

TECHNOLOGY BANKING CHANNELS ON CUSTOMER SATISFACTION IN MICRO FINANCE BANK

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ABSTRACT

The success of implementing the suggested technology banking service channels dependent on the ability firms to develop and institute a marketing plan which will attract sufficient numbers of users to give reason for the new system. This study therefore, sought to examine the effect of Technology banking service channels on customer satisfaction in Micro Finance Bank. The study used survey research design. In order to answer the research questions for the study, 150 questionnaires were administered to bank customers of from six micro finance banks randomly selected in Adamawa state and 123 useful questionnaires were return which is exactly the sample size of the study. The ICT based products selected were ATM, Telephone Banking electronics, Money transfer, point of sales and Mobile Banking. A Likert scale-typed questionnaire was used with responses ranging from strongly disagree, disagree, neutral, agree and strongly agree. The

Introduction:

Background to the study

Small and medium enterprises (SMEs) are the engine of economy growth and development globally, Nigeria inclusive. By their very nature, SMEs constitute the most viable and veritable vehicle for self-sustaining industrial development (Oyebamiji, Kareem, & Ayeni, 2013). SMEs in developing countries, like Nigeria are struggling to survive under intense competitive environments both domestic and international. Oyebamiji et al. (2013) discover that Small and

study indicated that two of technology banking channels (ATM and point of sales) is significant while two of the technology banking channels product (mobile banking Telephone Banking electronics and Money transfer) are not significant. In summary, customers are satisfied with the ATM, point of sales and Mobile Banking but still not satisfied with the use of Telephone Banking electronics and Money. Overall result directs that, bankers should consider the facts and enhance service quality of technology banking channels in order to increase customers' satisfaction. This study recommended that Micro finance Bank should properly implement their product based to increase customer satisfaction.

Keywords; *Technology Banking Channels, Customer satisfaction, Micro Finance Bank*

Introduction

These days, with the developing alternative bank channel, bank client can simply remain at home and do banking exchange on the web and get it convey to their home (Christopher, 2015). All should be possible with few ticks or taps. In light of this comfort, the enthusiasm on web based banking is expanding. E-banking in Nigeria has been developing altogether since the previous years. The act of elective type of banking administration and making instalments and acquiring money which has picked up conspicuousness in the financial segment goes back to early occasions. The utilization of elective banking started in the United States amid the 1920s, when individual firms, for example, oil organizations and inn networks, started issuing them to clients (Ocharo & Muturi, 2016). Firms began to acknowledge each other's elective techniques for banking channels to satisfy customers.

Current, banks alternative banking channels are faced with various challenges which brings concerns on their effect on customer satisfaction. The various issues faced include lack of customer confidence, security concerns, system failures, cases of transaction errors, network failures and bank halls continue to be congested. However, Musiime and Malinga (2011) did a study on internet banking, consumer adoption and customer satisfaction. The study established that there was a significantly positive relationship between Internet banking and customer satisfaction. Kamau

(2014) did a study on the effects of financial innovations on the financial performance of commercial banks in Kenya. Based on these issues this study examines effect of technology alternative banking channels service quality on customer satisfaction in micro finance bank. Specific objectives of the study are to; assess the effect of ATM on customer satisfaction; the effect of Mobile banking on customer satisfaction, effect of telephone banking on customer satisfaction, the effect of point of sales (POS) on customer satisfaction and the effect of technology banking channels on customer satisfaction in micro finance bank

Review of Related Literature and Hypothesis Development

Technology Banking Channels

Bank customers are now searching for multiple delivery channels and flexible as well as convenient working hours neither the clock nor the geographical locations are constraints (Mahalaxmi, 2013). Therefore, almost all banks are providing services through the various alternative e-channels; it is called as 'Technology Alternative Banking' (Omondi, Maokomba, Musiega, 2014). There are various means of alternative banking i.e. Core banking Solution (CBS), ATM, POS Terminals, Mobile Banking, Internet Banking, Credit Cards, Debit Cards, EFT, RTGS, MICR clearing. According to Omondi, Maokomba and Musiega (2014), alternative banking channels makes it so easy to access financial services thus motivating more clients to subscribe and use of banking services. It is suggested that the enhanced access and subscription banks can lead to higher profitability (Christopher, 2015).

