Emerging trends of Electronic Banking in Ghana

Kwame Owusu Kwateng1* Kwaben Obiri-Yeboah2 Felix Nyamekye Sarpong3

1. KNUST School of Business, Kwame Nkrumah University of Science & Technology, PMB, Kumasi Ghana
2. KNUST School of Business, Kwame Nkrumah University of Science & Technology, PMB, Kumasi Ghana
3. First Capital Plus Limited, PMB, Kumasi Ghana

*E-mail for corresponding author: kowusukwateng@yahoo.com

Abstract

The Government and Bank of Ghana have made it a priority to motivate existing banking customers and to reach the unbanked through the use of ICT. This strategy is also recognized as a relevant tool in the fight against poverty. In spite of this effort majority of Ghanaians still remain unbanked because the present financial service delivery methods are not able to meet the challenges of the customers, especially when it comes to serving remote communities and market men/women who finds it difficult to leave their shops and visit the bank. An ICT innovation like the speedbanking provides some hope to help solve these problems.

Keywords: speedbanking, electronic cards, unbanked, Information and Communication Technology (ICT)

1. Introduction

The growth of information systems has significantly affected products and services delivered through electronic banking. According to Gkoutzinis (2006) e-banking presents an efficient delivery channel through which banking products and services can be delivered more conveniently and economically. This has motivated banks all over the world to offer internet banking services to their customers. Some studies have found that innovation in products and services is an important tool for banks to have an edge on their competitors (Damanpour and Evan, 1984; Kimberly and Evanisko, 1981). Service delivery is intangible and it has been describe as subjective, attitude and perception by service quality literature. Few studies have examined the narrower subject of the effects of e-banking products on service delivery in the banking sector. This research work focused on the effects of electronic products, specifically Speed Banking on banking services delivery. It covers customers and employees of financial institutions in Ghana. The customers included both high and low end customers, literate and illiterate (with the illiterate forming the majority). This is due to the fact that most of these customers are “Susu” (daily or weekly collection of money) clients and migrating them to the speed banking platform is a way of increasing deposit mobilization through the purchase of the vouchers and reduce the risk of harbouring money at home, shops and other unconventional methods of saving money by traders in Ghana. It also constitutes one of the best ways of reaching out to the unbanked.

2. Literature Review

2.1 Defining Electronic Banking

E-banking is defined by Singh and Malhotra, (2004) as the use of electronic and communication networks by banks to directly serve customers. E-banking is seen as a medium through which customers can access diverse banking services such as electronic bill payment, deposit account, making investment, and online transfer (Pikkarainen et. al., 2004; De Young, 2001). E-banking can generally be referred to as the situation where a customer does not necessary need to visit the banking premises to receive services and products. The scope can be extended to include online service deliveries such as Internet banking, personal computer (PC) banking, remote electronic banking, virtual banking, remote electronic banking, phone banking, online banking, and home banking. Internet/online banking and PC banking is patronise by customers more than the others. With exception of cash withdrawal, all banking transactions can be assessed at the click of the mouse (De Young, 2001). With vicious competition, the internet is not just seen as competitive tool but as a requirement in financial service delivery. (Flavian, Torres, and Guinaliu, 2004; Gan, and Clemes, 2006). The internet, regarded as a significant delivery channel (Karjaluoto, Mattila, and Pentt 2002, p.261) has level the playing field to enable all financial institutions to have access to customers all over the world.
2.2 Internet banking

Internet banking is basically the use of the Internet as a delivery channel to carry out banking activity, for example, paying bills, transferring funds, paying mortgages, viewing checking and savings account balances, purchasing financial instruments and certificates of deposit. An Internet banking customer accesses his or her accounts from a browser-software that runs Internet banking programs resident on the bank’s World Wide Web server, not on the user’s PC. According to Yasuharu, (2003), a “true Internet bank” is defined as one that provides account balances and some transactional capabilities to retail customers over the World Wide Web. The Internet banks are also referred as virtual, net, cyber, interactive, or web banks. So far, advertising presence on the Internet—primarily in the form of informational or interactive web sites has been established by more banks than transactional web sites.

