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Assessing Digital Innovation and Sustainable Entrepreneurship among Business Owners and Managers in Southwest Nigeria

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Abstract

This study investigates the relationship between digital innovation and sustainable entrepreneurial performance among business owners and managers in Southwest Nigeria. The problem statement arises from the imperative to understand how digital innovation influences regional businesses' long-term success and viability. The study aims to assess the impact of digital innovation strategies, including technology adoption, skills development, and access to infrastructure, on sustainable entrepreneurial performance. Methodologically, a questionnaire administered via Google Forms was utilized to collect data from a purposive sample of 238 business owners and managers. The analysis employed measurement and structural models to examine the relationships between digital innovation variables and entrepreneurial outcomes. The findings reveal significant positive relationships between digital readiness initiatives, fostering a culture of innovation, and leveraging strategic partnerships to drive sustainable growth and competitiveness. Managerial recommendations include prioritizing investments in digital infrastructure, implementing supportive regulatory frameworks, and fostering continuous learning and innovation within organizations.

Keywords: Digital Innovation, Entrepreneurial performance, Sustainability, Technology, MSME

1. Introduction

Assessing digital innovation and sustainable entrepreneurship among business owners and managers is crucial in understanding the dynamics of modern business landscapes. In recent years, the integration of digital technologies has revolutionized traditional business models, presenting both opportunities and challenges for entrepreneurs worldwide. Studies have highlighted the significance of digital innovation in enhancing entrepreneurship success (Abubakre et al., 2022). However, achieving sustainability alongside digital innovation remains a pressing issue, particularly in developing economies like Nigeria.

The prevailing issues in this domain encompass various dimensions, including access to technology, digital skills, and regulatory frameworks. In many countries, particularly in Africa, limited access to affordable and reliable internet infrastructure hampers the adoption of digital tools among entrepreneurs (Omoyele et al., 2022). Moreover, inadequate digital literacy skills among business owners and managers impede their ability to leverage digital innovation effectively (Shamaki et al., 2022). Additionally, the absence of supportive policies and regulatory frameworks often constrains the growth of sustainable digital entrepreneurship ecosystems (Ufua et al., 2021).

In Nigeria, these challenges are exacerbated by factors such as infrastructural deficiencies, economic instability, and a volatile regulatory environment. Despite the country's growing digital landscape, the digital divide remains wide, with rural areas significantly lagging behind urban centers in terms of internet penetration and technological infrastructure (Ibidunni et al., 2022). Moreover, the high cost of data and electricity limits the ability of small and medium enterprises (SMEs) to adopt digital technologies for sustainable entrepreneurship (Oyedele & Oyero, 2022).

For instance, a study by Ajor and Alikor (2020) highlighted the importance of an innovative mindset in enhancing organizational sustainability among SMEs in Rivers State, Nigeria. However, they found that limited access to funding and technical support hinders the implementation of innovative strategies. Similarly, Eniola et al. (2022) emphasized the pivotal role of digital business strategies in improving efficiency but noted that many SMEs lack the necessary IT capabilities to harness the full potential of digital tools.

The problem statement revolves around the challenges hindering the effective integration of digital innovation and sustainable entrepreneurship among business owners and managers, particularly in Nigeria. Despite the transformative potential of digital technologies in enhancing entrepreneurial success (Abubakre et al., 2022), various factors impede the achievement of sustainable outcomes. These include limited access to technology and digital skills (Shamaki et al., 2022), inadequate regulatory frameworks (Ufua et al., 2021), and infrastructural deficiencies (Ibidunni et al., 2022). Furthermore, gender disparities exacerbate the situation, with female-owned enterprises facing additional hurdles in accessing finance, digital literacy, and overcoming cultural barriers (Shamaki et al., 2022). Addressing these multifaceted challenges is imperative for fostering a conducive environment for sustainable digital entrepreneurship in Nigeria and unlocking its potential for economic growth and development.

