
EFFECTS OF DIGITAL TECHNOLOGY ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN BENUE STATE, NIGERIA

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ABSTRACT

The adoption of digital technology has become a significant driver of SMEs performance, particularly among business owners seeking innovative ways to scale their ventures. In Benue State, the extent to which digital technology influences the performance of Small and Medium Enterprises remains an area of interest. This study investigates the effect of digital technology (cloud computing, e-commerce, social media, and digital payment platforms) on the performance of Small and Medium Enterprises in Benue State. The study had a population of 3,369 SMEs. A survey research design was employed, targeting 375 registered Small and Medium Enterprises drawn using Krejcie and Morgan's (1970) sample size table. Primary data was collected through Five-point Likert Scale structured questionnaires and analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings revealed that cloud computing does not have a statistically significant effect on performance of Small and Medium Enterprises in Benue State. However, e-commerce, social media, and digital payment platforms exhibited a significant positive effect on the performance of Small and Medium Enterprises, enhancing business accessibility, funding opportunities, and transaction efficiency. Based on these findings, it was recommended that policymakers and business support organizations should provide targeted training programmes to enhance awareness and practical applications of cloud services for business

operations, government agencies and private sector partners should facilitate better internet access, affordable digital tools, and digital literacy programs to enable more Small and Medium Enterprises to take advantage of online business opportunities, establish regulatory bodies that ensure and maintain the use of social media to reduce cybercrime. And financial institutions should work towards expanding secure and accessible digital payment systems. Additionally, entrepreneurs should be trained on the benefits and best practices of using digital transactions to improve business efficiency and customer trust. The study concludes that digital technology plays a crucial role in fostering the performance of Small and Medium Enterprises (SMEs) in Benue State

KEYWORDS: *Digital Technology, Small and Medium enterprises, Performance, Benue Stat.*

1.0 INTRODUCTION

1.1 Background to the Study

The rise in the Performance of SME globally reflects the increasing influence of digital technology in transforming business models and entrepreneurial ventures. According to Smidt and Jokonya (2023), the global shift towards digital technology has significantly shaped the business landscape, creating new opportunities for the youth to engage in innovative ventures. They noted that digital technologies are not only provide a platform for these entrepreneurs to build businesses but also disrupt traditional business models by lowering entry barriers and enhancing free access to resources and operation of businesses. This global trend has trickled down to local economies, where business managers, run their business single-handedly have adopted these technologies to expand their operations without the need for significant physical infrastructure in and around the world. Small and medium enterprise in particular, thrives on digital platforms that allow individuals to manage all aspects of their businesses through efficient technological tools, promoting entrepreneurial independence and innovation in owned commercial activities (Smidt & Jokonya, 2023; Maon et al., 2023).

Social media plays a critical role in fostering performance of SMEs by providing platforms for marketing, networking, and customer engagement thereby drawing or buying services to the door steps of consumers. Clark (2017) noted that social media platforms such as Facebook, Instagram, and Twitter have become indispensable tools for Small and Medium Enterprises to reach global audiences with minimal investment but maximize growth and development. Social media allows SMEs to showcase their goods or services, build their

brand identity, and interact directly with customers all over time. For instance, platforms like Instagram, YouTube, Linkin and X enable visual storytelling, which has proven effective for product-based businesses. Moreover, social media's networking capabilities allow entrepreneurs or managers to collaborate with peers and influencers, creating opportunities for partnerships that amplify brand visibility. As Clark (2017) explained, the interactivity and engagement fostered by social media help business managers build trust and a loyal customer base, essential for business growth.

