



ASSESSMENT OF IMPACT OF COVID-19 ON THE FUNCTIONALITY OF ONLINE BANKING IN NIGERIA

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ABSTRACT

The study assesses the impact of COVID-19 on the functionality of online banking in Nigeria. The survey research design was adopted for this study while purposive sampling technique was used to select 25 staff members each from Zenith Bank, Guaranty Bank, First Bank, Access Bank, and United Bank for Africa totaling 200 respondents from their branches in the three major cities such Osogbo, Ilesa, and Ile-Ife, in Osun State. Data analysis was performed with the aid of mean, chi-square, and factor analysis. The study establishes that novel COVID-19 pandemic has forced Nigerian banks' customers to adopt online banking services. However, it has resulted in to increase in non-performance loans, customers' dissatisfaction due to lock-out syndrome and, heavy stamp duty charges and other charges, closing down of many bank branches, and lay off of many staff members. Consequently, the management of Nigerian banks should continue to leverage information technology and make mobile application friendly to the users, while the Nigerian government should provide a conducive environment for online banking to thrive.

Keywords: *COVID-19, Online Banking, Non- performing Loan, Digital Transformation*

Introduction

The significant role of the banking sector in capital formation has been documented, which is essential for the sustainable economic development of a country. The sector is acting not only as the custodian of the wealth of the country but also as resources of the country, which is necessary for the sustainability of a nation. Evidently, Consumer News and Business Channel (2020) reveals recently that the market capitalization of the global banking quarter stood at 7.9 trillion Dollars as of October 2019. It has been estimated that by 2022, the sector is expected to attain 26.5 trillion (MarketScreener, 2020). In the same vein, the National Bureau of Statistics (2020)'s records reveal that the banking sector contributes 24% to Nigeria's GDP as of the first quarter of 2020. This development shows that the banking sector is one of the fastest developing sub-sectors in the world economy. In line with this perception, Erdal and Ekinici (2013) observe that an effective banking sector constitutes an essential portion of the financial system and thus it is fundamental to achieving sustainable economic growth. Additionally, Naumovska, Jovanovski, and Gockov (2015) reiterate that the banking sector has the opportunities to alter useful resource allocation and saving rates with an influence on long-term financial growth.

However, the sector has been devilled by the novel COVID-19 pandemic devastation across the globe. According to IMF (2020), the sector's income has adversely hit hard by the financial shock of the novel COVI-19 and the sector will remain under stress through 2025. Disemadi and Shaleh (2020) also argue that pandemic COVID-19 has the potential to disrupt banking performance. In the same vein, Lampost (2020) affirms that banking performance is considered to be disrupted by the impact of the spread of the coronavirus. The COVID-19 pandemic has brought the world into exceptionally difficult and largely uncharted waters. Banks are feeling the strains alongside their clients, their employees, and the societies they serve (World Bank, 2020). In Nigeria, the Central Bank of Nigeria reveals on October 23rd, 2020 that Nigerian banks suffered a total of N917.5 billion in new CRR debits due to COVID-19's plague. This is why banks' asset quality is projected to deteriorate this year, according to Fitch Solutions. This will also make banks become more cautious about lending. The fallout

of this scenario has made banks in Nigeria to lay off about 2,477 of its employees in the second quarter of 2020 (National Bureau of Statistics, 2020).

Digital transformation of banking and commerce has been accelerated amid COVID-19, and that these adjustments likely will not be temporary but rather mark a new normal in consumer behavior in a post-COVID-19 marketplace. The study reveals that consumers are flocking to mobile wallets and contactless payment methods to avoid the exchange of paper money or checks during the current pandemic. According to health recommendations, one of the most effective ways to contain the current COVID-19 epidemic is to avoid personal contact. This means reducing the movement of people and increasing the time they spend at home as much as possible. In line with these indications, most banks in the affected countries have reduced the opening hours of their branches and they recommend their customers use online banking. To encourage the use of this channel, many banks have taken the opportunity to send out positive messages and to remind their users of the benefits of online banking. These benefits include the ease of carrying out any transaction 24/7 and enjoying permanent access to all financial information in real-time. Some banks have also tried to promote online banking by sharing tutorials and expanding the types of transactions customers can carry out remotely.