The specific objectives are:

- i. to assess the influence of digital technology adoption on sustainable entrepreneurial performance of business owners and managers
- ii. to analyse the role of digital skills and training on sustainable entrepreneurial performance of business owners and managers
- iii. to ascertain the impact of access to digital infrastructure on sustainable entrepreneurial performance of business owners and managers:

2. Literature Review

2.1 Digital Innovation (DI)

Digital innovation encompasses the creation, adoption, and utilization of novel digital technologies, processes, and business models to drive transformative change and enhance organizational performance in today's dynamic business environment. Scholars have defined digital innovation from various perspectives, emphasizing its multifaceted nature and far-reaching implications. Abubakre et al. (2022) characterize digital innovation as the successful integration of information technology culture and personal innovativeness in information technology to achieve entrepreneurial success. Similarly, Eniola et al. (2022) conceptualize digital innovation as strategic business initiatives driven by digital business strategies and enabled by the firm's IT capabilities. Moreover, Omoyele et al. (2022) highlight the importance of digital entrepreneurship and sustainable business models in fostering digital innovation among SMEs in Nigeria. Overall, digital innovation represents a dynamic process of leveraging digital technologies to create value, foster growth, and drive sustainable entrepreneurship in today's digital economy.

2.2 Dimensions of Digital Innovation

The dimensions of digital innovation encompass the adoption of digital technologies, the development of digital skills and training, and access to digital infrastructure, all of which are pivotal for driving transformative change and fostering sustainable entrepreneurship in today's digital economy. These dimensions collectively shape the ability of individuals and organizations to leverage digital tools and platforms effectively, thereby enhancing productivity, competitiveness, and economic growth.

(i) Digital Technology Adoption:

Digital technology adoption refers to the process through which individuals, organizations, and societies integrate and utilize digital tools and platforms in various aspects of their operations and daily lives. Scholars have extensively studied this phenomenon, emphasizing its importance in driving innovation, enhancing efficiency, and fostering competitive advantage. Shamaki et al. (2022) underscore the significance of evaluating the influence of digital technology adoption on the performance of enterprises, particularly in the context of femaleowned businesses in Nigeria. They argue that understanding the factors influencing technology adoption is crucial for addressing barriers and maximizing the benefits of digitalization. Similarly, Abubakre et al. (2022) highlight the impact of information technology culture and personal innovativeness in information technology on digital entrepreneurship success, emphasizing the pivotal role of individual and organizational factors in shaping technology adoption behaviors. Furthermore, Pizzi et al. (2021) discuss the implications of fintech adoption for sustainable business models, emphasizing the need for businesses to adapt to evolving technological trends to remain competitive in the digital era.

(ii) Digital Skills and Training:

Digital skills and training encompass the knowledge, competencies, and capabilities required to effectively utilize digital technologies and tools in various professional and personal contexts. Scholars have underscored the importance of digital skills development in enhancing workforce productivity, employability, and overall digital literacy. Omoyele et al. (2022) emphasize the role of digital entrepreneurship and sustainable business models in promoting digital skills among SMEs in Lagos State, Nigeria. They argue that investing in training programs and skill development initiatives is essential for empowering entrepreneurs to leverage digital technologies for business growth and sustainability. Additionally, Eniola et al. (2022) highlight the intervening role of the firm's IT capabilities in enhancing digital business strategy and efficiency, underscoring the importance of ongoing training and upskilling efforts to ensure organizational readiness for digital transformation. Furthermore, Ufua et al. (2021) discuss the conceptual framing of digital transformation for attaining Sustainable Development Goals in Nigeria, emphasizing the need for comprehensive training programs to bridge the digital skills gap and foster inclusive development.

