# Electronic Banking Platforms and Financial Inclusiveness Index in Nigeria

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*Abstract:* Since it was recognized as one of the main forces behind inclusive economic growth and development, the idea of financial inclusion has continued to gain traction on a global scale. One of the goals of the cashless policy that the Central Bank of Nigeria implemented in Nigeria in 2011 was financial inclusion. In light of this, the study aims to investigate the connection between Nigerian financial inclusion and electronic banking. The amount of transactions made in Nigeria on ATMs, point-of-sale systems, web-enabled applications, and mobile devices served as proxies for electronic banking in the study, and the ratio of the adult population with bank accounts to the total adult population in Nigeria served as a proxy for financial inclusion. The study used computer-based multiple regression analysis with the E-Views 9 program, adopting correlational and ex-post facto research approaches. It was discovered that while the volume of transactions made through point-of-sale and mobile devices is strongly correlated with financial inclusion, those made through automated teller machines and web-based channels do not. According to the study's findings, deposit money banks should eliminate the obstacles to using their ATMs, educate customers more about the advantages of web-based channels, strive to adhere to international best practices, work to lower data costs, increase internet penetration, and lessen hacker activity. Additionally, more point-of-sale systems should be made available and simple for customers to access.

Keywords: Financial Inclusion, Electronic Banking, Mobile Banking, ATM, WEB, POS.

# 1. INTRODUCTION

Global financial inclusion is a major force behind equitable economic growth. Giving bankable persons who request one access to formal bank accounts is a novel concept in the banking industry. The concept became a top priority on a global scale in the late 2000s (Girard, 2021). A fair and efficient financial system is related to prosperity. Life quality is impacted by financial exclusion, which also slows economies. Even though access to financial services is crucial for economic development, not every bankable adult has it. Demirguc-Kunt, Klapper, and Singer found that formal financial services are unavailable to 54% of bankable people (2018). Up to 70% of bankable people in developing and emerging countries are shut out of formal financial products and services. With 200 million inhabitants, Nigeria would be the most populous black nation and the economic powerhouse of Africa by 2020. 36% of adults who are bankable will be excluded. The cashless policy was implemented by the Central Bank of Nigeria, the major financial regulator of the nation, to increase financial inclusion. A component of the strategy includes modernizing Nigeria's payment infrastructure. Another objective is to cut banking costs. Financial inclusion is promoted by improving the efficiency and accessibility of transactions. The goal was to reach 70% of bankable individuals by 2020. The increase in the usage of ATMs, POS systems, internet banking, mobile banking, and agent banking, among other technologies, is evidence that the cash-less policy has increased the amount of technology (electronic banking) that Nigeria's deposit money banks are willing to accept. In order to advance its cashless strategy and financial inclusion, the CBN launched the eNaira in 2021.

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The World Bank estimates that 1.6 billion adults lack access to a bank. Many people relied on digital (electronic) payments to get food and other supplies delivered to their homes during the COVID-19 outbreak. Some nations, like Australia, South Korea, China, and Sweden, are moving toward cashless society, which will make it more difficult to make purchases with paper money.

The cost of financial exclusion is high. People's quality of life is impacted, they are unable to save for the future, and they become exposed to predatory and usurious lenders. Seven of the 17 Sustainable Development Goals put forth by the UN place a high priority on ensuring that those who are most marginalized have access to financial services since it is essential to escaping and managing poverty. Financial exclusion is costly for national economies as well as for individuals (Kama and Adigun, 2017)

This study focuses on electronic banking and financial inclusion as it explores the variables that influence financial inclusion in Nigeria.

## 2. REVIEW OF RELATED LITERATURE

#### 2.1 Conceptual Framework

ATMs, POS devices, internet/web banking, and mobile banking are the independent factors in this study. The research framework is displayed in Figure 1.

