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Varying Impacts of Electronic Banking on the Banking Industry

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Abstract

The banking industry has undergone tremendous changes with the introduction of information technology (IT). Electronic banking (EB) is a new paradigm in banks' product and service delivery. Electronic banking products and services have become increasingly popular in the past three decades as the banking industry operating in a complex and competitive environment has experienced the awareness to serve its customers electronically. Online banking has become the preferred way for many Americans to conduct financial activities. This paper explores a few published articles that reported on the impacts of electronic banking on the banking industry. The articles vary in their findings. Impacts on the banking industry from the points of view of consumers and bank employees were reported. This paper examines the study of few other articles to propose that more research be conducted utilizing a different research methodology such as qualitative method to fully understand how EB impacts the banking industry and address cyber crime threats.

Keywords: **Electronic banking; Information technology; Innovation; US**

banking

INTRODUCTION

The development of IT has changed the delivery of banking products and services worldwide [1]. IT has helped banks to reduce operational costs, improve service quality, and customer relations [2]. Electronic banking (EB) is a new paradigm in banks product and service delivery [3]. Electronic banking products and services have become increasingly popular [4] in the past three decades. Online banking has become the preferred way for many Americans to conduct financial activities [5]. The banking industry operating in a complex and competitive environment has become aware of the need to serve its customers electronically [6]. Electronic banking has significantly improved bank employees' performance and customer satisfaction [7].

Information technology has become a subject of fundamental importance to banks worldwide [6]. Electronic banking enables customers to access their accounts, conduct financial transactions, and pay bills through the Internet or phone without having to physically visit their banks [8]. Banks use electronic devices such as computers for storing, analyzing, and distributing information. EB is considered a potential substitute for brick and mortar bank branches; however, bank customers still visit their banks at least once a month [9].

Shittu [6] indicated the first step of EB evolution is the introduction of automated teller machines (ATMs). For most people in the United States and Europe, EB means 24hours a day access to cash via ATM (Electronic Banking). Guru et al. [9] noted that a US survey revealed the Internet has helped banks to market information, deliver on-line banking products and services, and improve customer relationship. ATMs are the most popular electronic delivery channel for e-banking services. However, because transactions are initiated via cards and codes (ATM card and PIN), the Internet, and phones, the possibility of selling a customer another service that they need, promoting a bank's good image, and enhancing customer loyalty is hindered.

Various studies were conducted in the areas of EB and the impacts on the banking industry. However, few contradictory results were reported. Some researchers such as Ojokuku and Sajuyigbe [3] reported positive impacts on the banking industry while a few others such as Anguelov et al. [10] and Shittu [6] indicated a few challenges associated with EB that counters banks' efforts ro use EB as an avenue to reduce costs. The three main delivery channels in e-banking are ATM's, telebanking, and internet-banking [9]. It is critical for banks to provide e-banking services effectively and efficiently [11]. Banks therefore, need to

ensure there is enough e-banking customers to justify the provision of e-banking services. Otherwise, banks' profitability and sustainability might be at stake.

LITERATURE REVIEW

Various studied were conducted in the areas of electronic banking (EB) and its impacts on the banking industry. A few contradictory results were reported. Josefowicz and Novarica [12] indicated low economic growth, excess branch capacity, and pressure from the regulatory authorities' exerted pressure on bank profitability and increased competition for quality. To enhance profitability and competitiveness, banks focused on redesigning their products and costs utilizing IT to facilitate the use of internal and external data [12]. Creating more options for online and mobile bill pay (two forms of electronic banking), banks were able to restructure cost, and enhance their distribution systems. Idowu et al. [13] supported Josefowicz and Novarica as they indicated bank productivity and profitability were enhanced due to IT which enabled EB.