2.3 The Card System

The card system is a unique electronic payment type. Smart cards are basically plastic devices with embedded integrated circuit which is used for settlement of financial obligations. The power of cards lies in their complexity and acceptability to store and manipulate data and handles a number of applications on one card securely (Amedu, 2005). It can be used as a Debit Card, Credit Card, and ATMs (Automatic Teller Machine) depending on its sophistication. Gradually, the Card system has gained popularity in Ghana, especially the ATM card (Osei, Morrissey & Lloyd, 2005). The Smart Card was introduced into the Ghanaian market to eliminate or reduce problems of carrying cash about (Osei, 2005).

2.4 Service Delivery

Service quality and its measurement have become an essential research topic because of its apparent relationship to cost (Crosby, 1979), customer retention (Reichheld and Sasser, 1990), customer satisfaction (Bolton and Drew, 1991), and profitability (Buzzell and Gale, 1987; Rust and Zahorik, 1993). Service quality is seen as a driver of corporate marketing and financial performance (Buttle, 1996). A sound measure of service quality is required for identification of the aspects of service that need performance improvement, assessment of how much improvement is needed on each aspect, and evaluation of the impact of the improvement efforts. Due to the intrinsic nature of heterogeneity, inseparability of production and consumption, perishability and intangibility, the evaluation of quality services is more complex than for products (Frochot and Hughes, 2000, Zeithaml, et al., 2006).

2.5 E-Banking and Service Delivery

Service Delivery is a concept that has received considerable interest and debate in research literature due to the difficulty of defining it because it is a multidimensional concept (Jamel & Naser, 2002). The service delivery means different things to different people (Bennington & Cummane, 1998). First of all, service is abstract (Suresschandar, Rajendran & Anantharaman, 2002). For that reason, service is difficult for suppliers to explain and for customers to assess (Edvardsson et al, 1994). Secondly, no universal definition of Delivery quality has been established until now even though, this has been the focus for some time now. Reeves and Bednar (1994) emphasizes that different circumstances will lead to the acceptance of different definitions. According to Bennington and Cummane (1998), a search for this definition confirmed that service delivery has been defined variously as excellence (Pirig, 1974), value (Feigenbaum, 1951), conformance to requirement (Crosby, 1979), conformance to specification (Levitt, 1972), loss avoidance, fitness for use (Juran1974, 1988) and meeting and exceeding customers’ expectations (Gronroos, 1985).

2.6 E-banking in Ghana

Research relating to e-banking has been carry out in a multiplicity of contexts. E-banking research has been conducted in Europe (Daniel, 1999; Gurau, 2002; Kardaras and Papatthanasiou, 2001; Karjaluoto, Mattila and Pento, 2002; Karjaluoto, 2002; Ibbotson and Moran, 2003; Jayawardhena and Foley, 2000), Australia (Sathy, 1999) and Asia (Lafolet and Li, 2005; Hway-Boon and Yu, 2003; Jaruwachirathananakul and Fink, 2005; Lu, Liu, Jing and Huang, 2005; Shih and Fang, 2004). Research that relates to the adoption of the Internet and other
ICTs in banking has been discussed from the theoretical (Rollason, 1989; Zekos, 1999; Prendergast, 1993; Krumm, 1998; Jayawardhena and Foley, 2000) and empirical (Daniel, 1999; Kardaras and Papathanassiou, 2001; Rexha, Kingshott and Shang, 2003; Wan, Luk and Chaw, 2005; Gurau, 2002; Laforet and Li, 2005; Hway-Boon and Ming Yu, 2003; Sathy 1999; Mols, Bukh and Nielsen, 1999; Karjaluoto, Mattila and Pento, 2002; Bradley and Stewart, 2002; Bradley and Stewart, 2002; Pikkarainen, Pikkarainen, Karjaluoto, and Pahnila, 2004; Shih and Fang, 2004; Karjaluoto, 2002) perspectives.

