**Research Article**

# Analysing the Mediating Effect of Social Media on Online Shopping Using Partial Least Square

**Qaribu Yahaya Nasidi** [1,2*]
 0000-0003-3888-2945

**Muhamad Fazil Ahmad** [2]
 0000-0002-9992-8305

**Jamilu Abdulkadir** [3]
 0000-0002-9504-9899

**Murtala Garba** [2,4]
 0000-0003-0215-0275

[1] Ahmadu Bello University, Zaria, NIGERIA
[2] University Sultan Zainal Abidin, Terengganu, MALAYSIA
[3] Distance Learning Center, Ahmadu Bello University, Zaria, NIGERIA
[4] Abubakar Tafawa Balewa University, Bauchi, NIGERIA
* Corresponding author: qaribuyahaya@gmail.com

| ARTICLE INFO | ABSTRACT |
|---|---|
| | **Introduction:** Online shopping has become more popular due to increased internet usage, and social media has dramatically influenced and modified customer behavior and decisions to buy from online businesses. Because people are busy and have hectic schedules, online shopping has become increasingly popular in the twenty-first century. Therefore, this study aimed to examine the mediating effect of social media on online shopping behavior in Nigeria.<br>**Methodology:** The study used quantitative approach and self-administered questionnaires were used to collect data from 380 online shoppers. The study employs the partial least square structural equation modelling (PLS-SEM) approach to identify critical dimensions influencing online shopping behavior in Nigeria and to explore the correlational relationships among constructs.<br>**Results:** The results and applications of PLS-SEM evolve a variety of findings; advertising had an insignificant effect on online shopping behavior, while a positive relationship was found between advertising and social media effect. Similarly, the proposed relationship between social media effect and online shopping behavior is supported. In contrast, the projected relationship between trust and online shopping behavior is significant. Finally, the result revealed a strong correlation between trust and online shopping behavior.<br>**Implication:** The study contributed to the existing literature and have significant practical implications that can help managers and marketers of online stores to take measures on factors that may influence online shopping behavior in Nigeria.<br><br>**Keywords:** social media, trust, smart-PLS, online shopping |

## INTRODUCTION

Digital marketing requires the use of social media (Langan et al., 2019) provides excellent benefits that enable businesses to connect with millions of customers worldwide (Bhagaswara, 2021). Companies utilize social media to broaden their marketing efforts and reach new clients (Ancillai et al., 2019). Online stores use social media to connect with customers and persuade them to buy their goods and services. The digitization platform has changed user dynamics and consumption behaviors by increasing the importance of the Internet in everyday life and changing consumer habits (Schnauber-Stockmann & Mangold, 2020; Sharma & Sharma, 2020). Integrating social media with online stores offers the benefit of generating traffic to the

website (Nasidi et al., 2021a; Quesenberry, 2020). Consumers may click on the goods and be redirected to the online shop website by sharing material on social media.

Social media addiction gives online stores an advantage to reach out to their potential consumers. Social media addiction is a type of Internet addiction in which people feel compelled to use social media in excessive amounts. Individuals addicted to social media are typically too worried about it and are motivated by an uncontrolled need to get on and utilize it (Mwangi et al., 2019; Owan et al., 2020). Mood, cognition, physical, and emotional reactions, as well as interpersonal and psychological difficulties have all been linked to social media addiction (Kolhar et al., 2021; Rasmussen et al., 2020; Zhao & Zhou, 2021). It has been stated that social media addiction affects roughly 12% of users across social networking sites (Moore & Craciun, 2021).

Online shopping has grown more popular because of the rise in internet usage and social media addiction. And integration of social media in business and advertising activities (Akar & Dalgic, 2018; Bala & Verma, 2018). In Nigeria, using social media in promoting online stores is enormous because of the reasonable number of people using the platforms. As of January 2020, there were 27.00 million social media users in Nigeria (Datareportal, 2020). Despite advantages in the Nigerian market, many factors influence buying intent in an online transaction. Many of these factors are linked to a facet of confidence gained in online marketing. The trust instilled in customers by a brand's website significantly impacts their shopping behavior. Thus, this research aims to investigate the mediating effect of social media in the relationship between advertising and trust in online shopping in Nigeria.