(iii) Access to Digital Infrastructure:

Access to digital infrastructure refers to the availability and affordability of essential technological resources, such as internet connectivity, hardware devices, and software applications, that enable individuals and organizations to participate in the digital economy. Scholars have highlighted the critical role of digital infrastructure in facilitating economic development, social inclusion, and technological innovation. Omoyele et al. (2022) discuss the challenges faced by SMEs in Nigeria concerning access to digital infrastructure, particularly in rural areas with limited connectivity and technological resources. They argue that addressing infrastructural deficiencies is essential for bridging the digital divide potential and unlocking the of digital entrepreneurship. Similarly, Lawal et al. (2016) emphasize the importance of critical success factors for sustainable entrepreneurship in SMEs in Nigeria, highlighting the need for supportive infrastructure to enable businesses to thrive in the digital age. Moreover, Eniola et al. (2022) discuss the role of innovation capability in enhancing sustainability in SMEs from an emerging economy perspective, emphasizing the interplay between infrastructure development and innovation readiness in driving sustainable growth and competitiveness.

2.3 Sustainable Entrepreneurial Performance

Sustainability in Micro, Small and Medium Enterprises (MSMEs) is a multifaceted concept that encompasses economic, social, and environmental Scholars have dimensions. underscored the importance of integrating sustainability practices into MSMEs' business models to enhance long-term viability and competitiveness. Adekunle, Ehimen, and Muhammed (2019) argue that sustainability in MSMEs involves adopting practices that minimize environmental impact, optimize resource utilization, and promote social responsibility. For instance, Nigerian MSMEs in the renewable energy sector have embraced sustainable business models that prioritize clean energy production, waste reduction, and community engagement, thereby contributing to both environmental protection and social development (Adekunle et al., 2019). This highlights the potential of sustainability-driven strategies to foster innovation, value creation, and stakeholder engagement in MSMEs.

Moreover, scholars emphasize the role of sustainability in enhancing MSMEs' resilience to external shocks and market uncertainties. Islam, Wahab, and Latiff (2022) contend that sustainable business practices enable SMEs to mitigate risks, build reputational capital, and access new market opportunities. For example, MSMEs in the food and beverage industry have adopted sustainable sourcing practices to ensure the quality and safety of their products, thereby enhancing consumer trust and market competitiveness (Islam et al., 2022). This underscores the strategic imperative for SMEs to embed sustainability principles into their operations, supply chains, and value propositions to create enduring value for both business and society. Overall, sustainability-driven approaches offer MSMEs a pathway towards sustainable growth, innovation, and long-term success in today's complex and interconnected business landscape.

2.4 Theoretical Synthesis

Two salient theories pertinent to assessing digital sustainable innovation and entrepreneurial performance of business owners and managers are the Technology Acceptance Model (TAM) and the Resource-Based View (RBV) theory. The Technology Acceptance Model, proposed by Davis in 1989, posits that users' acceptance and adoption of technology are determined by perceived usefulness and perceived ease of use. In the context of digital innovation among business owners and managers, TAM suggests that the successful integration of digital tools and platforms hinges on individuals' perceptions of how these technologies will improve their efficiency and effectiveness in performing tasks (Davis, 1989). Conversely, the Resource-Based View theory, proposed by Wernerfelt in 1984 and further developed by Barney in 1991, argues that a firm's sustainable competitive advantage stems from its unique bundle of resources and capabilities. Applied to the context of digital innovation, RBV theory suggests that business owners and managers must strategically leverage their organization's digital resources, such as technological infrastructure and digital skills, to achieve sustainable entrepreneurial performance (Wernerfelt, 1984; Barney, 1991).

For business managers and owners, understanding and applying these theories have significant implications for navigating the complexities of digital innovation and sustainable entrepreneurship. By embracing the Technology Acceptance Model, managers can focus on fostering a culture of acceptance and enthusiasm towards digital technologies among employees, thereby enhancing their willingness to adopt and utilize innovative digital tools and platforms (Davis, 1989). Moreover, leveraging the insights from the Resource-Based View theory, managers can strategically allocate resources towards building and enhancing their organization's digital capabilities, thereby positioning themselves for long-term competitiveness and sustainability in the digital marketplace (Barney, 1991). Ultimately, by integrating these theories into their strategic decisionmaking processes, business managers and owners can effectively harness the transformative potential of digital innovation to drive entrepreneurial success and achieve sustainable growth in today's dynamic business landscape.

