RESEARCH ARTICLE

DIGITAL DISRUPTION AND THE IMPACT ON SERVICE DELIVERY BY BANKS IN ZAMBIA: CUSTOMERS' PERSPECTIVE

*Sidney Kawimbe

Ag Dean-School of Business, ZCAS University, Lusaka Zambia.

ARTICLE INFO	ABSTRACT
	The ultimate aim of any business is to satisfy their customers. Many researchers in business and management areas have conducted different studies to measure the perception of the customer's satisfaction; however, the actual thinking of customer's mind is still questionable. This paper empirically explores the major considerations associated with internet enabled banking (otherwise known as digital banking) by the banking sector on service provision in five dimensions of discernment named as reliability, responsiveness, assurance, security, and tangibles. The methodology used is qualitative approach, and data analysed using SPSS in which the correlations between different factors are examined. The results revealed that the service quality is highly dependent on the reliability of using internet banking by the customers, followed by security, then responsiveness, assurance and lastly tangibles. Some suggestions and recommendations are provided to improve the digital banking service quality and in turn customer satisfaction.

INTRODUCTION

It is well known that technology has changed the way financial services are delivered over the past decades. This not only has an impact on the services as such, but has also an impact on the resulting business strategy that banks need to implement. The COVID-19 has caused a profound shift in reality, and most banks have turned out to be more prepared for this crisis than anyone any sector. The1980s witnessed a marked shift in the financial services' distribution channels due to the emergence of new technologies that simplified remote access to banks i.e. telephone banking, Automated Teller Machine (ATMs), debit cards, internet banking, and mobile banking. Given the information-intensive nature of its operations and services, the banking sector is relatively amenable to innovative technologies. With the development of asynchronous and secure transaction technologies, an increasing number of banks worldwide are broadening their service capabilities and reaching out to their customers by offering low-cost, self-service automated channels, i.e. digital banking as a transactional and informational medium. Although decisions about integration of technology in financial services delivery are made at corporate level, the availability of new and complex technology such as digital banking does not necessitate the level or magnitude of change.

A critical aspect illustrating successful implementation is the acceptance of this technology at individual level i.e. customers' adoption pattern. In order to be successfully adopted and utilized, digital banking must offer clear-cut benefits for users (e.g. how easy or useful it is to use or how compatible it is with an individual's lifestyle and past experiences). Furthermore, benefits are seen as a necessary but alone are insufficient conditions toward understanding digital banking behaviour (Lasser *et al*., 2005). Customers' individual differences (demographics or personality traits) should also be considered along with various social, psychological and contextual influences in understanding the final adoption behavior. Customers' digital banking acceptability is indeed a complex process as its adoption depends on congruence between functional, utilitarian and technological aspects of and the social, psychological, economical and contextual characteristics of users. This perspective asserts that digital banking adoption is primarily an outcome of a learning or communications process and a fundamental step in examining this process is the identification of factors that play an important role in the adoption of digital banking. The following points characterise digital banking as a complex and innovative technology:

- Digital banking requires an interaction between an innovative medium of service delivery (network) and an intangible service (high in credence qualities).
- Digital banking relies on an advanced telecommunication infrastructure (PC, Internet, ATMs, and Mobile phone), which creates dependencies with other components of the

***Corresponding author:* Sidney Kawimbe,**
Ag Dean-School of Business, ZCAS University, Lusaka Zambia.

technological system availability and experience with such technologies.

- The complexity of digital banking can create learning barriers.
- The successful implementation of digital banking requires a considerable user mass to be efficiently deployed.

Literature Review

Acceptance Theory of Digital Banking: Research on the acceptance of digital transactions has been guided by theoretical models that explain the acceptance of technologies based on the characteristics of virtual channels, which have been widespread in modern society for only 20 years. Several authors have used theories of technology acceptance to analyse digital banking as well as banking (Afshan and Sharif, 2016; Oliveira et al., 2014); the main theories are the theory of diffusion of innovations (Rogers, 1995), the theory of reasoned action (Fishbein and Ajzen, 1975), the social cognitive theory (Bandura, 1977; Bonera, 2011), and the decomposed theory of planned behaviour (Taylor and Todd, 1995). Research on the acceptance of digital banking (Fishbein and Ajzen, 1975) has applied two theoretical models that have contributed to analysing the variables most important to this acceptance. The first of these is the Technology Acceptance Model (TAM) (Davis, 1989), which predicts that an individual's decision about whether to use digital banking is affected by his or her view of the "Perceived Usefulness" and the "Perceived Ease of Use" of electronic banking services (Bukhari et al., 2013).