## LITERATURE REVIEW

### Advertising and Online Shopping

Advertising means promoting various goods, services, or ideas to the general public or a particular target audience (Juska, 2017; Murwonugroho & Yudarwati, 2020; Quesenberry, 2020). The primary purpose of advertising is to increase revenues, attract new buyers, and retain existing ones (Aslam & Karjaluoto, 2017; Luo et al., 2021). Advertising is paid communication that reaches large audiences through non-personal mass media and other communication channels (Briandana & Dwityas, 2020). Advertising is typically characterized as one-way, paid promotional communication in any form of mass media. Advertising helps in promoting online shopping behavior among consumers. The research established the relationship between advertising and online shopping (Domazet, 2020; Kim & Huh, 2017; Okiyi et al., 2020; Wiese & Akareem, 2020).

### Trust and Online Shopping

Trust is individual confidence in other people's values, measured by their presumed honesty, virtue, and competence (Eneizan et al., 2020; Munshi, 2019; Nasidi et al., 2021b). The level of trust directly impacts attitudes, and the higher the level of trust, the stronger the attitude (Suleman & Zuniarti, 2019). Several empirical kinds of research have established the relationship between trust and online shopping (Alharthey, 2020; Haque & Mazumder, 2020; Jiang et al., 2019; Kim et al., 2017; Nassar et al., 2017; Singh & Matsui, 2017; Stouthuysen et al., 2018). Moreover, it has been examined that trust has a significant favorable influence on consumer online shopping decisions (Bhatti et al., 2021; Gera et al., 2021; Qalati et al., 2021; Suhartanto et al., 2018).

### Mediating Role of Social Media Effect

Three prerequisite steps must be met (Tryon, 2018). First, the independent variable (IV) must be linked to the dependent variable (DV). The second stage, the independent variable, must link to the mediating variable, and the last stage is that the mediating variable (MV) must connect with the (DV). According to Hayes (2015), the presence of a direct relationship between the independent variable and the dependent variable should not be used as a criterion for assessing mediation since mediation can be significant even without a direct connection. Hayes (2017) argued that a non-significant direct result could not be considered a preventing procedure in the mediation test cycle. The researchers choose social media as a mediator because it influences online shopping. Studies examined that social media significantly affects online shopping (Hajli, 2014; Harrigan et al., 2021; Hossain, 2019; Naeem, 2021; Ryu & Park, 2020; Wibowo et al., 2021). Based on the empirical literature reviewed, the conceptual model was developed in **Figure 1**.
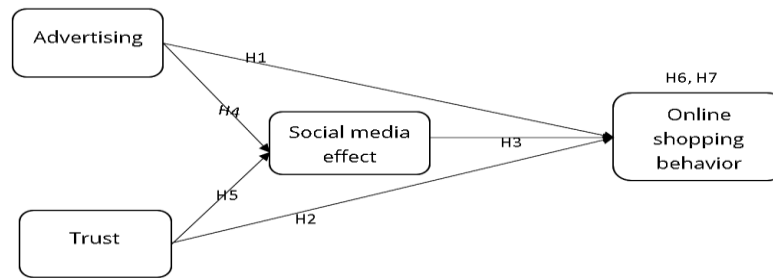
**Figure 1.** Conceptual model

## THEORETICAL UNDERPINNING

### Technological Determinism Theory (TDT)

This research is founded on technological determinism theory (TDT). The theory maintains that changes in communication technology would eventually result in significant changes in a system's culture and social media (Dafoe, 2015; Servaes, 2014). One of this theory's premises is that its relevance is determined by how individuals use or utilize it. According to Hauer (2017), many young people may not have a specific reason for using the Internet, but they assume that since a friend is addicted to it, it is inappropriate for them to be online. While surfing the web, teenagers see or read about their heroes or heronries, most of whom are from cultures other than their own.

