# Management capabilities and sustainable operational excellence of Micro, Small and Medium Enterprises (MMSMEs) in Nigeria

Joseph. A. DADA,<sup>1,5</sup> Adeyemi B. ADEBUSOYE,<sup>2</sup> Grace O. DADA,<sup>3</sup> Dan E. UFUA,<sup>4,5</sup> and Oluwatoyin D. ADESANYA<sup>4,5</sup>

<sup>1</sup>Department of Business Administration, <sup>2</sup>Department of Entrepreneurship, College of Management Sciences <sup>3</sup>Department of Accounting, College of Management Sciences Joseph Ayo Babalola University Ikeji Arakeji, Nigeria. <sup>4</sup>Department of Business Management, <sup>5</sup> Centre for Economic Policy and Development Research (CEPDeR). Covenant University Ota, Nigeria.

Corresponding Email: jadada@jabu.edu.ng

#### Abstract

The relationship between management capability and the sustainable operational excellence of selected micro, small, and medium-sized businesses (MSMEs) was investigated in this study. The study used a descriptive survey research design, guided by system theory. The study's sample size of 344 was established by applying the Taro Yamane formula (1967). 288 of the 344 copies of the questionnaire that were given to department heads and middle-level officers of MSMEs were legitimately retrieved and used as a sample frame for data analysis. To test the hypotheses, both descriptive and inferential statistics were used. Statistical Packages for Social Sciences 2.0 was used to analyze the data. According to the data, the majority of MSMEs possess sufficient managerial skills, which have been leveraged to improve sustainable operational excellence. It was also found that a strong predictor of sustainable operational excellence is management capability. The results of this study thus suggest that in order to improve the MSMEs' management capacity in agro-allied and services in Ogun State, Nigeria, training is required. The ability to critically examine the role that managerial competencies—experience in administration, information and communication, and technology—play in the sustainable operational excellence of MSMEs' businesses was made possible by this study.

**Keywords:** Management capabilities, Nigerian MSMEs, Sustainable operational excellence

#### 1. Introduction

and Medium-Sized Micro. Small, Enterprises (MSMEs) have been crucial in reducing poverty, empowering the private creating jobs, and fostering sector, socioeconomic growth in both developed and developing nations. Since MSMEs employ roughly 80% of all Nigerian workers in a gainful capacity, they are sometimes referred to as the engine room for economic development (Aremu & Adeyemi, 2011; Ufua, Olujobi, Ogbari, Dada, & Edafe, 2020). Because of these economic indicators, companies that want to be relevant in the market and are aware of the dynamic, inventive, and creative environment in which they operate will make sure that their objectives are maximized. The reason for this is that all facets of organizational life necessitate tactics that are defined by managing data and technological expertise regarding limited resources for business success (Agwu, 2018; Olanrewaju & George, 2015).

Administrative managers, according to Mescon, Albert, and Khedouri (2004), are in charge of organizing, leading, and

directing the activities of organizational members while utilizing all administrative resources available to meet organizational objectives. But there is a cost associated with every resource. The ability of MSME owners and managers to understand the consequences of using resources and to plan for administrative management in order to accomplish the objectives of business entrepreneurship is therefore one of the implicit costs of managerial capability. Consequently, management in all sizes of organizations faced is with administrative duty of leading, organizing, and involving people in order to accomplish the pre-established objective. Because the business environment faces difficulties with acculturation, globalization, technological advancements, there has been a paradigm shift in the administrative systems of organisations including MSME sector.

Information is a tool that management at all levels—strategic. tactical. operational—uses to outmaneuver rivals in the same business. Similar to this, commercial organizations use information systems to further their administrative aims (Adeleke, Ogundele & Oyenuga, 2014). The capacity to manage effectively is becoming crucial for MSMEs' owners and managers to get a competitive edge. One significant idea that affects both operational excellence and long-term sustainability is survival instinct. Therefore, encouraging the development of plans, goals, rules, practices, guidelines, policies, programs would help managers and owners of MSMEs manage their businesses to optimize capacity utilization in the face of an evolving organizational environment.