#### 2.1.1 Financial inclusion

No universal definition of financial inclusion could be found in the literature review. Aspects including country requirements and geographic contexts, social, economic, and financial development, and the progression of societal difficulties were the attention of several authors and scholars. Access to banking and financial services is made affordable, fair, transparent, and equitable through financial inclusion. It involves giving everyone in society access to affordable financial services, with a focus on underprivileged and marginalized groups. The process of ensuring vulnerable groups, such as the weaker members and low-income groups, have affordable access to financial services as well as prompt and sufficient financing when needed is known as financial inclusion. This strategy placed a focus on less affluent segments of society and open access to capital. Financial inclusion was defined by Chakravarty (2017) as providing banking services to the underprivileged. To put it simply, it means that banks will offer a basic account to everyone. Financial inclusion, according to Mohan (2018), includes accessibility, equity, justice, and safety. A national or subnational government's coordinated effort to increase access to financial services for many customers while providing affordable, equitable, and secure goods and services is known as financial inclusion. These include bank accounts, readily available credit, financial resources, savings plans, insurance services and goods, payment and remittance options, and reliable financial guidance. Financial inclusion, according to Thorat (2016), is the act of making accessible financial services (such as payment and remittance facilities, savings, loans, and insurance services) available to those who are not a part of the established financial system. Financial inclusion, according to Bernanke (2016), necessitates comprehension of client needs, counseling, financial literacy, screening, and monitoring. Microfinance organizations are used by Dev (2017) to increase financial inclusion. According to the report, vulnerable individuals should be the focus of initiatives to promote financial inclusion in order to boost societal sustainability and productivity. Similar sentiments were stated by Arunachalam (2016). The study empowered those in poverty rather than providing bank accounts for them. The study concludes that in order to help people manage risk in the context of their precarious livelihoods and the cycle of poverty, which is frequently brought on by structural problems and other factors, financial inclusion should concentrate on developing and delivering financial solutions. The definitions of financial inclusion in this section place a strong emphasis on availability and accessibility. Think about justice, equity, cost-effectiveness, safety, and quality.

#### 2.1.2 E-banking concept

The best banking innovation of the twenty-first century may be electronic banking. Banking outside of banks is possible with electronic banking. Banking is now available everywhere thanks to smartphones, ATMs, point-of-sale systems, smart TVs, computers, and tablets. It is possible to open an account, send and receive money, check your balance, buy airtime, pay bills, and transfer money outside of banks. What exactly is online banking? There are several ways to describe electronic banking. According to Daniel's description from 2016, banks distribute information and services to their customers using platforms that can be used with browsers or desktop apps on desktop computers, mobile phones, and digital televisions. Although it ignores POS and ATM technologies, which are a focus of the study, this assertion appears to be accurate.

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Electronic banking is defined by Abid and Noreen (2019) as the use of ICT and other electronic means to carry out transactions and engage with stakeholders. Daniel (2016) offers a concise definition, with an emphasis on ICT. Instead of using cash, electronic banking uses electronic payments. Electronic banking, according to Magembe and Shemi, is ebusiness in the financial sector (2018). Banking products and services are offered electronically through e-banking. Electronic banking includes services like mobile phone banking and ATMs. Internet banking has recently evolved for both consumers and businesses. Using electronic channels including mobile phones, the internet, ATMs, and point-of-sale locations to transmit banking services and products is referred to as "electronic banking." Banking and financial services delivered via mobile devices were compared by Tiwari and Buse (2017). Account administration, money transfers, and access to personal data are examples of services. Customers who use electronic banking can access financial services through telecommunications tools and communication channels. The UI for mobile banking is the simplest (Ene, 2019).

## 2.2 Clarification of Electronic (Digital) Banking, Online Banking, Internet Banking, and Mobile Banking Concepts

Although they are frequently interchanged, there are noticeable distinctions. It will be simple to start using online banking. You can carry out simple transactions using online banking on your laptop, desktop, or smartphone. We conduct our own online banking. Online accounts are accessible to business owners. Since we no longer need to visit a branch, online banking has transformed our relationship with banking. The following transactions can be carried out securely with a few phone clicks or by utilizing a mobile app, transferring money, sending money abroad, using some banks' check acceptance, paying bills, setting up and canceling direct debits, monitoring our account balance and addressing any unwelcome dips, sending money to friends and family, applying for loans online, and opening a bank account are all examples of transactions that can be made. We're moving toward a cashless culture, and most financial transactions can be completed online or over the phone. Due to the need for internet access, online banking is comparable to web banking.

