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TANGIBLE AND INTANGIBLE RESOURCES ON BUSINESS PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMEs) IN DEVELOPING ECONOMIES: MEDIATING ROLE OF SUSTAINABILITY MANAGEMENT

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A B S T R A C T

The rising consciousness of effective and efficient organisational resource utilization for facilitating enhanced business performance cannot be ignored since the advent of sustainable development goals and the recent COVID-19 pandemic. This study investigated the relationship between tangible and intangible resources on business performance in the context of SMEs in developing economies such as Nigeria with the mediating role of sustainability management. The purpose of this study is to find out how sustainability management can optimize organisational resources for business performance among SMEs in Nigeria. The study used a survey method based on quantitative research with a sample of 400 respondents selected using purposive and convenient sampling procedures. The data was collected through a questionnaire and analysed through descriptive and inferential statistics; in essence, the hypotheses were tested using Regression analysis. The outcomes from this study indicated that tangible resources have a significant effect of 82.4% on the business performance of SMEs in Nigeria, also, there is a significant effect of intangible resources of 83.0% on the business performance of SMEs in Nigeria. Furthermore, the study revealed that sustainability management has a significant mediating role in enhancing tangible and intangible resources by 84.5% for the business performance of SMEs in Nigeria. The study recommended among other things that business owners, leaders, executives and management of SMEs in Nigeria should articulate their organisational resources through the distinction of tangible and intangible resources to align with overall strategy.

1. INTRODUCTION

One of the major drivers of developing economies such as Nigeria, are small and medium enterprises (SMEs) by contributing to gross domestic product with their operations, activities and performances. It has been observed by the Central Bank of Nigeria (2019) that the economic activities in Nigeria are primarily propelled by manufacturing-oriented, highly import-dependent, consumption-driven and undiversified. As an emerging

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and developing economy, Nigeria has a wide variety of economic activities dependent on manufacturing and production driven by SMEs amounting to up to 97% of economic activities and businesses (Adebisi & Bakare, 2019; Olisah, 2023; Oluseye & Olarinre, 2023).

The dominance of small and medium-sized businesses in all sectors of Nigeria's economy—manufacturing, construction, agriculture, services, commerce and industry, trade, etc.—makes the success of these companies crucial to many countries economic development (Agwu, 2018: Bayraktar & Algan, 2019). These SMEs face tremendous challenges and competition in the global and Nigerian business environment, therefore requiring effective application of strategies and strategic management in their operations (Adebisi & Bakare, 2019; Lobonțiu, 2022; Amoah et al., 2022).

Sustainability management has been brought to the forefront of how contemporary business organizations operate and perform. The after-effects of the events from the global pandemic have impacted business organizations both large and small, causing the need to comprehend sustainability management practices in a more holistic way (Aladejebi, 2020; Huang et al.,2023). It has been argued that organizational resources serve as the background for which contemporary business organizations can adequately drive their operations for superior performance (Thompson & Strickland, 2019; Pan et al., 2023). However, this research points to the exploration of how tangible and intangible resources can be amplified through sustainability management practices to enhance SME's performance.

Thus, investigating organisational resources within the context of sustainability management for enhanced business performance is becoming more pertinent for contemporary businesses whether large or small, as it is currently being considered an area of interest for researchers, scholars and business professionals (Ahmed & Othman, 2017; Mwai et al., 2018; Elbanna et al., 2020). Managers and owners of SMEs around the world, as well as in Nigeria have been known to be confronted with several obstacles and challenges due to issues such as scarcity of resources, unavailability and inadequacy of effective usage of resources and capital, as well as inappropriate of basic and technical infrastructures (Agwu, 2018; Jawed & Siddiqui, 2019). Therefore, it is germane and crucial to investigate organizational resources and business performance in a continuum. Organizational resources are expressed as stocks, assets, elements, and inventories owned and utilised by organizations to carry out their activities and operations, they can be in the form of human, financial, physical, material, technological, informational resources (Kamasak, 2017; Kazmi, 2018; Mwangi & Waithaka, 2023)

In light of the above, this research focuses on investigating the extent to which tangible and intangible resources in SMEs as requisite for enhanced performance considering the mediating role of sustainability management. The purpose of this research is to evaluate the understanding, usage and how to maximize tangible and intangible organizational resources in SMEs that can influence their business performance with emphasis on sustainability practices. Barney (2001) explained that resource-based view theory is a conceptual framework in strategic management that asserts that organizational success is linked to the adequate acquisition, development, and deployment of resources. The argument on which of the organizational resources drives the most performance has been an ongoing one (Kamasak, 2017; Jawed & Siddiqui, 2019; Jancenelle, 2021).