### Theory of Planned Behavior

The theory of reasoned action (TRA) influenced the creation of the theory of planned behavior (TPB) (Nasiru & Abubakar, 2020; Wibowo et al., 2022; Yim & Byon, 2021). TPB is made to forecast and explain human behavior across a variety of information technology platforms. According to TPB, a person's attitude, subjective norms (SN), and perceived behavioral control (PBC) toward doing specific acts directly impact their actual behavior. The individual's impression of ease or difficulty in doing the behavior of interest is referred to as PBC (Gu & Wu, 2019). Understanding the complexity of online shopping behavior will involve an interlacing of TPB and TRA.

## METHODOLOGY

A quantitative technique was applied in the research. The population for this study is made up of Kano metropolis internet shoppers. According to an online sample size calculator, a minimum sample size of 380 is necessary. Respondents were chosen using a simple random sampling method. To minimize sample size error and handle the non-response issue, the questionnaire distribution was raised by 10% and applied to the above minimum sample size specified by the calculation to make it 418. The sample size was increased by 10% to account for other unavoidable flaws such as incomplete filling and the inability of some respondents to return questionnaires (Dewaele, 2018). Therefore, 418 questionnaires were distributed to the respondents. A total of 367 questionnaires were completed and returned. The questionnaires were adapted from previous researches (Alalwan, 2018; Dodoo & Wu, 2019; Fossen & Schweidel, 2019; Kim & Kim, 2021; Qalati et al., 2021). The data gathered through the questionnaire were analyzed using partial least structural equation modeling (PLS-SEM) in this study.

### Validity and Reliability

The Cronbach's alpha values for the overall measurement and convergent validity are provided in **Table 1** for each construct's validity and reliability. **Table 1** shows that the model's AVE value for all constructs is significantly higher than 0.5, which is the proposed cut-off AVE value (Hair Jr et al., 2020). Furthermore, according to Sarstedt et al. (2019), the composite reliability ratings for both structures were higher than the recommended value of 0.700. The composite results ranged from 0.885 to 0. 937. Finally, Cronbach's alpha values ranged from 0.809 to 0.918, satisfying the 0.700 cut-offs (Hair Jr et al., 2020).

**Table 1.** Cronbach's alpha (CA), composite reliability (CR), and average variance extracted (AVE)

|  | Cronbach's alpha | Composite reliability | Average variance extracted |
|---|---|---|---|
| Advertising | 0.88 | 0.904 | 0.511 |
| Online shopping behavior | 0.916 | 0.933 | 0.669 |
| Social media effect | 0.864 | 0.894 | 0.515 |
| Trust | 0.917 | 0.931 | 0.63 |

**Table 2.** Fornell-Larcker criterion analysis to check discriminant validity

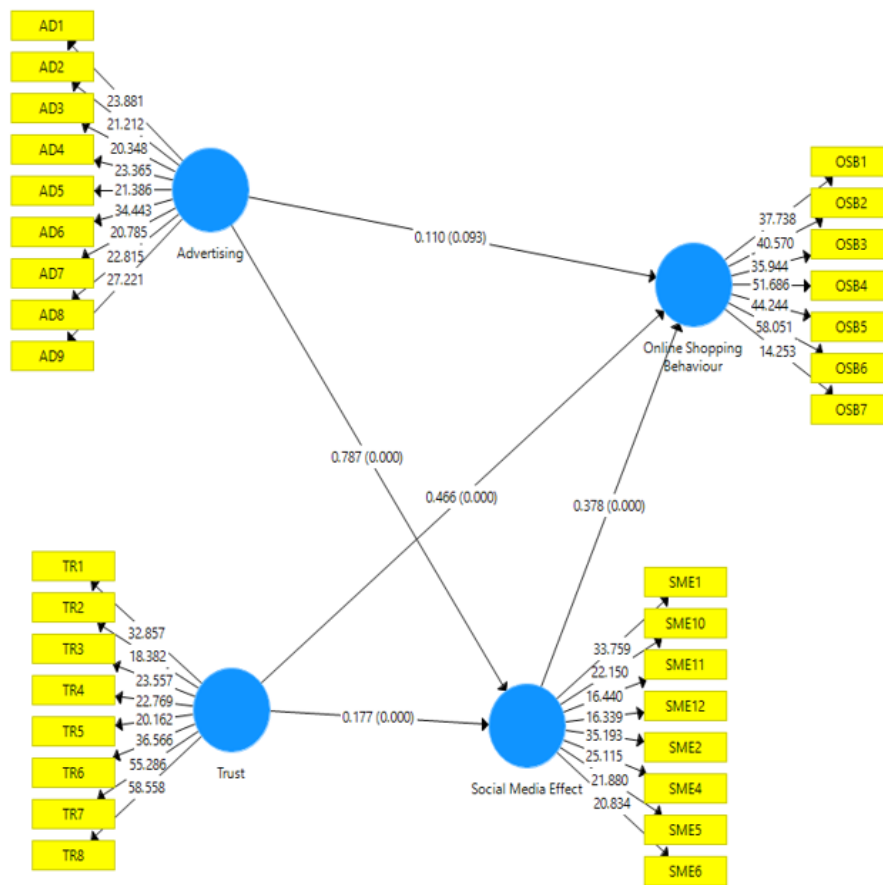|  | Advertising | Online shopping behavior | Social media effect | trust |
|---|---|---|---|---|
| Advertising | **0.715** |  |  |  |
| Online shopping behavior | 0.684 | **0.818** |  |  |
| Social media effect | 0.679 | 0.648 | **0.717** |  |
| Trust | 0.521 | 0.744 | 0.587 | **0.794** |