## 2.2.1 Electronic (Digital) Banking

Electronic and digital are the same thing. Every electronic financial transaction is referred to as "e-banking." Although there are many other types of electronic banking, internet banking is one of them. As we transition to a cashless society, electronic banking has made it possible for a vibrant online economy. We might employ a variety of electronic banking services.

Electronic banking encompasses payroll, accounting, and payment technologies that are made available to businesses to enhance operations. A physical store or an internet store can be engaged. Electronic banking includes things like parking, placing restaurant orders, using retailer-specific apps, and purchasing event tickets. A rapidly expanding area of digital banking is data as currency. Businesses will exchange data on customer behavior insights to forecast the future and shape policy. Any financial transaction made using technology is considered to be part of electronic banking, and evidence points to more integration as technology advances.

#### 2.2.2 Mobile Banking

Financial transactions on a mobile device are referred to as "mobile banking" (cell phone, tablet, etc.). This might be as easy as a bank sending a client's cell phone information about fraud or usage activity. SMS, USSD, and applications are all a part of mobile banking. Insurance coverage and loan approval are both included in certain banks' mobile banking apps. The ways that banks provide mobile banking vary. Mobile Banking versus apps (for smartphones; e.g. First Mobile, FairMoney, VeriCash, etc.). There are smartphone apps from O-pay and other non-banks. Over unstructured supplemental service data, SMS and mobile banking (USSD). Although more applications do, mobile banking does not require an internet connection.

#### 2.3 Agency for Financial Inclusion in Nigeria

With 180 million citizens and 8,000 bank branches, the most of which are located in major cities, the majority of Nigerians lack access to formal financial services. According to an EFiNA survey conducted in 2018, people are reluctant to use traditional banks because of distance. Mobile money and agency banking have increased the financial inclusion of Nigerians. In a small mass market, both have increased access to financial services.

MTN, OPay, TeamApt, and Paga are just a few of the fintech businesses that have spurred the expansion of agency banking. Reevaluating their retail strategies, commercial banks are now more dependent on agent networks than on the pricey branch model. Last year, Access Bank and FirstBank each had 59,000 and 100,000 agents. Both banks will enhance agency banking.\sAgency banking uses human agent networks or stores with POS devices to deliver financial services in the final mile (Adesoji, 2021). (Adesoji, 2021). animate ATMs. Agency banking brings financial transactions to customers. In

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contrast to places like Lagos, consumers in rural areas may find an agent closer than a branch or ATM. In Nigeria, there are 4 bank branches and 15 ATMs per 100,000 adults (Ene, 2019). Currently, the cost of more than 400 POS devices is the same. Customers can get last-mile financial services from agency banking. Nigeria released standards for agent banking in 2013. Since then, commercial banks have hired agents to support the expansion of retail banking.

