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ABSTRACT

This paper investigates the factors that influence the consumer adoption of Electronic banking in Nigeria and found that there is a need to conduct research on Electronic banking adoption behaviour. The empirical data were collected from a questionnaire survey of 125 from Bayero University Kano (BUK), in northern Nigeria. This study examines the relationship between Electronic banking adoption and the determining factors for critical success of Electronic Banking in Nigeria. Hence, the results show’s that the relevant factors determined the adoption of Electronic banking in Nigeria include the level of its six factors, namely awareness, ease of use, security, cost, reluctance to change and accessibility. The results of this study show that four factors examined are significantly important to the adoption of Internet banking in Nigeria. However, perceive ease of use and reluctant to change are found to be insignificant in determining its adoption. This study provides insightful understanding of academic staff and non academic staff perception about Electronic banking adoption in their banking transactions. Banks and other private sector in Nigeria that are interested in promoting Electronic Banking might find these findings helpful in guiding their efforts.

Keyword: Electronic banking, Adoption, behaviour and Nigeria

INTRODUCTION

Electronic Banking is defined as “the use of technology to communicate instructions and receive information from a financial institution where an account is held. This service includes the system that enables financial institution customers, individuals or business to access accounts transact business, or obtain information on financial products and services through a public or private network”. Prakash and Malik, (2008, P.84). However, Electronic banking has experienced tremendous growth in many countries especially Africa and today it has transformed the traditional banking practice in Nigeria. Currently, Electronic banking in Nigeria has changes the way services are deliver by the banking sectors to their customers. Electronic banking services, has lower operating costs, improve customer services deliver, retain customer, reduce branch traffic, and downsize the number of branch staff. Parisa (2006).

Electronic banking is the provision of banking services to customers through Internet technology. Ovia (2005). Essentially, through the use of Information and Communication Technology banks now employ different channels such as online banking, mobile banking and Automated Teller Machine to deliver their services. Report on Electronic banking system in Nigeria reveals that e-payment machinery, especially the card
technology, is presently enjoying the highest popularity in Nigeria banking market. According to INTER SWITCH statistics, Nigeria has over 30 million ATM card holders who conduct over 30 Billion worth of transactions on the machines every month. Nigeria's banks operate over 9,000 ATM machines across the country's 36 states and Federal Capital Territory.

Also, to enhance effective security measure, Nigerian banks have upgraded their ATM cards from the magnetic stripe to the Euro-Visa-Master card standard, popularly known as Verve Card (www.businessdayonline.com). This latter technological device is more fraud resistant because all the data of the customer are recorded on the chip. Hence, Electronic banking system has become the main technology driven revolution in conducting financial transactions in Nigeria. Meanwhile, Nigerian banks have made huge investments in telecommunication and electronic systems, users have also been validated to accept Electronic banking system as useful and easy to use. Adesina and Ayo, (2010). However, there are many advantages of Electronic Banking. It is convenient, it isn’t bound by operational timings, there are no geographical barriers and the services can be offered at a minuscule cost. IAMAI’s, (2006). Electronic banking has experienced explosive growth and has transformed traditional practices in banking .Gonzalez et al., (2008).

PROBLEM STATEMENT
This study focuses on the adoption of Electronic banking services by staff of Bayero University Kano (BUK) and aims to gain a deeper understanding of the factors influencing the adoption of Electronic banking services by Nigerians, particularly in Bayero University, Kano (BUK).

To this end, options were gathered from a broad base in the University community paying particular attention to the academic staff and non academic staff that are customers of the bank. The University community is chosen in this study, as this is an excellent reflection all antecedent of Nigerian States, where it comprises different sort of staff from all nicks and crony around Nigeria. The focus of this research will be particularly to provide both commercial banks and policy makers with public opinion that could assist in the understanding and appreciation of the factors that affect the adoption of Electronic banking in Nigeria, particularly in Bayero University Kano (BUK).

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT
Sathye (1999) Defines adoption as “the acceptance and continued use of a product, service or idea.” Mols et al. (1999) study reveals that the diffusion of electronic banking is more determined by customer’s acceptance than by the seller offerings. O’Connell (1996) demonstrated that the explanation for slow growth of Electronic banking is caused by security concerns, lack of knowledge about availability of such a service, Electronic banking sites being not user friendly and the lack of access to computers or the Internet. In line with Wallis (1997) whose report states that new technology adoption by the majority of the customers depends mainly on awareness, ease of use, safety and security, cost of Internet banking, reluctance and lack of computer or Internet access are focused.

