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THE IMPACT OF E-BANKING ON CUSTOMER SERVICE AND PROFITABILITY OF BANKS IN GHANA

DR. ALEX ADDAE-KORANKYE
CENTRAL BUSINESS SCHOOL, CENTRAL UNIVERSITY COLLEGE,
P.O.BOX DS 2310, DANSOMAN, ACCRA, GHANA.

Abstract

The study examined the impact of e-banking on customer service and profitability of banks in Ghana. Random sampling was used to select ten banks and two hundred and fifty customers all in Accra for the study. The study found that E-banking and hence Information and Communication Technology has impacted positively on customer service and profitability of banks though there are a number of challenges. It was recommended among others that there should be 24/7 monitoring of the Automatic Teller Machines(ATMs) so that any failure is addressed as soon as possible to guarantee customer retention. It was concluded that the government should provide adequate regulatory framework that will ensure customer protection and security of transactions; and again to achieve competitive advantage periodic training programmes on ICT should be organised by the banks to ensure that their employees are always abreast with current trends and programs in ICT.

Keywords: *E-banking, Profitability, Customer service, Information and Communication Technology.*

Introduction

The advent of electronic business (e-business) and hence Information and Communication Technology(ICT) has heralded some fundamental changes in the way that existing businesses operate (Hammer and Champy, 2001).

Internet technology holds the potential to fundamentally change banks and the banking industry. DeYoung (2001) who holds an extreme view speculates that the Internet will destroy old models of how bank services are developed and delivered. The widespread availability of Internet banking for instance is expected to affect the mixture of financial services produced by banks, the manner in which banks produce these services and the resulting financial performances of these banks. De Young(2001) asserted that whether or not this extreme view proves correct and whether banks take advantage of this new technology will depend on their assessment of the profitability of such a delivery system for their services.

In addition, industry analysis outlining the potential impact of Internet banking on cost savings, revenue growth and risk profile of the banks have also generated considerable interest and speculation about the impact of the Internet on the banking industry (Berger, 2003).

According to Berger(2003), banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability. However, to date researchers have produced little evidence regarding these potential changes. Nonetheless, recent empirical studies indicate that Internet banking is not having an independent effect on banking profitability, although these findings may change as the use of the Internet becomes more widespread.

In Ghana, developments in information technology (IT) are radically changing the way business is done. 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 and services. This revolution in the market place has set in motion a revolution in the banking sector for the provision of a payment system that is compatible with the demands of the electronic marketplace. Specifically, the Ghanaian banking industry has been undergoing rapid changes as a result of technological innovation, increased awareness and demands from customers. The banking industry of the 21st century operates in a complex and competitive environment characterised by these changing conditions and highly unpredictable economic climate. Previously, the provision of banking services in Ghana was basically manual. However, over time, Information and Communication Technology (ICT) has been deployed to influence service delivery in the banking sector. All banks in Ghana are now using ICT to penetrate the 'unbanked' sectors in the economy.

According to Owusu (1997), innovations in information processing, telecommunications, and related technologies – known collectively as "information technology" – are often credited with helping fuel strong growth in many economies. It seems apparent then that, technological innovation affects not just banking and financial services, but also the direction of an economy and its capacity for continued growth.

The Problem

In Ghana, for more than a decade E-banking has been a major factor in the competitive banking environment. Every bank in Ghana is using at least an aspect of e-banking as a tool to gain competitive advantage. However, the impact of e-banking on the performance and operations of banks in Ghana is yet to be established.

The objective of the study therefore was to examine the impact of e-banking on profits and customer service of banks in Ghana.

Literature Review

The Concept and definition of E-banking

According to Basel Committee on banking supervision, (1998 and 2003) E-banking is defined as the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit taking, lending, account management, the provision of financial advice, electronic bill payment, and the provision of other electronic payment products and services such as electronic money.