As a result, the Nigerian government has made numerous attempts to raise awareness among entrepreneurs in the MSMEs subsector through a number of programs and policies that were started in the past with the intention of enhancing MSMEs. The majority of MSMEs' owners and managers in Nigeria still lack the necessary

management skills to sustain the long-term operational efficiency of the country's MSMEs sub-sector, despite the government's intervention (Eniola & Ektebang, 2015; Iria-Anenih, 2023; & Okeke, Ifebi, & Ekesiobi, 2023; Olayinka, Oyebola, Ogunjemilua, & Olaposi, 2023).

#### **Statement of the Problem**

There is a relationship between managerial capabilities, managerial performance and organizational performance. However, this research could not trace the previous studies on managerial capabilities, and sustainable operational efficency of MSMEs in the context of organizational size, ownership in the developing countries. The introduction of managerial concepts. particularly in Nigeria, to African countries has presented challenges due to cultural differences in environmental socioeconomic conditions compared to western nations where these approaches originated. The Nigerian government, as well as the governments of most developing nations, are reportedly quite concerned about the focus placed on the role that managerial capabilities play in improving the performance outcome of MSMEs. operational excellence is Sustainable viewed as a collection of procedures for creating a common understanding of what is to be accomplished as well as for managing and developing organizational capabilities, which involve the effective organization of people, information, and other resources to achieve organizational objectives (Adeleke, et al., 2014; Wayne & Montealegre, 2016).

Scholars studying business administration and strategic management have come to conclude that the main problem facing 21st-century organizations is management capability. This is because, in order for an organization to adopt a strategy, it must first assess its environment in order to avoid making strategic mistakes that could endanger its existence as a corporate entity (Agwu, 2018; Onwudiwe, Agwamba, Ugwuegbu & Opara, 2018). Researchers

like Olubiyi, Egwakhe, and Egwuonwu (2019) in Nigeria; Agwu (2018); Kiyabo and Isaga (2019) in Tanzania; Okeke (2019) in Malaysia; and Lear (2012) in South Africa have all emphasized that MSME owners and managers have a responsibility to clearly display and explain their organizations' mission statements so that everyone can understand them because they are more of transactional than transformational in the running of their firms.

Since it is necessary to achieve the goals and objectives of MSME firms, providing strong management capabilities plays a significant role for owners and managers of MSMEs. Accordingly, this study aims to identify the management capabilities that owners and managers of MSMEs consider useful in providing managerial insight in their business organizations and how those capabilities can be encouraged in enhancing sustainable operational excellence MSMEs firms in Ogun State, Nigeria. Practitioners and scholars of strategic management have noted that an emphasis on the short term and a disregard for core competencies in managing people and information in the face of changing circumstances and a turbulent environment are likely to result in organizational failure. The objectives of this paper to investigate the nexus of demographic variables with management capability and sustainable operational excellence of MSMEs and to examine the relationship management capability and sustainable operational excellence of MSMEs. In view of the above, the paper postulates the following hypotheses:

Ho<sub>1</sub>: Demographic variables do not have significant nexus with management capability and sustainable operational excellence of MSMEs.

Ho<sub>2</sub>: Management capability does not have significant relationship on sustainable operational excellence of MSMEs

#### 2. Literature Review

## 2.1 Concept of Management Capabilities

Having management skills guarantees that daily operations are performed with organization and a keen eye for detail. Owners and managers of MSMEs should be abreast of advancements in the company and office environment due to the volatility and changes in environmental issues. In an effort to bring value to the organization, there is a tendency for management capacities to question the efficacy of established protocols (Bessen, 2016). The main factors influencing managerial competencies have been found by studies like Anwar, Banjarnahor, Adam and Kurniawan (2018), Adikeibe, et al. (2023), Ngene and Muhammad (2023), Ogungbesan, et al (2023). These include exposure to technology, information and communication skills, and administrative experience.

Stated differently, administrative experience deals with the planning and management of people and resources to achieve stated objectives, and this is applicable to both public and private organizations (Ogundele, 2010). The tools of administration are strategies, objectives, policies, standards, methods, procedures and programmes. Information resource management, according to Anwar et al. (2018), enables MSME owners managers to gather, store, process, and distribute data in businesses to meet needs. Sazali, Raduan, and Suzana (2012) state that technology can be viewed in two ways: first, as a physical component made up of things like products, tools, equipment, blueprints, techniques, and processes; and second, as an informational component made up of marketing, production, knowmanagement, quality control. how dependability, skilled labor, and functional areas. Because managers may be competent at lower and intermediate levels but not at the highest hierarchical level, management skills are therefore required at all levels of

management (Anzengruber, Goetz, Nold, & Woelfle, 2017).