Automated Teller Machine

ATM Automated teller machine (ATM) is an electronic telecommunications device that enables the customers of a financial institution to perform financial transactions. ATMs are often located inside a specific place which may be accessible 24 hours a day. They are also considered as a branch of the bank, since they provide different services offered in the bank (Christopher, 2015).

Telephone Banking

Telephone banking is the conducting small transactions between a customer and its bank can be possible through telephone banking which

can be through three different methods: audio transaction, voice recognition, and pre-planned telephones (Mahalaxmi, 2013).

Electronic Money Transfer

Electronic money transfer involves the use of internet or other networks to store or transmit money. This type of money can be stored on smart cards or computer's hardware. Electronic money falls into different types as follows: electronic card, electronic wallet, electronic check, digital money, and virtual card (Omondi, *et al.*, 2014).

Point of Sale

Point of sale (POS) is the place where a retail transaction is completed. It is the point at which a customer makes a payment to the merchant in exchange for goods. At the point of sale the retailer would calculate the amount owed by the customer and provide options for the customer to make payment. Telephones or network communications may be utilized to conduct transactions through POS (Zadeh & Hashjin, 2011). The POS system market in The Netherlands contains no less than 150 vendors, each offering their own 'unique' software package. POS systems enable retailers to consult more detailed management information compared to traditional cash registers and Electronic Cash Registers (ECRs).

Mobile Banking

Mobile banking multidimensional services such as gprs which are accessible through mobile customers to conduct financial transactions like getting account balance and financial statement, requesting check, and transferring from one account into other accounts (Maungu, 2015).

Customer satisfaction

Customer satisfaction is catchphrase today, once here everyone using this customer's satisfaction is affected by the importance placed by the customers on each of the attitudes of the product/ service (Kumbhar, 2014). Customer satisfaction Assessment allows an firm to understand the main drivers that lead to customer satisfaction or dissatisfaction; and what is really driving their satisfaction during a service experience (Kumbhar, 2011),. Customer satisfaction is the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service (Kevin, 1995; Kumbhar, 2010). It is

also feeling or attitude of a customer towards a product or service after it has been used. According to Oliver (1980) satisfaction appears to mediate changes between pre-exposure and post-exposure attitudinal components. It is a major outcome of marketing activity whereby it serves as a link between the various stages of consumer buying behavior (Jamal & Nasser, 2002). When customers pay money to buy a service he has some minimum expectations from the transaction.

Technology Banking Channels and Customer satisfaction

Christopher (2015) found out that alternative banking channels have a positive effect on the financial performance of commercial banks. Based on this finding, the researcher recommends to the management of commercial banks to adopt more alternative banking channels as well as exploiting more innovation that enhance alternative banking. The study also, established that mobile banking enhances the financial performance of banks. In view of this, it is recommended that bank management need to establish the level of awareness and conversance of customers with mobile banking. Mizanur (2013) investigated on the implementation of mobile banking in Bangladesh. The specific purpose of this research was to assess the Opportunities and Challenges of mobile banking in the country. The research showed tremendous potential for mobile banking in Bangladesh and revealed some of the key barriers of progress as well.

Adetunji (2013) investigated on the adoption of mobile banking in Nigeria. The study found out that age, educational qualification, relative advantage, complexity, compatibility, observability and trialability are important determinants of the adoption of mobile banking. Siddik, Gang, Yanjuan and Sajal (2014) did a study on the financial inclusion through mobile banking in Bangladesh. The study found out that Perceived financial cost, Perceived risk and Subjective norm are the most influencing factors that affect people's behavioural intention to adopt (or continue to use) mobile banking.

Vijay and Agarwal (2013), The Researcher found in their research the highest customer satisfaction is demonstrated in the responsiveness area such as willingness to help customer, friendly attitude of staff, followed by the reliability area such as customer guidance, customer support and other hand, the moderate satisfactions are in the tangibles area, such as infrastructure facilities, decor, followed by empathy area such as banks business timing and return on investment. Due to the wide variation of the

responses, both public and private banks need to consider the weak areas in order to meet customer requirements. Omondi, Moomba and Musiega (2014), alternative banking channels makes it so easy to access financial services thus motivating more clients to subscribe and use of banking services. The authors suggest that the enhanced access and subscription to commercial banks can lead to higher profitability. From the consumers 'perspective, alternative banking channels allow consumers easier access to financial services, lower bill paying, and time saving in managing their finances.