The focus on Africa and West Africa for that matter, in relation to electronic banking has been almost absent. A notable study by Boateng and Molla (2006) analysed the use of the Internet in developing e-banking capabilities in Ghanaian banks. Yet, the study, which was centred on an exploratory single case study, particularly focused on the strategies adopted by the bank in developing e-banking capabilities and also relatively failed to generate considerable insight on consumer perceptions and expectations on the bank’s e-banking services and products. Electronic banking (e-banking) has been viewed as one of the means in which ICTs can and is impacting the banking sector as purported by academic and practitioner oriented literature (Gurau, 2002; Shih and Fang, 2004; Boateng and Molla, 2006). In terms of service complexity, e-banking services range from information push - mono-directional-services where customers receive information about the bank, its products and services, to information-download– bi-directional-services where customers can download (or ask in case of telephone-banking) account information and forms to full-transaction – multi-directional – services where customers can perform most banking transactions (such as bill payment, transfer between accounts, third party payment, card and loan applications, etc.) electronically (Boateng and Molla, 2006; Singh and Malhotra, 2004). With the assurance of the Internet, its application as the electronic and communication medium or channel for offering transactional banking services – Internet banking – offers the potential for improving the quality of service delivery and timeliness of response from banks. It also facilitates self-service and service customization, as well as improvement in customer communication and relationship (Gurau, 2002).

Some banks have allowed some form of e-banking for their clients thus to check their account balances and to transfer money from one account to another, all in an attempt to catch up with global developments and improve the quality of their service delivery. Moody (2002) observed that online banking is the fastest growing services that banks can offer in order to achieve and retain a sizeable market share, offer better and quicker response to market changes and reduce transaction cost. The era from the early to mid 1990s observed a gradual and continual application of computerized technology into banking operations by Ghanaian banks. From year 2000 onwards ICT has become an important strategic tool for competitive advantage as well as defining market segmentation and market share. There has been massive influx of Information and Communication technology of various forms into several banking operations to this end.

3. Data and Methodology

Both interviews and questionnaires were used in the data collection process. The target population for the research comprised all bank customers and employees in Ghana. Since banking customers and staff are so many, a sample of 140 was convincing enough as a true representative and this was considered for the purpose of this study. The sample size of 140 is supported by Baileys’ (1994) proposition that a sample size between 30 – 500 should be sufficient to deliver realistic findings in a research. The random sampling technique was employed to ensure that everyone in the sampling frame had an equal chance of being selected as part of the final sample. The sample size included one hundred (100) employees, twelve (12) executives of the banks and forty (40) of the bank’s customers. This questionnaire was constructed by the researcher and it was based on a 5- point likert scale (1= Strongly Disagree, 2 = Disagree, 3 = Not Sure, 4 = Agree, and 5 = Strongly Agree) in which higher score indicate more perceived peer relation influence.

4. Results and discussion

Considering the Level of Acceptance And Usage Of SpeedBanking Among Bank Employees, there is an overwhelming acceptance level of 88% of sampled staff whilst only 12% were not entirely sure if they had
accepted SpeedBanking. Among customers/consumers on the other hand, responses showed that 52% had accepted speedbanking as against a significant minority of rejection (47.5%) of SpeedBanking. 100% of respondents mentioned the benefits of SpeedBanking as Faster way of depositing money, Saves time and transportation and Convenience in depositing money. However, a whooping majority of respondents (93%) answered that SpeedBanking reduced the risk of attack by thieves and robbers, thereby creating a safer line of cash deposit. This is highly supported by the Bank of Ghana and the Ghana National Security in their bid to introduce cashless transactions in the country and reduce armed robbery respectively.

Table I Consumer/Customers Acceptance of SpeedBanking

<table>
<thead>
<tr>
<th>Responses</th>
<th>Bank Staff</th>
<th>Bank Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Yes</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

With regards to Speedbanking’s direct effect on service delivery satisfaction for customers, a significant majority (26 customer respondents representing 65%) of customers said they were not happy with their usage of SpeedBanking. Only 35% said they were happy with SpeedBanking. This findings was totally opposite that of employees, majority (97%) of whom responded to being happy with SpeedBanking compared to just 3% who said they were not happy.