# 2.2 Concept of Sustainable Operational Excellence

A component of organizational intelligence and leadership, sustainable operational excellence emphasizes meeting customer expectations while putting a strong emphasis on applying a range of systems, tools, and principles to the long-term improvement of important performance metrics (Barnes, 2008; Dada & Adeigbe, 2022). Its foundation is made up of data-driven measurements that come from Presented in the figure below.

artificial intelligence, machine learning, and algorithms. Sustainable operational excellence is centered on a long-term shift in organizational culture rather than the conventional event-based paradigm of Consequently, improvement. 360° perspective and balanced scorecard are produced by ongoing operational excellence. Its main objective is to meet customer expectations by continuously enhancing the organization's operational procedures (Barnes, 2008; Dada Adeigbe, 2022).



Figure 2.1: Operational Excellence for Successful Business Operations Source: Barnes, D. (2008). *Operations Management: An International Perspective*. London: Thomson Learning.

Once everyone can see normal and abnormal flow, the next step is to create what's known as standard work for abnormal flow. In this phase, we create standard work that corrects abnormal conditions when the flow begin to occur. This means that the people working in the flow (either on the manufacturing floor or in the office) have a standard methodology for correcting things when they go wrong. The end result is something called selfhealing value streams, which means that when flow breaks down somewhere in the operation, the employees working in the flow are able to fix it without the need for management intervention (Barnes, 2008).

## 2.3 Concept of Demographic Variables

The gathering and analysis of data about the general traits of certain groups is the idea behind this concept. It is widely used as a

tool for corporate marketing to analyze consumer behavior and find the most effective ways to connect with them. Businesses can calculate the size of a potential market by segmenting the demographics of the population. Demographic factors are the study of human populations and the differences in size caused by migration, fertility, and death. The word "demography" comes from the Greek word "describing people". Consequently, this discipline investigates the features of populations, taking into consideration factors like the sex ratio, age distribution. composition, distribution, and density of the population (Callaghan. 2021). Occasionally. distinction is made between "formal demography," also known as "demographic analysis," which includes the statistical

analysis of population parameters and their dynamics, and "population studies," which involve looking at the causes and effects of changes in population structure in a larger context and in relation to other phenomena and processes.

considerations are Demographic crucial for marketing and for managing the production and distribution of new goods and services, from the perspectives of business and entrepreneurship. Thus, the term "demographic variables" is generally used to refer to statistical studies that are based mostly on mathematical statistical techniques used to data from population censuses, population change surveys, and systems (Klimczuk, 2021). Demographic data are used to ascertain the connections between specific demographic events. This concept is the collection and study of data regarding the general characteristics of specific populations. It is frequently used as a business marketing tool to determine the best ways to reach out to customers and assess their behaviour (Aransi, 2020).

#### 2.4 System Theory

System theory was invented by several individuals, including Chester Barnard and Mary Parker Follet, but it was initially applied in the physical and natural sciences by a biologist by the name of Ludwig Von Bertalanffy (Lawal, 2012). System theory serves as the foundation for this study on the administrative capacity management and long-term operational excellence of MSMEs in Ogun State, Nigeria. While the human relations method was focused on people, relationships, and satisfaction, the system approach assumed that organization, structure, and productivity were important. But the system theory tries to reconcile the two previous ways, and it managers convinces to view organization as a whole as well as a component of a broader environment (Mullins, 2011). According to the system theory, an organization is not seen as distinct entities but rather as an interconnected, cohesive system made up of interrelated sub-systems (Stoner, Freeman & Gilbert, 2004).

According to Olanrewaju and George (2015), a system is a predetermined configuration of components that work together to fulfill specific goals. For example, the departments of administration, production, marketing, finance, accounts, and operations are examples of sub-systems inside a typical organization. Because these departments work together to accomplish organizational goals, their combined actions form a whole system. Every department within the organization has a certain function to perform. This system theory is pertinent to this study on management competence and sustainable operational excellence because of the joint responsibilities performed in the administrative system of MSMEs operational achieving sustainable excellence as a goal.