Theoretical Framework

This study was developed on theory of financial intermediation theory. The financial intermediation theory originates from the work of Gurley and Shaw (1960). The theory is based on agency theory, transactional cost theory and informational asymmetry theory (Bert and Dick, 2003). Financial intermediation is a process which involves surplus units depositing funds with financial institutions, who then lend to deficit units (Bisignano, 1992) According to this theory financial intermediaries come into existence because of failure to have complete information, high transactional costs and the regulation methods. Financial intermediation theory views intermediaries as a way of reducing informational asymmetries and transaction costs through pooling resources of customers hence resulting to scale economies (Alexandra et al., 2009). The most important contribution of intermediaries is a steady flow of funds from surplus to deficit units.

This study adopted the financial intermediation theory since it tries to justify the reasons behind banks establishing alternative banking channels. Establishment of alternative banking channels is seen as a way that can result to long term growth, maintenance of liquidity and sustainability. According to Scholtens and van Wensveen (2003), the role of the financial intermediary is essentially seen as that of creating specialized financial commodities. Financial intermediaries exist due to market imperfections. As such, in a 'perfect' market situation, with no transaction or information costs, financial intermediaries would not exist.

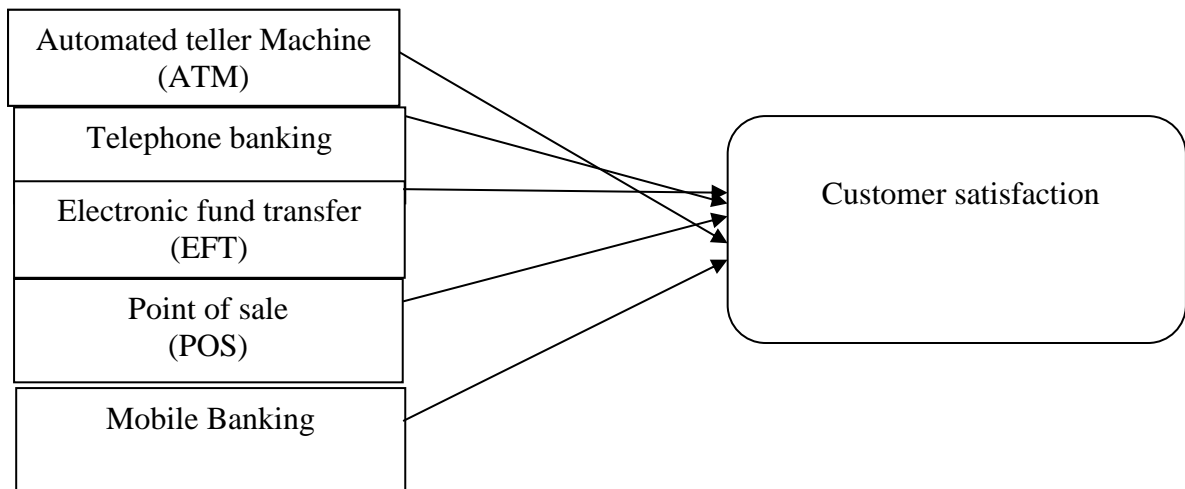


Figure 1: Conceptual Framework, Source Researcher, 2018

Methodology

Survey research design was used; this research design was very useful as it helps the researcher to develop a mental image of the structure for gathering the data and the analysis that will follow. The research study set out to assess the influence of information technology on customer satisfaction in micro finance bank and to provide vital information in order to extract the sincere perception of the bank customers with regards to the position and role of information technology in banking operations.

Population refers to the total number of cases in the focus of interest. The population of this research work was 180 of customers in the micro finance banks within Adamawa state. The sample size to be used for this research work consists of 123 respondents using sample size tables of (Krejcie & Morgan 1970). The sample size is drawn from population of 180 customer of selected micro finance bank in Adamawa state; the sample technique for this study was probability and non-probability sampling method. The six banks was randomly selected and convenience sample techniques was be used to select the bank customer. Here the sampling selection is based on the subjective choice of the researcher as to which elements best provide desired basis and probability of good outcome.