Table II Speedbanking’s direct effect on service delivery satisfaction for customers

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Valid Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>No</td>
<td>26</td>
<td>65</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100</td>
</tr>
</tbody>
</table>

On the issue of Speedbanking’s direct effect on service delivery satisfaction and Output for employees, Table III indicates responses to the questionnaire instrument seeking responses to employee time efficiency. This instrument was put forward as an assessment factor to the determination of the direct effect of SpeedBanking on service delivery satisfaction and output of employees. Findings showed that 57% of respondents agreed that SpeedBanking had direct effect on employee time efficiency. 13% strongly disagreed whilst 24% and 6% disagreed and strongly disagreed respectively.

Table III SpeedBanking makes me more efficient with time.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Valid Percentage (%)</th>
<th>Cumulative percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>6</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Disagree</td>
<td>24</td>
<td>24%</td>
<td>30%</td>
</tr>
<tr>
<td>Agree</td>
<td>57</td>
<td>57%</td>
<td>87%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>13</td>
<td>13%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Linear simple regression analysis was conducted to assess the effect of SpeedBanking on Employee Performance
Efficiency. In this analysis, employee Performance Efficiency was treated as the study dependent variable, while SpeedBanking was treated as independent. The results are presented in table IV below.

Table IV: Forced entry regression of speedbanking on Employee Performance Efficiency

<table>
<thead>
<tr>
<th>Variables</th>
<th>b</th>
<th>Beta</th>
<th>R</th>
<th>R²</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.24</td>
<td>3.546</td>
<td>0.144</td>
<td>0.117</td>
<td>1.140</td>
<td>0.041</td>
</tr>
<tr>
<td>SpeedBanking</td>
<td>13.12</td>
<td>3.546</td>
<td>0.144</td>
<td>0.117</td>
<td>1.140</td>
<td>0.041</td>
</tr>
</tbody>
</table>

In table IV, it can be inferred that SpeedBanking has significant effect on Performance Efficiency (beta = 3.546, t= 1.140, p<0.041). This implies that use of SpeedBanking contributes positively to employee Performance Efficiency. The model also predicted that for every unit increase in SpeedBanking, employee Performance Efficiency increases by 13.12 units. Again, the contribution of SpeedBanking in the profitability accounted for 11.7% (i.e., R² = 0.117). Therefore the amount of variation in Performance Efficiency scores that was explained by the independent variable (Use of SpeedBanking) was 11.7%. The 11.7% shared variance was maximum effect size between the variables in the study since the model was able to explain the variation in the model (Cohen, 1988). Thus, the study was able to show that there was statistically significant correlation between use of SpeedBanking and employee attitude to work. It is recommended that the bank should develop Broad Spectrum Campaign That Targets Everybody, Repackage the Product to Serve Customers Better and Constant Training of Employees Handling E-Banking Product Sales.

5. Conclusion

E-Banking has become the order of the day. All forms of e-banking products abound in various financial institutions but surprising does not provide the competitive edge it was supposed to provide. This is partly because almost all financial institutions provide similar, if not the same sort of e-banking services. With SpeedBanking, a novelty has arrived. Like every new product, its acceptance and assimilation into the banking’s customer base is often a strategic game of effort, continuous evolution and patience. Speed Banking is bound to chalk great successes and pave the way for many other novelty e-banking products but before that, more work needs to be done. Considering the blistering pace of advancement in technology and the taste of Ghanaian population for technological products, it is recommended that management of financial institutions must conduct further research to discover areas of operations where the use of E-banking can be employed to increase not only the performance of employees, but also to reach the unbanked population in Ghana.

Reference


Crosby, P.B., (1979), Quality Is Free, New American Library, New York, NY


Shih, Y., and Fang, K. (2004). The use of a decomposed theory of planned behaviour to study Internet banking in
Taiwan, Internet Research: Electronic Networking Applications and Policy, Vol. 14, No. 3.


Yasuharu UKAI (2003), The Effects of Information System Investment in Banking Industry.


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