Journal of Digital Marketing & Communications (JDMC) Vol. 2, N0. 1, 2024 ***E-ISSN:*** *1597-2259*
https://parojournals.com, https://www.parogroup.org/ ***Print-ISSN:*** *3043-5331*

INTERNET-MEDIA STRATEGIES FOR PROMOTING ELECTRONIC BANKING IN NIGERIA

Mbum, Patrick Awok
Department of Marketing, Faculty of Administration & Management Sciences,
University of Calabar, Nigeria
Email: pambum@unical.edu.ng

Onyiaji, Judith Chiaka
Institute for Management and Technology (IMT), Enugu,
Enugu State – Nigeria.
Email: onyiajijudith@gmail.com

Bassey, Adede Eja
Department of Marketing, Faculty of Administration & Management Sciences,
University of Calabar, Nigeria
Email: adede.bassey@yahoo.co.uk

Nkengla, Blesse Penn (Corresponding Author)
Mitanyen Cooperative Credit Union Ltd,
Sonac Street, Bamenda – Cameroun.
Email: nkenglablesse@gmail.com

Abstract
This study examined internet media strategies for promoting electronic banking in Nigeria. It was occasioned by the incessant bank customers' complaints against electronic banking operations in the country. The specific objectives were to: ascertain the level of spread of internet media tools amongst the Nigerian banking publics, and determine the effectiveness of the media networks as tools for motivating bank customers in Nigeria to accept the Internet banking culture. For the methodology, web surveys was adopted in gathering data and the data so gathered were presented in Likert's 5-points scale and analysed with chi-square statistical tool. Results obtained show that the internet media tools and networks are significantly spread within the reach and use of bank customers in Nigeria ($X^2_{calculated} = 247.08 > X^2_{critical} = 12.34$; $p = 0.001 < 0.05$), and that the internet media networks are significantly effective as tools for motivating bank customers in Nigeria to accept the Internet banking culture ($X^2_{calculated} = 124.12 > X^2_{critical} = 12.34$; $p = 0.000 < 0.05$). Hence, it was recommended that for banks in the country to significantly improve their customers' attraction and retention capacities, the must also improve their internet-banking services in the areas of its convenience, efficiency, security and reliability. They should also plug the loopholes for frauds in internet banking, online-banking and mobile-banking services to the Nigerian publics in order to encourage the use of this new banking technology amongst the populace.

1.1 Introduction
Electronic banking, also known as e-banking, virtual banking and online banking, is a service that allows customers to access their bank information, conduct financial transactions, make deposits, withdrawals and pay bills through the Internet without having to physically visit their banks (Businessdictionary.com, 2012; Sheykhan et al., 2024). It provides bank customers the convenience of accessing banking facilities from the comfort of their home or office (Ehow.com, 2011). It is also defined as a form of banking where funds are transferred through

an exchange of electronic signals between financial institutions, rather than an exchange of cash, checks, or other negotiable instruments (Singh et al., 2021). The ownership of funds and transfers of funds between financial institutions are recorded on computer systems connected by telephone lines. Customer identification is by access code, such as a password or Personal Identification Number instead of a signature on a check or other physical document. Examples include retail payment systems, such as Automated Teller Machine networks and Point-of-Sale systems; and large-cash interbank payment systems, such as Clearing House Interbank Payments System (Wong, 2022).

Electronic banking also involves the use of computers and telecommunication systems to enable banking transactions to be done by mobile telephones or computers rather than through human interactions. Its features include electronic funds transfer for retail purchases, automatic teller machines (ATMs), and automatic payroll deposits and bill payments. Some banks offer home banking, whereby a person with a personal computer can make transactions, either via a direct connection or by accessing a Web site. Electronic banking has vastly reduced the physical transfer of paper money and coinage from one place to another or even from one person to another (Windasari et al., 2022; Tosun, 2020).

One of the major features of the internet banking culture is the automated teller machine (ATM). This is a device through which customers could cash their money from electronic machines without human interaction from bank officials. The ATM is a computerized machine that permits bank customers to gain access to their accounts with a magnetically encoded plastic card and a code number (Clark & Duley, 2025). It enables the customers to perform several banking operations without the help of a teller, such as to withdraw cash, make deposits, pay bills, obtain bank statements, effect cash transfers (Welsh Affairs Committee, 2024). It is also called automated banking machine, automatic till machine, or remote service unit in some places.