### 2.5 Empirical Review on Management Capabilities and Sustainable Operational Excellence of Micro, Small and Medium Enterprises (MMSMEs)

Ahmed (2017) investigated the influence of development on managerial capabilities and performance in Pakistan. This value chain relationship was tested in the context of size and ownership of the organization and found interesting empirical evidence: Multinational and large sized Pakistani organizations create learning culture and invest on development that enhance their managerial capabilities leading to improved performance although there is no direct relation between size and ownership of the organization with managerial capabilities and performance. Small sized Pakistani organizations lack development framework learning culture that adversely influence the development of managerial capabilities; leading to poor managerial performance and overall firm performance and sustainability.

Srećković (2018) discussed the performance effect of network and

managerial capabilities of entrepreneurial firms. The study applied an extended organizational capabilities model integrating Porter's value chain model and Grant's hierarchy of organizational capabilities. It was argued that under higher environmental uncertainty, capabilities are more important for the performance of architecture firms whereas managerial capabilities are more important for the performance of real estate development firms. Employing data from Austria, Germany, and Switzerland, the research results support the hypotheses. This study integrated Porter's value chain concept and the organizational capabilities model and delivers a contribution to the organizational capability theory. It was discvered that network capabilities are more important for creating competitive advantage in entrepreneurial firms than in other firms.

Ali, Zwetsloot, and Nada (2019) explored relationship examined the managerial capability and operational capability to infuse organizational innovation in small and medium-sized enterprises by proposing and empirically validating a rigorous capability-based model. Partial least squares structural equation modelling (PLS-SEM) employed to test the model hypotheses and importance-performance map (IPMA) provided information about the significance and relevance of the key dimensions of managerial and operational capability which explain and help to infuse organizational innovation. The empirical data was gathered through questionnaires distributed across 210 SMEs. The results exhibited strong and significant relationships among managerial capability, operational capability and organizational innovation where majority of the hypothesis are supported by the empirical results.

Dada, Worlu, Osibanjo, Ufua, and Falola (2020) explored the impact of leadership capabilities on the operational efficiency of faith-based organisations (FBOs) in

Nigeria. With the assistance of stratified and simple random sampling techniques, one hundred and forty (140) respondents were selected from the leadership system of the selected organisation. One hundred and eighteen (118) copies of the questionnaire were received, reflecting the response rate of 84.21 percent. The mathematical method used for the study was the Structural Equation Model (AMOS 23). The findings indicated that the organisation's leadership skills have a major impact on its operational performance. The results also showed that demographic features moderate relationship of faith-based organisations leadership capabilities between operational efficiency of FBOs. research recommended that leadership capabilities (strategic direction, people management skills and technological leveraged strength) should be prioritized by faith-based organisations for more operational efficiency and excellent performance outcome.

Elghayesh, and Abdeen (2023) analyzed the mediating effect of digital IT capabilities on relationship between managerial capabilities and the firm's efficiency. The Egyptian Oil and Gas Sector case was considered specifically in this research through managers working in Joint Venture and Investment Law Companies. The research used quantitative methodology; the sample size is 380 while the analyzed valid responses are 399 out of 418 received responses accumulated using a survey distributed questionnaire that is managers. Structural equation modeling (SEM) was the adopted statistical analysis technique, where the measurement model assessment proved the reliability and validity of the measurement instrument, in addition to the goodness of the proposed model. SEM path analysis findings reveal that the full mediation effect of the digital IT capabilities between the digital business strategy and the firm's efficiency has been proven through the mediation analysis as the major research finding. Therefore, the

research concluded that digital IT capabilities were expected to mediate the impact of managerial capabilities on the firm's efficiency in the case of the Egyptian Oil and Gas sector.