Due to the rapid changes and complexity of today's business climate, it has become pivotal for SMEs to consider tangible and intangible resources to make adjustments and enhance their sustainability strategies and operations to keep up and even improve their business results. Thus, the application of sustainable management practices in contemporary business focuses on harmonizing organisational efforts in preserving resources for societal and environmental benefits as a key to economic prosperity in emerging economies, thus, tangible and intangible resources need to be considered in the light of maintaining sustainability (Baumgartner & Rauter, 2017; Sumanasiri, 2020; Gonibeed et al., 2023).

Studies have been done on organisational resources (tangible and intangible) to organisational performance constructs in different industries and countries (De-Guimarães et al 2016; Ahmed & Othman, 2017; Kamasak, 2017; Mwai et al., 2018; Othman et al., 2018; Jawed & Siddiqui, 2019; Elbanna & Abdel-Maksoud, 2020; Jancenelle, 2021; Kraja, 2022; Mwangi & Waithaka., 2023; Pan et al., 2023), however, there appear to be limited studies as regarding tangible and intangible resources and the mediating role of sustainability management as it affects the business performance of SMEs. Therefore, by examining the impact of both tangible and intangible resources on the business performance of SMEs in Nigeria, as well as the mediating function of sustainability management, this study aims to close the gap in the literature.

Through an analysis of a subset of SMEs in Lagos state, this study seeks to understand how the interaction between tangible and intangible resources, as mediated by sustainability management, impacts the business performance of SMEs in Nigeria. The specific objectives of the study include to:

1.1 Research Questions

i. What is the effect of tangible resources on the business performance of SMEs in Nigeria?
ii. To what extent do intangible resources affect the business performance of SMEs in Nigeria?
iii. What is the relationship between tangible and intangible resources through sustainability management on the business performance of SMEs in Nigeria?

2. LITERATURE REVIEW

2.1 Tangible Resources and Business Performance

In Jiangsu Province, China, Pan et al. (2023) investigated how an organization's resources and competencies affected the organisational performance of large-scale industrial enterprises. Using a survey that was created using a closed-ended questionnaire, the study used a quantitative research approach. The sample size was 100 respondents based on the purposive sampling technique. The results demonstrated that financial resources, knowledge and information technology, and human resources were the main drivers of organisational success in China's large-scale manufacturing sector. The study backs up the claims made by the Resource-Based View (RBV) and emphasises that resource configurations needed by large enterprises must be founded on proper planning and execution.

Mwangi and Waithaka (2023) looked at the performance of road-building companies in Kenya's Nyeri Region as well as their physical organisational resources. The methodology employed in this research was quantitative based on primary and secondary data from 58 companies using management reports. Using a semi-structured questionnaire and a mixed research technique, the study also employed a sample of 116 respondents. In terms of regression analysis, the study employed both descriptive and inferential statistics. According to the study's findings, road construction companies' performance and intangible resources are significantly and favourably correlated. It was established that road construction companies have been known to enjoy abundant endowment of intangible resources and require the cultivation of strategic management thinking for efficient utilisation.

H_0: Tangible resources have no significant effect on the business performance of SMEs in Nigeria.

2.2 Intangible Resources and Business Performance

The impact of intangible organisational resources on organisational success in Kenyan non-governmental organisations (NGOs) was examined by Mwai et al. (2018). Positivism served as the guiding concept for the explanatory and descriptive research approach that was used. A sample of 374 project managers was chosen for the study using a straightforward random selection method. Data was gathered using a questionnaire and the survey method. Following the processing of the data using descriptive and inferential statistics, hypotheses were tested using regression analysis. According to the research findings, the degree of efficiency in the organisational process is significantly impacted by financial resources, including fundraising initiatives and the allocation of cash among different strategic goals and activities. However, process efficiency is negatively impacted by employee empowerment. It is proposed and advised that resource management and strategies be used to increase the efficacy of an NGO's organisational performance.

The relationship between organisational resources and organisational performance in Pakistan's banking industry was also examined by Ahmed and Othman (2017). The study employed a survey strategy based on distributing questionnaires to 100 respondents as part of a quantitative research methodology. The data analysed resources used in the organisation through organisational innovation as a mediator. The findings showed that the notion of organisational resources is significantly attached to organisational innovation and performance within Pakistan's banking industry.