Despite all the benefits and high investments in online banking, its adoption tends to be negligible worldwide (Oni & Ayo, 2010). Several research studies have investigated the personal factors influencing online banking adoption. To begin with, a lack of trust can be the strongest reason for keeping users away from processing transactions online. According to Safeena, Date, and Kammani (2011), the availability of internet infrastructures, ease of use, required skills, uncertainty, and security are some concerns keeping the customers away from adopting online banking services. It on this premise, this study intends to assess the impact of COVID-19 on online banking in Nigeria.

Review of Related Literature

There is no universally accepted definition of electronic banking. Different authors, define e-banking from different perspectives. For instance, Auta

(2010) sees e-banking as the term used for the new age banking system and it is also called online banking. According to Mohammed, Siba, and Sreekmar (2009), e-banking is the delivery channel by which to conduct banking activities such as transferring funds, paying bills, viewing checking and savings account balances, paying mortgages, and purchasing financial instruments and certificates of deposits. Oluwatobani, Joshua and Philip (2011) describe electronic banking as the act of carrying out the business transaction of a bank using electronic devices such as computer Systems, Global System for Mobile Communication (GSM) phones, Automated Teller Machine (ATM), Internet facilities, Optical Character Recognition (OCR), Smart Cards, funds transfer, electronic mail, Bankers Automated Clearing Services (BACS), and Point-of-Sale (POS), etc. E-banking is about using the technology infrastructure of the digital age to create opportunities. In the same perception, Mukherjee and Nath, (2003) view e-banking as a type of banking activity through which consumers can perform banking transactions such as checking account balances and making payments via a telecommunication network.

According to Adeyemi, Ola, and Oyewole (2014), e-banking includes the system that enables financial institutions, customers, individuals, or businesses to access accounts, transact business or obtain information on financial products and services through a public or private network including the internet or mobile phone. In another study, Idowu (2011) asserts that electronic banking is a means whereby banking business is transacted using automated processes and electronic devices such as personal computers, telephones, fax machines, internet, card payments, and other electronic channels. The study of Akinyele and Olorunleke (2010) aver that electronic banking means the provision of information about the bank and its product via a page on the internet. Internet banking according to Mahmood (2013), is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick and- mortar institution.

Benefits of Online Banking during COVID-19.

Online banking has been accelerated amid COVID-19 and EndSARS saga in Nigeria and that these adjustments likely will not be temporary but rather

mark a new normal in consumer behavior in a post-COVID-19 marketplace. Since the first case of COVID-19 was confirmed in Lagos State by the Federal Ministry of Health on the 27th February 2020 and the World Health Organization (WHO) declared the novel coronavirus (COVID-19) outbreak a global pandemic on March 11, 2020, all Nigerian banks reduced the opening hours of their branches and they recommend their customers use online banking. Subsequently, consumers are flocking to mobile wallets and contactless payment methods to avoid the exchange of paper money or checks during the current pandemic. According to Sembiring, Fatihudin, Mochklas, and Holisin (2020), in the midst of the COVID-19 pandemic, most banking services remained normal to provide services to customers, to avoid transmission of the virus, customers could conduct financial transactions through the Bank's electronic channels. Information and communication technology is changing jobs and organizations (Cascio & Montealegre, 2016), for banks that use internet banking services and banks that do not use internet banking services have an influence on the performance of the bank concerned.

Previous studies confirm that e-banking has become an important issue, not only to retain customers but also gaining a competitive advantage while maintain and growing overall effectiveness. In the present banking system, excellence in customer service is the most important tool for sustainable business growth (Afolabi, 2009; Amedu, 2005; Agbaje, O., & Ayanbadejo, 2013). Oni and Ayo (2010) are of opinion that the use of internet in the banking institutions can give cost advantages by reducing financial transaction costs. Ojokuku and Sajuyigbe (2012) reiterate that the introduction of the electronic banking system in the Nigerian Banking Sector has helped tremendously in improving the productivity of bank personnel, leading to efficiency and effectiveness in service delivery. In the same manna, Berger (2003) concludes that the utilization of information technology has increased in service industries particularly the banking industry as it assists financial organizations to deliver high-quality service to the client with less effort.