Santomero [14] stated that electronic payment helped to foster and support automated check clearing (Check 21, a technology innovation). As noted by Santomero, Check 21 is expected to save banks about $2B a year in check processing costs. Because banks can use check images for check clearing, transportation of physical checks and the risks associated with it are mitigated.
Some researchers such as Kobrin [15] indicated that the introduction of electronic-money (a form of EB) could make monetary control less effective and that Central Banks/Federal Reserve Bank (CBN/Fed) would have to substantially modify their operating procedures for monetary policy to be effective. Cohen [16] on the other hand, argued that the introduction of electronic currency would not affect monetary control (the ability of Central Bank to control M aggregate, Ms, and Md), but might reduce monetary autonomy (the ability of CBN/Fed to influence output and price). Regulators therefore, need to identify threats if any, that e-money and EB pose to the economy and develop strategies for effective policy options.

Friedman [17] noted that EB could result in an alternative payment system, which is not under CBN/Fed control. Banking concurred with Friedman by saying that EB enables banks to bypass the CBN/ Fed clearing and settlement system. Lee and Longe-Akindemowo [18] noted that EB is not harmful to the monetary policy as CBN/ Fed could regulate the financial markets to protect consumers against market (systemic) risk. Freedman [19] agreed with Lee and Longe- Akindemowo [18] by stating that CBN/Fed could use its power to regulate e-money (smart/credit card) companies; if e-money is harmful to the monetary policy or the national financial stability. Regulating e-money companies would be a better solution to controlling the effect of e-money on the monetary policy [19]. Electronic-banking might make monetary policy less effective in the short run thereby shifting the LM curve to the right [19]. The flattening of the LM curve

(liquidity trap according to Keynesians) may be an indication that monetary policy is less effective and that fiscal policy will work better. Woodford [20] agreed with Freedman by concluding that CBN/Fed will always find alternative ways such as regulating short-term interest rates to control monetary policy. Tanaka suggested the introduction of a cyberspace monetary authority that would be responsible for controlling e-money.

Amedu [8] and Yunus and Akingbadei [7] noted in their findings that the introduction of electronic banking has improved banks' efficiency in services to customers while Fredrick [1] and Ojokuku and Sajuyigbe [3] stated that EB improved the growth of the banking industry, enhanced bank-customer relations, improved customer satisfaction, facilitated banking transactions, and brought banking services closer to customers. Guru et al. [9] supported the finding and noted that EB brought banking services to the customers' doorsteps. Fredrick also noted that the introduction of EB in Africa reduced operating costs for banks in terms of labor, rent, and back office paper work.

Shittu [6] noted that EB brought convenience to bank customers. As debit card replaced cash; people would carry less cash on them. Shittu [6] further noted that bank customers who have debit cards can purchase or make payments from their accounts in person, online, or by phone at stores that display the Visa logo. With a debit card, fund transfer from customers' account is fast; however, a customer must ensure that he or she has sufficient fund in his/her accounts to cover the purchase or payment. EB enables direct deposit or withdrawals to and from customers' accounts. Shittu also stated that EB enabled electronic check processing, which reduced the number of clearing days and improve security. Afolabi [21] noted improved customer satisfaction in his study findings but advised that people should be cautious of online and telephone transactions.

Malesky [22] mentioned that EB reduced customer long wait in the banking hall and improved the labor intensive information processing system. Boateng and Molla [2] mentioned easy account access and speedy transaction as benefits of EB. Tucker [23] supported Boateng and Molla's [2], Fredrick's [1], and Santomero's [14] findings by stating that online banking is an avenue for banks to reduce costs; which banks in turn pass to their customers in the form of lower service fees.

Despite the benefits enjoyed from the introduction of EB, researchers such as Amedu [8]. reported some EB drawbacks Some customers' attitudes towards online banking is still negative due to cyber crime and inadequate or lack of legal protection for bank customers unlike in the USA and Europe [8]. Cyber crime and identity theft are global issues. Cyber crime widens as unemployment rate rises [6]. Anguelov et al. [10] studied U.S. consumers and electronic banking and noted that some bank customers were hesitant to conduct financial transactions over the Internet. His findings aligned wirh Shittu's [6] and Amedu's [8] study

resultd findings.

Kolodinsky et al. [24] studied e-banking and US consumers. They noted that individuals with high income, high net worth, within certain age group would adopt some form of EB. In other words, socioeconomic and demographic elements are significant determining factors of the likelihood of utilizing EB. Goi's [25] study result aligned with this finding as he stated that personality and perception of customers influence the use of Internet banking. Customers' hesitation/conservation counters banks' efforts to reduce costs and improve profitability.