AlMuhayfith and Shaiti (2020) looked into enterprise resource planning (ERP) as an intangible asset in business performance based on innovation as a mediating factor in SMEs in Saudi Arabia. The study used an exploratory research method to identify the factors contributing to the effective and successful use of an ERP in organisations based on a sample of 120 respondents. The study used analysis focused on structural equation modelling (SEM). The outcome of this study depicted that management support, user fulfilment, and training significantly impact ERP utilisation which emphasises increased SMEs' performance.

H_0: There is no significant effect of intangible resources on the business performance of SMEs in Nigeria.

2.3 Sustainability Management as Mediating Role

Organisational resources have come to a point where the need to infuse sustainability management into resource deployment and utilization is essential. Sumanasiri (2020) argued that organisations can use sustainability as an imperative tool in organisational resource management by operating in a manner that meets their short-term operational needs without compromising their ability and the ability of others to meet future needs. This can be done through recycling, reusing and reconfiguring resources across organisational processes Sumanasiri 2020; Rahman et al., 2022). In essence, sustainability management integrated with resource management is about organisations' commitment to responsible deployment and utilization of human resources, financial resources, technological resources, material resources, and knowledge resources (Rahman et al., 2022; Chen et al., 2023). This can be in the form of equal employee rights, ethical approaches to customers and suppliers, conservation of natural and environmental assets and responsibility to society.

As far back as 2019, McKinsey and Company (2019) reported in a survey carried out among 1,946 company executives across diverse sectors, industries and regions, that sustainability management is enacted and related to the organisational strategies used in navigating environmental preservation, societal development and effective corporate governance. Accordingly, the role that sustainability management plays as a mediator between tangible and intangible resources can be articulated as an organisational strategy for businesses that generate long-term value for stakeholders and shareholders by managing the challenges and seizing opportunities brought about by social, environmental, and economic development (Sumanasiri 2020; Huang et al., 2023). SMEs are observed to begin to develop interests and integration of sustainability of their resources for enhanced business performance, especially in areas of strong stakeholder relationships, technological innovations and eco-friendly operational systems. This has resulted in better competitive positioning, market reputation and business survival (Sumanasiri 2020; Martins et al., 2022).

From the perspective of the Albanian scenario, Kraja's (2022) study examines the effects of both tangible and intangible assets on the success of SMEs. Both qualitative and quantitative methodologies were combined to form the methodology. Using a random sampling of 1120 people from all around Albania, the SMEs examined in this work were chosen. Based on the respondents who indicated interest in filling out the questionnaire, an empirical analysis was done. Utilizing a questionnaire with multiple items on the seven-point Likert scale, data for the study was gathered. As to the report, SME success can be enhanced by leveraging organisational resources according to their classifications.

In addition, Jancenelle (2021) evaluated the composition of tangible and intangible resource composition and the enterprise's positive outcomes. The study concentrated on organisational resources, including both material and intangible resources, as key factors in business performance. To demonstrate the positive linear impact of both tangible and intangible resources on business performance, the study employed quantitative research. The study uses complexity theory to imply that resource composition, is measured by relative intangibility. That is a business's proportion of intangible resources to the total of both kinds of resources may have an impact on corporate success. The findings suggested that productivity, a crucial measure of business performance, and relative intangibility have a U-shaped connection.

In comparison, Jawed and Siddiqui (2019) used data from Pakistan's business sectors to examine how changes in a firm's performance are influenced by its competencies and its tangible and intangible resources. Using market share, sales turnover, and profitability as benchmarks, the research sought to assess the impact of tangible, intangible, and competencies on company performance. A cross-sectional survey method was employed in the study, with data gathered from 202 business firms in Pakistan. The study's conclusions included strong evidence that these competencies may be used to forecast a company's performance. On the other hand, the performance connection revealed that tangible and intangible resources had a negative and minor role.

H_0: Sustainability management has no significant mediating role in enhancing tangible and intangible resources for the business performance of SMEs in Nigeria.

2.4 Conceptual Model of the Study

Based on a key review of literature considered in this research from strategic management as regarding organisational resources in terms of tangible and intangible as the independent variables which are mediated based on sustainability management while business performance is considered as the dependent variable, the study model was developed from adaptation from previous studies of De-Guimarães et al (2016), Kawasaki (2017), Ahmed and Othman (2017), Jawed and Siddiqui (2019), Jancenelle (2021), Kraja (2022), Martins et al. (2022) as well as Pan et al (2023) as shown in the figure 1.