Service Quality Dimensions: Numerous studies have sought to uncover the global attributes of service that contribute most significantly to relevant quality assessment in traditional service environment, (Gronroos, 1982, 1984; Parasuraman *et al.,* 1985, 1988). Granroos (1982) argue that service quality should include three dimensions:

- The technical quality outcome: That is the actual outcome of the service encounter. The service outcome can be measured by the consumer in an objective manner.
- The functional quality of the service encounter. This element of quality is concerned with the interaction between the provider and the recipient of the service and is often perceived in a subjective manner
- The corporate image. This is concerned with the consumers' perceptions of the service organisations. The image depends on the technical and the functional quality; price; external communication; physical location; appearance of the site and the competence and behaviour of service company's employees

Trivedi and Remedios (2014) in their research explained the impact of digital banking on customer retention plainly demonstrate that digital banking holds customers. On the off chance that the bank intends to expand the customer base of internet banking they should concentrate more on service quality, responsiveness, protection and security, affirmation and dependability elements of digital banking. Now more than ever a bank ought to be more mindful to make their digital banking service greater quality full for their customers. In recent decades, other technologies have become closely integrated with information and communication technologies because these offer a cost-efficient way for businesses to create

a competitive advantage in the market and retain their customer base (Bhatt and Bhatt, 2016; Laukkanen, 2016). Zambian banks and some Micro Finance Institutions (MFIs) have adopted digital banking as a new channel for improving offered services while simultaneously increasing process efficiency, for example, electronic payments, as it provides an online platform that supports many e-commerce transactions (Chiumya, 2012). Digital banking platforms can offer bank customers services that are typically provided in physical branches, such as account status inquiries, transfers and payments to third parties, bank statements, the ability to consult savings and credit simulators, and 24-hour access, among others. In light of this trend, several studies have found that customers cite a number of reasons for preferring e-banking (Al-sharafi et al., 2016; Ayo et al., 2016; Hui Ling et al., 2015; Lee, 2009; Tan and Teo, 2000; Yousafzai et al., 2003), including transaction speed, lower management costs, greater control over service delivery, shorter wait times, a perception of more customised service, and greater convenience given access to services that is not limited by time or space (Lee, 2009; Montazemi and Qahri-Saremi, 2015).

Despite its appeal, consumers have been slow to adopt digital banking in some emerging countries (Montazemi and Qahri-Saremi, 2015). In fact, acceptance of new technologies generally lags behind the pace at which they are introduced in all regions of the world (Katz et al., 2015). In regions like Latin America, where there is a significant digital divide (Landau, 2012; Sánchez Torres and Arroyo-Cañada, 2016), consumers are refraining from using these types of technologically advanced services due in part to a lack of awareness but also due to concerns about security, usability and trustworthiness (Bhatt and Bhatt, 2016).In Colombia, for example, data from the SuperintendenciaFinanciera (2016) show thatalthough both monetary and non-monetary online transactions increased from 951,616,157 in2012 to 1,905,341,076 in 2015 (comprising 43.97 per cent of total operations for that year), much scepticism is still apparent when only monetary transactions are considered; these accounted for 313,888,272 operations by 2015, representing only 13.10 per cent of total monetary transactions. Other indicators such as the low rate of credit card use (just 10 per cent) and the high cost of financial services reveal widespread scepticism of e-banking in this country(Rodríguez-Raga and Riaño Rodríguez, 2016). In addition, government policies and publicprogrammes to develop the digital sector, including e-banking, are limited throughout Latin America (Katz et al., 2015) due to the sector's lack of importance, poor coordination between different sectors, a lack of transparency in the management of those resources devoted to the sector, a lack of trust between the private and public sectors, and the high cost for companies to implement technology services. Therefore, it is important to understand the factors that influence customers' decision to use banking services and how they may be encouraged to engage with them (Ayo et al., 2016). In their research, Parasuraman et al (1988) purified and distilled customer service from an initial ten to five (see Table 1): tangibles, reliability, responsiveness, assurance and empathy which constitute the base of global measurement for service quality. Based on these five dimensions, the researchers found out that reliability was the most critical dimension followed by responsiveness, assurance and empathy were of least concern to customers. Yang (2004) have noted that traditional service quality, such as competence,

courtesy, cleanliness, contort and friendliness are not relevant to digital banking, whereas other factors, such as reliability, responsiveness, assurance and access are critical to service quality and digital banking. Madu (2002) proposed the following dimensions of digital banking; performance, features, structure, integrity, security, trust, responsiveness, differentiation, and customisation as well as empathy.