Unfortunately, many years after its introduction into the banking system, electronic banking culture is yet to have a firm foothold amongst some remote Nigerian banking communities. This fact is made more manifest in the rural areas of the country, where over seventy percent of the populace reside. Could Internet media tools and networks be used to effectively solve this problem? Finding answers to that is the main focus of this study.

1.2 Statement of the Problem

Since the inception of electronic-banking in Nigeria, some bank customers still view it with cynicism and phobia, due to some associated problems. These include reported cases of frauds, poor functionality of the facilities, poor network connectivity problems, complexity and difficulties in the usage of some of the facilities, lack of security and many more (Andabai & Victor, 2025). Thus, public apathy against electronic banking practices in Nigeria, had arisen mainly from the complaints of loss of money through the internet-banking, reported by a few of its citizens. Others claim that there is problem of infrastructural inadequacies like epileptic power supplies in the cities and non-availability of electricity in majority of the rural communities as the reasons for public scepticisms about electronic banking in the country (Odior, 2012; Andabai & Victor, 2025). This problem is worsened by the fact that about 70% of Nigerians are reported to be residing in the rural areas which are characterised by either epileptic power supply or none at all, making it difficult them to key into the electronic banking system (World Bank, 2022). Meanwhile, the public relations and marketing communications school of thought believe that this problem could be addressed through effective and professional deployment of the social-media tools (Odigbo et al. 2022).

E-ISSN: *1597-2259*
Print-ISSN: *3043-5331*

1.3 Objectives of the Study

The broad objective of the study is to determine the effect of internet-media strategies for promoting electronic banking in Nigeria. The specific objectives of the study included:

1. To ascertain the spread of the Internet-banking media tools amongst Nigerian banking publics.
2. To determine the effectiveness of the Internet-banking media networks as a tool for convincing bank customers in Nigeria to accept the Internet banking culture.

1.4 Research Questions

The following research questions were addressed in the study:

1. Are Internet-banking tools and networks significantly spread amongst majority of the Nigerian banking publics?
2. To what extent are the Internet-banking tools and networks effective for convincing bank customers in Nigeria to accept the Internet banking culture?

1.5 Research Hypotheses

To find answers to the above, the following null-hypotheses were tested:

1. Internet-banking tools and networks are not significantly spread within the majority of Nigerian banking publics.
2. The Internet-banking tools and networks are not significantly effective as a tool for convincing bank customers in Nigeria to accept the Internet banking culture.

1.6 Review of Related Literature

1.6.1 Theoretical Framework

The theoretical underpinning of this study was founded on the Unified Theory of Acceptance and Use of Technology (UTAUT) model and the social network/social support theory.