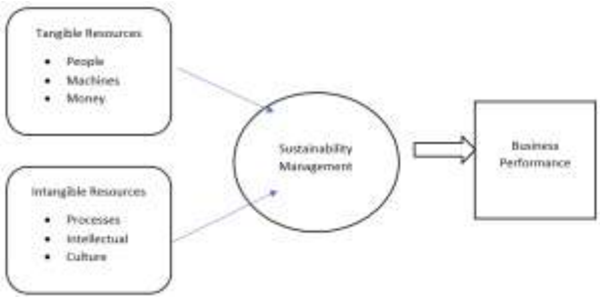

Figure 1. The study model was developed from adaptation from previous studies

Source: Researchers' Construct (2024) adapted from Kamasak (2017) Kraja (2022) and Pan et al. (2023)

3. METHODOLOGY

For every research project to be successful, the methodology is essential as well as to be well formulated and implemented. This research followed a positivist research philosophy focusing on a deductive research approach to test the relationship between resource-based theory and sustainability theory. Saunders et al. (2019) expatiated the appropriateness of positivism in business research as it allows for objective and scientific observations of a phenomenon.

This study employed a quantitative research approach based on a survey research design to examine the research issue. In essence, employing a survey research strategy that looks at the study variables cross-sectionally.

The population of this study consisted of fully registered SMEs in Nigeria according to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2020) survey of 2020 which amounts to 670,447. As a result of the large number of SMEs, a sample was calculated using Taro Yamane's (1967) formula. The sample size used for the study was 400 respondents made up of SME owners, managers and employees. This study used purposive sampling techniques and convenience sampling techniques to select members that make up the sample from the study population. The sampling techniques were adopted because the nature of the population makes it difficult to utilize probability sampling techniques (Creswell & Creswell, 2018). The survey method used in this study was presented by primary data collection from a representative sample of selected SMEs in Lagos State. The use of structured questionnaires is justified by the instrument's simplicity in data processing and its assistance in directing participants correctly while responding to research questions.

Since most survey questions seek to gauge respondents' perspectives on the study variables at play, a 5-point Likert scale is used. The scale ranges from strongly agree, agree, undecided, disagree, and strongly disagree. There are two parts to the questionnaire (A & B). Section A focuses on the participants' demographic background, such as gender, age, marital status, educational qualification, and so on, while Section B is the major body of the questionnaire and is designed to gather information on key research variables.

Saunders et al. (2019) explained validity as the degree to which the research instrument and items are true, authentic, effective and useable for gathering research. This research used content and construct validity to ensure the research instrument and its items can give authentic insights about the investigated phenomenon.

Regarding reliability, which represents the overall consistency of the research variables and measures. This study adapted measures of tangible and intangible resources as described by Kamasak (2017) and Pan et al (2023) with Cronbach Alpha values of above 0.70. In addition, balance scorecard variables proposed by Kaplan (1992) as cited in Conțu (2020) were used in the study to measure the business performance of SMEs. The mediating factors of sustainability management were identified and proxied from practices relating to (environmental, social and governance) ESG framework. The data is analysed using both descriptive and inferential statistical techniques. While regression analysis is used to test hypotheses and use SPSS 20.0 (Statistical Package for the Social Sciences) to analyse the degree of cause-and-effect relationship between the study's variables, descriptive analysis uses frequency distribution, simple percentages, means, and standard deviations.

4. DATA ANALYSIS AND INTERPRETATION

Four hundred (400) copies of the questionnaire were distributed to owners, managers, and employees of SMEs in specific areas of Lagos state; of these, three hundred and forty-eight (348) usable copies of the questionnaire were sorted, edited, and coded for analysis. The research instrument was edited to ensure that only properly filled instruments were used for the data analysis; those that were not properly filled were removed. This section includes a detailed analysis, presentation, and interpretation of the data collected using a structured questionnaire. The study examined how sustainability management can mediate tangible and intangible resources for improved business performance of SMEs in specific areas of Lagos state. This gives a response rate of 87% which was found acceptable for this kind of study.

The major findings of this study were as follows; firstly, female respondents are more than male respondents with the age bracket of the participants between 41 and 50 years. It was observed that the participants have the highest educational qualification of B.Sc. / BA/ HND degree thereby presenting adequate knowledge to give information about the study. Also, the majority of the participants involved in this study have owned, managed and worked in respective SMEs between 6 to 10 years in the production/manufacturing sector with annual revenue ranging from N5million and N50million. This infers that the participants involved in this study are relevant, appropriate and suitable to give opinions about SME operations and activities in Nigeria based on their level of education, experience in SME operations and level of revenue generated.