3. Methods and Materials

For this study, business managers and owners were chosen as the primary participants due to their integral roles in decision-making and implementation processes within their respective organizations. An explanatory research design was selected to delve deeper into the relationships between digital sustainable entrepreneurial innovation and performance among business owners and managers in Southwest, Nigeria. This design allows for the exploration of causal relationships and the clarification of underlying mechanisms, thus providing a more comprehensive understanding of the phenomenon (Creswell & Creswell, 2017). A sample population of 238 business managers and owners was identified, with inclusion criteria specifying individuals actively involved in managerial decision-making processes within their organizations.

Purposive sampling technique was employed to select participants who best represent the target population based on their expertise and experience in managing businesses in Southwest Nigeria. This sampling method was chosen to ensure that the sample comprises individuals with diverse perspectives and insights relevant to the research topic (Etikan et al., 2016). The research instrument, a questionnaire, was developed based on existing literature and validated scales adapted from previous studies. The questionnaire was administered through Google Forms, allowing for efficient data collection and management while ensuring anonymity and convenience for participants.

The sources of the research instrument were cited, indicating the adaptation or adoption of validated scales from reputable studies in the field. For this study, validated scales were adapted from existing literature to measure key constructs. The scales used included the Technology Acceptance Model (TAM) scale to assess participants' perceptions of digital technology adoption, the Digital Skills and Training scale to measure participants' level of proficiency and training in digital tools and platforms, and the Access to Digital Infrastructure scale to evaluate participants' access to essential technological resources. These scales were chosen based on their reliability and validity in previous research contexts, ensuring the robustness of the measurement instrument for this study.

Content validity was established through expert reviews to ensure the validity of the research instrument, while reliability was assessed using Cronbach's alpha coefficient to measure internal consistency (Hair et al., 2019). Structural and measurement models were employed as data analysis methods to examine the relationships between digital innovation and sustainable entrepreneurial performance. Structural equation modeling (SEM) facilitated the exploration of causal pathways and direct and indirect effects. At the same time, measurement models assessed the validity and reliability of the constructs under investigation (Hair et al., 2019). Overall, this methodology ensures a rigorous and systematic approach to investigating the research objectives while minimizing biases and enhancing the trustworthiness of the findings.

4. Data Analysis and Discussions

The data presented in this study were collected from business owners and managers who play direct and active roles in their enterprises' day-to-day operations and decision-making processes. These individuals were selected based on their expertise and experience in managing businesses across various industries and sectors in Southwest Nigeria. The response rate, indicating the percentage of participants who completed the questionnaire, is summarized in Table 1. This response rate provides insight into the level of engagement and participation among the targeted population. reflecting the reliability and representativeness of the collected data.

Table 1: Analysis of Overall Response Rate of Shared Questionnaire

| Questionnaire | Number of Respondents | Percentage [%] |
|---------------|-----------------------|----------------|
| Returned | 207 | 87 |
| Not returned | 31 | 13 |
| Total | 238 | 100 |

Table 1 analyses the overall response rate of the shared questionnaire among business owners and managers in Southwest Nigeria. Out of the 238 questionnaires distributed, 207 were returned, representing a response rate of 87%. Conversely, 31 questionnaires were not returned, accounting for 13% of the total. This high response rate suggests a significant level of engagement and interest among the targeted population in participating in the study. The robust response rate enhances the reliability and validity of the collected data, as it indicates a representative sample of the population under investigation. Furthermore, the high participation rate underscores the importance and relevance of the research topic, indicating a keen interest among business owners and managers in exploring the dynamics of digital innovation and sustainable entrepreneurship. These findings have implications for business managers and owners, highlighting the importance of actively engaging with research endeavors to advance knowledge and practices within their respective industries. Additionally, the high response rate enhances the credibility of the study's findings, allowing for more accurate and meaningful insights into the relationships between digital innovation and sustainable entrepreneurial performance.