METHODOLOGY

The study is exploratory in nature. The questionnaire method was used to collect data for analysis. The questionnaire had variables that were used to identify customer satisfaction level in accessibility, adaptability,affordability, efficiency in banking services. Simple random sampling was used by the researcher. The sample size for this study was 60. The 60-sample size was settled for by applying the saturation concept which according to Britten (1995), samples sizes larger than 30 and less than 60 are generally best suited for most qualitative research. Questionnaire method was used to collect the primary data for this study. The questionnaire was divided in three sections.Section A gathered data on security features on digital banking. Section B deals withquestions related to speed of transaction, section C deals with questions related to accessibility, Section D deals withquestions related to adaptability, Section E deals with question related to affordability, section F deals with efficiency, section G deals with questions related to ease and convenient banking, section H deals with questionsrelated to accuracy and I deal with questions related to reliability respectively.

Descriptive data analysis entailed counts, percentages, cross tabulations and measures of central tendencies. T test, Anova, Chi-Square were used for analysing the relationship among variables based on. A 5-point Likert-scale (1=strongly disagree, 5=strongly agree) was used and respondents were asked to rate the factors according to this provided scale. Purposive sampling was used due to the fact that it is the most effective non-probability sampling when one needs to study a certain cultural domain with knowledgeable experts within. A total number of 60 questionnaires were sent to selected bank customers through by handing them questionnaires while others received questionnaires via emails. Most of the customers are well educated. A total of 50 questionnaires representing 83% were voluntarily returned. This was deemed adequate in line with Fincham (2008) who recommends response rates of above 60% and above to be representative enough. The research examines the relationship between how the digital banking impacts the service quality in commercial banks from a customers' perspective in Zambia. Based on the research problem, it is believed that the qualitative approach is the most appropriate method.

FINDINGS AND RESULTS

Correlation coefficients were calculated to describe the relationship between variables. The correlation provided information on the strength and direction of the relationship between variables.

Reliability: Reliability test was done over the respondents, Cronbach's Alpha Showing .855 which means the survey conducted is valid. Reliability, security, communication and access are all interrelated on digital banking. The results show that the users give importance on service quality dimensions towards below sequence: - firstly Reliability, Security, Communication and lastly Responsiveness.

Relationship between Digital Banking and Reliability: The results show reliability as the most important dimension on service quality. This is because, consistent performance and trustworthy are playing vital roles in reliability. There were three questions asked to measure for all variables. The participants, defined the reliability as services they used for example processing transaction via the internet is error free and response time kept as promised by banks through online. Response time and processing via Internet is error free (.392) and processing via the Internet is error free and services perform right the first time (.472) showing a moderate significant relationship. This may be caused by customers required to use machine reliability rather than human reliability in dealing with banks such as cash credit, cash withdraw, cheque, credit transfer and many other services. However, there is no significant relationship between response time and services perform right the first time (.2).

Relationship between Digital Banking and Convenience: This research shows that convenience ranks the last dimension in service quality. Under this dimension includes, are users satisfied with customer service response time and complaints are taken care efficiently. The relationship between Internet Banking and responsiveness showed moderate correlation coefficient is significant. This is between satisfied with customer service response and process time taken to process transaction (.438), satisfied with customer service response and complaints handled effectively (.402) and process time to process transaction and complaints handled effectively (.444). This indicates that, customers prefer to machine reliability rather than human reliability. This probably by time concerning or human being not be emotionally stable. In addition, customers can accept if the machines are in out of services, but when it comes to bank' staff they cannot tolerate with their low services. Once again, this result shows that customers have different perception and understanding between machines and human being.

Relationship between Digital Banking and Security: This involves financial safety and confidentiality. Security is chosen as the third important dimension in service quality, although it is no major difference from reliability. This covers users" confidence that services provided in a secure manner, all customer files and records kept safely and customer personal information would not be misused. There is a moderate significant between services provide secure and users confident with bank management online (.381) and customers" information files kept safe and users confident with bank management online (.425). However, there is no significant relationship between customer information files kept safe and services provided secure through online (.125). This illustrated customers" concerns about privacy matters and insecurity of banks misused personal information. Even though the incredible growth of internet influences everyone, when it comes to the topic of security, customers are less confident of exploring it. This result is contrary to the findings by Chun Wang & Zheng Wang, (2006).