#### 3. Methodology

The descriptive survey method was used in this study because it was successful in gathering data from a subset of the whole population. There were 24,65 registered MSMEs in Ogun State, which made up the actual research population (SMEDAN, 2017). Using a purposive sample technique, the study narrowed its emphasis to department heads and middle level officials from the population. Data on the factors under study were gathered from the respondents using structured a questionnaire. Sampling is the process of choosing a portion of a population to minimize error and gather data for generalizing about the larger group. Taro Yamane (1967) was utilized in the study to get the 344 as sample size. Techniques for simple random and stratified sampling were applied. Four (4) significant (Abeokuta, Ifo, Ilaro and Ota) were selected in Ogun State because they have large concentration of MSMEs in the State. A total of 344 copies of the questionnaire were issued to the respondents; 288 of those copies were validly returned, given a response rate of 83.7%. Fifty-six (56) copies of questionnaire were rejected due to improper filling. To guarantee representation among the heads departments and middle-level officials of agro-allied services **MSMEs** and enterprises, stratified sampling was employed. Furthermore, data from primary and secondary sources were used. The primary source of data was the survey questionnaire; secondary sources were papers from online journals, textbooks, and publications. The survey questionnaire was the main tool utilized to collect data. There were two pieces to it. The respondents' demographic variables were recorded in Section A. The topics of management competence and long-term operational effectiveness in MSMEs in Ogun State were covered in Section B. A five-point Likert scale was used in the questionnaire's design. Tabular presentation and both descriptive and inferential statistics were used in the data analysis process. In general, percentages and frequencies were utilized for data analysis, and the research hypotheses were tested using Pearson Product Moment Correlation Analysis to assess relationship between management capabilities and sustainable operational efficiency. Statistical Packages for Social Sciences (SPSS) version 2.0 made data analysis easier. In a same spirit, academic experts in the field examined the survey's face and content validity. The study instrument's reliability was assessed using the internal consistency approach. In order to accomplish this, the questionnaire was given to 20 respondents who were chosen at random from the study's population but were not involved in the primary investigation. Chrobach's Alpha employed to assess the survey's reliability.

#### 4. Results and Discussion

Table 4.1: Demographic Characteristics, Management Capabilities, and Sustainable Operational Excellence of MSMEs

Demographic Characteristics	Frequencies	Percentages					
Gender							
Male	180	62.5					
Female	108	37.5					
Total	288	100%					
Age							
24 years and below	96	33.3					
25 – 40 years	159	55.2					
41 years and above	33	11.5					
Total	288	100%					

Marital Status		
Single	60	20.8
Married	207	71.9
Others	21	7.3
Total	288	100%
<b>Educational Qualification</b>		
SSCE	33	11.5
OND/ NCE	123	42.7
B.SC/B.Ed./B.A	102	35.4
Others	30	10.4
Total	288	100%
	Work Experience	
Below 6 years	84	29.2
6-10 years	126	43.7
11 -15 years	48	16.7
16 years and above	30	10.4
Total	288	100%

Source: Researcher Computation (2023)

# Ho1: Demographic variables have no significant relationship with management capabilities and sustainable operational excellence of MSMEs in Ogun State

In Table 4.1, demographic factors revealed that 62.5% of respondents were male and 37.5% were female, suggesting that men make up a larger proportion of the population in the State's agro-allied sector. According to this table, 33.3% of respondents were under 25, 55.2% were between 25 and 40, and 11.5% of respondents were 41 years of age or older. This is a sign that young, energetic men are becoming interested in and finding ways to work in the agro-allied sector. According to the respondents' marital status, 20.8% were single, 71.9% were married, and 7.3% were other. As for the respondents' educational background, the preceding table indicated that 11.5% of the responses has SSCE certificate; 42.7% of respondents said they held an OND or NCE, 35.4% said they held a B.Sc., B.Ed., or B.A., and only 10.4% said they held other professional qualifications,

such as an M.Sc., M.Ed., or M.A., indicating that a larger percentage of respondents—88.9%—were literate.

Regarding the distribution of respondents' business experience over time, the table showed that 29.2% had worked with MSMEs for one to five years, 43.7% for six to ten years, 16.7% for eleven to fifteen years, and 10.4% for sixteen years or more. According to the respondents, who are presumed to have sufficient years of experience and managerial company practice handling expertise, owners and managers stated by 71.9%. Their ability to manage management practices would allow them to propel long-term sales growth that improves the relevance and survival of MSMEs in the Nigerian state of Ogun (Teece, Pisano, & Shuen, 1997; Asenge, & Agwa, 2018; & Aransi, 2020). As a result, the alternative hypothesis—which holds that there is no connection between demographic factors and the management skills and long-term operational excellence of MSMEs—is accepted.