1.6.2 The Unified Theory of Acceptance and Use of Technology

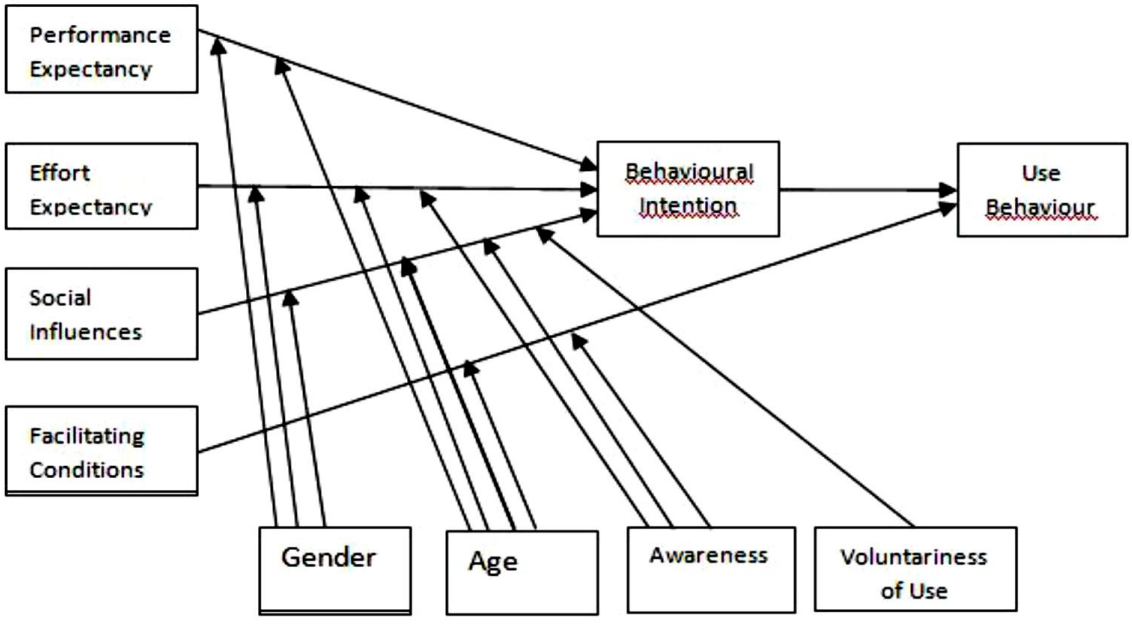

Fig. 1: The Unified Theory of Acceptance and Use of Technology (UTAUT) model. Source: Venkatesh Viswanath, Morris Michael G., Davis Gordon B., Davis Fred D. (2003)**,** "User Acceptance of Information Technology: Toward a Unified View", *MIS Quarterly* 27 (3), p. 447

The Unified Theory of Acceptance and Use of Technology (UTAUT) model, a synthesis of different technology models, was developed by Venkatesh et al (2003). The UTAUT

theorizes that four factors play a significant role in determining user acceptance and user behaviour towards technology. The factors are: performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003). Of the four predictors, performance expectancy, effort expectancy, and social influence each has direct effect on behavioural intention, while facilitating conditions and behavioural intention have a direct effect on usage behaviour. Gender, age, experience, and voluntariness of use form the moderators of the model.

Over the years, the eight dominant models that have been used to study technology adoption were the Theory of Reason Action (TRA) by Fishbein and Ajzen (1975), Technology Acceptance Model (TAM) by Davis (1989), Motivational Model (MM) by Davis et al., (1992), Theory of Planned Behaviour (TPB) by Ajzen (1991), Model of PC Utilization (MPCU) by Thompson et al. (1991), Innovation Diffusion Theory (IDT) by Rogers (1995), Social Cognitive Theory (SCT) by Bandura (1986), and Triadis's Model of PC Utilization, MPCU (Robinson & Moore, 2012; Neves et al., 2025). According to Venkatesh et al., (2003), previous models were able to explain approximately 40% of technology acceptance, whereas UTAUT was able to explain 70% of the intention to use technology. They reported that the shortcomings and limitations of prior models include: the technologies studied were simple and individual-oriented as opposed to complex and sophisticated organizational technology, most participants in those studies were students, time of the measurements were general and in most studies well after acceptance or rejection of the usage decisions so individuals' reactions were retrospective. Again, the nature of the measurements were in general cross-sectional, most of the studies were conducted in voluntary usage contexts making it rather difficult to generalize results to mandatory settings (Neves et al., 2025, Hua & Wang, 2019; Pentina, Hancock & Xie, 2023).

However, in the UTAUT model, Venkatesh et al. (2003) conducted a longitudinal field studies in four different organizations among individuals that were introduced to new technologies in their workplace. The study was carried out at three different points in time - post training, one month after implementation and three months after implementation; while actual usage behaviour was measured over the six-month post-training period (Hua & Wang, 2019). They also studied the effect of some moderating variables that have been reported in previous research to affect the usage decision. These were experience, voluntariness, age, and gender (Judge et al., 2019). The Results showed that the predictive validity of the models increased after including the moderators (Judge et al., 2019) added.

They found seven factors that are significant direct determinants of intention or usage of technology. Four of them (performance expectancy, effort expectancy, social influence, and facilitating conditions) play a significant role as direct determinants of technology user acceptance and usage behaviour (Champahom et al, 2025; Tamilmani et al, 2021). They also found that attitude, computer self-efficacy, and anxiety do not have a direct effect on behavioural intention. The four moderating variables discovered in the study were: gender, age, experience and voluntariness (Champahom et al, 2025; Tamilmani et al, 2021). As could be seen in figure 1 above, UTAUT model has four exogenous variables - performance expectancy, effort expectancy, social influences, and facilitating conditions; with two endogenous variables - intention to use technology and user-behaviour, and four moderating variables - gender, age, experience and voluntariness (Papagiannidis & Marikyan, 2022).