The term "electronic banking" or "e-banking" covers both computer and telephone banking. It refers to the use of information and communication technology by banks to provide services and manage customer relationship more quickly and most satisfactorily (Charity-Commission, 2003). Burr (1996) describes it as an electronic connection between the bank and the customer in order to prepare, manage and control financial transactions.

Electronic banking according to Al-Abed (2003) is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick and- mortar institution. Lustsik (2004) describes electronic banking as a variety of the following platforms: Internet banking, telephone banking, TV-based banking, mobile phone banking, and PC banking.

Daniel(1999), and Sathye (1999) are also of the view that Internet Banking is the usage of Internet and telecommunication networks to deliver banking services to customers. Customers can inquire information and carry out most banking services such as account balance inquiry, inter-account transfers, and bill-payment via the Internet. There are different perceptions of Internet Banking between the literature and practitioners. With reference to most Australian banks' websites, the term 'Internet banking' has been construed as the transactions relating to current and credit card accounts such as viewing balances, paying bills, and transferring funds. In contrast, in the literature, Internet banking includes the services relating to financing, insurance, investment, and new banking services (Furst, Lang, & Nolle 2000; Sathye, 1999).

E-banking includes systems that enable financial institutions, customers, individuals and businesses, to access accounts, transact business, or obtain information on financial products and services through public or private networks, including the internet. Customers access e-banking services using an intelligent electronic devise, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM). Private networks "closed" restrict access to participant (financial institutions, customers, merchants, and third party service providers) bound by agreement on the terms of membership. Public networks "open" have no such membership requirements.

E-banking has unique characteristics that may increase an institution's overall risk profile and the level of risk associated with traditional financial services, particularly, strategic, operational, legal, and reputation risks.

The impact of Electronic Banking on bank performance

According to Nathan (1999), electronic banking services have provided numerous benefits for both banks and customers. The first benefit for the banks offering electronic banking service is better branding and better response to the market. Those banks that would offer such service would be perceived as leaders in technology implementation. As a result, they would enjoy a better brand image. The other benefits are possible to measure in monetary terms. The main goal of every company is to maximise profits for its owner and other stakeholders. According to Allen and Hamilton (2002), an estimated cost of providing the routine business of a full service branch in USA is $1.07 per transaction, as compared to 54 cents for telephone banking, 27 cents for ATM banking and 1.5 cent for internet banking. On the other hand, the advantages for the customers are significant time saving and reduced costs in accessing and using the various banking products and service, increased comfort and convenience (Pyun, Scruggs and Nam, 2002).

Internet Banking provides clear advantages to both the financial institutions and the customers. From the banks' perspective, Internet Banking has very low cost transactions, compared to human teller banking. According to The Fourth International Conference on Electronic Business (ICEB2004) / Beijing, e-banking reduces the following expenses (Wright & Ralson, 2002)): (1) Banks can reduce customer service staff as customers use more self-service functions; (2) There is less cheque processing costs due to an increase in electronic payments.; (3) Costs of paper and mail distribution are reduced as bank statements and disclosures are presented online; (4) There is less data entry as applications are completed and processed online by customers. On the other hand, according to KPMG (1998), bank's revenue increases from Internet Banking due to: (1) Increased account sales; (2) Wider market reach; (3) New fee-based income; (4) New market opportunities; (5) Improved customer satisfaction. For consumers, Internet banking provides convenience, lower service charges, more accessible information about bank accounts, and an attractive option for busy people since it saves time to go to the bank branches and gives 24 hours access (Lee & Lee, 2000). All the benefits of B2C e-commerce such as 24*7 bank service, convenience, access from anywhere, one stop shop and easy access to information also apply to internet banking Singh (2004).

The benefits of E-banking are manifold and are to be seen from the point of view of the banks themselves, customers and even the regulators Sergeant(2000). Sergeant is of the view that for banks, E-banking brings different and arguably lower barriers to entry; opportunities for significant cost reduction; the capacity to rapidly reengineer business processes; and greater opportunities to sell cross border. For customers, the potential benefits are: more choice; greater competition and better value for money; more information; better tools to manage and compare information; and faster service.