The source of data for this research work was Primary sources of data collection. The data shall be generated by means of a structured questionnaire instrument. The questionnaire shall be divided into two sections; the first section shall collect the personal data of the respondents

while the second section shall focus on the subject matter of the study. The questionnaire to be used shall be self-administered and a total of 123 bank customers for the purpose of this study. But 120 questionnaires were returned. The research instrument being the questionnaires was administered by the researcher and a face to face approach will be adopted in the process of administering the questionnaire. 5 Likert-type rating scale will be used, where (SA)=5 Strongly Agree, (A)=4 Agree, (N)=3 Neutral, (D)=2 Disagree, (SD)=1 Strongly Disagree. The measuring instrument was adapted from (Samuel, 2011).

The responses to the questions on the questionnaire shall be analyzed using linear regression method of analyzing data with the aid of manual and electronic application such as the Statistical Packages for Social Sciences (SPSS V.20). SPSS is an integrated system of computer programs specifically conceived and designed for the analysis of social and behavioural science research data and information. A multiple regression is a statistical technique used to derive an equation that relates a single continuous dependent variable to two or more independent variables (Churchill & Brown, 2004). Multiple regressions was calculated using this particular formula: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + b$

Y represents the dependent variable, coefficient (a) represents the intercept or constant, and (b) was the partial regression coefficients. The partial regressions coefficient represents the expected change in the dependent variable, where it is changed by one unit and other independent variables are held constants.

Result

In this part of the analysis includes a regression model to test hypotheses. Five extracted ICT based were taken as independent variables against customer satisfaction as dependent variable in a multiple regression model. Before the conduct of multiple regression analysis all the necessary pre and normality test were done to determine the validity, reliability and normality of the data and all the hypotheses was used at 95% interval. To understand about the individual effect of information communication technology product based in micro credit bank, multiple regression using the following model was run; $Y = \alpha + \beta X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + e$ (1). Where, Y = customer satisfaction, α = Constant, X_1 = ATM, X_2 = Telephone Banking, X_3 = electronics Money transfer X_4 = point of sales, X_5 = Mobile Banking + e.

Table 1 has shown that the R Square is 0.645 for the regression of customer satisfaction. This means that 64.5% of the variation in the customer satisfaction be explained by the five independent variable which are ATM, Telephone Banking, electronics Money transfer, point of sales, Mobile Banking. The others 35.5% remain unexplained.

Table 1: Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.645 ^a	0.416	0.391		2.28180

a. Predictors: (Constant), MB, TB, ATM, POS, EMT

Based table 2 , it is identify that the value of Fitness statistics is 16.265 and is significant as the level of significance is less than 5% ($P < 0.05$). This indicates that the overall model was strongly fit and there was significant association between information communication technology and banking operation. Moreover, it also indicated that the null hypothesis is rejected and alternate hypothesis is accepted. Consequently, it can be concluded that information communication technology dimensions has significant impact on banking operation in Adamawa State

Table 2: ANOVA^a

		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	423.369	5	84.674	16.263	0.000 ^b
	Residual	593.556	114	5.207		
	Total	1016.925	119			

a. Dependent Variable: CS

b. Predictors: (Constant), MB, TB, ATM, POS, EMT

Df = degree of freedom

F= fitness

Table 3 shows the coefficient of the variables which indicated that ATM has $\beta = 0.313$, $t = 3.478$, $P < 0.001$, this means ATM has significant effect on customer satisfaction. The second variable is telephone Banking which has the $\beta = 0.016$, $t = 0.193$, $P > 0.847$ it indicate that there is no significant effect of telephone Banking on customer satisfaction. Electronics Money transfer has $\beta = 0.065$ $t = 0.614$, $P > 0.541$ this shows that electronics Money transfer has no significant impact on customer satisfaction. Point of

sales (POS) has $\beta = 0.111$, $t = 1.161$, $P < 0.248$ this indicated that there is no significant effect of point of sales (POS) on customer satisfaction in Micro credit banks. The result of mobile banking indicate that $\beta = 0.269$, $t = 2.267$, $P < 0.024$ this reveals that mobile banking has significant effect on customer satisfaction in Micro credit bank.