**Figure 2.** SmartPLS standardized result

The reliability was tested utilizing the internal consistency technique by evaluating the composite reliability values. All variables demonstrated composite reliability (values better than 0.7). The Fornell-Larcker test (**Table 2**) was used to assess discriminant validity, whereas the AVE (average variance explained) was used to examine convergent validity. According to the requirements for discriminant validity, the square root of AVE should be greater than the correlation between latent variables for each latent variable.

## STRUCTURAL MODEL ANALYSIS

The analysis method is converted into SmartPLS 3.0.0 graphics. **Figure 2** shows the diagram; in addition, the arrows that link the constructs of this study are decided by the direction of the hypotheses suggested in the framework. The single-headed arrows are used to verify the causal effect of the study construct. Furthermore, **Figure 2** explains the standardized estimate for the structural model of this report, showing the factor loading for each item and the mediating effect of social media.

**Table 3.** Summary of path coefficients

| Relationship | Beta value | Standard deviation (SD) | t-Statistics (|O/SD|) | p-Value |
|---|---|---|---|---|
| Advertising -> Online shopping behavior | 0.110 | 0.063 | 1.743 | 0.082 |
| Advertising -> Social media effect | 0.787 | 0.023 | 34.556 | 0.000 |
| Social media -> Online shopping behavior | 0.378 | 0.066 | 5.735 | 0.000 |
| Trust -> Online shopping behavior | 0.466 | 0.036 | 12.817 | 0.000 |
| Trust -> Social media effect | 0.177 | 0.028 | 6.35 | 0.000 |

**Table 4.** Summary of the $R^2$

| Endogenous construct | R square | R square adjusted |
|---|---|---|
| Online shopping behavior | 0.704 | 0.702 |
| Social media effect | 0.795 | 0.794 |

**Table 5.** Mediation effect

| | O | M | SD | t-Statistics (|O/SD|) | p-Value |
|---|---|---|---|---|---|
| Advertising ->Social media ->Online shopping behavior | 0.297 | 0.296 | 0.054 | 5.495 | 0.000 |
| Trust ->Social media-> Online shopping behavior | 0.067 | 0.066 | 0.015 | 4.438 | 0.000 |

Note. O: Original sample; M: Sample mean; SD: Standard deviation

**Table 3** summarized the study's effects using the SmartPLS structural equation model (SmartPLS SEM). It demonstrates the relationship between the path coefficients, standard deviation (STDEV), probability value (p-value), and each research construct's outcome. The analysis revealed that advertising had a negative and statistically insignificant direct effect on online shopping behavior with a path coefficient (Beta value=0.11; t-value=1.743; p=0.082). This result indicated that hypothesis 1 is supportive. Hypothesis 2 reported positive relationship between advertising and social media effect (Beta value=0.787; t-value=34.556; p=0.000). Hypothesis 3 supported the proposed relationship between social media effect and online shopping behavior (Beta value=0.378; t-value=5.735; p=0.000). Hypothesis 4 reinforced the projected relationship between trust and online shopping behavior (Beta value=0.466; t-value=12.817; p=0.000). Lastly, a strong correlation between trust and social media (Beta value=0.177; t-value=6.35; p=0.000) supports hypothesis 5.