4.1 Research Hypotheses One

H_0: Tangible resources have no significant effect on the business performance of SMEs in Nigeria.

: **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.*908[a]	.824	.806	1.281

a. Predictors: (Constant), tangible resources

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.689	1	3.689	5.055	0.03
	Residual	311.556	347	0.729		
	Total	315.245	348			

a. Dependent business performance

b. Predictors: (Constant): tangible resources

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	F	Sig.
1	(Constant)	2.890	0.203	0.234	14.265	0.00
	Tangible resources	1.268	0.056	0.1061	4.771	0.03

a. Dependent Variable: business performance

Figure 2. a) Model Summary b) ANOVA c) Coefficients

The analysis employed in this study indicates that business performance as the dependent variable is affected by tangible resources as an independent variable by the R-square value (0.824). The analysis of the variation table points to the calculated probability value of 0.03 which is less than the stated level of significance (0.05). This confers to the fact leading to the rejection of the null hypothesis and acceptance of the alternative one, which is stated as follows; tangible resources have a significant effect on the business performance of SMEs in Nigeria (Figure 2).

4.2 Research Hypothesis Two

H_0: There is no significant effect of intangible resources on the business performance of SMEs in Nigeria.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.911ᵃ	.830	.811	1.012

a. Predictors: (Constant), intangible resources

ANOVAᵃ

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.189	1	2.189	5.821	0.01
	Residual	300.126	34	0.375		
	Total	303.205	348			

a. Dependent Variable: intangible resources
b. Predictors: (Constant) intangible resource

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	F	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.090	0.203	0.444	14.005	0.00
	Intangible resources	1.110	0.052	1.011	1.271	0.01

a. Dependent Variable: Business performance

Figure 3. a) Model Summary b) ANOVA c) Coefficients

The analysis employed in this study indicates that business performance as the dependent variable is affected by tangible resources as an independent variable by the R-square value (0.830). The analysis of the variation table points to the calculated probability value of 0.01 which is less than the stated level of significance (0.05). This confers the rejection of the null hypothesis two and acceptance of alternative two, which is stated as follows; there is a significant effect of intangible resources on the business performance of SMEs in Nigeria (Figure 3).

4.3 Research Hypothesis Three

$H_{0:}$ Sustainability management has no significant mediating role in enhancing tangible and intangible resources for the business performance of SMEs in Nigeria.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.918ᵃ	.845	.816	1.166

a. Predictors: (Constant), tangible and intangible resources

ANOVAᵃ

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.689	1	3.689	5.2712	0.02
	Residual	319.556		0.700		
	Total	333.245	800			

a. Dependent Variable: operational performance
b. Predictors: (Constant), tangible and intangible resources

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	F	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.999	0.133	0.234	14.335	0.000
	Tangible and intangible resources	1.120	0.046	0.078	1.529	0.02

a. Dependent Variable: operational performance.

Figure 4. a) Model Summary b) ANOVA c) Coefficients

The tables above present the regression analysis indicative of the combination of tangible and intangible resources which are mediated by the extent of sustainability management based on the effect of operational performance. The R-square value of 0.845 points to the cause and effect of tangible and intangible resources through sustainability management on business performance. The analysis of the variation table, indicated the calculated probability value at 0.02 which is less than the level of significance (0.05). To this end, it was indicated that the rejection of the null hypothesis three and the acceptance of alternative hypothesis three. Thus, pointing out that sustainability management has a significant mediating role in enhancing tangible and intangible resources for the business performance of SMEs in Nigeria (Figure 4).

5. DISCUSSION OF FINDINGS

In light of the data analysis, all the null hypotheses tested were identified to be rejected based on the probability values calculated being less than the level of significance (5%). The outcome from the analysis leads to findings relating to answering the research questions, which are discussed in line with prior research and studies as shown below:

Firstly, the findings revealed that efficient use of tangible resources has a significant effect on the business performance of SMEs in Nigeria. The respondents indicated that most SMEs do not have tangible resources in the form of buildings and facilities to carry out operations as well as not having the necessary financial resources and funding for running SMEs operations. The respondents however indicated that SMEs relied on technological resources in carrying out operations. The findings agreed with the research of Elbanna and Abdel-Maksoud (2020) concerning the use of tangible resources of an organisation to pursue desired goals and objectives. The findings give inferences that among small and large businesses, tangible resources need to be identified, capitalised and developed to suit organisational strategy as described by Jawed and Siddiqui (2019). In comparison, the study findings disagreed with the assertion of Othman et al (2018) based on the fact that tangible resources are a source for driving performance, especially in larger companies to smaller companies.