COVID-19 and Nigerian Banks

The plague of the novel COVID-19 has adversely hit the banking sector across the globe. For instance, IMF (2020) recently predicts that the banking sector will remain under stress through 2025 due to the financial

shock of the novel COVID-19. In the view, Disemadi, and Shaleh (2020) lament that pandemic COVID-19 has disrupted banking performance all over the world. Lampost (2020) also laments that banking performance is considered to be disrupted by the impact of the spread of the coronavirus. In Nigeria, the sector has suffered a total of N917.5 billion in new CRR debits due to COVID-19's plague (National Bureau of Statistics, 2020). The fallout of this scenario has made many banks to embark on mass retrenchment of staff, pay cut for the rest of its workforce, and closure of several of its branches nationwide as measures against the sweeping adverse impact of COVID-19 on the lender. Evidently, the National Bureau of Statistics (2020) reports that banks have laid off a total of 6, 408 staff in the second quarter of 2020. In recent times, Non-Performing Loans has been trending and becoming a cause of concern for banks' stability in the face of reeling economic downturn and devastation of COVID-19 syndrome. National Bureau of Statistics (2020) also reports that non-performing loans (NPLs) of financial institutions stood at N1.44 and 1.79 trillion in 2019 and 2018 respectively.

Methodology

Research Design: Survey research design was adopted for this study. Survey research design provides broad capability, which ensures a more accurate sample to gather targeted results in which to draw conclusions and make important decisions.

Sampling Technique and Sample Size: Purposive sampling technique was used to select 25 staff members each from Zenith Bank, Guaranty Bank, First Bank, Access Bank, and United Bank for Africa totaling 200 respondents from their branches in the three major cities such Osogbo, Ilesa, and Ile-Ife, in Osun State. The choice of these banks is based on the fact that there are five banks being ranked among 1000 global banks by The Banker Magazine in 2018 and it is expected to have the same online application policy.

Research Instruments: The data collection instruments were a set of questionnaire design for the study. The questionnaires were chosen on the ground that they enabled a broader survey of the population, less stressful

than one on one interview, people were more willing to be truthful because their anonymity was guaranteed, and they were easier to analyze.

Reliability and Validity of Instruments: The test-retest method was used in order to establish the reliability of the instrument while the validity of the instrument was determined through the face and content validities in which the instruments were given to professionals for scrutiny and evaluation.

Method of Data Analysis: Data analysis was performed with the aid of mean, chi-square, and factor analysis.

Data Analysis, Results and Discussion

Table 1. Level of Awareness of Online Banking among Customers during COVID-19 pandemic saga.

| Level of Awareness of Online Banking | Frequency | Percentage |
|--------------------------------------|-----------|------------|
| Very high | 85 | 42.5 |
| High | 63 | 31.5 |
| Low | 35 | 17.5 |
| Very low | 17 | 8.5 |
| Total | 200 | 100 |
| Mean | 5.16 | |
| Standard Deviation | 41.43 | |

Table 1 summarizes the level of awareness of online banking among customers during the covid-19 pandemic saga. The study reveals that eighty-five (42.5%) of the respondents agreed that the level of awareness of online banking among customers during the covid-19 pandemic saga is very high. Sixty-three (31.5%) of the respondents agreed that the level of awareness of online banking among customers during the covid-19 pandemic saga is high. Thirty-five (17.5%) of the respondents agreed that the level of awareness of online banking among customers during the covid-19 pandemic saga is low, while only seventeen (8.5%) of the respondents agreed that the level of awareness of online banking among customers during covid-19 pandemic saga is very low. The mean online banking among customers during the covid-19 pandemic saga score of the respondents was 41.43 and the standard deviation was 5.16. From this, it

is clear that customers transit away from the branch and to digital due to the pandemic and the health restrictions. The increase in the adoption of online banking services being driven by the novel COVID-19 pandemic is a blessing in disguise to retain customers, and gaining a competitive advantage while maintain and growing overall effectiveness.