1.6.3 Social Network and Social Support Theory

Propounded by Israel et al (1985), this theory holds that social interactions can either promote or inhibit individual and collective behaviour. The theory emphasises the importance of "Social Network" which refers to the set of linkages and social relationships between people and "social support," which refers to the content of these relationships, that is, what is actually being shared or transmitted during different interactions (Acoba, 2024). Such social support include:

emotional support, i.e. caring, esteem, love, respect, instrumental support which may money, services, tangible aid and transport, informational support which includes advice, suggestions or information useful to problem solving (Acoba, 2024).

Studies like Brailovskaia et al. (2021), Mansueto et al. (2021), and Alhakami et al. (2023), argue that social network and social support boosted mental well-being in patients during the COVID-19 pandemic, and contributed to consistent better mental health, on people diagnosed with increased stress, physical challenges, fatigue, loneliness, depression, and anxiety. Again, in the Philippines, Tee et al. (2020), Montano and Acebes (2020), and Odigbo et al. (2021) observed that there were reported widespread mental health concerns and human rights abuses during the strict COVID-19 quarantine and lockdown crisis, and these were ameliorated through social network and social support cares (Odigbo et al., 2021).

However, for this theory to gain wide acceptability within a given population it must be promoted amongst the target social groups, who would after assimilating its values, become the message carriers and promoters to other members of the public. However, this must be augmented with some social, psychological and material supports that would enhance the acceptability levels of the offering.

1.6.4 Features and Services of Electronic Banking

Electronic banking services and solutions fall into a few broad categories, including transactional services, non-transactional services, administrative services and wire transfers (Long et al., 2024). Transactional services include EBPP (electronic bill presentment and payment), transfer of funds between different user accounts, investment sale or purchase, loan transactions and applications. Non-transactional services provided by electronic banking systems include webchat with online bankers, viewing online statements and accessing bank information services online. Administrative services are also provided online, including interest rate calculation, depreciation, adjustment of fees and others ((Long et al., 2024; Windasari et al., 2022).

Electronic banking systems offer a multitude of advantages over traditional, physical banks (Nicoletti, 2023). They provide a convenient, reliable and safe method of online transactions, allowing customers to access their financial records from anywhere in the world at any time (Pham et al., 2018; Raman, 2019). Electronic banking saves time, costs and allows information to be processed quicker than traditional banking system (Wong, 2022, Xie et al., 2022; Yun et al., 2023).

1.6.5 Criticisms Against Electronic Banking

In spite of its manifold advantages, some criticisms and complaints dot the paths of the electronic banking system (Welsh Affairs Committee, 2024). Among these are that hackers and malicious software can break into even the toughest of online vaults and steal personal information (Andabai et al., 2025). Again, system failures or technical hitches in servers can cause an electronic banking network to go offline temporarily, which can prove a nuisance, especially if a bill or payment is to be made or cash transferred urgently (Margaret et al., 2022). In developing countries like Nigeria, there have also been complaints of loss of money via the Internet or the ATM by customers. All these scare some customers at the mention of electronic banking (Anwers.com, 2011; eHow.com, 2010; Businessdictionary.com, 2011).

1.7 Methodology

Explorative survey research design was used in this study, to assess the spread and effectiveness of Internet banking tools among bank customers in two cities: Calabar and Ikom, all in Cross River State, Nigeria. The justification for the choice of the explorative survey method is because it is faster, more flexible and easier compared to other methods.

The population of the study was 1,200,000 banking customers in Calabar and Ikom. From this, the sample size was computed by using the Taro Yamane's formular for finite populations. Then, computing at a 95% confidence level and 5% margin of error, a sample size of 400 was determined, and used in the study.

1.8 Data Analysis

1.8.1 The Respondents' Demographic Data

OPTIONS	**FREQUENCY**	**PERCENTAGE**
SEX:		
Male:	252	63%
Female	148	37%
Age:		
21 – 30 years	100	25%
31-40 years	172	43%
41 – 50 years	98	24.50%
50 years Or Above	30	7.50%
Education:		
O'Levels/Equivalent	51	12.75%
OND/NCE	49	12.25%
HND/BA/B.Sc	201	50.25%
MBA/M.Sc/PhD	99	24.75%
TOTAL	**400**	100%

Source: Field Survey, 2013.