Table 4.2: Relationship Between Management Capability and Sustainable Operational Efficiency of MSMEs

	ciency of MISM							T = =	
S/N	STATEMENTS	SD 1	D 2	N 3	A 4	SA 5	Total	Mean	SD ∂
1	My organisation seeks advice and considers divergent opinions	84 29.2	36 12.5	21 7.3	99 34.4	48 16.7	288 100%	3.35	0.519
2	My organisation provides administrative actions are guided by professional values and goals.	57 19.8	27 9.4	29 10.4	75 26.0	99 34.4	288 100%	3.47	0.593
3	The organisation improves image and recognition of unit.	33 11.5	48 16.7	36 12.5	109 38.0	63 21.9	288 100%	4.06	0.683
4	I am knowledgeable of policies, procedures and regulations	30 10.4	30 10.4	33 11.5	90 31.3	105 36.5	288 100%	4.13	0.634
5	My organisation implements appropriate strategies to achieve objectives.	36 12.5	63 21.9	15 5.2	81 28.1	93 32.3	288 100%	4.12	0.690
6	I accept responsibility to facilitate programmes.	42 14.6	30 10.4	45 15.6	57 19.8	114 39.6	288 100%	3.21	0.627
7	My organisation addresses issues promptly and effectively.	57 19.8	36 12.5	27 9.4	63 21.9	105 36.4	288 100%	4.16	0.708
8	My firm's facilitate continuous improvement of products to achieve competitive advantage	42 14.6	30 10.4	48 16.7	63 21.9	105 36.4	288 100%	4.28	0.727
9	My firm is satisfied with how various activities of the organisation are	42 14.6	48 16.7	27 9.4	63 21.9	108 37.5	288 100%	3.81	0.959

	controlled to improve return on sales								
10	My firms product/service quality is relative to competition	48 16.7	39 13.5	36 12.5	63 21.9	102 35.4	288 100%	3.20	0.726
11	My firm is known for its continuous improvement	60 20.8	33 11.5	15 5.2	81 28.1	99 34.4	288 100%	4.17	0.756

Source: Researcher Computation (2023)

Table 2 above demonstrates that all of the statement set's means return a mean that is higher than the acceptable 3.0 mean and have standard deviations that are less than 1, indicating a small departure from the mean. The findings confirmed hypothesis that building management capability is a good way to help MSMEs in Ogun State achieve long-term operational efficiency. This was consistent with earlier research in administrative administration, strategic human resource management, and other fields that shown that the ability of any corporation to store and disseminate knowledge to individuals inside organization was essential to its survival. Similarly, it is evident that every mean from the statement set returns a mean that is

higher than the acceptable 3.0 mean and has a standard deviation of less than 1. indicating a small departure from the mean. The findings confirmed the hypothesis that building management capability is a good way to help MSMEs in Ogun State achieve long-term operational efficiency. Additionally, it was shown that the company adopted sensible tactics to meet goals and, in the end, dealt with problems in a timely and efficient manner. The operational excellence findings aligned with the majority of research studies in the fields of marketing, psychology, and strategic management that looked at the variables influencing company's a productivity, growth, and profitability (Eletu, Nwuche, & Akhigbe, 2021; Dada, & Adeigbe, 2022; Ngele, et al. 2023).

**Table 4.3: Correlation Between Management Capability and Sustainable Operational Excellence of MSMEs** 

Correlations							
		Management Capability	Operational Excellence				
	Pearson correlation	1	0.663**				
	Sig. (2-tailed)		0.000				
Management Capability	Sum of squares and cross- products	45.833	31.417				
	Covariance	0.482	0.331				
	N	288	288				
	Pearson correlation	0.663**	1				
	Sig. (2-tailed)	0.000					
Operational Excellence	Sum of squares and cross- products	31.417	48.958				
	Covariance	0.331	0.515				
	N	288	288				
**. Correlation is significant at the 0.01 level (2-tailed).							

Source: Researcher Computation (2023)

Ho2: Management capabilities do not have any significant relationship with the sustainable operational excellence of MSMEs

The Pearson product-moment correlation coefficient was used to examine the relationship between MSMEs' operational excellence and management competencies in Table 3. The sustainable operational excellence of MSMEs and managerial capabilities showed a substantial positive link (r = 0.663, n = 288, p = 0.0005). This finding implies that the management skills of owners and managers have an average influence on the degree of sustainable operational excellence of MSMEs. In summary, the Pearson Product Moment Correlation Analysis results demonstrated a statistically significant and positive correlation between MSMEs' operational excellence and managerial competencies. As a result, the study accepts the alternative hypothesis and rejects the null hypothesis, which states that there is no correlation between management competencies and MSMEs' sustained operational excellence (Anzengruber, et al. 2017; Elghayesh & Abdeen, 2019; Ngele, & Muhammad, 2023).