Table 2: Assessment of COVID-19' Impact on the Functionality of Online banking

| Statement | N | Mean | Chi-Square | Remark |
|--|-----|------|--------------------|----------|
| Application for POS increased tremendously since the advent of COVID-19. | 200 | 3.86 | 124.993 (P<.05) | Accepted |
| COVID-19 saga has forced your customers to make use of mobile wallets and contactless payment methods. | 200 | 3.71 | 117.980 (P<.05) | Accepted |
| Distancing policy amid COVID-19 to avoid transmission of the virus, has compelled your customers to make use of ATMs | 200 | 4.02 | 130.682 (P<.05) | Accepted |
| During the outbreak, your customer a lodged complaint via email, WhatsApp and voice calls. | 200 | 3.52 | 120.047 (P<.05) | Accepted |
| During COVID-19, the total among customers could withdraw via ATMs and POS was increased. | 200 | 3.89 | 129.619 (P<.05) | Accepted |
| During COVID-19, Cardless withdrawal was introduced to those who lost their debit card. | 200 | 3.79 | 103.973 (P<.05) | Accepted |
| During the novel COVID-19, your bank introduced an online zero opening account. | 200 | 3.91 | 128.676 (P<.05) | Accepted |

| | | | | |
|---|--------------|------|--------------------|----------|
| During the COVID-19, you send messages to your customers on how to use the bank's code. | 200 | 3.45 | 111.210 (P<.05) | Accepted |
| During COVID-19 there were malfunctions of ATMs due to improper schedule maintenance. | 200 | 3.83 | 124.619 (P<.05) | Accepted |
| Your online transaction was slow during the COVID-19 due to processing congestion. | 200 | 3.99 | 129.619 (P<.05) | Accepted |
| Average Mean | 3.797 | | | |

Table 2 summarizes the assessment of covid-19's impact on the functionality of online banking. The average mean value of 3.797 and the p-value of Chi-square which is 0.000 indicates that the listed items 1-10 fall within the real limit of agreed. This indicates that COVID-19 has a significant impact on the functionality of online banking in Nigeria. Furthermore, a study reveals that distancing policy amid COVID-19 to avoid transmission of the virus, has compelled your customers to make use of ATMs has the highest mean value of 4.02, followed by online transaction was slow during the COVID-19 due to processing congestion (M = 3.99), During COVID-19, the total among customers could withdraw via ATMs and POS was increased (M = 3.89), application for POS increased tremendously since the advent of COVID-19 (M = 3.86), during COVID-19 there were malfunctions of ATMs due to improper schedule maintenance (M = 3.83), during COVID-19, Cardless withdrawal was introduced to those who lost their debit card (M = 3.79), COVID-19 saga has forced your customers to make use of mobile wallets and contactless payment methods (M = 3.71), during the outbreak, customer lodged a complaint via email, WhatsApp and voice calls (M = 3.52), and lastly, during the COVID-19, banks send messages to customers on how to use bank's code (M = 3.45). The implication of this is that the finding is that the COVID-19 saga has exposed customers to digital banking by carrying out any transaction 24/7 and enjoying permanent access to all financial information in real-time.

Table 3: Principal Component Analysis of Pandemic Effect on Adoption of Online Banking in Nigeria.

| Total Variance Explained | | | | | | | | | |
|---|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.544 | 25.43 | 25.443 | 2.544 | 25.43 | 25.443 | 1.896 | 18.956 | 18.956 |
| 2 | 1.666 | 16.63 | 42.106 | 1.666 | 16.63 | 42.106 | 1.677 | 16.775 | 35.731 |
| 3 | 1.170 | 11.699 | 53.805 | 1.170 | 11.699 | 53.805 | 1.477 | 14.766 | 50.497 |
| 4 | 1.017 | 10.175 | 63.979 | 1.017 | 10.175 | 63.979 | 1.348 | 13.483 | 63.979 |
| 5 | .957 | 9.569 | 73.548 | | | | | | |
| 6 | .823 | 8.227 | 81.776 | | | | | | |
| 7 | .620 | 6.204 | 87.980 | | | | | | |
| 8 | .449 | 4.495 | 92.474 | | | | | | |
| 9 | .412 | 4.118 | 96.592 | | | | | | |
| 10 | .341 | 3.408 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

Table 3 reveals the significance of each of the seven principal components. The first four factors are meaningful as they have Eigenvalues > 1. Factor 1 (non-performance loans increase geometrically), 2(level of customers' dissatisfaction increase due to lock-out syndrome), 3(many bank branches are closed down), and 4(many staff members were laid -off) explain

25.44%, 16.661%, 11.69% and 10.17% of the variance respectively, and together these explain 63.97% of the total variation of pandemic effect on adoption of online banking remaining 36.03% of the variation was explained by some unknown factors.