LIMITATION OF THE STUDIES

Sample size and data collection limitation

Ojokuku and Sajuyigbe [3] surveyed bank employees from 1 bank regarding the impacts of EB on bank employee performance. In the paper, the sample size was 35. One limitation about this study is that the study participants were from the same socio-economic status. The study was limited to a small sample size of 35 as opposed to a large sample size typical of a quatitative reseach. Shittu [6] investigated the impacts of EB on the Nigerian banking system by surveying 1 bank's employees using a sample size of 40. He revealed that EB improved bank relationship with its customers. Abor [11] also studied the impact of EB on Ghanaian banks by surveying bank employees. He stated that EB helped to improve bank-customer relationship and customer satisfaction. Abor's [11] and Shittu's [6] studies have the same limitations as stated in Ojokuku and Sajuyigbe's [3] study above. Another limitation is that although questions about bank performance regarding productivity and profitability could be answered by bank employees; it is possible that employees exaggerate/inflate on their employers' financial performance for the fear of retaliation from the banks.

Methodology limitation

Of all the studies examined, none utilized qualitative methodology. Studying the impacts of EB on the banking industry should be a study that answers the how question (i.e. how does EB impact the banking industry?), which Yin [26] argued should be addressed by utilizing a qualitative design to conduct the research. As argued by Astin and Long, a quantitative method does not enable a researcher to gain a comprehensive understanding of a phenomenon. In a quantitative study, a researcher constructs knowledge and hypothesizes while in a qualitative methodology, a researcher discovers knowledge [27]. In a quantitative research, the aim is to quantify data and generalize study result to a population of interest [28]. Jackson et al. [27] also noted that there is no room for open-ended questions in quantitative research. Researchers feed the participants with the

answers as is the case with likert-scale (agree, disagree, true false, yes, no).

Recommendations for action

While one cannot make firm recommendations based on the findings of the studies examined, it is evident that some customers are still conservative towards electronic banking. Banks should strive to reach out to the conservative segment of the population by providing periodic training to employees to improve employees' electronicbanking knowledge for them to educate customers. Providing more feasible training for bank employees could further enhance the effectiveness of service delivery. Banks might create Websites aimed at educating conservative customers on e-banking and its benefits and the steps banks are taking to secure customers' information. Investing in advanced technology that might help mitigate cyber crime is another option. This education might help increase public confidence in ebanking. Banks should continue to invest in IT to improve efficiency and encourage customers to use online banking service. Regulatory authorities should provide online protection for electronic-banking customers.

Recommendation for future study

A possible future research direction is the use of another research methodology to explore the impacts which the evolving EB has on the banking industry. Strategies for educating conservative bank customers could be another future research interest. This type of study could enable banks to capture the conservative customers segment of the population to increase banks' market share and profitability.

CONCLUSION

In order to have a better understanding of the impacts of electronic banking on the banking industry it is necessary to conduct studies that explore participants' live experiences. According to Moustakas, using an in-depth interview, a qualitative design, will enable a researcher to acquire an understanding of the phenomenon from the participants' perspectives. In-depth interview enables a researcher to probe deep and uncover new clues, which can securely ensure accurate and naturalistic accounts based on personal experience [28].

Moustakas noted that using a qualitative design enables a researcher to describe a phenomenon accurately without referring to any preset guidelines. Yin [26] argued that case study. A qualitative design is the best strategy when a researcher needs to address the why and how. Achieving a thorough understanding of human beings' experiences, in a humanistic, interpretive approach, often requires a researcher to go beyond data and statistics [27].

Although EB has positive impacts on the banking industry, banks should develop strategic plans to address the challenges associated with EB to further enhance profitability and reduce costs. Training should be provided to educate conservative customers on EB and its benefits. Steps should be taken to address cybercrimes.

REFERENCES

1. Fredrick A (2012)The impact of electronic banking transaction in the banking industry: The case of ADB, SG-SSB and Barclays Bank branches in the eastern region. CEMBA Thesis, Kwame Nkrumah University of Science and Technology, Ghana.