The respondents' demographic data show that: 63% were male while 37% were female; 25% were in the age bracket of 21 to 30 years, 43% in the age range of 31 to 40 years, 24.50% were aged between 41 to 50 years, while 7.50% were either 50 years or above. 12.75% had only O'Levels, 12.25% had either OND or NCE, 50.25% had First Degrees, while the remaining 24.75% had either Masters Degrees or PhDs**.**

1.8.2 The Respondents' Adoption of E-banking Services

OPTIONS	**FREQUENCY**	**PERCENTAGE**
ATM	159	39.75%
Mobile banking	72	18%
Internet banking	33	8.25%
POS	226	56.50%
Total	**400**	**100%**

From table 2, among the four most popular internet-banking tools/media in the country, the POS commands the highest usage rate amongst the respondents with 59.50%, followed by the ATM with 39.75%, then mobile banking with 18%, and finally internet banking with 8.25%.

1.8.4 Test of Hypothesis 1: The social media tools and networks in the country are not significantly within the reach and use of bank customers in Nigeria.

S/N	Question	SA	A	UD	D	SD	Mean	Decision
1	The social media tools and networks in the country are not significantly within the reach and use of bank customers in Nigeria	23 (115)	36 (144)	31 (93)	111 (222)	199 (199)	1.93	Respondents Disagreed

Source: Field Survey, 2025.

Test Statistics = Chi-Square (X^2)
Degree of Freedom = 4, Hence Critical X^2 = 12.34
Expected Frequency = $\frac{23 + 36 + 31 + 111 + 199}{5}$
= 100

$\mathbf{X^2} = \frac{(23-100)^2}{100} + \frac{(36-100)^2}{100} + \frac{(31-100)^2}{100} + \frac{(111-100)^2}{100} + \frac{(199-100)^2}{100}$
= 59.29 + 40.96 + 47.61 + 1.21 + 98.01
= 247.08

Conclusion: Since the computed chi-square is greater than the critical chi-square, we hereby reject the null hypothesis and accept the alternative hypothesis which holds that the social media tools and networks in the country are significantly within the reach and use of bank customers in Nigeria ($X^2_{calculated}$ = 247.08 > $X^2_{critical}$ =12.34; p = 0.001 < 0.05).

Test of Hypothesis 2: The social media networks are not significantly effective as a tool for convincing bank customers in Nigeria to accept the Internet banking culture

S/N	Question	SA	A	UD	D	SD	Mean	Decision
1	The social media networks are not significantly effective as a tool for convincing bank customers in Nigeria to accept the Internet banking culture	41 (205)	47 (188)	51 (153)	100 (200)	161 (161)	2.27	Respondents Disagree

Source: Field Survey, 2025.

Test Statistics = Chi-Square (X^2)
Degree of Freedom = 4, Hence Critical X^2 = 12.34
Expected Frequency = $\frac{41 + 47 + 51 + 100 + 161}{5}$
= 100
$\mathbf{X^2} = \frac{(41-100)^2}{100} + \frac{(47-100)^2}{100} + \frac{(51-100)^2}{100}$

$$+ \frac{(100-100)^2}{100} + \frac{(161-100)^2}{100}$$

$= 34.81 + 28.09 + 24.01 + 0 + 37.21$
$= 124.12$

Conclusion: Since the computed chi-square is greater than the critical chi-square, we hereby reject the null hypothesis and accept the alternative hypothesis which holds that the social media networks are significantly effective as a tool for convincing bank customers in Nigeria to accept the Internet banking culture ($X^2_{calculated} = 124.12 > X^2_{critical} = 12.34$; $p = 0.000 < 0.05$).

1.9 Summary of Results

From the analysis of data, the following results were obtained:

1. The social media tools and networks in the country are significantly within the reach and use of bank customers in Nigeria ($X^2_{calculated} = 247.08 > X^2_{critical} = 12.34$; $p = 0.001 < 0.05$).
2. Social media networks are significantly effective as a tool for convincing bank customers in Nigeria to accept the Internet banking culture ($X^2_{calculated} = 124.12 > X^2_{critical} = 12.34$; $p = 0.000 < 0.05$).