COST/PRICE FACTORS
Today, in Nigeria Price/costs is one of the major factors that influence the consumer adoption of innovation. Gupta (1988), Mazursky et al., (1987) identify `price” as a major factor in brand switching. Also, the Wallis Report (1997) states that for `consumers to use new technologies, the technologies must be reasonably priced relative to alternatives”. Otherwise, the acceptance of the new technology may not be viable from the standpoint of the consumer.

Thus, the following hypothesis is proposed:

H1: BUK staffs are not adopting Electronic banking service because it is not reasonably priced.

CUSTOMER ACCESSIBILITY
One of the major factors for adopting Electronic banking is the availability of access to computers/Internet
Sathye, 1999). The Wallis Report (1997) states "as the Internet becomes more widely accessible households will conduct their financial transactions over the Internet" this means that, the more widespread the access to computer/Internet the greater the possibility of use of Electronic banking adoption. O, Connell (1996) state that lack of access to computers as one of the reason for slow adoption of Internet banking. There for, lack of access to computers/Internet might be one of the major hindrances of adopting Electronic Banking in Nigeria. As such the following hypothesis is proposed:

H2: **BUK** staffs are not adopting Electronic banking service because they do not have access to computers/Internet.

**PERCEIVE EASE OF USE**

Cooper (1997) identifies "ease of use" as one of the three important characteristics from customer’s perspective for adoption of innovative service. Katz and Aspden (1997), Walis (1997) and Mols (2000) suggested that it is crucial for the Internet to be easy to use to increase the adoption rate Electronic banking. The Wallis Report (1997) identifies that technological innovation "must be easy to use" to ensure customer take up or acceptance. Daniel (1999) identifies "ease of use" as one of the factors for customer acceptance in her study of electronic banking in the UK and Ireland.

This means that for successful implementation of Electronic banking, Nigerian commercial banks must ensure that the services are simple, easy and of sufficiently high quality to ensure customer satisfaction in order to maintain their customers. These findings and observations lead to the following hypothesis:

H3: **BUK** staffs are not adopting Electronic banking service because they do not find that it is easy to use.

**CUSTOMER RELUCTANT TO CHANGE**

Daniel (1999) stated that there is a high level of customer inertia in changing their established banking arrangements. Sathye (1999) emphasized that customers, particularly the senior citizens, prefer personal interaction and that they have technology phobia. Furthermore, adoption of new technologies often comes across a certain amount of resistance to change from present ways of operating. This means that unless such a need is fulfilled by the commercial banks, customers may not be prepared to change from present ways of operating. These findings and observations lead us to the hypothesis:

H4: **BUK** staffs are not adopting Electronic banking service because they do not want to change from currently familiar ways of transacting.

**CUSTOMER AWARENESS**

Adoption can be defined as the acceptance and continued use of a product, service or an idea. According to Rogers and Shoemaker (1971), consumers go through “a series of process in knowledge, conviction, decision and confirmation” before they are ready to adopt a new product or service. Hence, for adoption of Electronic banking in Nigeria, it is necessary that the commercial banks offering this service make the customers aware about the availability of such a product and explain how it adds value relative to other products of its own or that of the competitors. The added value in electronic banking, according to Trethowan and Silicone, (1999), was convenience, sales orientation and lower costs. These findings and observations lead us to the hypothesis:

H5: **BUK** staffs are not adopting Electronic banking service because they are unaware of the service and the benefits it offers.

**SECURITY CONCERN**

Security is one of the very important factors in determining the decision of consumers to use Electronic banking. Cooper (1997) identifies "the level of risk" as an important characteristic from a consumer's perspective in the adoption of innovation. In a study ABF (1997) found that security concerns are keeping both consumers and bankers away from Electronic banking. Booz et al. (1997), reveals that security concern among customers was the top ranking obstacle for non adoption of Electronic banking in Latin America. Apparently, Electronic banking will not be adopted in Nigeria unless it is considered safe and secure by the customers.
Hence, the following hypothesis is proposed:

**H6: BUK** staffs are not adopting Electronic banking service because they are concerned about the safety and security of transactions.

**Figure 1. Research conceptual model**

From the literature discussion above, we found that the six constructs (customer accessibility, customer reluctant to change, cost/price factors, security concern, perceive ease of use, and customer awareness) mostly have a significant or direct impact on Electronic Banking Adoption and it could be said that all of them are success factors for Electronic Banking Adoption, but there are limited empirical studies that found these constructs to have insignificant effect on Electronic Banking Adoption. However, these prior studies on Electronic banking adoption factors have produced mixed results, which have culminated to the difficulty in articulating the Electronic banking adoption drivers.