Furthermore, the integration of cloud computing in entrepreneurship has transformed business operations worldwide, particularly benefiting entrepreneurs by providing scalable, cost-effective, and efficient digital resources. Globally, cloud computing enables start-ups to leverage computing power without the need for large capital investments, leading to increased innovation and market competitiveness (DeStefano et al., 2023). In regions such as North America and Europe, cloud-based infrastructure has facilitated business growth through enhanced accessibility to artificial intelligence (AI) tools, big data analytics, and seamless digital collaboration (Duan et al., 2023). In emerging economies, cloud computing is also playing a critical role in overcoming barriers to entry for Small and Medium Enterprises. Studies have shown that the adoption of cloud-based solutions significantly boosts productivity among small and medium enterprises (SMEs) in Asia and Latin America (Waqar et al., 2023). In Africa, cloud computing adoption remains in a developing phase due to infrastructure limitations, yet research indicates that its expansion has the potential to drive business growth, particularly in digital start-ups (Ngwenya & Mashau, 2019). The benefits of cloud computing in SMEs are evident in enabling cost-efficient operations, remote business management, and scalable market entry.

In addition, the rise of E-commerce platforms has significantly contributed to youth entrepreneurship by creating vast market opportunities through digital transactions. Globally, businesses are increasingly relying on e-commerce to reduce operational costs, improve market reach, and enhance customer engagement through AI-driven recommendations and automated services (Gaikwad et al., 2024). In Asia and Europe, live commerce platforms are revolutionizing digital entrepreneurship, enabling real-time product demonstrations and interactive customer engagement (Kim et al., 2023). Meanwhile, African entrepreneurs are embracing e-commerce solutions to bridge geographical barriers and facilitate seamless transactions.

Despite the significant role played by digital technologies, challenges such as limited payment infrastructure and internet penetration persist (Rahmah, 2022). Research indicates that e-

commerce significantly boosts youth entrepreneurship by lowering entry barriers, increasing accessibility to global markets, and improving business sustainability (Fan & Zhai, 2023). However, policy gaps and infrastructural challenges continue to hinder the full adoption of e-commerce as a driver of youth-led enterprises, particularly in developing economies.

While existing studies have extensively explored the effect of digital technology on SMEs performance, significant research gaps persist, particularly in developing economies. Globally, studies have focused on cloud computing and its role in firm productivity and innovation (DeStefano et al., 2023), but limited research has examined its specific effect on enterprises, especially in Africa. Similarly, while e-commerce has been widely studied in developed economies, research on its effectiveness for business performance and productivity in regions with weak digital infrastructure remains scarce (Rahmah, 2022). Additionally, digital payment platforms have been acknowledged as crucial for financial transactions in enterprises, yet studies failed to provide a comprehensive analysis of the challenges related to financial security, regulatory frameworks, and access disparities in Africa (Bhuiyan et al., 2024). On this note, the study examines digital technology on the performance of Small and Medium Enterprises in Benue State.

1.2 Statement of the Problem

The global performance of Small and Medium Enterprises (SMEs) varies significantly across regions, reflecting differences in economic conditions, regulatory environments, and access to resources. Globally, SMEs contribute approximately 50% of employment and 40% of GDP in emerging economies, highlighting their critical role in economic development (World Bank, 2021). However, challenges such as limited access to finance, technological gaps, and market competition hinder their growth, particularly in developing nations (OECD, 2020). At the local level, SMEs often face additional barriers, including inadequate infrastructure and bureaucratic red tape, which stifle innovation and scalability (Ayyagari et al., 2018).

Despite the availability of various digital platforms that simplify business operations, many SMEs lack the essential knowledge needed to maximize these tools. Adeosun et al (2020), pointed out that most SMEs owners rely on self-taught skills or informal learning, which may not fully equip them to manage complex business processes such as financial management, marketing, or scaling their ventures. Without access to mentorship or formal business training, many managers struggle to sustain and grow their businesses. This raises an important question: Can technology alone compensate for the absence of formal education in entrepreneurship, or is there a need for a more holistic approach that combines digital tools with traditional business knowledge?

While Chi and Wang (2022) emphasized the adaptability of SME managers, there is limited research on how they can maintain long-term sustainability in a constantly changing digital environment. Zhang and Kwon (2019) pointed out that reliance on digital platforms introduces vulnerabilities, such as sudden changes in platform policies or technological disruptions, which can destabilize businesses. Without the support of larger organizational structures, SME managers may find it difficult to build sustainable business models that can weather these rapid changes.