1.10 Discussion of Findings and the Implications

Result number one shows that the social media tools and networks in the country are significantly within the reach and use of bank customers in Nigeria. The economic and social implications of these results is that social media is today a very crucial communication weapon for the mass mobilisation of Nigerians for any good course (Oguejiofor, 2021; Olaegbe, 2021; Mohammad & Saad, 2021; Onodugo, 2020). It is therefore a cheering news to learn that the social media tools and networks in the country are also significantly within the reach and use of bank customers in the country. Hence, the marketing communication departments of the banks in the country should take note of this and avail their organisations of the opportunities inherent in social media for convincing their Nigerian customers to willingly accept internet banking as a way of life that has come to stay.

However, the complaint of the Nigerian banking customers regarding loss of money through internet and ATM frauds is not without some substance. For the ATM and internet banking to gain a firm foothold in the country, such financial anomalies must be corrected in order to restore public confidence in the system (Ovia, 2020; Pavlou, 2022; Rasiah, 2020).

1.11 Conclusion

The ATM and Internet banking is a global phenomenon that has come to stay. Any country that shy away from it, risks being relegated to the stone-age in the world's business transaction playfield. Nigeria is too much for such a disdain. Social media tools and networks could be used to effectively carry out a marketing communications' campaign to allay the fears of the Nigerian public against the ATM and Internet banking operations. This does not however preclude the idea of improving the system in the country, to make it more efficient and fraud-proof.

1.12 Recommendations

So, based on that, we hereby recommend as follows:

1. Everything must be done by the banks in Nigeria to significantly improve upon the convenience, efficiency, security and reliability of ATM usage in the country.
2. All loopholes that allow rooms for Internet frauds on customers' accounts must be identified and plugged in order to restore public confidence in the system.

3. When the above have been taken care of, the multi-media opportunities available in the social media networks in the country should then be fully exploited for convincing the Nigerian masses on the overwhelming advantages of Internet banking and the ATM over the traditional banking system they were used to.
4. Service quality, user-friendliness, ease of usage, quick response to complaints, availability of cash at all times, should be the unique selling points (USP) for marketing these new banking culture to the Nigerian public.

References

Acoba, E. F. (2024). Social support and mental health: The mediating role of perceived stress. *Frontiers in Psychology*, *15*, 1330720. https://doi.org/10.3389/fpsyg.2024.1330720

Alhakami, A., Salem, V., Alateeq, D., Nikčević, A. V., Marci, T., Palmieri, S., et al. (2023). The Arab COVID-19 Anxiety Syndrome Scale (C-19ASS): COVID-19 anxiety syndrome and psychological symptoms in the Saudi Arabian population. *Clin. Psychol. Psychotherapy* 30, 1083–1094. doi: 10.1002/cpp.2860

Andabai, Priye Werigbelegha & Victor, Jane James (2025). Internet Banking And Commercial Banks' Performance In Nigeria. *Multidisciplinary Journal of Vocational Education & Research; Vol.7 No.1*, February 2025, pg.99 -109.

Answers.com (2012), Electronic-banking, http://www.answers.com/topic/electronic-banking#ixzz1A85jHHgi

Bandura, A. (1986). *Social Foudations of Thought and Action.* New Jersey: Prentice- Hall, Inc.

Brailovskaia, J., Cosci, F., Mansueto, G., Miragall, M., Herrero, R., Baños, R. M., et al. (2021). The association between depression symptoms, psychological burden caused by Covid-19 and physical activity: An investigation in Germany, Italy, Russia, and Spain. *Psychiatry Res.* 295:113596. doi: 10.1016/j.psychres.2020.113596

Businessdictionary.com (2011), http://www.businessdictionary.com/definition/electronic-banking.html#ixzz1A80XwsDN

Businessdictionary.com (2012), Automated teller machine, http://www.businessdictionary.com/definition/automated-teller-machine-ATM.html

Champahom, T., Wisutwattanasak, P., Chonsalasin, D., Se, C., Jomnonkwao, S., & Ratanavaraha, V. (2025). Comparing Electric Vehicle Adoption Intentions Across Vehicle Types in Thailand: An Extended UTAUT2 Model with Government Participation. *Transport Policy*, *163*, 408-435. https://doi.org/10.1016/j.tranpol.2025.01.033