Table 1. Digital Banking Quality Dimensions and Descriptions

SN	Service Quality Dimensions	Five Item Scale
1	Reliability	Included correctness of cash disbursements and account trailing correctness
2	Responsiveness	Included individualised attention when query is made, personal thank you notes and availability of message area for customer questions and comments
3	Assurance	Related to ease-to-remember URL addresses, well organised, well-structured and easy-to-follow menus, site navigability and concise and understandable content and terms and conditions. It also included explained transaction charges
4	Security	It included security of personal information
5	Tangibles	It included the history of the financial services provider and their stability on the market

Table 2. Correlation Coefficient

Item	Pearson	Significant
Reliability		
a)If a response is promised in a certain time, does it happen?	.472**	.001
b)The processing via internet is error free	.392**	.005
Convenience	.444**	.001
a)You are satisfied with the customer service response to queries	.438**	.001
b)The processing time taken to process transactions prompt enough		
Security	.381**	.002
a)You are confident with management of customer's personal information held in the bank	.425**	.006
b)Are you confident that services provided are done in secured manner		
Assurance	.406**	.003
a)Internet makes communication easier and work efficiently		
b)Does your bank communicate immediately there is any new development?		
Tangibles	.201**	.006
a)The name of your bank matters when it comes to choice of bank	.406**	.001
b)Internet makes communication easier and work efficient		

Table 3. Reliability Statistics

Reliability Statistics		
Cronbach's Alpha[a]	Cronbach's Alpha Based on Standardized Items[a]	N of Items
.855	.855	5

Therefore, banks can increase customers" confidence by utilizing a complex certified process such as personal number, password and code.

Relationship between Digital Banking and Assurance: Respondents stated that communication is less important and ranks fourth place in the dimension in service quality. Santos (2003) stated that communication has improved since the internet has been used. Banks must ensure customers are informed in good time when there are any changes in pricing, banking hours, the contact person in cases of queries (Customer Relationship Officer) Although, bank has improved the methods of communication, still customers dissatisfy with the system because hard to understand or limited language alternatives and, etc. Therefore, to make communication easier, banks can have face-to face on line services for effective communication.

Relationship between Digital Banking and Tangibles: Respondents stated that tangibles variable is less important and ranks fifth place in the dimension in service quality. Results show that no significant relationship between the name of the bank or the ambiance in the bank and the choice of bank (.201). Although some respondents indicated that the stability of the bank was an issue, this was not supported by the majority of respondents as they deemed that banks generally in Zambia are safe repositories of assets both financial and otherwise as the central bank, Bank of Zambia (BoZ) has put in place stringent

banking operating protocols that made banks generally safe. This meant that the name of the bank was not an issue

Conclusions and Recommendation

Based on the findings of this paper, it can be concluded that reliability is the most important dimension of service quality, followed by security, communication and responsiveness. This shows that, the Internet leads banking service more convenience, time saving and easier to reach. However, still there are a lot of improvements needed for the banking sector to reform and train their customers to the Internet. Going through the questionnaire survey, the main problem that customers still face is the lack of security. Therefore, they have fear of account hacking and thus do not go for internet banking. Although, banks are trying the best level by providing that best security options to the customers, still there are a lot of factors, which betray customer interaction via the Internet. The statistical analysis was conducted on a limited number of respondents only in a limited number in Lusaka only and mostly ZCAS University employees. This might have been biased as they could have given wrong answers and may be based on their opinions. The differences could be based on different backgrounds, age groups and personal experience. With consideration to the limitation identified in this paper, it would be useful to replicate the study. This would give a better accuracy to the dimensions of service quality in digital banking as this information would vary depending on the proposal

characteristics of the users of digital banking. Further research can be conducted on service quality and customer satisfaction in digital banking.

REFERENCES

Finchan, J 2008. Response Rates and Responsiveness for Surveys, Standards, America Journal of Pharmaceutical Education

Afshan, S. and Sharif, A. 2016. "Acceptance of mobile banking framework in Pakistan", Telematics and Informatics, Vol. 33 No. 2, pp. 370-387.

Al-sharafi,M.A., Arshah, R.A., Abu-shanab, E., Fakhreldin, M. and Elayah, N. 2016. "The effect of security and privacy perceptions on customers' trust to accept internet banking services: an extension of TAM literature review", Journal of Engineering and Applied Sciences, Vol. 11 No. 3, pp. 545-552.

Ayo, C. k., Oni, A.A., Adewoye, O.J. and Eweoya, I.O. 2016. "E-banking users' behaviour: e-service quality, attitude, and customer satisfaction", International Journal of Bank Marketing, Vol. 34 No. 3, pp. 347-367.