#### 5. Conclusions and Recommendations

The management competence of MSMEs and their sustained operational excellence were positively correlated. This finding implies that the managerial aptitude of entrepreneurship managers and company owners has an average impact on the operational quality of MSMEs. Based on the results, the study makes the following recommendations: Micro. small, medium-sized businesses should adopt and manage information and communication, technological exposure, and administrative experience effectively in order to achieve their desired performance. This will help to continuously improve operational excellence in the areas of management capability. Businesses should understand that in order to stay in operation and maintain their relevance in the marketplace, they must have an entrepreneurial mindset when it comes to managing their technology, information, and administration to improve operational effectiveness.

#### References

- Adeleke, A., Ogundele, O. J. K. & Oyenuga, O. O. (2014). Business policy and strategy
  - (Second Edition). In Ogundele, O. J. K. (eds). Comparative management and administration: A book of readings. Lagos: Concepts Publications Limited.
- Adikeibe, O. K., Ike, O. F., & Adline, O. (2023). An analysis of the impact of integrating information and communication technology (ICT) by entrepreneurs in product marketing: A study of SMEs in Imo State. *Jalingo Journal of Social and Management Sciences*, 5(1), 81-98.
- Agwu, M. E. (2018). Analysis of the impact of strategic management on the operational excellence of MSMEs in Nigeria. *Academy of Strategic Management Journal*, 17(1), 1-12.
- Ahmed, K. A. (2017). The influence of development on managerial capabilities and performance: Empirical evidence from Pakistan. *Journal of Southeast Asian Research*, 20(1), 1-12.
- Ali, Z., Zwetsloot, I. M., & Nada, N. (2019). An empirical study to explore the interplay of managerial and operational capabilities to infuse organizational innovation in SMEs. *Procedia Computer Science*, 158, 260-269.
- Anwar, S. M., Banjarnahor, H., Adam, S. & Kurniawan, A. (2018). The role of information technology in knowledge management in small and medium enterprises. *Journal of Theoretical and Applied*

- Information Technology, 96(24), 8265-8278.
- Anzengruber, J., Goetz, M. A., Nold, H., & Woelfle, M. (2017). Effectiveness of managerial capabilities at different hierarchical levels. *Journal of Managerial Psychology*, 32(2), 134-148.
- Aransi, W. O. (2020). Perceived challenges and strategies towards the attainments of Sustainable Development Goal Three (SDG 3): Evidence from Irewole and Isokan Local Government Areas of Osun State, Nigeria. *Economy*, 7(1), 42-51.
- Aremu, M. A. & Adeyemi, S. L. (2011). Small and medium scale enterprises as a survival strategy for employment generation in Nigeria. *Journal of Sustainable Development*, 4(1), 200-206.
- Asenge, E. L. & Agwa, T. R. (2018). Entrepreneurial competencies and entrepreneurial mindset as determinants of small and medium scale enterprises performance in Nigeria. Global Journal of Management and Business Research: Administration and Management, 18(13), 1-11.
- Barnes, D. (2008). *Operations Management: An International Perspective*. London: Thomson
  Learning.
- Bessen, J. E. (2016). How computer automation affects occupations: Technology, jobs and skills. *Boston University School of Law, Law, Economics Research Paper 15(49),* 46.
- Callaghan, W. (2021). Sex and gender: More than just demographic variables. *Journal of Military, Vetteran and Family Health*, 7(S1), 37-45.
- Dada, J. A., & Adeigbe, Y. K. (2022). Empirical examination of internal resource management capabilities