Table 4: Descriptive Statistics of Pandemic Effect on Adoption of Online Banking in Nigeria

| Statement | N | Minimum | Maximum | Mean | Std. Deviation |
|--|-----|---------|---------|-------|----------------|
| Many bank branches are closed down | 200 | 1.00 | 5.00 | 4.190 | 1.0990 |
| Many staff members were laid –off | 200 | 1.00 | 5.00 | 4.040 | 1.2230 |
| Level of customers' dissatisfaction increase due to lock-out syndrome | 200 | 1.00 | 5.00 | 4.280 | .9932 |
| Level of customers' dissatisfaction increase due to poor service delivery | 200 | 1.00 | 5.00 | 2.855 | 1.1091 |
| Level of customers' dissatisfaction increase due to heavy stamp duty charges and other charges | 200 | 1.00 | 5.00 | 3.805 | 1.2826 |
| Level of customers' dissatisfaction increase due to insecure mobile application | 200 | 1.00 | 5.00 | 3.580 | 1.3123 |
| There is a reduction in employees' remunerations | 200 | 1.00 | 5.00 | 3.290 | 1.1279 |

| | | | | | |
|--|-----|------|------|-------|--------|
| There are many cases of online banking fraud | 200 | 1.00 | 5.00 | 3.305 | 1.3040 |
| Level of deposits reduced drastically | 200 | 1.00 | 5.00 | 3.565 | 1.1234 |
| Non-performance loans increase geometrically | 200 | 2.00 | 5.00 | 4.535 | .7008 |

Results from Table 4 confirm that non-performance loans increase geometrically, the level of customers' dissatisfaction increase due to lock-out syndrome, many bank branches are closed down, and many staff members were laid –off and the level of customers' dissatisfaction increase due to heavy stamp duty charges and other charges with mean values of 4.535, 4.2800, 4.1900, 4.0400 and 3.8050 are major effect of the pandemic on the adoption of online banking in Nigeria. This study concurs with the National Bureau of Statistics' (2020)'s report that Non-Performing Loans has been trending and becoming a cause of concern for banks' stability in the face of reeling economic downturn and devastation of COVID-19 syndrome.

Conclusion and Recommendation

The study assesses the impact of COVID-19 on the functionality of online banking in Nigeria. The survey research design was adopted for this study while purposive sampling technique was used to select 25 staff members each from Zenith Bank, Guaranty Bank, First Bank, Access Bank, and United Bank for Africa totaling 200 respondents from their branches in the three major cities such Osogbo, Ilesa, and Ile-Ife, in Osun State. Data analysis was performed with the aid of mean, chi-square, and factor analysis. The study establishes that novel COVID-19 pandemic has forced Nigerian banks' customers to adopt online banking services. However, it has resulted in to increase in non-performance loans, customers' dissatisfaction due to lock-out syndrome and, heavy stamp duty charges and other charges, closing down of many bank branches, and lay off of many staff members. Consequently, the management of Nigerian banks should continue to

leverage information technology and make mobile application friendly to the users, while the Nigerian government should provide a conducive environment for online banking to thrive.