Bandura, A. 1977. "Self-efficacy: toward a unifying theory of behavioral change", Psychological Review, Vol. 84 No. 2, pp. 191-215.

Bhatt, A. and Bhatt, S. 2016. "Factors affecting customers adoption of mobile banking services", The Journal of Internet Banking and Commerce, Vol. 21 No. 1, pp. 161-175.

Britten N. 1995. Qualitative research: qualitative interviews in medical research. BMJ. 1995;3116999):251–3.

Bukhari, S.M.F., Ghoneim, A., Dennis, C. and Jamjoom, B. 2013. "The antecedents of travellers' e-satisfaction and intention to buy airline tickets online: a conceptual model", Journal of Enterprise Information Management, Vol. 26 No. 6, pp. 624-641.

Davis, F.D. 1989. "Perceived usefulness, perceived ease of use, and user acceptance of information technology", MIS Quarterly, Vol. 13 No. 3, pp. 319-340.

Fishbein, M. and Ajzen, I. 1975. Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research, Addison-Wesley, Reading, MA.

Hui Ling, C., Islam,M.A., Abdul Manaf, A.H. andWanMustafa,W.M. 2015. "Users satisfaction towards online banking in Malaysia", International Business Management, Vol. 9 No. 1, pp. 15-27.

Katz, R., Agudelo, M., Bello, P. and Rojas, E.-F. 2015. "El ecosistema y la economía digital en América Latina", in Telefonica, F. Ed.. Ariel, Barcelona, available at: http://repositorio.cepal.org/bitstream/handle/11362/38916/e cosistema_digital_AL.pdf?sequence=1

Lassar, W., Manolis, C. &Lassar, S. 2005). *The relationship between consumer innovativeness, personal characteristics, & online banking adoption*, International Journal of Bank Marketing, 232. 176-99

Laukkanen, T. 2016. "Consumer adoption versus rejection decisions in seemingly similar service innovations: the case of the internet and mobile banking", Journal of Business Research, Vol. 69 No. 7, pp. 2432-2439.

Lee, M.-C. 2009. "Factors influencing the adoption of internet banking: an integration of TAM and TPB with perceived risk and perceived benefit", Electronic Commerce Research and Applications,

Madu, CN and Madhu, A A. 2002. Dimensions of e-quality", International Journal of Quality and Reliability Management, Vol. 19, No 3, pp.246-58

Montazemi, A.R. and Qahri-Saremi, H. 2015. "Factors affecting adoption of online banking: a meta-analytic structural equation modeling study", Information & Management, Vol. 52 No. 2, pp. 210-226.

Parasuraman, A., Zeithhamal, V A and Berry, L 1988. SERVQUAL: A multiple item scale for measuring consumer perceptions of service quality", Journal of Retailing, Vol 64, No 1

Rogers, E.M. 1995. Diffusion of Innovations, The Free Press, New York, NY. San Martín, H. and Herrero, Á. 2012. "Influence of the user's psychological factors on the online purchase intention in rural tourism: integrating innovativeness to the UTAUT framework", Tourism Management, Vol. 33 No. 2, pp. 341-350.

Sánchez Torres, J.A. and Arroyo-Cañada, F.-J. 2016. "Diferencias de la adopción del comercioelectrónico entre países", Suma de Negocios, Vol. 7 No. 16, pp. 141-150.

SuperintendenciaFinanciera 2016. Informe de operaciones: Segundo semestre de 2015, No. 1215, SuperintendenciaFinanciera de Colombia, Bogotá.

Tan, M. and Teo, T.S.H. 2000. "Factors influencing the adoption of internet banking", Journal of the Association for Information Systems, Vol. 1 No. 1, pp. 1-44.

Taylor, S. and Todd, P.A. 1995. "Understanding information technology usage: a test of competing models", Information Systems Research, Vol. 6 No. 2, pp. 144-176.

Trivedi. G. Remedios. R. 2014). *Internet Banking and Customer Retention-A Study on the Impact of Internet Banking on Customer Retention of Hdfc Bank*. Galaxy International Interdisciplinary Research Journal.Vol.2 2). ISSN 2347-6915.

Vol. 8 No. 3, pp. 130-141.

Yousafzai, S.Y., Pallister, J.G. and Foxall, G.R. 2003. "A proposed model of e-trust for electronic banking", Technovation, Vol. 23 No. 11, pp. 847-860.

****