Electronic banking (E-banking) enables customers to do their banking 24 hours a day, 7 days a week. E-banking customers are able to check their account balances, pay bills, apply for a loan, trade securities, and conduct other financial transactions. E-banking can be divided into five major categories: (1) Internet banking, (2) Telephone banking, (3) TV-based banking, (4) Mobile phone banking, and (5) PC banking. Technological innovations in recent decades have made the move towards E-banking possible. The increasing competition for customers in banking and need to decrease cost of providing banking services has led banks to integrate these changes.

The benefit which is driving most of the banks towards E-banking is the reduction of overall costs in two ways: cost of processing transactions is minimised and the numbers of branches that are required to serve an equivalent number of customers are reduced (Saatcioglu et al, 2001).

E-banking creates unprecedented opportunities for the banks in the ways they organise financial product development, delivery, and marketing via the Internet. While it offers new opportunities to banks, it also poses many challenges such as the innovation of IT applications, the blurring of market boundaries, the breaching of industrial barriers, the entrance of new competitors, and the emergence of new business models (Saatcioglu et al. 2001, Liao and Cheung 2003). Now, the speed and scale of the challenge are rapidly increasing with the pervasiveness of the Internet and the extension of information economy (Holland and Westwood 2001).

Khrawish and Al-sa'di(2011) made an attempt to assess the impact of e-banking on banks profitability for the banking sector in Jordan during the period (2000-2009).

Their study found that for banks that do not apply the e-banking services through the internet, have no significant effect on the Return on Equity (ROE) and the margin of the sample, but significant in terms of Return on Assets(ROA). For banks that apply the electronic banking services for less than 2 years, there is no significant effect of these services on the return on assets and the return on equity but was founded to be significant on margin. For banks that apply the electronic banking services, there is no significant effect of these services on banks profitability after 2 years of applying it for the tested sample during the period 2000-2009.

Bello and Dogarawa(2005) also examined and assessed the impact of e-banking services on customer satisfaction in the Nigerian banking industry. Their study found out that many banks' customers in Nigeria are fully aware of the positive developments in information technology and telecommunications which led to the introduction of new delivery channels for Nigerian commercial banks' products and services. The aim was to satisfy and get customer delighted. Most customers however, still patronise the bank branches and find interaction with human tellers as very important.

Secondly the study found that customers enjoying electronic banking services are still not
satisfied with the quality and efficiency of the services. This is expressed in the number of times customers physically visit banks and length of time spent before such services are received.

Customers' perception of and reaction to these developments are issues of concern to both Government and banking industry.

Mahotra and Singh (2007) examined the impact of Internet banking on banks' performance and risk in India. The study examined a comprehensive set of 10 measures of financial performance that made it possible for the authors to critically look into bank performance. By developing a deeper understanding of these phenomena, the researchers drew more insightful inferences about the impact of the Internet on banking on business strategies, production processes and financial performance.

The results of the study revealed that on average, Internet banks are more profitable than non-Internet banks and are operating with lower cost as compared to non-Internet banks, thus, representing the efficiency of the Internet banks.

Methodology

The study employed survey design. Survey was used because they are the most appropriate research design for management and business research. Secondly survey was used because it gives highly specific and precise data and also because the population was relatively large, the survey method was preferred.

The population of the study comprised of customers and staff of the sampled banks. These customers are those who have been with their respective banks for at least two years. The staff comprised of heads of ICT/MIS department, and heads of finance and Accounting department.

Ten banks in Accra were randomly selected. From each bank, purposive sampling was employed to select the head of ICT/MIS and the head of finance and accounting department. This sampling technique was chosen because, the study wanted specific data from specific category of employees. Again, twenty five customers from each bank were also randomly selected to give each customer equal chance of selection. In all the sample size was 250 customers and 20 employees of the banks(heads of ICT/MIS department and Heads of Finance and accounting departments).