2. Boateng R, Molla A (2006) Developing e-banking capabilities lessons. Journal Banking and Commerce 11: 1-10.

3. Ojokuku RM, Sajuyigbe A S (2012)The impact of electronic banking on human resource performance in the Nigerian banking industry. International Journal of Economic Development Research and Investment 3: 61-69.

4. Oladejo, Akanbi (2012)Bankers perceptions of electronic banking in Nigeria: A review of post consolidation experience. Research Journal of Finance and Accounting 3:2222-2847.

5. Emarketer (2015) Online Banking reaching mainstream. The TimesCenter, New York.

6. Shittu O (2010) The impact of electronic banking in Nigeria banking system: Critical appraisal of Unity Bank PLC. Banking And Finance 5:1-85.

7. Yunus DA, Akingbade WA (2011) Technology innovation and Nigeria banks performance: The assessment of employees' and customers' responses. American Journal of Social and Management Sciences 2: 329-340.

8. Amedu UM (2005)Domestic electronic payment in Nigeria: The Challenges. CentralBank of Nigeria Bullion, January/March.

9. Guru BK, Vaithilingam S, Ismail N, Prasad R (2001) Electronic banking in Malaysia: A note on evolution of services and consumer reactions. Electronic Banking 2:135-137.

10. Anguelov CE, Hilgert MA, Hogarth JM (2004) U.S. Consumers and electronic banking 1995-2003. Federal Reserve Bulletin, pp. 1-18.

11. Abor J (2005) Technological Innovations and banking in Ghana: An evaluation of Customers' perceptions.IFE PsychologIA 13: 170-187.

12. Josefowicz M, Novarica MM (2011)U.S. banking industry trends and IT impacts.Banking system and technology, Information week.

13. Idowu P, Alu AO, Adagunodo ER (2002) The Effect of information Technology on the growth of the banking industry in Nigeria. Electronic Journal on Information Systems in Developing Countries 10: 1681-4835.

14. Santomero AM (2004) Banking in the 21st century. New Jersey Bankers Association Annual Convention,Aventura, Florida. Federal Reserve Bank of Philadelphia.

15. Kobrin SJ (1997)Electronic cash and the end of national markets.Foreign Policy, Wharton magazine.

16. Cohen BJ (2001) Electronic Money: New day or false dawn? International Political Economy 8: l97-225.

17. Friedman B (1999) The Future of Monetary Policy: The Central Bank as an army with only a signal corps?International Finance 2: 321-338.

18. Lee B, Longe-Akindemowo O (1999) Regulatory issues in electronic money: A legal-economics analysis. Netnomics 1: 53-70.

19. Freedman C (2000)Monetary policy implementation: Past, present, and future: Will electronic money lead to the eventual demise of Central Banking? International Finance 3: 211-227.

20. Woodford M (2000)Monetary policy in a world without money. International Finance 3: 229-260.

21. Afolabi FO (2009)The role of information technology in Nigeria banks: A case study of Intercontinental bank, Guaranty Trust Bank and First Bank PLC.

22. Malesky M (2014) Traditional banking vs. electronic banking system. eHow.

23. Tucker J (2012) The transformation of banking. Daily reckoning magazine.

24. Kolodinsky J M, Hogarth JM, Hilgert MA (2004)The adoption of electronic banking technologies by US consumers. International Journal of Bank Marketing 22: 238-259.

25. Goi C (2014)Sustainability of E-Banking in Malaysia: Opportunities

andchallenges in the new era. Journal of Internet Banking and Commerce 19: 1-11.

26. Yin RK (2009) Case study research: Designs and methods(3rdedn.)SAGE Publications, India .

27. Jackson R, Drummond D, Camara S (2007)What is qualitative research? Qualitative Research Report in Communication 8: 21-28.

28. Ibrahim MF, Leng SK (2003) Shoppers' perceptions of retail developments:Suburban shopping centers and night markets in Singapore. Journal of Retail & Leisure Property 3: 176-189.