4.1 Data Analysis and Interpretation

The data collected for this research is structured into two sections to provide a comprehensive understanding of the study's objectives. The first section comprises demographic statistics, which offer insights into the characteristics of the respondents. This includes their geographic location, highest level of education attained, years of experience in their respective industries, and professional affiliations (as depicted in Table 1). These demographic variables serve as important contextual factors that may influence business owners' and managers' perceptions and behaviors regarding digital innovation and sustainable entrepreneurship. Understanding these demographics allows for a nuanced analysis of how different population segments perceive and engage with digital technologies in their entrepreneurial endeavors.

The second section of the data focuses on the use of inferential statistics, specifically employing Structural Equation Modeling (SEM) with Partial Least Squares (PLS) analysis (as illustrated in Table 2). This analytical approach enables examining complex relationships between variables and constructs, thereby elucidating the underlying mechanisms driving digital innovation and its impact on sustainable entrepreneurial performance. By leveraging SEM-PLS analysis, the study aims to uncover the causal pathways and direct and indirect effects of digital innovation on entrepreneurial outcomes, providing valuable insights for theory development and practical implications for business managers and owners alike.

| SN | | | Percentage |
|----|---------------------------|---------------------------|------------|
| 1 | Gender | Male | 54 |
| | | Female | 46 |
| | | Total | 100% |
| 2 | Status | Business Owners | 18 |
| | | Business Managers | 32 |
| | | Business Supervisors | 50 |
| | | Total | 100% |
| 3 | Highest Academic | Diploma | 21 |
| | Qualification | College/Bachelors' degree | 49 |
| | | Masters | 15 |
| | | PHD | 5 |
| | | Total | 100% |
| 4 | Working Experience | 1-5years | 11 |
| | | 6 – 10years | 51 |
| | | 11- 15years | 30 |
| | | 16 years and above | 8 |
| | | Total | 100% |
| 5 | Professional Affiliations | None | 20 |
| | | 1-3 | 69 |
| | | 4.6 | 11 |
| | | Total | 100% |

 Table 2: SECTION A: Demographic Statistics [N= 207]

Table 2 provides a detailed breakdown of the demographic statistics of the respondents, shedding light on key characteristics that may influence their perceptions and behaviors regarding digital innovation and sustainable entrepreneurship. The data reveal that most respondents are male, comprising 54% of the sample, while females represent 46%. Additionally, the analysis indicates that the respondents consist of a diverse mix of individuals in their professional roles, with 18% identified as business owners, 32% as business managers, and 50% as business supervisors. Moreover, the educational background of the respondents varies, with 49% holding college or bachelor's degrees, 21% possessing diplomas, 15% having master's degrees, and 5% holding PHDs. Furthermore, the distribution of respondents based on their years of working experience shows that 51% have 6-10 years of experience, followed by 30% with 11-15 years, 11% with 1-5 years, and 8% with 16 years and above. Lastly, regarding professional affiliations, 69% of respondents have 1-3 affiliations, while 20% have none, and 11% have 4-6 affiliations. These demographic insights have implications for business managers and owners as they highlight the diverse backgrounds and experiences of the respondents, underscoring the need for tailored approaches to implementing digital innovation strategies within their organizations. By understanding the demographic profiles of their workforce, managers can effectively design training programs and initiatives to enhance digital literacy and skills among employees, thereby fostering a culture of innovation and adaptability. Additionally, recognizing the varying levels of experience and professional affiliations among respondents enables managers to tailor communication strategies and implementation plans to address different workforce segments' specific needs and preferences, ultimately maximizing the success and sustainability of digital innovation initiatives within their organizations.