Table 3: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.134	1.626		4.388	0.000
	ATM	0.282	0.081	0.313	3.478	0.001
	TB	0.021	0.108	0.016	0.193	0.847
	EMT	0.072	0.117	0.065	0.614	0.541
	POS	0.187	0.161	0.111	1.161	0.248
	MB	0.304	0.133	0.269	2.287	0.024

a. Dependent Variable: CS

ATM= Automate teller Machine and MB = Mobile banking are having calculated value less than $P < 0.005$ while TB= Telephone Banking EMT= Electronic Money transfer POS= Point of sales are with the calculated value is greater than $P > 0.005$ significance level.

Discussion

Based on Table 3, the significant value of AMT 0.001 which is below 5% ($p > 0.001$). This can be concluded that ATM significant effect on customer satisfaction, so it accepts H1. The study is supported by the study of (Vijay et al., 2013). Based on Table 3, the significant value of telephone banking on customer satisfaction has no significance value of since is greater than 0.005. This can be concluded that telephone banking has no significant effect on customer satisfaction, so accept null hypothesis. The findings of this result are not in line with the study of (Christopher, 2015). Based on Table 3, Electronic Money Transfer has no significant impact on customer satisfaction calculated value is greater than 5% ($P < 0.001$). This can be concluded that Electronic Money Transfer has no significant impact on customer satisfaction. POS has significance value of 0.248, which is greater than 5% ($P < 0.001$). This can be concluded that POS has no impact on customer satisfaction. This study is not inline with study of (Mizanur, 2013).

Finally, there is significant value of mobile banking is 0.0024, which is less 5% ($P < 0.001$). This can be concluded that mobile banking strong impact on customer satisfaction, so accept H5. This study is supported by study of (Christopher, 2015; Mizanur, 2013; Vijay et al., 2013).

Implication of the study

To examine effect of ICT on customer satisfaction, this study has reviewed the financial intermediation theory originates from the work of Gurley and Shaw (1960). The results obtained from this analysis have contributed to the literature in the following ways. The empirical analysis resulting from this study furthers our understanding of the effect of technology alternative banking channels dimensions. The empirical analysis reminds a number of important findings. First, the results suggest that each dimension has a different effect on customer satisfaction. A number of results of the study are consistent with past studies, and indicate that ATM and POS contribute significantly to customer satisfaction in micro finance bank. This study has also explored the patterns of technology alternative banking channels usage by Micro finance bank and forecasts the degree and magnitude of the effects of various channels based product on bank customer. This study suggests some changes and modifications to Micro finance stakeholders existing policies and strategies to promote technology channels adoption and use by Micro finance bank for economic development. Government policy and supports focusing on the integrated and proper use of technology could contribute positively to customer satisfaction and performance of Micro finance bank.

Conclusions

This study examines the effect of technology alternative banking channels on customer satisfaction in micro finance bank. The usage of technology alternative banking channels can lead to lower costs, but the effect on profitability remains inconclusive, owing to the possibility of technology effects that arise as a result of consistence high demand of skilled work force, issues of increasing demand to meet customer's expectation for customer service delivery, trustworthiness of the information system and competition in financial services. However, from the discussion whilst reviewing literature many researchers did not find technology alternative banking channels, for the delivery of customer service and profitable for bank's financial performance. So there has been an arrow head among

these findings on perspective of profitability and customer service delivery. While, on the same vein, other researchers found technology alternative banking channels channel making profitable impact on the banks that are only internet start-ups than the conventional banks transforming into click and mortar.

Recommendations

Business environment is becoming ever competitive and dynamic, invariably then, banks require solutions that can scale up to their growth plans and provide them the much-needed agility to create a clear differentiation in the market.

1. More research need to be carrying out in different location and different time frame may confirmed or refute the previous findings by collecting the primary data to come up to a conclusion for the effect of technology alternative banking channels on Customer satisfaction.
2. Micor finance banks need to employ technology alternative banking channels in such a way that meets the desired qualities of flexibility and scalability, providing them with a competitive advantage to stay ahead and provide new and improved products and services to delight their customers.
3. Increase the geographical outreach of the financial system through the use of non-bank agents; a method that will involve investment in innovative technology alternative banking channels products and services.
4. Micor finance banks bank need to focus and improve more on the ATM since the result of finding indicated that ATM is significant on the Customer satisfaction.
5. Micor finance banks need to improve on telephone banking or finding why telephone banking has negative impact on deposit money deposit operation.