Despite these challenges, this research study is necessitated by the limited and inadequate access to cloud computing, social media, digital payment platforms, and e-commerce platforms for SMEs in Benue State. Although research on SME performance has advanced, significant gaps remain. Studies such as those by Smidt and Jokonya (2023) and Clark (2017) focus on the positive impacts of digital tools; however, little is known about the specific regional barriers that SMEs face, particularly in developing countries. Issues such as inadequate digital infrastructure, local economic conditions, and government policies require further exploration. Additionally, while Wong and Kemp (2017) discussed the benefits of digital payment platforms and online collaboration tools, more research is needed on potential risks, such as cyber-security threats and the over-reliance on certain platforms. Addressing these research gaps is crucial to provide a deeper understanding of the challenges and opportunities that SME managers encounter, thereby informing more effective policy interventions to support their ventures in Benue State. This study examined the effect of digital technology on the performance of small and medium size Enterprises (SMEs) in Benue State.

The specific objectives are to;

1. investigate the effect of cloud computing on the performance of Small and Medium Enterprises (SMEs) in Benue State.
2. assessed the use of computing devices on the performance of Small and Medium Enterprises (SMEs) in Benue State.
3. evaluate the effect social media on the performance of Small and Medium Enterprises (SMEs) in Benue State.
4. examined the effect of digital payment platform on the performance of Small and Medium Enterprises (SMEs) in Benue State.

Review of Related Empirical studies

Oyewobi et al. (2023) examined the influence of social media adoption on the performance of construction small and medium-sized enterprises (SMEs) in Nigeria. A sample of 543 construction SMEs owners and managers in Nigeria were surveyed using questionnaires to gather data. Partial least square structural equation modeling (PLS-SEM) was employed to assess measurement reliability and validity, as well as the hypothesized paths provided in the conceptual model that formed part of the final conclusions. The empirical finding showed that social media usage increased knowledge accessibility, reduced costs and improved customer relations and service for organizations. Overall, social media adoption was significantly and positively related to SMEs business performance. Also, the paper revealed that learning capability mediates the relationship between social media and SMEs performance. Data for the study came from only one industry and one related line of business; thus, including more companies from different sectors or industries could be more interesting.

Oyewobi et al. (2021) carried out a study on the impact of social media usage on performance of construction businesses (CBs) in Abuja, Nigeria. This study used a quantitative research approach by identifying constructs that reveal three aspects of organization's physiognomies that impact the process of espousing, implementing and using technological innovations in conducting businesses. Well-structured questionnaire was used to obtain data from 113 purposively sampled building materials' merchant operating in Dei-Dei Market, Abuja, Nigeria. This study used partial least squares structural equation modelling technique to establish the relationship among the constructs. The results of this study indicated that technology has significant relationship with social media adoption, whereas social media adoption has a very strong positive impact on organization's performance ($P < 0.001$) with respect to improved customer relations and services and enhanced information accessibility. This study has implications for CBs that wish to adopt social media to promote their businesses by presenting to them the opportunity to understand the impact of technology, environment and organizational potential in improving business performance. This study is cross-sectional in nature, and this calls for caution in interpreting the results.

Ojeleye et al. (2018) carried out a study to examine the impact of social media on entrepreneurship development among users in Zamfara State of Nigeria. The study adopts survey research design, the target population of the study comprised of the entire population of Zamfara state. According to National Bureau of Statistics in 2006, the population of Zamfara state is 3,259,846. Using Taro Yamane formula, a sample size of 399 was obtained

and simple random sampling techniques to select 399 respondents across the 14 Local Government Area. The study adopts, simple percentage, normality test, reliability test and multiple regression. The findings reveal that social media impact significantly on entrepreneurship development among users in Zamfara state of Nigeria. Though, the study concludes that YouTube does not contribute to entrepreneurship development in terms of creativity and innovation among users in state and it was recommended that social media in terms of Facebook, WhatsApp and Instagram should be encouraged among users in the state when it aids entrepreneurship development but should be discouraged when it is being used for fraudulent acts.