Clark, S.D., Duley, C. A (2025). Study of Changing Automated Teller Machine (ATM) Accessibility and its Implications in England and Wales. *Appl. Spatial Analysis* **18**, 56 (2025). https://doi.org/10.1007/s12061-025-09658-2

Davis, F.D. (1986), Technology Acceptance Model for Empirical Testing New End-User Information System: Theory and Results. Cambridge, MA: MIT Sloan School of Management.

eHow.com (2012), Electronic Banking Definition, http://www.ehow.com/about_6717015_electronic-banking-definition.html#ixzz1A835i2AS

Hua L. and Wang, S. (2019). Antecedents of consumers' intention to purchase energy-efficient appliances: An empirical study based on the technology acceptance model and theory of planned behavior. Sustainability, 11 (10) (2019), 10.3390/su11102994

Judge, M., Warren-Myers, G., Paladino, A. (2019). Using the theory of planned behaviour to predict intentions to purchase sustainable housing. Journal of Cleaner Production, 215 (2019), pp. 259-267, 10.1016/j.jclepro.2019.01.029

Long Kim, Kanyanit Wichianrat, Sook Fern Yeo (2024). An integrative framework enhancing perceived e-banking service value: A moderating impact of e-banking experience. Journal of Open Innovation: Technology, Market, and Complexity, 10(3) 100336. https://doi.org/10.1016/j.joitmc.2024.100336.

Mansueto, G., Lopes, F. L., Grassi, L., and Cosci, F. (2021). Impact of COVID-19 outbreak on Italian healthcare workers versus general population: Results from an online survey. *Clin. Psychol. Psychother.* 28, 1334–1345. doi: 10.1002/cpp.2644

Margaret, M et al., (2022). Effects of internet banking on financial performance of listed commercial banks in Kenya. American Journal of Finance, 1(2) 53-71.

Mohammad, J & Saad, H (2021). Impact of electronic banking on the Jordanian banks' performance. *The Journal of Banking and Commerce, 9(3),* 21-32.

Montano, R. L. T., and Acebes, K. M. L. (2020). Covid stress predicts depression, anxiety and stress symptoms of Filipino respondents. *Int. J. Res. Bus. Soc. Sci.* 9, 78–103.

Neves, C., Oliveira, T., Cruz-Jesus, F., & Venkatesh, V. (2025). Extending the unified theory of acceptance and use of technology for sustainable technologies context. *International Journal of Information Management, 80,* 102838. https://doi.org/10.1016/j.ijinfomgt.2024.102838

Nicoletti, B. (2023). Industry 5.0 and Banking 5.0. In *Palgrave Macmillan* (Palgrave S). Springer. http://dx.doi.org/10.1007/978-3-030-75871-4.

Odigbo B., Eze F., Odigbo R. & Kajang, J.L. (2020). COVID-19 lockdown controls and human rights abuses: the social marketing implications. Emerald Open Research. 2020 Jul 17;2:45. doi: 10.35241/emeraldopenres.13810.1. PMCID: PMC8243984.

Odior, Ernest Simeon (2012), "Cashless Banking in Nigeria: Challenges Benefits and Policy Implications," European Scientific Journal, June edition vol. 8, No.12.

Oguejiofor, C.S & Ikedimma,,A.M (2021).Extent internet search competencies are required of business education graduates for better productivity in Anambra State. Multidisciplinary journal of vocational education and research 4(!) 162-173.

Olaegbe P., (2021). Customers' adoption and use of e-banking services: The South African perspective. Banks and Bank Systems, 9(2), 78-88.

Onodugo C., (2020). Factors influencing the adoption of e-banking in Sudan: Perceptions of retail banking clients. *The Journal of Electronic Banking and Commerce, 17(3),* 1-12.

Ovia, J. (2020), Internet Banking: Practices and Potentials in Nigeria. A paper at the conference organized by the Institute of Chartered Accountants of Nigeria (ICAN), Lagos, September 5.