- on sustainable operational efficiency of micro, small and medium scales enterprises in Ogun State, Nigeria. *International Journal of Financial Research & Management Science*, 9(7), 397-416
- Dada, J. A., Worlu, R. E., Osibanjo, A. O., Ufua, D. E., & Falola, H. O. (2020). Leadership capabilities and operational efficiency of faith-based organisations in Nigeria. *Academy of Strategic Management Journal*, 19(5), 1-13.
- Eletu, I. T., Nwuche, C. A., & Akhigbe, O. J. (2021). Learning capability and operational efficiency of manufacturing firms in Nigeria. Journal **Emerging** of Trends in **Economics** and Management Sciences, 12(4), 150-161.
- Elghayesh, K. F. M., & Abdeen, T. H. I. (2023). Examining the mediating effect of IT capabilities on the relationship between managerial capabilities and firm's efficiency. *Journal* of *Business*, 11(5), 272-283.
- Eniola, A. A. & Ektebang, H. (2015). Government policy and performance of small and medium business management. International Journal of Academic Research in Business and Social Sciences, 5(2), 237-248.
- Kiyabo, K. & Isaga, N. (2019). Strategic entrepreneurship, competitive advantage and MSMEs performance in the welding industry in Tanzania. *Journal of Global Entrepreneurship Research*, 9(62), 1-12.
- Klimczuk, A. (2021). Demographic Analysis: Selected concepts, tools, and applications.
- Lawal, A. A. (2012). *Management in focus*. Lagos: Sahanit Nigeria Limited.

- Lear, L. W. (2012). The relationship between strategic leadership and strategic alignment in high performing companies in South Africa. Doctoral Dissertation of University of Pretoria, South Africa.
- Likert, R. (1969). Supervision in the Research & Development Game. David Allison (ed.). Cambridge, M.A: The MIT Press. 161 181.
- Mescon, M. H., Albert, M. & Khedouri, F. (2004). *Management Fundamentals* (3rd Edition). U.S: Amazon Publishers Limited.
- Mullins, L. J. (2011). Essentials of organisational behaviour (3<sup>rd</sup> Edition). Prentice Hall Financial Times.
- Ngele, A. N., & Muhammad, M. Y. (2023). Entrepreneurial mindset and growth of micro small and medium enterprises (MSME's) in Nigeria: a case study of Abuja Municipal Area Council (AMAC) Federal Capital Territory (FCT) Abuja. *Journal of Global Social Sciences*, 4(14), 1-20.
- Ogundele, O. J. K. (2010). Comparative Management and Administration – A Book of Readings
- Ogungbesan, F., Egwakhe, J. A., & Akpa, V. O. (2023). Business strategies and firm profitability of selected mobile operating firms in Nigeria. *International Journal of Business Strategies*, 8(1), 44-61.
- Okeke, V. I. (2019). Leadership style and MSMEs sustainability in Nigeria: Multiple case study. Dissertation and Doctoral Studies of Walden University.
- Olanrewaju, A. D. & George, O. J. (2014).

  Management theories and its application in organisations: The Nigerian Experience. Conference Proceedings of the British Academy of Management, 1-18.

- Olayinka, E. A., Oyebola, A. I., Ogunjemilua, E. M., & Olaposi, T. O. (2023). Factors influencing innovation capability of Flour Processing Firms in Southwest, Nigeria. American Journal of Engineering and Technology Management, 8(4), 41-50.
- Olubiyi, T. O., Egwakhe, A. J. & Egwuonwu, T. K. (2019). Managerial roles and competitive advantage of MSMEs in Lagos State Nigeria. *International Journal of Small Business and Entrepreneurship Research*, 7(3), 1-14.
- Sazali, A. W, Raduan, C. R. & Suzana, I. W. O. (2012). Defining the concept of technology transfer: A literature analysis. *International Business Research*, 5(1), 61-71.
- SMEDAN (2017). National Policy on Micro, Small and Medium Scale Enterprises.
- Stoner, J. A. F., Freeman, R. E. & Gilbert, D. R. (2004). *Management*. New Delhi. Prentice-Hall of India.
- Srećković, M. (2018). The performance effect of network and managerial capabilities of entrepreneurial firms. *Small Business Economics*, *50*, 807-824.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 1(1), 509-533
- Ufua, D. E., Olujobi, J. O., Ogbari, M. E., Dada, J. A., & Edafe, O. D. (2020). Operations of small and medium enterprises and the legal system in Nigeria. *Humanities and Social Sciences Communications*, 7(1), 1-7.
- Yamane, T. (1967). Research methods: Determination of sample size.