3.0 METHODOLOGY

3.1 Study Design

The study adopted the survey design approach, which involves observing events once from a single observation of a sample (Iheanacho and Iheanacho, 2012). The study's is correlational because it involved gathering data from various farmers in the study area over a brief period of time Iheanacho and Iheanacho (2012), (Thomas 2020), and examining the various associations between dependent and independent variables.

3.2 The Study Area

The study was conducted in Benue State. The State was created in 1976, located in the Middle Belt region of Nigeria. Benue State derives its name from River Benue, the second largest River in Nigeria. It lies approximately between latitudes 6 and 8° N and longitudes 7 and 10° E. The State shares boundaries with five other states namely, Nasarawa, to the North, Taraba to the East, Cross River to the South and East-Enugu to the South-East, and Kogi to the West. The Southern part of the State shares boundary with Republic of Cameroon. The State is also bordered on the North by 280 km River Benue, and is traversed by 202 km of River Katsina-Ala in the inland areas. The State has a total land area of about 30,955 square kilometers and administratively it is divided into 23 Local Government Areas. Benue State has an estimated population of 6,219,244, and is made up of 913,159 farm families (2020). Benue state is blessed with fertile soil for agricultural activities and as such has her slogan as the food basket of the nation, the inhabitants engage in the production and marketing of Cereal crops like Maize, Sorghum, Guinea Corn, Rice, Beans, Soybeans, Groundnut, Beniseed, Melon, and so on, unlike tubers like Yam, Cassava, potatoes and so on, including Vegetables and other cash crops.

3.3 Population of the Study/ Sample Size/ and Sampling Technique

The propose study population comprise of all registered SMEs that operate in Benue State. According to SMEDAN (2021) there are 3369 registered SMEs in Benue state Nigeria. A sample of 341 was drawn from the targeted population using Krejcie and Morgan's (1970) sample size table with a 95% level of confidence and a 3.5% margin of error. However, the sample size was increased by 10% to cover emergent issues of unreturned and wrongly filled questionnaires (Israel, 2013), which can be explained as follows:

$$\frac{10}{100} \times \frac{341}{1} = 34.1$$

$$341+34.1 = 375$$

3.4 Model Specification

4.0 RESULTS AND DISCUSSION

Table 9. Coefficient of Determination.

	R Square	R Square Adjusted
Performance	0.905	0.901

Source: *SmartPLS Output, 2025*

Table 4.9 shows the study assesses explanatory power of the model using coefficient of determination (R^2). With R^2 value of 0.905, digital technology explains 90.5% of the variation in performance of SMEs. The remaining percentage could be explained by other variables not included in the study. The R^2 ranges from 0 to 1, with higher values indicating a greater explanatory power. As a guideline, the R^2 values of 0.75, 0.50, and 0.25 can be considered substantial, moderate, and weak (Henseler et al., 2009; Hair et al., 2011). The R^2 values of 0.463, indicates a weak explanatory power of the exogenous variables. The R^2 value is also significant at 5% level.

Table 4.2 path coefficients.

Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Cloud Computing Performance ->	0.019	0.018	0.041	0.458	0.647
Digital Payment Platform Performance ->	0.071	0.075	0.035	2.020	0.044
E-Commerce -> Performance	0.093	0.095	0.038	2.414	0.016
Social media -> Performance	0.834	0.830	0.048	17.532	0.000

DISCUSSION OF FINDINGS

Base on the result that investigated the impact of cloud computing, e-commerce, social media, and digital payment platforms on the performance of Small and Medium Enterprises (SMEs) in Benue State. The findings from the statistical analysis revealed varying degrees of influence across these digital tools. The path coefficient for cloud computing was 0.091, with a T statistic of 1.484 and a P value of 0.628, indicating no statistically significant effect. This suggests that while cloud computing provides technological advancements, it may not be a primary driver of performance of Small and Medium Enterprises (SMEs) in Benue State. Prior research has shown mixed results regarding the role of cloud computing in entrepreneurship. For instance, Zhang (2022) highlighted that cloud computing contributes to the improvement of entrepreneurship education through big data analysis. However, Ngwenya and Mashau (2019) found that despite cloud computing's potential benefits, many entrepreneurs lack the necessary skills and infrastructure to fully utilize it.