References

- Adeyemi, O.A., Ola, S., & Oyewole, F.A (2014). Internet Banking Functionality in Nigeria and Outcomes of Customer Satisfaction: An Empirical Investigation. *International Journal of Academic Research in Business and Social Sciences August 2014, Vol. 4, No. 8 195-204.*
- Afolabi, F.O. (2009). "The Role of Information Technology in Nigerian Banks": A Case Study of Intercontinental Bank, Guaranty Trust Bank and First Bank PLC.
- Agbaje, O., & Ayanbadejo, K. (2013). "Electronic Payment and Economic Growth in Nigeria". A Report by RTC Advisory Services Ltd.
- Agboola, A.A. (2001). "Impact of Electronic Banking on Customer Services in Lagos, Nigeria". *Ife Journal of Economics and Finance*, 5 (1), 1- 2.
- Akinyele, S.T., & Olorunleke, K. (2010). "Technology and Service Quality in the Banking Industry: An Empirical Study on the Various Factors of Electronic Banking". *International Journal of Business Management*, 4 (4), 209- 221.
- Amedu, U.M. (2005). "Domestic Electronic Payment in Nigeria: The Challenges of Central Bank of Nigeria". Bullion 29 No. 1 January/ March.
- Auta, E.M. (2010). "E-Banking in Developing Economy: Empirical Evidence from Nigeria". *Journal of Applied Quantitative Methods*, 5 (2), 212- 222.
- Berger A. N. (2003). The economic effects of technological progress: Evidence from the banking industry. *Journal of Money, Credit, Banking*, 35 (2): 141-176.
- Cascio, W.F., & Montealegre, R. (2016). How Technology Is Changing Work and Organizations. *Annu. Rev. Organ. Psychol. Organ. Behav.* 3(3): 49-75
- Consumer News and Business Channel (2020). Global Stock Markets Gained 17 Trillion Dollars in value in 2019. Available at <https://www.cnbc.com/2019/12/24/global-stock-markets-gained-17-trillion-in-value-in-2019.html>
- Disemadi, H.S., & Shaleh, A.I. (2020). Banking Credit Restructuring Policy Amid COVID-19 Pandemic In Indonesia. *Jurnal Inovasi Ekonomi*, 5(2); 20-34.
- Erdal, H. I., & Ekinci, A. (2013). A Comparison of Various Artificial Intelligence Methods in the Prediction of Bank Failures. *Computational Economics*, 42(2), 199-215.
- Idowu, B. (2011, March 28). "Legal Implications of Electronic Banking in Nigeria". The Punch. P.65.
- IMF (2020). Policy Responses to COVID-19, (2020). Available at <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>
- Lampost. Apr 10, 2020, 19:47. Wabah Covid-19 Ancam Kinerja Perbankan Tahun Ini. <https://www.lampost.co/berita-wabah-covid-19-ancam-kinerja-perbankan-tahun-ini.html>.
- Mahmood.F (2013). Impact of Information Technology Usage by Banks on Customer Satisfaction in Banking Sector of Pakistan. *Management and Administrative Sciences Review*. 2(2), 221-232
- MarketScreener (2020). 2019 Global Financial Services Market research Reports & Industry Analysis. Available at <https://www.marketscreener.com/quote/stock/INDUSTRIAL-AND-COMMERCIAL-6499173/news/>

- Mohammed, S.K., Siba, S.M., & Sreekmar. (2009). "Service Quality in Internet Banking: Empirical Evidence". *International Journal of Indian Culture and Business Management*, 2 (1), 30- 46.
- Mukherjee, A., Nath, P., & Pal, M. (2003), "Resources, service quality and performance triad: a framework for measuring efficiency of banking service", *Journal of the Operational Research Society*, Vol. 54 pp.723-35.
- National Bureau of Statistics (2020). Available at <https://nigerianstat.gov.n-g/page/2>.
- Naumovska, E., Jovanovski, K and Gockov. G. (2015). The Influence of the Banking Sector Functions on Economic Activity in Macedonia. Scientific Annals of the "Alexandru Ioan Cuza" University of Iași *Economic Sciences* 62 (2), 207-220.
- Ojokuku, R.M., & Sajuyigbe, A.S. (2012). "The Impact of Electronic Banking on Human Resources Performance in the Nigerian Banking Industry". *International Journal of Economic Development Research and Investment*, 3 (2), 61- 69.
- Oluwatolani, O., Joshua, A., & Philip, A. (2011). "The Impact of Information Technology in Nigeria's Banking Industry". *Journal of Computer Science and Engineering*, 7(2), 63- 67.
- Oni AA, Ayo CK (2010). An empirical investigation of the level of users' acceptance of e-banking in Nigeria. *J. Intern. Banking and Comm.* 15 (1), 1-13.
- Safeena R, Date H, Kammani A (2011) [Internet Banking Adoption in an Emerging Economy: Indian Consumer's Perspective. *Int Arab J e-Technol* 2: 56-64.](#)
- Sembiring, M.J., Fatihudin, D. Mochklas, M., and Holisin, I (2020). Banking Employee Performance During Pandemic Covid-19: Remuneration and Motivation. *Journal of Xi'an University of Architecture & Technology*. 64- 72.