Furthermore, the findings discovered that there is a significant effect of intangible resources on the business performance of SMEs in Nigeria. The majority of the respondents showed that SMEs have processes and systems that allow for efficient operations, as well as the fact that intangible resources in SMEs are represented in the way of doing things in terms of work culture contributes to business performance. The findings supported the works of Pan et al (2023) based on the argument of the resource-based view theory emphasising intangible resources as most relevant to organisational activities. The intangible resources are internal capabilities that are configured across organisational functions of SMEs and serve as the main source of performance-driven activities as mentioned in the previous studies of Ahmed and Othman (2017), Mwai et al (2018) as well as Kraja (2022).

Finally, the findings pointed out that sustainability management holds a significant moderating role for tangible and intangible resource relationships for driving the operational performance of SMEs. The majority of the respondents asserted that SMEs combine their resources in a balanced manner that contributes to business performance. The mediating role of sustainability management in SMEs allows them to leverage tangible and intangible resources. The findings support discussions from previous research was done by Jancenelle (2021) as well as Annamalah et al (2023) in terms of the need for contemporary organisations to continually embrace sustainable exploration and exploitation of resources for efficiency and effectiveness in business operations and performance.

6. CONCLUSION AND RECOMMENDATIONS

The incorporation of sustainability management into organisational resource management is an area for evolving strategic management, especially for SMEs that seek to navigate the VUCA business environment. This study concludes there is a significant effect of tangible and intangible resources on the business performance of SMEs based on sustainability management practices in Nigeria using a study of selected SMEs in Lagos state. The study established that through resource recycling, reusing and reconfiguration SMEs can explore and exploit tangible and intangible resources for sustainable competitive advantage. In essence, SMEs can facilitate sustainability management by setting fair and equitable human resources practices, innovative applications to material and technological resources, conservation of natural resources as well as accountability of operations to society and community.

This study contributed to the knowledge and practice of organisational resources and business performance by infusing the need for sustainability management. This means that in a bid to attain business performance that is sustainable, the tangible and intangible resources can be integrated into environmental, social and governance frameworks.

It was established that though SMEs in Nigeria are observed not to have adequate tangible resources in terms of buildings and facilities for enhancing their operations, there exists competent people and technology infrastructure to supplement such insufficiencies. Also, it was evident and significant in SMEs in terms of processes, systems and innovation culture. This gives the implication that intangible resources serve as capabilities that SMEs in Nigeria use in driving desired performance. Finally, it was found that SMEs in Nigeria can perform better in terms of operational efficiency through sustainability management of tangible and intangible resource allocation, development, deployment and utilisation.

The following propositions for recommendations are made concerning the findings and conclusions:

i. Business owners, leaders, executives and management of SMEs in Nigeria should articulate their organisational resources through the distinction of tangible and intangible resources to align with the overall strategy.
ii. In addition, the tangible and intangible resources of SMEs should be consistently evaluated periodically for sustainability practices to ascertain their relevance in contemporary business realities.
iii. It is recommended that SMEs leverage tangible and intangible resources that are built on sustainability management in a manner that drives sustainable competitive advantage, for instance using digital transformation of processes to reduce operational inefficiencies.
iv. SMEs should consider outsourcing areas of their organisations in which there are no evident capabilities in terms of tangible and intangible resources.
v. Finally, it is recommended that government and policymakers should provide financial and infrastructural support for SMEs in Nigeria that can assist in their utilisation of tangible and intangible resources sustainably, these can be through local content projects, grants, developmental funds, and technology investments.

This study was limited to investigation of the mediating role of sustainability management in tangible and intangible resources based on the effect on the business performance of SMEs in Nigeria using a study of selected SMEs in Lagos state, hence further studies can focus on how the various aspects tangible and intangible resources can be integrated with sustainability practices and measured against other business performance indicators such as profitability and market share of SMEs in Nigeria.

Further study can be done on other strategic management areas that can affect the business performance of SMEs and larger organisations. The study employed a quantitative research approach through the survey method, thus further studies can consider qualitative research approach through focus groups and interviews or through mixed research techniques.

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