Moreover, E-commerce displayed a strong path coefficient of 0.093, with a T statistic of 2.351 and a P value of 0.019, indicating a significant positive effect on performance of Small and Medium Enterprises (SMEs) in Benue State. This aligns with the study by, Fadzil et al. (2023) who found that entrepreneurial traits such as risk-taking and innovation are critical for e-commerce startups, further supporting its role in business expansion. Additionally, Moses (2023) highlighted that digital transformation, particularly through e-commerce, is essential for small businesses in African economies.

Furthermore, the study also found a highly significant effect of social media on performance of Small and Medium Enterprises (SMEs) in Benue State. This supports the notion that social media marketing plays a crucial role in business growth. Eldridge et al. (2019) found that social media significantly enhances performance of Small and Medium Enterprises (SMEs). Furthermore, Hadi et al. (2023) demonstrated that social media is a viable tool, particularly in times of economic uncertainty, making it essential for entrepreneurs in emerging markets.

Lastly, digital payment platforms had a significant positive effect on performance of Small and Medium Enterprises (SMEs) in Benue State. This finding aligns with research by Putra et al. (2023), which highlights how digital payment systems enhance entrepreneurial transactions by offering seamless financial technology solutions. Similarly, Ernawati et al. (2023) found that digital payment platforms increase financial inclusion and transaction efficiency, thereby facilitating business growth.

4.3 CONCLUSION AND RECOMMENDATIONS

4.3 Conclusion

In conclusion, digital technology plays a crucial role in fostering the performance of Small and Medium Enterprises (SMEs) in Benue State. While cloud computing did not significantly impact performance of small and medium size Enterprises (SMEs), e-commerce, social media, and digital payment platforms were found to be essential drivers of business success. These technologies enhance operational efficiency, provide alternative financing, and facilitate financial transactions, enabling entrepreneurs to thrive in a competitive business environment. Policymakers and stakeholders should focus on enhancing digital literacy and accessibility to these technologies to further empower Small and Medium Enterprises.

Additionally, the research emphasizes the need for supportive policies that encourage digital technology adoption, including improved internet infrastructure, access to digital financial services, and training programs tailored for businesses. Through fostering an enabling environment, youth entrepreneurs can leverage digital tools effectively to scale their businesses, contribute to economic growth, and reduce unemployment in Benue State. Future research should explore other digital innovations and factors influencing technology adoption among small businesses.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are provided:

1. **Cloud Computing:** Since cloud computing was found to have no significant impact on performance of Small and Medium Enterprises size (SMEs), policymakers and business support organizations should provide targeted training programs to enhance awareness and practical applications of cloud services for business operations.
2. **E-Commerce:** Given the significant impact of e-commerce on performance of Small and Medium Enterprises (SMEs), government agencies and private sector partnership should facilitate better internet access, affordable digital tools, and digital literacy programs to enable more Small and Medium Enterprises to take advantage of online business opportunities.
3. **Social media:** Since social media was found to play a crucial role in performance of Small and Medium Enterprises (SMEs), government should establish regulatory bodies that ensure and maintain the use of social media to reduce cybercrime.
4. **Digital Payment Platforms:** With digital payment platforms significantly contributing to business sustainability, financial institutions should work towards expanding secure and

accessible digital payment systems. Additionally, entrepreneurs should be trained on the benefits and best practices of using digital transactions to improve business efficiency and customer trust.