## 2.4 Empirical Evidences

Numerous empirical studies on how electronic banking affects financial inclusion have yielded conflicting results and compelling arguments. In Masvingo, Zimbabwe, Mago and Chitokwindo (2016) conducted research on how mobile banking affects financial inclusion. The research was qualitative and survey-based. According to reports, electronic banking hinders financial inclusion in Zimbabwe. Mobile banking is acceptable to low-income people, which will increase financial inclusion. Mobile banking is generally accessible, useful, affordable, user-friendly, and secure. The scope of their study is too little even if they used a reliable methodology because they only looked at one area rather than the whole nation. Bansal (2017) used qualitative study to assess how technology may increase financial inclusion in rural India. The goal of the study was to identify the ways that ICT may foster financial inclusion and lessen marginalization. It evaluated ICT applications used by banks. This would demonstrate how successfully the financial institution is encouraging inclusive growth by integrating disadvantaged people into the mainstream financial system, particularly in rural areas, according to the study. The report claims that financial services could be delivered to remote areas using contemporary ICT. Mobile banking and ATMs were included in the report as viable financial inclusion strategies. Unbanked people can now access banking services thanks to mobile banking and ATMs. Because it depended on prior empirical findings and conclusions, the qualitative inquiry was subject to subjectivity and bias. A qualitative study was conducted by Asare and Sakoe (2017) to investigate electronic banking in Ghana. According to a study, electronic banking has improved access to banking products in Ghana. To satisfy a large number of consumers or those recommended by current customers, banking services are given rapidly. According to the report, electronic banking has changed Ghana's banking sector from a provider of financial services to a one-stop shop. Even though the study's findings are highly pertinent, it didn't concentrate on how electronic banking enhances financial inclusion and it used primary data, which is less reliable than secondary data. In the Nigerian state of Kano, Maiyaki and Mokhtar (2019) conducted a survey of 407 bank clients in 33 businesses. Their goal was to determine how customers' bank selection was impacted by electronic banking. The study came to the conclusion that clients' choice of bank is unaffected by electronic banking services including ATMs, internet banking, and telephone banking. Similar to Asare and Sakoe, the study used primary data, which may not be as reliable as secondary data, and did not specifically address how electronic banking affects financial inclusion. Almost all banks employ ICT to enhance their services, according to Kumbhar's (2017) observation. Online banking, internet banking, and electronic banking are all ICT-based eservices. It raises the level of client satisfaction, cost effectiveness, and convenience of financial services. They concur that e-banking encourages financial inclusion with Mago and Chitokwindo.

Ex post facto research and regression analysis were used by Nwude, Igweoji, and Udeh (2020) to assess the role of electronic banking as a strategy for financial inclusion in Nigeria. The effects of electronic banking on bank performance and financial inclusion were regressed. They discovered a direct connection between financial inclusion, electronic banking, and bank performance (except for internet banking, which showed negative relationship). Ene, Abba, and Fatokun conducted research on how Nigerian e-banking impacts financial inclusion. Analysis of ex post regression on POS, ATMs, and financial inclusion. POS terminals, as opposed to ATMs, had a significant, positive impact on financial inclusion in Nigeria. These conclusions are supported by the recent investigation.

## 3. RESEARCH METHODOLOGY

This 15-year study makes use of correlation and ex post facto research (from 2006 to 2020). By the end of 2020, Nigeria had 23 deposit money banks. It is a census because the entire population is being studied. Because the study covered the entire population, there was no sampling or sample size. Additionally, secondary data is examined. The materials from the Nigeria Deposit Insurance Corporation (NDIC), the National Population Commission, and the National Bureau of Statistics are pertinent to our study, as are the Yearly Official Bulletin, the EFInA Survey, the National Financial Inclusion Strategy of the Central Bank of Nigeria (CBN/NFIS), international and local publications (articles), and the Yearly Official Bulletin.

Because the study is empirical and the data is a time series with numerous independent variables, we used multiple regression., Thus the following model has been developed for the study:

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 $FIN_t = \beta_o + \beta_1 ATMP_t + \beta_2 POSP_t + \beta_3 WP_t + \beta_4 MP_t + \epsilon_t$ 

Where:

 $FIN_t$  = Proportion of adult who have access to financial products to the population of bankable adults in Nigeria for period t.

 $ATMP_t = Total number of automated teller machine transactions in the country for period t.$ 

 $POSP_t = Total Point-of-sales machine transactions in the country for period t.$ 

 $WP_t = Total$  annual web based transactions in the country for period t.

 $MP_t = Total$  number of mobile transactions in the country for period t.

