009

Using More of Electronic Banking Services in the Future

The table 3.4 below shows the responses of the customers with regard to using more of e – banking services in the future in Sunyani Agricultural Development Bank Ltd.

Table 3.4: You will use more of electronic banking services in the future

Respondents	Frequency	Percentage
Strongly Disagree	1	1.2
Disagree	5	5.8
Neutral	10	11.6
Agree	46	53.5
Strongly Agree	24	27.9
Total	86	100

Source: Field Survey, 2009

The results from the table 3.4 above show that 1.2% of the respondents strongly disagreed to use more of electronic banking services in the future, 5.8% disagreed, 11.6% were neutral, 53.5% agreed and 27.9% strongly agreed. This indicates that 81.4% of the customers were loyal to e – banking in Sunyani Agricultural Development Bank Ltd., 11.6% remained neutral and 7% were not loyal. This further indicates that majority of the customers demonstrate an increased purchasing behaviour towards the bank’s e-banking services.

Continue to Use Electronic Banking If Service Charge is increased

Table 3.5 shows the responses of electronic bank customers with respect to using electronic banking services even if service charge is increased somewhat. The results from the table show that 9.4% of the respondents strongly disagreed to continue to use electronic banking even if the service charge is increased somewhat in Sunyani Agricultural Development Bank Ltd., 24.7% disagreed, 11.8% neither agreed nor disagreed, and 36.5% agreed and 17.6% strongly agreed.

Table 3.5: You will continue to use electronic banking even if service charge is increased to somewhat

Respondents	Frequency	Percentage
Strongly Disagree	8	9.4
Disagree	21	24.7
Neutral	10	11.8
Agree	31	36.5
Strongly Agree	15	17.6
Total	85	100

Source: Field Survey, 2009

From the table above, a total of 54.10% agreed to continue to use electronic banking even if service charge is increased to somewhat, 11.80% neither agreed nor disagreed and 34.10% disagreed. This

indicates that more than half of the customers show commitment to e – banking and were prepared to partner the bank to achieve its objectives.

Preference for Electronic Banking

The responses of the respondents with respect to having strong preference for electronic banking to conventional banking are shown in table 3.6a below. The results revealed that 1.2% of the respondents strongly disagreed to having strong preference for electronic banking to conventional banking in the Sunyani Agricultural Development Bank Ltd., 3.5% disagreed, 12.8% were neutral, 43.0% agreed and 39.5% strongly agreed. In other words, a total of 82.50% agreed to have strong preference for electronic banking to conventional banking, 12.8% neither agreed nor disagreed and 4.70% preferred conventional banking to electronic banking. This shows that majority of the customers preferred e - banking to conventional banking in the bank.

Table 3.6a: You will have strong preference for electronic banking to conventional banking

Respondents	Frequency	Percentage
Strongly Disagree	1	1.2
Disagree	3	3.5
Neutral	11	12.8
Agree	37	43.0
Strongly Agree	34	39.5
Total	86	100

Source: Field Survey, 2009

Electronic Banking Service Is the First Choice

The table 3.6b below shows the responses of respondents with respect to electronic banking service as the first choice in the minds of the respondents when considering having banking services. The results show that 2.3% of the respondents strongly disagreed to consider electronic banking services as the first choice when thinking of having banking services in Sunyani Agricultural Development Bank Ltd., 2.3% disagreed, 14.0% were neutral, 39.5% agreed and 41.9% strongly agreed. Thus, a total of 81.40% agreed to consider electronic banking service as the first choice when thinking of having banking services, 14.0% remained neutral and 4.60% disagreed. The results further indicate that a large proportion of the customers show a strong cognitive behaviour towards electronic banking services in the Sunyani Agricultural Development Bank Ltd

Table 3.6b: Electronic banking service is the first choice in your mind when you consider having banking services

Respondents	Frequency	Percentage
Strongly Disagree	2	2.3
Disagree	2	2.3
Neutral	12	14.0
Agree	34	39.5
Strongly Agree	36	41.9
Total	86	100

Source: Field Survey, 2009

Access to banking services 24 hours, 7 days in a week

Table 3.7 below shows how IT has made banking services more accessible to electronic banking customers of Agricultural Development Bank in Sunyani. The results from the table below indicate that 100% of respondents could access banking services from the bank 24 hours, 7 days in a week. This indicated that the electronic banking customers could access banking services at their own convenient time.

Table 3.7: Does the use of IT (ATM, E – Zwich, internet, etc) make it possible to have access to banking services 24 hours, 7 days in a week

Respondents	Frequency	Percentage
No	0	0
Yes	86	100
Total	86	100

Source: Field Survey, 2009

Implication of Convenience of banking services to Customers` Loyalty to the Bank

The table below shows the influence of the convenience to banking services on the loyalty of the respondents to the Agricultural Development Bank in Sunyani. The results revealed that 67.4% of the respondents had become loyal to the bank as a result of convenient banking services provided by Agricultural Development Bank Ltd with the introduction of IT, 22.1% remained neutral and 10.5% were negatively influenced. The results further show that the majority of the electronic banking customers had become loyal to the bank due to convenience of the banking services.

Table 3.8: How has convenience influenced your loyalty to the bank?

Respondents	Frequency	Percentage
Very Negative	0	0.0
Negative	9	10.5
Neutral	19	22.1
Positive	51	59.3
Very Positive	7	8.1
Total	86	100

Source: Field Survey, 2009

Time Saving

Table 3.9 below shows the time electronic banking customers spent in accessing banking services (deposits and withdrawals) in the bank. The results indicated that 90.7% of the respondents spent less than 30 minutes in accessing electronic banking services and 9.3% also spent 30 minutes to 1 hour. According to the Management of the Agricultural Development Bank Ltd. in Sunyani customers normally spend an hour or more before they could withdraw money when using the conventional banking. This shows that generally less time was spent in accessing electronic banking services especially with regard to withdrawal of money from the ATMs, balance enquiries, etc, in the Agricultural Development Bank Ltd. in Sunyani.