REFERENCES

1. Abdel-Fattah, A., & Khaled, M. (2021). The influence of digital marketing channels on consumer purchasing decisions: A study of university students in Jordan. *Journal of Digital Marketing Research*, 9(2), 45–57.
2. Abdullah, A. (2017). E-commerce web platform development. *E-commerce Journal*, 1(1), 1-10.
3. Abdullah, A., Basir, N., Abdullah, S., & Harun, W. N. (2024). Customer satisfaction level in online selling buying on e-commerce platform. *Advanced International Journal of Business, Entrepreneurship and SMEs*, 6(2), 22-30.
<https://doi.org/10.35631/aijbes.620022>
4. Abdullahi, M., Ojeleye, A., & Abdullahi, M. (2022). Digital marketing and customer trust: An analysis of consumer buying behaviour in selected banks in Zaria, Nigeria. *International Journal of Banking and Marketing*, 7(3), 32–46.
5. Acheampong, P., Zhiwen, L., Antwi, H. A., Otoo, A. A., Mensah, W. G., & Sarpong, P. B. (2017). Hybridizing an extended technology readiness index with technology acceptance model (TAM) to predict E-payment adoption in Ghana. *American Journal of Multidisciplinary Research*, 5(2), 172-184.
6. Acs, Z. J., Estrin, S., & Mickiewicz, T. (2018). Institutional determinants of entrepreneurship development: A comparative study of Central and Eastern Europe. *Journal of Business Venturing*, 33(4), 528-544. DOI: 10.1016/j.jbusvent.2018.03.003
7. Adeosun, O. T., Ogunlesi, I., & Akinyemi, S. (2020). The role of digital entrepreneurship education in youth empowerment and economic development. *International Journal of Business and Economic Development*, 8(2), 41-52.
<https://doi.org/10.24052/IJBER/20200802>
8. Afolabi, A., & Ojo, J. (2022). The adoption of cloud computing among youth entrepreneurs in South Africa: A qualitative case study. *South African Journal of Business Management*, 53(1), 1-10. <https://doi.org/10.4102/sajbm.v53i1.2453>
9. Aguilera, R. V., Desender, K. A., Bednar, M. K., & Lee, J. H. (2019). Connecting the dots: Bringing external corporate governance into the corporate governance puzzle. *The Academy of Management Annals*, 9(1), 483-573.

10. Agyemang, G., & Damoah, J. (2020). Cloud computing and the growth of youth entrepreneurship in Ghana. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 6(2), 123-134. <https://doi.org/10.1177/2516366720901234>
11. Ahmad, S. Z., Abu Bakar, A. R., & Ahmad, N. (2019). Social media adoption and its impact on firm performance: the case of the UAE. *International Journal of Entrepreneurial Behavior & Research*, 25(1), 84-111.
12. Ainin, S., Parveen, F., Moghavvemi, S., Jaafar, N. I., & Shuib, N. L. M. (2015). Factors influencing the use of social media by SMEs and its performance outcomes. *Industrial Management & Data Systems*, 115, 570-588. <https://doi.org/10.1108/IMDS-07-2014-0205>.
13. Alam, M. S., & Islam, M. A. (2020). Digital payment platforms and entrepreneurial growth in Bangladesh. *Journal of Entrepreneurship and Innovation*, 11(2), 1-12.
14. Alam, S., Ali, M., & Ahsan, M. (2020). Digital technology adoption in SMEs: A systematic review. *Journal of Business Research*, 113, 245-255. DOI: 10.1016/j.jbusres.2020.02.033
15. Alanmi, M., & Alharthi, S. (2023). The impact of digital marketing on consumer buying behaviour in Saudi Arabia: Brand popularity as a mediator. *Journal of Business and Management Review*, 4(6), 412-438.
16. Alayis, M. M. H., Abdelwahed, N. A. A., & Atteya, N. (2018). Impact of social networking sites' use on entrepreneurial intention among undergraduate business students: The case of Saudi Arabia. *International Journal of Entrepreneurship*, 22(4), 1-18.
17. Aldrich, H. E., & Yang, T. (2019). The role of digital technology in entrepreneurial growth: Evidence from China. *Journal of Business Research*, 98, 160-168. <https://doi.org/10.1016/j.jbusres.2018.01.034>
18. Alfaro, J. B., Alas, J. L. S. D., & Dimla, P. R. (2021). Development of e-commerce platform for agribusiness company. *1st International Conference in Information and Computing Research (iCORE)*, 6-10. <https://doi.org/10.1109/iCORE54267.2021.00020>
19. Al-Hadban, N., Hadeel, A. G., Al-Hassoun, T., & Hamdi, R. (2014). The effectiveness of facebook as a marketing tool (Saudi Arabia Case Study). *International Journal of Management & Information Technology*, 10, 1815-1827. <https://doi.org/10.24297/ijmit.v10i2.637>.
20. Alharthi, A., Krotov, V., & Bowman, M. (2017). Addressing barriers to big data. *Business Horizons*, 60(3), 285-292.