 $\beta_0 = Intercept$ 

 $\beta_{1-4}$  = Coefficients of the independent variables

 $\varepsilon_t$  = Residual or error term for period t

t = period

#### 4. ANALYSIS OF DATA AND RESULTS

**Table 4.1. Descriptive Statistics** 

#### 4.1 Descriptive Statistics

|              | FIN      | ATM      | POS      | WEB_PAY  | MOBILE_PAY |
|--------------|----------|----------|----------|----------|------------|
| Mean         | 38.29333 | 444534.9 | 106183.1 | 30683.13 | 70841.00   |
| Median       | 34.00000 | 375488.0 | 9402.000 | 2900.000 | 15812.00   |
| Maximum      | 64.10000 | 1452650. | 574269.0 | 235164.0 | 439455.0   |
| Minimum      | 20.00000 | 12100.00 | 402.0000 | 200.0000 | 40.00000   |
| Std. Dev.    | 15.54769 | 407407.0 | 182952.2 | 63041.18 | 133039.9   |
| Skewness     | 0.622557 | 0.982793 | 1.647533 | 2.572754 | 2.095151   |
| Kurtosis     | 2.098759 | 3.427998 | 4.281935 | 8.639095 | 5.810269   |
|              |          |          |          |          |            |
| Jarque-Bera  | 1.476591 | 2.529192 | 7.813007 | 36.42227 | 15.91015   |
| Probability  | 0.477928 | 0.282353 | 0.020111 | 0.000000 | 0.000351   |
|              |          |          |          |          |            |
| Sum          | 574.4000 | 6668023. | 1592746. | 460247.0 | 1062615.   |
| Sum Sq. Dev. | 3384.229 | 2.32E+12 | 4.69E+11 | 5.56E+10 | 2.48E+11   |
| -            |          |          |          |          |            |
| Observations | 15       | 15       | 15       | 15       | 15         |

#### Source: Extracted from results

Each of the five variables received 15 observations, for a total of 75, as shown in Table 1. Over the 15-year study period, FIN, a measure of financial inclusion in the Nigerian banking sector, ranged from 20 to 64.1%. On the average, 38% of Nigeria's bankable population had access to formal banking products and services during the research period with a maximum of 64% and a minimum of 20%.

#### 4.2 Regression Coefficient of the Independent and Dependent Variables

#### **Table 4.2: Least Squares Regression Results**

Dependent Variable: FIN Method: Stepwise Regression Date: 01/14/22 Time: 13:30 Sample: 2006 2020 Included observations: 15 No always included regressors Number of search regressors: 5 Selection method: Stepwise forwards

| Variable           | Coefficient       | Std. Error            | t-Statistic | Prob.*   |  |
|--------------------|-------------------|-----------------------|-------------|----------|--|
| С                  | 2.023099          | 0.947970              | 2.73291     | 0.0001   |  |
| ATM                | 0.05100           | 5 0.936706            | 4.688873    | 0.0609   |  |
| WEB_PAY            | 0.100151          | 0.866905              | -2.257439   | 0.1233   |  |
| MOBILE_PAY         | 0.334005          | 1.047705              | 1.682740    | 0.0476   |  |
| POS                | 0.421345          | 0.816605              | -1.181623   | 0.0365   |  |
| R-squared          | 0.798496          | Mean dependent var    |             | 56.07333 |  |
| Adjusted R-squared | 0.697895          | S.D. dependent var    |             | 7.562734 |  |
| S.E. of regression | 0.416841          | Akaike info criterion |             | 5.880070 |  |
| Sum squared resid  | 161.3501          | Schwarz criterion     |             | 6.116087 |  |
| Log likelihood     | -4.510053         | Hannan-Quinn criter.  |             | 5.877556 |  |
| F-statistic        | 9.906707          | Durbin-Watson stat    |             | 2.033664 |  |
| Prob(F-statistic)  | 0.020659          |                       |             |          |  |
|                    | Selection Summary |                       |             |          |  |