According to the model, the squared multiple correlation (R2) coefficient for latent variables was tested to examine the variance of the latent variables. The squared multiple correlations ($R^2$) result is shown in **Table 4**, indicating that hypothesized model explained statistically significant variance for the endogenous variables.

## Mediation Effect

**Table 5** showed the significant study of indirect effect and total effect path coefficients from the bootstrapping procedure (with 450 tests, 5,000 subsamples, and no sign changes). The results showed that social media has a significant role in mediating the relationship between advertising and online shopping behavior with a path coefficient (Beta value=0.297; t-value=5.495; p=0.000). The last hypothesis indicated that social media has a significant relationship between trust and online shopping behavior with a path coefficient (Beta value=0.067; t-value=4.438; p=0.000).

## CONCLUSION

The paper proposed mediating effect of social media on the relationship between advertising, trust and online shopping behavior using SmartPLS as a tool of analysis. Advertising and trust have been hypothesized to directly affect social media and online shopping behavior, while social media is anticipated to mediate advertising and trust in online shopping behavior. The findings stated that advertising had a positive and statistically significant direct effect on online shopping behavior; also, the relationship between advertising and social media is substantial. Moreover, the result revealed the relationship between trust and online shopping. Furthermore, the findings indicate that social media have an impact in influencing online purchasing behavior. The study contributed to the existing literature and have significant practical implications that can help managers and marketers of online stores to take measures on factors that may influence online shopping behavior in Nigeria. Managers must be conscious that social media is the most important factor that pushes online shopping behavior.

## REFERENCES

Akar, E., & Dalgic, T. (2018). Understanding online consumers' purchase intentions: A contribution from social network theory. *Behaviour & Information Technology, 37*(5), 473-487. https://doi.org/10.1080/0144929X.2018.1456563

Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management, 42*, 65-77. https://doi.org/10.1016/j.ijinfomgt.2018.06.001

Alharthey, B. (2020). The role of online trust in forming online shopping intentions. *International Journal of Online Marketing, 10*(1), 32-57. https://doi.org/10.4018/IJOM.2020010103

Ancillai, C., Terho, H., Cardinali, S., & Pascucci, F. (2019). Advancing social media driven sales research: Establishing conceptual foundations for B-to-B social selling. *Industrial Marketing Management, 82*, 293-308. https://doi.org/10.1016/j.indmarman.2019.01.002

Aslam, B., & Karjaluoto, H. (2017). Digital advertising around paid spaces, E-advertising industry's revenue engine: A review and research agenda. *Telematics and Informatics, 34*(8), 1650-1662. https://doi.org/10.1016/j.tele.2017.07.011

Bala, M., & Verma, D. (2018). A critical review of digital marketing. *International Journal of Management, IT & Engineering, 8*(10), 321-339.

Bhagaswara, D. (2021). Exploration of digital marketing strategy for new market acquisition in the family company PT. Agro Komoditi Lestari. *Journal Research of Social, Science, Economics, and Management, 1*(3), 222-243.

Bhatti, A., Rehman, S. U., Kamal, A. Z., & Akram, H. (2021). Factors effecting online shopping behaviour with trust as moderation. *Jurnal Pengurusan* [*Management Journal*]*, 60,* 109-122. https://doi.org/10.17576/pengurusan-2020-60-09

Briandana, R., & Dwityas, N. A. (2020). Conventional marketing communication tools for residential products in digital era. *Technium Social Sciences Journal, 14*, 193-205.