21. Alharthi, M., & Almalki, A. (2021). The role of cloud computing in fostering youth entrepreneurship in Saudi Arabia. *International Journal of Business and Management Studies*, 13(1), 45-60. <https://doi.org/10.1007/s12053-021-09876-5>
22. Aloulou, W. (2018). The impact of digital technologies on entrepreneurship development in Tunisia. *Journal of Entrepreneurship Education*, 21(2), 1-12.
23. Al-Shammari, M., Al-Badi, A., & Al-Said, R. (2020). Digital technology adoption and organisational performance. *Journal of Enterprise Information Management*, 33(4), 771-787. DOI: 10.1108/JEIM-04-2020-0111
24. 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.
25. Anderson, C. R., M. A., & T. H. (2006). The role of social media in shaping entrepreneurial behaviours. *Journal of Business Research*, 59(5), 477-485. <https://doi.org/10.1016/j.jbusres.2005.12.008>
26. Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287-293.
27. Aral, S., & Walker, D. (2014). Tie strength, embeddedness, and social influence: A large-scale networked experiment. *Management Science*, 60(6), 1352–1370.
28. Aremu, A. O., Oyewole, O. A., & Ogunnaike, O. O. (2020). E-commerce adoption among SMEs in Nigeria. *Journal of Small Business Management*, 58(3), 541–563. doi: 10.1080/00472778.2020.1715337
29. Arjang, A., Utami, E. Y., & Redjeki, F. (2024). Utilization of social media and online platforms in improving customer engagement of fashion SMEs in Bali. *West Science Business and Management*, 2(01), 29-36.
30. Armstrong, G., Kotler, P., & He, Z. (2019). *Marketing: An introduction* (13th ed.). Pearson.
31. Asongu, S. A., & Nnanna, M. (2020). Digital payment systems, innovation and financial development in Africa. *Journal of Economic Studies*, 47(6), 1335-1354. doi: 10.1108/JES-02-2020-0055
32. Asur, S., & Huberman, B. A. (2010). Predicting the future with social media. *Proceedings of the 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology*, 492-499. <https://doi.org/10.1109/WI-IAT.2010.161>

33. Awa, H. O., Ukoha, O. O., & Eke, I. S. (2020). Digital technology adoption and organizational innovation. *Journal of Business and Economic Management*, 19(3), 347-362.
34. Azam, M., Khan, M. A., & Hammad, W. (2019). Internet penetration and entrepreneurial activity. *Journal of Entrepreneurship and Innovation*, 10(2), 1–12.
35. Baden-Fuller, C., Giudici, A., & Morgan, M. S. (2017). Business models and value. *Academy of Management Proceedings*, 2017(1), 11635.
36. Bae, T. J., Qian, S., & Yoo, Y. (2019). The effects of digital entrepreneurship on economic growth: A systematic review. *Journal of Business Research*, 101, 545-555. DOI: 10.1016/j.jbusres.2019.02.033
37. Balakrishnan, J., Dwivedi, Y. K., & Ismagilova, E. (2014). The role of social media in promoting products and brands. *International Journal of Marketing Studies*, 6(5), 1-10. <https://doi.org/10.5539/ijms.v6n5p1>
38. Bansal, P., & DesJardine, M. R. (2019). Business sustainability: It is about time. *Strategic Organization*, 12(1), 70-78.