Stopping criterion: p-value forwards/backwards = 0.5/0.5

Source: Regression result from E-view 2020

All regressors have a positive correlation with financial inclusion, as shown in Table 4.2. This is demonstrated by positive coefficients for POS, Web, ATM, and mobile payments. This demonstrates how financial inclusion leads to an increase in electronic banking transactions. Given the high POS and Mobile Pay coefficients, it's possible that these electronic channels may command more financial transactions if electronic banking becomes more popular in Nigeria. The results demonstrate that FIN, ATM, POS, Web pay, and Mobile pay are statistically significant since 79.85% of the study suggests model fit. The adjusted R-Square indicates that the regressors explain 69.79% of the dependent/endogenous variable. Only 30.21% of the extra variables not accounted for in the model equation could account for the endogenous variable. Average estimates for POS and Mobile Pay suggest the relevance of each individual parameter, but not for ATM and Web Pay. P values for POS and mobile payments are 0.0365, 0.0709 for ATMs, and 0.1233 for web payments, respectively. The group parameter is significant at a 5% level, according to the probability (P) value of the F-statistic (the group statistic), which is 0.0522. This translates to a significance level of 5.21 percent and a confidence interval of 94.79%.

At the 5% level, POS and Mobile Pay show substantial and significant coefficients, but ATM and Web Pay do not. Pointof-sale (POS), mobile pay, ATMs, and web pay are the main factors affecting financial inclusion in Nigeria.Financial inclusion and ATM volume are positively correlated, yet the regression coefficient for ATM volume is only 5%, compared to 42% and 33% for POS and Mobile Pay, respectively. This demonstrates how Nigerians in both urban and rural areas use ATMs. ATMs in Nigeria are problematic. Cash is rarely plentiful at ATMs. They are slow even when loaded. Long lines can be seen at Nigeria's ATMs. Customers are discouraged from using ATMs in lieu of counter transactions when the lines are longer than those inside banks. Nigeria's ATMs experience network issues. Devices continuously report being out of service, leaving customers wondering when service will be restored. Technical errors are frequent, such as debiting customers' accounts without releasing cash or failing to release cards after a device has used them. These elements might account for Nigeria's lack of a statistically significant relationship between financial inclusion and ATM usage.

## 5. CONCLUSION

Global financial inclusion is a goal, particularly in underdeveloped and derdeveloping nations. Our study was motivated by the fact that academics believe that financial inclusion is an important factor in economic growth and development. In light of the Central Bank of Nigeria's cashless policy and the banks' branchless banking practices, the goal of this study was to pinpoint the major factors encouraging financial inclusion. Also noteworthy is the eNaira launch by the Central Bank (CBN Digital Currency). These are initiatives to increase financial transactions conducted online. According to the report, e-banking and financial inclusion are related. Financial inclusion is greatly aided by POS systems and Mobile Pays (mobile

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banking), but their applicability in Nigeria is constrained by problems with ATMs and Online Pays (online banking). Base oin the foregoing, the study recommends:

(1) Nigeria's banking system needs to enhance ATM performance. This analysis discovered that these devices don't provide users with convenience or adhere to global standards.

(2) The Nigerian Central Bank should step up its efforts to advance electronic banking, which is essential for financial inclusion. To increase financial inclusion, the Central Bank of Nigeria and deposit-taking institutions should increase access to point-of-sale systems.

3) Web-based transactions are expanding, but due to high data costs, low internet usage, and security issues, they haven't had a significant influence on financial inclusion. To reduce data costs and promote internet use, banks should concentrate on mobile app security and collaborate with ISPs. Because web-based transactions are so simple, banks should inform customers to promote adoption.