Dafoe, A. (2015). On technological determinism: A typology, scope conditions, and a mechanism. *Science, Technology, & Human Values, 40*(6), 1047-1076. https://doi.org/10.1177/0162243915579283

Datareportal. (2020). DIGITAL 2020: NIGERIA. https://datareportal.com/reports/digital-2020-nigeria

Dewaele, J.-M. (2018). Online questionnaires. In A. Phakiti, P. De Costa, L. Plonsky, & S. Starfield (Eds.), *The Palgrave handbook of applied linguistics research methodology* (pp. 269-286). Springer. https://doi.org/10.1057/978-1-137-59900-1_13

Dodoo, N. A., & Wu, L. (2019). Exploring the anteceding impact of personalised social media advertising on online impulse buying tendency. *International Journal of Internet Marketing and Advertising, 13*(1), 73-95. https://doi.org/10.1504/IJIMA.2019.097905

Domazet, A. (2020). *The effect of storytelling advertising on consumer evaluation of green fashion in the online shopping environment* [Master thesis, Universidade Católica Portuguesa].

Eneizan, B., Alsaad, A., Abdelbaset Alkhawaldeh, H. N., & Rawash, O. E. (2020). E-wom, trust, usefulness, ease of use, and online shopping via websites: The moderating role of online shopping experience. *Journal of Theoretical and Applied Information Technology, 98*(13), 2554-2565.

Fossen, B. L., & Schweidel, D. A. (2019). Social TV, advertising, and sales: Are social shows good for advertisers? *Marketing Science, 38*(2), 274-295. https://doi.org/10.1287/mksc.2018.1139

Gera, N., Fatta, D. D., Garg, R., & Malik, S. (2021). Which are online shopping determinants? Analysing ease and convenience to use, prior shopping experience, online benefits, social influence in India. *International Journal of Electronic Marketing and Retailing, 12*(1), 19-35. https://doi.org/10.1504/IJEMR.2021.112251

Gu, S., & Wu, Y. (2019). Using the theory of planned behaviour to explain customers' online purchase intention. *World Scientific Research Journal, 5*(9), 226-249.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research, 109*, 101-110. https://doi.org/10.1016/j.jbusres.2019.11.069

Hajli, M. N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research, 56*(3), 387-404. https://doi.org/10.2501/IJMR-2014-025

Haque, U. N., & Mazumder, R. (2020). A study on the relationship between customer loyalty and customer trust in online shopping. *International Journal of Online Marketing, 10*(2), 1-16. https://doi.org/10.4018/IJOM.2020040101

Harrigan, P., Daly, T. M., Coussement, K., Lee, J. A., Soutar, G. N., & Evers, U. (2021). Identifying influencers on social media. *International Journal of Information Management, 56*, 102246. https://doi.org/10.1016/j.ijinfomgt.2020.102246

Hauer, T. (2017). Technological determinism and new media. *International Journal of English Literature and Social Sciences, 2*(2), 239174. https://doi.org/10.21125/inted.2017.2401

Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research, 50*(1), 1-22. https://doi.org/10.1080/00273171.2014.962683

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.

Hossain, S. F. A. (2019). Social networking and its role in media entrepreneurship: Evaluating the use of mobile phones in the context of online shopping–A review. *Journal of Media Management and Entrepreneurship, 1*(1), 73-86. https://doi.org/10.4018/JMME.2019010105

Jiang, C., Rashid, R. M., & Wang, J. (2019). Investigating the role of social presence dimensions and information support on consumers' trust and shopping intentions. *Journal of Retailing and Consumer Services, 51*, 263-270. https://doi.org/10.1016/j.jretconser.2019.06.007

Juska, J. M. (2017). *Integrated marketing communication: Advertising and promotion in a digital world*. Routledge. https://doi.org/10.4324/9781315526812

Kim, D. Y., & Kim, H.-Y. (2021). Influencer advertising on social media: The multiple inference model on influencer-product congruence and sponsorship disclosure. *Journal of Business Research, 130*, 405-415. https://doi.org/10.1016/j.jbusres.2020.02.020

Kim, H., & Huh, J. (2017). Perceived relevance and privacy concern regarding online behavioral advertising (OBA) and their role in consumer responses. *Journal of Current Issues & Research in Advertising, 38*(1), 92-105. https://doi.org/10.1080/10641734.2016.1233157