4.2 Test of Hypotheses

The study aimed to assess the impact of digital innovation on sustainable entrepreneurial performance, utilizing a combination of structural and measurement models. For this investigation, a distinctive methodology known as SMART_Partial Least Squares (PLS) version 4 was employed, chosen for its efficacy in handling complex models given the intricate interplay between variables. Particularly advantageous was PLS's ability to yield reliable results even with relatively small sample sizes, which can be challenging to obtain in company-specific studies like this. PLS's focus on predictive ability made it particularly suitable for understanding how different digital innovation strategies or approaches influenced **SEM Path Diagram (Version 4)** the sustainable entrepreneurial performance of MSMEs. The findings, illustrated in Table 3 and Figure 1, elucidated the relationships between digital innovation strategies and sustainable entrepreneurial performance, with path coefficients and the structural model further delineated in Figures 1 and 2, respectively.



Figure 1: Path Diagram and T-values



Figure 2: Path Diagram and P-values

| SN | Variables | Co- efficient | R- Square | T value | Sig. | Decision |
|----|---|------------------|--------------|---------|-------|-------------|
| 1 | Digital Technology Adoption [DTA] → Sustainable Entrepreneurial Performance | 0.288 | | 7.451 | 0.049 | Significant |
| 2 | Digital Skills & Training [DST] → Sustainable Entrepreneurial Performance | 0.099 | 0.827 | 3.233 | 0.001 | Significant |
| 3 | Access to Digital Infrastructure [ADI] → Sustainable Entrepreneurial Performance | 0.627 | | 13.381 | 0.000 | Significant |
| 4 | Digitalinnovation[DI]→SustainableEntrepreneurialPerformance | 0.518 | | 10.764 | 0.000 | Significant |

 Table 3: Path Coefficients of Digital Innovation and Sustainable Entrepreneurial Performance

Table 3 presents the path coefficients of digital innovation variables, namely Digital Technology Adoption (DTA), Digital Skills & Training (DST), Access to Digital Infrastructure (ADI), and Digital Innovation (DI), on Sustainable Entrepreneurial Performance. The coefficient values indicate the strength and direction of the relationships between these variables and sustainable entrepreneurial performance. Starting with Digital Technology Adoption (DTA), the coefficient of 0.288 suggests a positive and significant impact on sustainable

entrepreneurial performance, with an R-square value of 0.827, indicating that DTA explains 82.7% of the variance in sustainable entrepreneurial performance. This result resonates with the findings of previous studies that emphasize the pivotal role of technology adoption in driving entrepreneurial success (Abubakre et al., 2022). Similarly, the coefficient for Digital Skills and training (DST) is 0.099, signifying a positive and significant relationship with sustainable entrepreneurial performance, supported by a T-value of 3.233 and a low p-value of 0.001. This finding aligns with the submission of Eniola et al. (2022), who argue that investing in digital skills development is essential for enhancing organizational readiness for digital transformation.

Moving on to Access to Digital Infrastructure (ADI), the coefficient of 0.627 indicates a strong positive relationship with sustainable entrepreneurial performance, supported by a high R-value of 13.381 and a p-value of 0.000, indicating statistical significance. This finding corroborates the works of Omoyele et al. (2022), who highlight the critical role of digital infrastructure in facilitating entrepreneurial activities and fostering economic development. Additionally, the coefficient for Digital Innovation (DI) is 0.518, indicating a significant positive impact on sustainable entrepreneurial performance, with a high T-value of 10.764 and a p-value of 0.000. This result aligns with the findings of Bruce et al. (2023), who emphasize the importance of digital innovation in driving sustainable growth and competitiveness among SMEs. Overall, the study concludes that digital innovation variables, including digital technology adoption, skills development, access to infrastructure, and innovative practices, play pivotal roles in enhancing sustainable entrepreneurial performance in Southwest Nigeria.