The study used not only questionnaires but also interview guide as the research instruments, because some of the customers were illiterates and semi-literates, so it was necessary to interview them. Simple frequency tables were used to present and analyse the data.

Results and Discussion

E-banking and improvement in customer service

The customers/clients were asked whether or not they agree that the implementation of E-banking has improved customer service. Out of the 250 respondents, 60 representing 24% said they strongly agree and 140 representing 56% agreed to the statement that the implementation of E-banking has improved customer service. So in all 200 representing 80% agreed that E-banking implementation has improved customer service. This confirms the findings of the study done by Pyun, Scruggs and Nam, 2002, and also Nathan(1999). On the other hand 14% and 6% respectively strongly disagree and disagree to the statement. So in all 20% disagreed. This is also consistent with the study done in Nigeria by Bello and Dogarawa(2005) on the impact of e-banking on customer service. Those who disagreed lamented on issues like the frequent failure or break down of automatic teller machines (ATMs), long queues in some of the banks, frequent network failure, unfriendly bank officers, illiterates and the physically challenged are disadvantaged to withdraw from the ATMs, etc.

The implication of the above is that though e-banking has had a positive effect on customer service, there is more room for improvement since some (20%) are still not satisfied with the services they are receiving from their respective banks. This is represented in table 1.

Table 1: E-banking has improved customer service of banks

Responses	Frequency	Percentage(%)
Strongly agree	**60**	**24%**
Agree	**140**	**56**
Disagree	**35**	**14**
Strongly disagree	**15**	**6**
Total	**250**	**100**

Source: Field survey, 2013

Impact of E-banking on profits of banks in Ghana.

On the question of the impact of e-banking on profit, out of the 20 employees of various banks, 5 representing 25% indicated that e-banking implementation has increased their profit on the average by 10-30%; 8 respondents (40%) asserted that e-banking has increased their profit margin by >30% to 50%; 5 representing 25% indicated that the implementation of e-banking has increased their profit by an average of >50%-100% and finally only 2% indicated that the implementation of e-banking has increased their profit by more than 100%.

The above implies that there is a positive correlation between implementation of e-banking and banks' profitability. This confirms the findings of the study by Mahotra and Singh(2007) on the impact of e-banking on banks' performance and risk profile in India. This is depicted in table 2.

Table 2: Impact of E-banking on Profit

Profit range	Frequency	Percentage(%)
10 - 30%	**5**	**25%**
>30 – 50%	**8**	**40**
>50 – 100%	**5**	**25**
>100%	**2**	**10**
Total	**20**	**100**

Source: Field survey, 2013

Conclusion and Recommendations

The importance of service delivery and its impact on customer satisfaction, customer retention, sales or revenue, market share, profit and corporate image of the bank cannot be overlooked.

An overwhelming majority indicated that the implementation of e-banking has had a positive effect not only on customer service but also profits of the banks.

The study recommended the following to policy makers, the banks, and the government for consideration:

Failure of the ATMs should be quickly addressed and they should be well lit especially in the night. There should be 24/7 monitoring of the ATMs so that any failure is addressed as soon as possible to guarantee customer retention. They should also develop facilities to ensure that the illiterates, the elderly and the physically challenged are not disadvantaged.

Banks should organise public exhibitions and talk shows and make products accessible to all customers. In addition, they should improve their service delivery to justify the benefits of electronic banking products and services. This way, customers' interest would be aroused.

Banks should try to win customers' confidence by providing adequate security of transaction back up of critical data files and alternative means of processing information. They should also ensure good connectivity and power base that will enable them serve customers faster and more conveniently. The banks should ensure that at no time should service cease as a result of network problem.

Government should provide adequate regulatory framework that will ensure customer protection, and security of transaction. That way, customers' confidence in electronic banking would be secured. Finally, to remain competitive in the industry the banks should conduct periodic marketing research studies on their own customers.

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