Kim, S. Y., Kim, J. U., & Park, S. C. (2017). The effects of perceived value, website trust and hotel trust on online hotel booking intention. *Sustainability, 9*(12), 2262. https://doi.org/10.3390/su9122262

Kolhar, M., Kazi, R. N. A., & Alameen, A. (2021). Effect of social media use on learning, social interactions, and sleep duration among university students. *Saudi Journal of Biological Sciences, 28*(4), 2216-2222. https://doi.org/10.1016/j.sjbs.2021.01.010

Langan, R., Cowley, S., & Nguyen, C. (2019). The state of digital marketing in academia: An examination of marketing curriculum's response to digital disruption. *Journal of Marketing Education, 41*(1), 32-46. https://doi.org/10.1177/0273475318823849

Luo, X., Tong, S., Lin, Z., & Zhang, C. (2021). The impact of platform protection insurance on buyers and sellers in the sharing economy: A natural experiment. *Journal of Marketing, 85*(2), 50-69. https://doi.org/10.1177/0022242920962510

Moore, K., & Craciun, G. (2021). Fear of missing out and personality as predictors of social networking sites usage: The Instagram case. *Psychological Reports, 124*(4), 1761-1787. https://doi.org/10.1177/0033294120936184

Munshi, N. (2019). *Africa's Amazon hopeful Jumia retreats from big expansion*. https://www.ft.com/content/a4f6ee1e-182b-11ea-9ee4-11f260415385

Murwonugroho, W., & Yudarwati, G. A. (2020). Exposure to unconventional outdoor media advertising. *Pertanika Journal of Social Sciences & Humanities, 28*(4), 3407-3424. https://doi.org/10.47836/pjssh.28.4.50

Mwangi, E. W., Gachahi, M. W., & Ndung'u, C. W. (2019). The role of mass media as a socialisation agent in shaping behaviour of primary school pupils in Thika Sub-County, Kenya. *Pedagogical Research, 4*(4), em0048. https://doi.org/10.29333/pr/5950

Naeem, M. (2021). Do social media platforms develop consumer panic buying during the fear of COVID-19 pandemic. *Journal of Retailing and Consumer Services, 58*, 102226. https://doi.org/10.1016/j.jretconser.2020.102226

Nasidi, Q. Y., Ahmad, M. F. B., & Hassan, I. (2021a). Mediating role of social media in the relationship between reliability, perceived usefulness on online shopping behaviour: Building a conceptual framework. *International Journal of Academic Research in Business and Social Sciences, 2021*. https://doi.org/10.6007/IJARBSS/v11-i2/8834

Nasidi, Q. Y., bin Ahmad, M. F., Garba, M., Hassan, I., & Gamji, M. B. (2021b). Empirical investigation of factors affecting online shopping behavior. *Laplage em Revista* [*Laplage in Magazine*]*, 7*(3D), 363-377. https://doi.org/10.24115/S2446-6220202173D1728p.363-377

Nasiru, M. A., & Abubakar, F. U. (2020). The application of theory of reasoned action and theory of planned behaviour to explain intention to participate in cure among obstetric fistula women in Nigeria. *International Journal of Healthcare Sciences, 7*(2), 328-336.

Nassar, M. Y., Yau, F. S., Kok, T. K., & Yasin, I. M. (2017). Studying influencing factors on trust towards online shopping at Limkokwing University at Malaysia. *International Journal of Business Forecasting and Marketing Intelligence, 3*(4), 365-375. https://doi.org/10.1504/IJBFMI.2017.087648

Okiyi, G., Odionye, C., Emutumah, F., & Awobamise, A. (2020). Influence of advertising on Abuja women's choices of e-commerce platforms. *KIU Interdisciplinary Journal of Humanities and Social Sciences, 1*(2), 53-67.

Owan, V. J., Ekpe, M. B., & Eneje, S. (2020). Undergraduates' utilization of social networking media and sexual behaviours in higher education: A case study. *Pedagogical Research, 5*(2), em0062. https://doi.org/10.29333/pr/7940

Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Hong Thuy, T. T., & Merani, S. H. (2021). Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping. *Cogent Business & Management, 8*(1), 1869363. https://doi.org/10.1080/23311975.2020.1869363

Quesenberry, K. A. (2020). *Social media strategy: Marketing, advertising, and public relations in the consumer revolution*. Rowman & Littlefield Publishers.