The implications of these findings for business managers and owners are profound. The positive coefficients and significant relationships underscore the importance of prioritizing investments in digital technology adoption, skills development, and infrastructure enhancement to drive sustainable entrepreneurial performance. Managers should allocate resources toward training programs, technological upgrades, and infrastructure development initiatives to enhance the digital readiness of their organizations (Ufua et al., 2021). Secondly, the high R-square values indicate that the digital innovation variables explain a substantial proportion of the variance in sustainable entrepreneurial performance, highlighting their relevance and impact. Therefore, managers should leverage digital tools and practices to improve operational efficiency, customer engagement, and competitive advantage (Ajibola, 2020). Overall, the study provides actionable insights for business managers and owners to navigate the digital landscape effectively and achieve sustainable growth and success in today's dynamic business environment.

5. Conclusion

The findings of this study underscore the significant impact of digital innovation on sustainable entrepreneurial performance among businesses in Southwest Nigeria. Through the analysis of path coefficients, it is evident that digital technology adoption, skills development, access to infrastructure, and innovative practices play crucial roles in driving sustainable growth and competitiveness. These findings emphasize the importance of investing in digital readiness initiatives and fostering a culture of innovation within organizations. Business managers and owners are encouraged to prioritize digital transformation efforts, leveraging technological advancements to enhance operational efficiency, customer satisfaction, and overall business performance. By embracing digital innovation strategies and approaches, businesses can adapt to the evolving marketplace dynamics, seize new opportunities, and achieve long-term sustainability in today's digital economy.

6. Recommendations and Policy Implications

Based on the findings of this study, several recommendations and policy implications can be proposed to support the advancement of digital innovation and sustainable entrepreneurship in Southwest Nigeria. Firstly, policymakers and government agencies should prioritize investments in infrastructure, including broadband digital connectivity, technological resources, and digital skills development programs. By improving access to digital infrastructure, especially in rural and underserved areas, policymakers can facilitate greater participation in the digital economy, thereby fostering inclusive growth and development (Eniola et al., 2022). Additionally, policymakers should implement supportive regulatory frameworks and incentive programs to encourage businesses to adopt digital technologies and innovate. This may include tax incentives for investments in digitalization, grants for technology adoption initiatives, and regulatory reforms to promote entrepreneurship and innovation (Ajor & Alikor, 2020).

Furthermore, business managers and owners are encouraged to embrace a culture of continuous learning and innovation within their organizations. Investing in employee training and development programs focused on digital skills acquisition and technology adoption is crucial for enhancing organizational readiness for digital transformation (Amadi et al., 2021). Moreover, businesses should foster strategic partnerships and collaborations with technology providers, industry experts, and academic institutions to stay abreast of emerging trends and best practices in digital innovation. By leveraging external expertise and resources, businesses can accelerate their digital transformation journey and gain a competitive edge in the marketplace (Shamaki et al., 2022). collaborative approach А involving policymakers, businesses, and other stakeholders is essential for creating an enabling environment conducive to digital innovation and sustainable entrepreneurship, driving economic growth and prosperity in Southwest Nigeria.

7. Contributions to Knowledge and Suggestions for Further Studies

This study contributes to the existing body of knowledge by providing empirical evidence on the relationships between digital innovation and sustainable entrepreneurial performance among businesses in Southwest Nigeria. By employing a rigorous methodology and analyzing path coefficients, the study elucidates the significant impact of digital technology adoption, skills development, access to infrastructure, and innovative practices on business success. The findings highlight the importance of prioritizing investments in digital readiness initiatives and fostering a culture of innovation within organizations. For further studies, researchers are encouraged to explore the moderating effects of contextual factors, such as industry characteristics, organizational culture, and regulatory environments, on the relationship between digital innovation and performance. entrepreneurial Additionally, longitudinal studies tracking the long-term effects of digitalization initiatives on business outcomes would provide valuable insights into the sustainability and scalability of digital innovation strategies.

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