**RESEARCH METHODOLOGY**

Quantitative analysis was chosen to test the research model, as it is good for measuring how many and in what proportion. The method for collecting empirical data for the statistical analysis was customer survey. 250 survey questionnaires were sent out to randomly academic staff and non academic staff selected from the list of salary payment schedule from the bursary department.

The data for the study was gathered through a structured questionnaire. All variables were operationalized using the literature on online shopping Booz et al., 1997; Suganthy et al., 2001. The first part of the questionnaire included questions about Electronic banking usage habits of the respondents such as preference of Electronic banking usage, whether they have access to Online Banking, Mobile Banking and ATM in the University or not, and their feelings about their general feeling on Electronic banking security. The second part consisted of questions measuring all the variables including two questions which are used to measure the Electronic banking. The third part consisted of questions regarding the demographic characteristics of the respondents firms. All the questions were utilizing on a Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.
The questionnaire was pretested within the for the purpose of establishing face validity of the items. The aim of the pre-test was to prevent any vagueness and misunderstanding with minor adjustment to the wording and sequence of the questions. Then, the revised questionnaire was administered to respondents.

All items intended to measure the variables in this study were adopted from previously validated instruments. Regression analysis was used to analyze the data. An exploratory factor analysis was performed with varimax rotation to assess the reliability and validity of the measurement model before the regression analysis.

**LIMITATION OF THE STUDY**

In this study, some of the major constraint in this study are the respondents were only selected from Bayero University Kano (BUK), Nigeria. This means that the academic staff and non academic staff might not represent the entire Nigerian population. However, in order to get a more reliable representation of Nigeria, respondents should be gathered from all states around Nigeria.

In addition, the research managed to responses from 120 staff. And this also means that the response might not reflect the actual perceptions and opinions of Nigerians. Also there is the need for a larger set of sample to be selected if more reliable results were to be obtained.

The opinions of student, bankers and other communities residing within the school have not been taking into consideration in this study.

**CONCLUSION AND RECOMMENDATION**

In the light of these findings, several recommendations will be made which may be useful for bankers and other related authorities.

- Electronic banking products such as Online Banking, Mobile Banking and ATMs should be made as user-friendly as possible as not many consumers are familiar with the Electronic Banking, especially the older generation. Providing online help and giving customer the choice of their preferred language will ease their transactions.
- Nigerian Banks should take security of their Internet banking sites into serious consideration since fraud and websites hacking still haunt most of the customers. Perhaps they can implement more advanced encryption methods and build stronger firewalls to prevent security infringement.
- Nigerian Banks should make their customer more aware of their new products or services so as to encourage higher adoption rate. They can do so by having a series of seminars, radio jingles, posters and fliers.
- However, it also recommends that commercial banks in Nigeria should not attached unnecessary charges to their customer for the Electronic banking services. This is because users have to incur other costs. However, if this does not appear to be feasible, they would have to make sure that the costs of transacting manually within the branch does not exceed the costs of Electronic banking.
- Furthermore, in order to receive greater response towards Electronic banking, it is recommended that Nigerian Commercial banks should target their promotional activities towards those in the younger business personnel who are quite well to do as they seem to be the most likely users of Electronic banking as indicated in this study.

Finally, the main objective of this study is to identify the factors affecting the adoption of Electronic banking by staffs of Bayero University Kano, Nigeria. This research able to identify that for the Non-academic staffs, awareness is the most important and security is seen as the least important and ease of use and reluctant to change are not important factors in influencing their adoption rate. This might be due to the fact that the users still think using Electronic banking are complicated process. This study makes significant contributions to knowledge in relation to Nigerians’ perception of factors affecting Electronic banking adoption.
REFERENCE

Adesina A. A. and Ayo C.K. 2010. An Empirical Investigation of the Level of Users’ Acceptance of
Inc. New York, NY.
Inc., New York, NY.
Journal of Bank Marketing, 17(2).
Gupta, S. (1988), "Impact of sales promotions on when what and how much to buy", 
Katz, J. & Aspden, P. (1997). Motivations for and Barriers to Internet Usage: Results of a National Public
Opinion Survey. Internet Research: Electronic Networking Applications and Policy, 7(3), 170-188.
Mazursky, D., LaBarbera, P. and Aiello, A. (1987), "When consumers switch brands", Psychology and
O’Connell, B. (1996). Australian Banking on the Internet- Fact or Fiction? The Australian Banker,
(December), 212-214.
p.8-18.
University of Technology, Division of Industrial Marketing and E- Commerce.
of Internet Banking and Commerce, Available at:
http://www.arraydev.com/commerce/jibc/0103_01.htm
IAMAI’s Report on OnlineBanking 2006 Retrieved from
http://www.iamai.in/Research.aspx?Fileid=r8_home.htm&r=8