Rasmussen, E. E., Punyanunt-Carter, N., LaFreniere, J. R., Norman, M. S., & Kimball, T. G. (2020). The serially mediated relationship between emerging adults' social media use and mental well-being. *Computers in Human Behavior, 102*, 206-213. https://doi.org/10.1016/j.chb.2019.08.019

Ryu, S., & Park, J. (2020). The effects of benefit-driven commitment on usage of social media for shopping and positive word-of-mouth. *Journal of Retailing and Consumer Services, 55*, 102094. https://doi.org/10.1016/j.jretconser.2020.102094

Sarstedt, M., Hair Jr, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal, 27*(3), 197-211. https://doi.org/10.1016/j.ausmj.2019.05.003

Schnauber-Stockmann, A., & Mangold, F. (2020). Day-to-day routines of media platform use in the digital age: A structuration perspective. *Communication Monographs, 87*(4), 464-483. https://doi.org/10.1080/03637751.2020.1758336

Servaes, J. (Ed.). (2014). *Technological determinism and social change: Communication in a tech-mad world*. Lexington Books.

Sharma, M. H., & Sharma, D. S. (2020). A marketing transformation from societal to digital-impact of COVID-19 on consumer's buying preferences. *IBMRD's Journal of Management & Research, 9*(2), 25-32.

Singh, M., & Matsui, Y. (2017). How long tail and trust affect online shopping behavior: An extension to UTAUT2 framework. *Pacific Asia Journal of the Association for Information Systems, 9*(4), 2. https://doi.org/10.17705/1pais.09401

Stouthuysen, K., Teunis, I., Reusen, E., & Slabbinck, H. (2018). Initial trust and intentions to buy: The effect of vendor-specific guarantees, customer reviews and the role of online shopping experience. *Electronic Commerce Research and Applications, 27*, 23-38. https://doi.org/10.1016/j.elerap.2017.11.002

Suhartanto, D., Triyuni, N., & Leo, G. (2018). Online shopping loyalty: The role of quality, trust, value, and satisfaction. *Advanced Science Letters, 24*(1), 735-738. https://doi.org/10.1166/asl.2018.11803

Suleman, D., & Zuniarti, I. (2019). Consumer decisions toward fashion product shopping in Indonesia: The effects of attitude, perception of ease of use, usefulness, and trust. *Management Dynamics in the Knowledge Economy, 7*(2), 133-146. https://doi.org/10.25019/MDKE/7.2.01

Tryon, W. W. (2018). Mediators and mechanisms. *Clinical Psychological Science, 6*(5), 619-628. https://doi.org/10.1177/2167702618765791

Wibowo, A., Chen, S.-C., Wiangin, U., Ma, Y., & Ruangkanjanases, A. (2021). Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience. *Sustainability, 13*(1), 189. https://doi.org/10.3390/su13010189

Wibowo, H. A., Hamdan, H., & Husain, M. K. (2022). Extending the theory of planned behavior with religiosity: Explaining entrepreneurial intention of employees students. *Indonesian Journal of Business and Entrepreneurship, 8*(1), 49-49. https://doi.org/10.17358/ijbe.8.1.49

Wiese, M., & Akareem, H. S. (2020). Determining perceptions, attitudes and behaviour towards social network site advertising in a three-country context. *Journal of Marketing Management, 36*(5-6), 420-455. https://doi.org/10.1080/0267257X.2020.1751242

Yim, B. H., & Byon, K. K. (2021). Validation of the sport fan model of goal-directed behavior: Comparison to theory of reasoned action, theory of planned behavior, and model of goal-directed behavior. *Journal of Global Sport Management, 6*(4), 388-408. https://doi.org/10.1080/24704067.2020.1765699

Zhao, N., & Zhou, G. (2021). COVID-19 stress and addictive social media use (SMU): Mediating role of active use and social media flow. *Frontiers in Psychiatry, 12*, 63554. https://doi.org/10.3389/fpsyt.2021.635546