Suggestion for further studies

The study was limited to the effects of information communication technology on customer satisfaction in Adamawa state Micro finance Bank,

There is need for a study to be conducted on the relationship between internet banking and customer satisfaction of micro finance banks in Adamawa state. Since this study cover only micro credit in Adamawa state more or further research can be done on Other factors include; other products offered by the bank for example the different types of accounts, loans and advances, investments for example in government securities among others in Micro credit banks..

References

- Adetunji, O. (2013). Going cashless: adoption of mobile banking in Nigeria. *arabian journal of business and management review*, 1(2), 9-17.
- Christopher, K.N. (2015). *The effect of alternative banking channels on financial performance of commercial banks in Kenya*. Master Thesis in Business Administration of the University of Nairobi
- Churchill, G., & T. Brown. (2004). *Basic Marketing Research*. Mason, OH: South-Western.
- Jamal, E., & Naser, H. (2002), Customer satisfaction and retail banking: an assessment of some of the key antecedents of customer satisfaction in retail banking. *International Journal of Bank Marketing* 20(4), 146-160
- Kevin C.,(1995). *Measuring and managing customer satisfaction: "The gulf between satisfied customers and completely satisfied customers can swallow a business."* Harvard Business Review, November/December 1995
- Kumbahr V. M. (2010). *Reliability and validity of eBankQual'Scale in ATM Service Settings: A Study*, in VINIMAYA, Vol. XXXI No. 4 January – March 2011, Published by National Institute of Bank Management, Pune
- Kumbhar V. M. (2011), Factors affecting on customers' satisfaction: an empirical investigation of ATM service. *International Journal of Business Economics and Management Research*, 2(3), 234-245
- Kumbhar V. M. .(2014). Alternative Banking Channels and Customers' Satisfaction: An Empirical Study of Public and Private Sector Banks. *International Journal of Business and Management Tomorrow*, 1(1), 1-24
- Mahalaxmi, K. (2013). Alternate Banking Channels for Customer Convenience. *International Journal of Scientific Research*, 2 (2), 2277 – 8179.
- Mahalaxmi, K. (2013). Alternate Banking Channels for Customer Convenience. *International Journal of Scientific Research*, 2 (2), 2277 – 8179.
- Maungu, D. O. (2015). *An investigation of the influence of alternative financial delivery channels on the performance of commercial banks in Kenya*. Unpublished MBA thesis, Kenyatta University.
- Mizanur R. (2013). Implementation of Mobile Banking in Bangladesh: Opportunities and Challenges. *Journal of Electronics and Communication Engineering*, 7(5), 53-58.

- Musiime, A., & Malinga, R. (2011). Internet banking, consumer adoption and customer satisfaction. *African Journal of Marketing Management*, 3(10), 261-269
- Ocharo, W & Muturi, W. (2016). Effect of alternative banking channels on profitability of commercial banks. *International Journal of Economics, Commerce and Management United Kingdom*, IV(4), 811-819
- Oliver R., L., (1980), A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions, *Journal of Marketing Research*, 17(4). 460-469
- Omondi O. M., Maokomba, C., & Musiega, D. (2014). The effects of alternative banking channels on profitability of commercial banks- case of the Co-operative bank of Kenya. The *International Journal of Engineering and Science (IJES)*, 3 (3), 29-34.
- Omondi O. M., Maokomba, C., Musiega, D. (2014). The effects of alternative banking channels on profitability of commercial banks- case of the Co-operative bank of Kenya. The *International Journal of Engineering and Science (IJES)*, 3 (3), 29-34.
- Samuel, A. (2011). *The contribution of information and communication technology based products to customer satisfaction: case study of Barclays bank Ghana limited retail customers*
- Siddik, N. A., Gang, S, Yanjuan, C & Sajal K. (2014). Financial Inclusion through Mobile Banking: A Case of Bangladesh. *Journal of Applied Finance & Banking*, 4(6), 109-136.
- Vijay Prakash Gupta and P.K. Agarwal(2013), comparative study of customer satisfaction in public and private sector banks in India. *Journal of Scientific Research*, 2(3), 24-35