Papagiannidis S. & Marikyan, D. (2022). Environmental sustainability: A technology acceptance perspective. International Journal of Information Management, 63 (2022), Article 102445, 10.1016/J.IJINFOMGT.2021.102445

Pavlou F., (2022). Is internet banking in India consumer concern and changing bank strategies. *Global Journal of Business Research,* 2(1) 43-51.

Pentina, I., Hancock, T.& Xie, T. (2023). Exploring relationship development with social chatbots: A mixed-method study of replica. *Computers in Human Behavior, 140* (2023), Article 107600, 10.1016/j.chb.2022.107600

Pham, Q.T., Tran, X.P., Misra, S., Maskeliunas, R., Damaševičius, R. (2018). Relationship between convenience, perceived value, and repurchase intention in online shopping in Vietnam. Sustain. (Switz.), *10* (1) (2018), 10.3390/su10010156

Raman, P. (2019). Understanding female consumers' intention to shop online: the role of trust, convenience and customer service. Asia Pac. J. Mark. Logist., *31* (4) (2019), pp. 1138-1160.

Rasiah G., (2020). Haven't adopted electronic financial services yet? The acceptance and diffusion of electronic banking technology. International Financial counselling and planning, 2 (1), 49-60

Rogers, Everett M. (2003), *Diffusion of Innovations*, Fifth Edition 2003, Free Press, New York, p227.

Sheykhan, S., Boozary, P., Ghorbantanhaei, H., Pourmirza, M. & Rabiee, M. (2024). Evaluation of sustainable marketing strategy based on product perceived value in attracting brand loyalty using FCM & Rough BWM methods. Power System Technology, *48* (1), pp. 806-827.

Singh, S., Singh, N., Kalinić, Z. & Liébana-Cabanillas, F.J. (2021). Assessing determinants influencing continued use of live streaming services: an extended perceived value theory of streaming addiction. *Expert System Application*, *168* (2021), Article 114241. Doi: 10.1016/j.eswa.2020.114241

Tamilmani, K., Rana, N.P., Wamba, S.F. & Dwivedi,R. (2021). The extended unified theory of acceptance and use of technology (UTAUT2): A systematic literature review and theory evaluation. International Journal of Information Management, 57 (2021), Article 102269, 10.1016/J.IJINFOMGT.2020.102269

Tee, M. L., Tee, C. A., Anlacan, J. P., Aligam, K. J. G., Reyes, P. W. C., Kuruchittham, V., et al. (2020). Psychological impact of COVID-19 pandemic in the Philippines. *J. Affect. Disord.* 277, 379–391.

Tosun, P. (2020). Brand trust for digital-only bank brands: Consumer insights from an emerging market. ATLAS 7th International Conference on Social Sciences, ATLAS (2020).

Venkatesh Viswanath, Morris Michael G., Davis Gordon B., Davis Fred D.**,** (2003). "User Acceptance of Information Technology: Toward a Unified View", *MIS Quarterly* 27 (3), p.447.

Welsh Affairs Committee. (2024). Access to High Street Banking in Wales: Written evidence submitted by NoteMachine Ltd. House of Commons. https://committees.parliament.uk/work/8340/access-to-high-street-banking-in-wales/publications/

Windasari, N. A., Kusumawati, N., Larasati, N., & Amelia, R. P. (2022). Digital-only banking experience: Insights from gen Y and gen Z. *Journal of Innovation & Knowledge*, *7*(2), 100170. https://doi.org/10.1016/j.jik.2022.100170

Wong, J. (2022). Digital Banking Cambodia. In *ResearchGate* (Issue June).

World Bank Report (2012), available online at http://www.tradingeconomics.com/nigeria/rural-population-percent-of-total-population-wb-data.html, accessed February 17, 2013.

Xie, J., Ye, L., Huang, W. & Ye, M. (2022). Understanding fintech platform adoption: Impacts of perceived value and perceived risk. J. Theor. Appl. Electron. Commer. Res., *16* (5) (2022), pp. 1893-1911, 10.3390/jtaer16050106

Yun, J.J., Zhao, X., Ma, L., Z. Liu, B. Yang (2023). Open innovation dynamics and evolution in the mobile payment industry – comparative analysis among Daegu, Cardiff, and Nanjing. Eur. Plan. Stud., *31* (5) (2023), pp. 862-884, 10.1080/09654313.2022.2132784