Table 3.9: How long do you spend in accessing services (deposits and withdrawals) through ATM, E – Zwich, etc in the bank?

Respondents	Frequency	Percentage
Less than 30 minutes	78	90.7
30 - 1 hour	8	9.3
1-2hours	0	0.0
More than 2 hours	0	0.0
Total	86	100

Source: Field Survey, 2009

Personalization of Banking Services

Electronic banking customers were welcomed/or greeted by their names or otherwise when using the E-zwich, ATM, etc in accessing banking services from the bank. This indicates that electronic banking customers were given personal attention when accessing electronic banking services. Table 3.10 below shows the response of respondents on the use of IT (ATM, E- Zwich, etc) to provide personal banking services in the bank. The results from the table revealed that 89.5% received personal banking services when using IT (ATM, E-zwich, etc) in the bank whilst 10.5% of the respondents disagreed. This shows that the majority of the electronic banking customers received personalized electronic services in the Sunyani Agricultural Development Bank Ltd.

Table 3.10: Does the use of IT make it possible to receive personal banking services (e.g. welcome you by name or otherwise)?

Respondents	Frequency	Percentage
No	9	10.5
Yes	77	89.5
Total	86	100

Source: Field Survey, 2009

Cost- Saving

Table 4.23 below shows the response of the respondents on the cost of electronic services in the Agricultural Development Bank in Sunyani. The results revealed that 81.4% of the respondents had not experienced reduction in cost of banking services since the cost for each transaction (withdrawal) on the ATM was GH¢ 0.25 irrespective of the account holding in the bank whilst transaction(withdrawals) on the conventional banking attracts no services charges apart from current account holders who pay GH ¢2.00 every month. The remaining 18.6% of the respondents had experienced reduction in cost of electronic services partly due to saving of transportation cost in accessing banking services. This indicates that majority of the customers had not experienced reduction in cost in accessing banking services electronically.

Table 3.11: Does the use of IT reduce your cost in accessing banking services from the bank?

Respondents	Frequency	Percentage
No	16	18.6
Yes	70	81.4
Total	86	100

Source: Field Survey, 2009

Challenges Facing Agricultural Development Bank Ltd. in Sunyani in adopting IT in Service Delivery

The following challenges were identified making it difficult for the bank to provide ideal banking services to the customers; security concerns (alteration of data, especially by the IT specialist, theft, etc), cost factors(cost of IT infrastructure, training, maintenance, etc),availability of IT skills, perceived customer readiness, lack of familiarity of the customers to IT in the bank, reluctance on the part of the bank to network with other banks, low level of economic development(frequent power failure, low level of education, access to internet, etc).Other challenges include fraud and frequent system failures.

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Main Findings

From the study, the quality of the electronic banking services in the bank was low. This indicates that despite the introduction of Information Technology in service delivery, customers still queue for a longer time in accessing banking services, feedback to customers` complaints was delayed, receipts for transactions were sometimes not provided to customers, sometimes electronic banking services could not be accessed 24hours, 7 days in a week, etc. Again, it was found that, A little more than half of the electronic banking customers were satisfied with electronic services in the Sunyani Agricultural Development Bank Ltd.

From the study, it was revealed that customers` loyalty to electronic services in the Agricultural Development Bank Ltd. in Sunyani was generally high with more than 70 per cent agreed to be loyal to electronic banking. The introduction of IT in the bank`s service delivery had enhanced customer loyalty in the Agricultural Development Bank Ltd. in Sunyani through convenience and /or accessibility, time – saving and personalization of electronic services. Even though cost of banking services had not been reduced yet the majority of the customers remained loyal to the bank. The Agricultural Development Bank in Sunyani had been facing certain challenges in adoption of IT in its service delivery, among them were security concerns, low level of economic development, perceived customer readiness, poor system connectivity, increasing cost of IT infrastructure, etc. These had made it difficult for the bank to provide ideal electronic banking services to its customers.

Conclusion

It can be concluded that the bank had adopted ATMs, E-zwich and Networking in the delivery of services in order to benefit from tremendous opportunities in terms of cost – saving, revenue generation, increased market share, facilitating employee’s jobs etc. However, the number of technological innovations used by the bank was few. This means that the bank does not have enough electronic banking facilities to cope with the customers` demand for quality banking services and also reap the full benefits of the IT. It was also revealed that the introduction of IT in the bank`s service delivery had enhanced customer loyalty by offering electronic banking customers convenience, time–saving and personalized services. The loyalty of the customers to electronic banking was generally high with an average of about 70% being clients, advocates, supporters and a little more than half of the respondents being partners. This can generate revenue stream for the bank, reduce the cost of servicing and attracting new customers, increase repeat purchases and overall profitability and competitiveness of the bank in the industry.

Recommendations

Based on the findings and the conclusion of the study it was recommended that, the management should make its electronic services more accessible by improving the efficiency of the electronic facilities through regular maintenance to enable customers have access to banking services, 24 hours, 7 days. Again, the management should develop its electronic facilities to cater for the elderly or disabled. Moreover, the management of Agricultural Development Bank Ltd. should channel its efforts in terms of financial and time to improve the perceived performance of the electronic banking facilities to enhance the service quality. This would go a long way to raise the customer satisfaction levels and hence customer loyalty in the bank.

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