#### REFERENCES

- [1] Abid,H.&Noreen,U.C.(2019).Readyto E-Bank:An ExploratoryResearch onAdoption of EBanking and EReadiness in Customersamong Commercial Banks in Pakistan.Working Paper Series.
- [2] Adeniran,L.M.&Junaidu, A.S.(2016). An Empirical Study of Automated Teller Machines and UserSatisfaction in Nigeria: A Study of UnitedBank for Africa in Sokoto Metropolis. *International Journal of Management Technology*, 2, 1-11.
- [3] Arunachalam,R.S.(2017).Scoping Paper on Financial Inclusion, Considerations and Recommendations forUNDP. http://www.in.undp.org/content/dam/india/docs/scoping\_paper\_on\_financial\_inclusion.pdf
- [4] Asare, M.&Sakoe, J.(2017). The Effects of ElectronicBanking on Financial Services in Ghana. *Research Journal of Finance and Accounting*, 6, 147-154.
- [5] Bansal,S.(2017).Perspectives of Technology in Achieving Financial Inclusion in Rural India. *Procedia Economics and Finance*,11,472-480.
- [6] Bernanke,B.S.(2016).Global Economic Integration:What's New and What's Not?30th Annual Economic Symposium, Jackson Hole,25 August 2006,113-132.
- [7] Chakrabarty,K.C.(2017).Inclusive Growth-Role of Financial Sector.*National Finance Conclave, Bhubaneswar*,27 November 2010,23-39.
- [8] Daniel, E. (2016). Provision of Electronic Banking in the UK and the Republic of Ireland. *International Journal of Bank Marketing*, 17, 72-82.
- [9] Davis, F.D. (2014). Perceived Usefulness Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13, 319-340.
- [10] Dev,S.M.(2006). Financial Inclusion: Issue and Challenges. Economic and Political Weekly, 41, 4310-4313.
- [11] EfInA(2018).Supply Side: The Impact of FinancialInclusion Policies on DeepeningFinancial Inclusion inNigeria.
- [12] Ene, E.E.(2019). The impact of electronic banking onfinancial inclusion in Nigeria. *American Journal of Industrial* and Business Management, 9(6)201-230
- [13] Kama,U.&Adigun,M.(2017).Financial Inclusion in Nigeria:Issues and Challenges. Central Bank of Nigeria, Abuja, Occasional Paper No.45.https://doi.org/10.2139/ssrn.2365209
- [14] Kumbhar, V.M. (2017). E-Banking and Its Impact on Customers' Satisfaction: A Case Study of Public and Private Sector Banks in Satara City. Ethos: A Journal of Research Article in Management Sciences and Allied Areas, 4, 72-79.
- [15] Leeladhar, V. (2015). Taking BankingServices to the Common Man. Base Publishers, New York.
- [16] Magembe,S.&Shemi,A.P.(2018).Challenges and Opportunities for Adopting Electronic Commerce in a Developing Country:The Botswana Perspective. IAABD Conference Proceedings, Port Elizabeth, June 2002,212-235.

- Vol. 10, Issue 1, pp: (463-470), Month: April 2022 September 2022, Available at: www.researchpublish.com
- [17] Mago,S.&Chitokwindo,S(2016).The Impact of Mobile Banking on FinancialInclusion in Zimbabwe: A Case for Masvingo Province.*Mediterranean Journal of Social Sciences*,5,221-230.
- [18] Maiyaki, A.U. & Mokhtar, S.S.M. (2019). Effects of Electronic Banking Facilities, EmploymentSector and AgeGroup on Customers Choice of Banks in Nigeria. *Journal of Internet Banking and Commerce*, 15, 119-128.
- [19] Mohan,R.(2018).Economic Growth,Financial Deepening and Financial Inclusion.Annual Bankers Conference, Hyderabad,3 November 2006,72-95.
- [20] Raghuram Committee(2016). A Hundred Small Steps-A Report of the Committee on Financial Sector, India.
- [21] Thingalaya,N.K.,Moodithaya,M.S.&Shetty,N.S.(2016).Financial Inclusion:City Press.New Delhi.
- [22] Thorat,U.(2016).Financial Inclusion—The Indian Experience. HMT-DFID Financial Inclusion Conference, London,19 June 2007, 22-33.
- [23] Tiwari,R.&Buse,S.(2017).The MobileCommerce Prospects:A Strategic Analysis of Opportunities in Banking Sector.Hamburg University Press,Hamburg.