BIAR PUBLISHER
Rowter Journal
e-ISSN : 2828-1950
p-ISSN : 2828-9765

Knowledge Management Capabilities and SMES Performance in Computer Village Ikeja, Lagos

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Abstract

In today's knowledge-driven economy, effective management of knowledge resources is critical for the competitiveness and sustainability of small and medium-sized enterprises (SMEs). Despite SMEs' significant contributions to employment and economic development, particularly in Nigeria, many still face constraints such as inadequate infrastructure, limited technology adoption, and informal knowledge-sharing practices. This study investigates the relationship between knowledge management capabilities – comprising knowledge acquisition, application, storage, and creation – and SME performance within the dynamic context of Computer Village, Ikeja, Lagos. Employing a quantitative survey research design, data were collected from 375 SMEs using structured questionnaires and analyzed through descriptive and regression analyses. The results demonstrate that all four dimensions of knowledge management significantly and positively impact SMEs' performance, influencing areas such as innovation, operational efficiency, and customer satisfaction. Findings highlight the importance of structured knowledge practices over informal methods to prevent knowledge loss and enhance competitive advantage. The study recommends that SMEs invest in digital tools for knowledge storage, cultivate cultures that encourage sharing and innovation, and leverage external collaborations to enrich knowledge bases. These insights are crucial for business owners, policymakers, and stakeholders aiming to harness knowledge as a strategic asset to drive sustainable growth and resilience in Nigeria's SME sector.

Keywords

Knowledge Management; SMEs; Performance; Knowledge Capabilities; Computer Village; Lagos;Nigeria.

I. Introduction

A firm in the knowledge-driven economy today is found to have a critical state of whether it can manage knowledge effectively in the context of sustainable competitive advantage and business performance (Al-Hakim & Hassan, 2020). Knowledge Management (KM) comprises activities in which the organizations obtain, exchange, retain, and apply the knowledge to enhance the decision-making process, achieve innovativeness, and operational efficiency (Kianto et al., 2018). The transition into using KM capabilities to determine firm outcomes within different companies and industries has by now seen an increasing interest in the scholarly and practical sphere of studying how such capabilities directly affect final outcomes of firms (Masa'deh et al., 2019). Out of these, Small and Medium sized Enterprises (SMEs) have especially been under the spotlight since possessing, at best, limited resources, SMEs are, in many cases, highly agile and innovative, thus successfully reaping the benefits of successful knowledge management behaviors (Cillo et al., 2021).

The SMEs make up the pipe-line of most economies with more than 90 percent of the enterprises worldwide contributing immensely to their economies through employment and gross domestic product (World Bank, 2020). However, these businesses experience significant difficulties to remain competitive, in particular, in the conditions of a high level of globalization, technological revolution, and international crisis like a COVID-19 pandemic (Donbesuur et al., 2020). Budding evidence suggests that KM capabilities such as acquisition, dissemination, and application of knowledge become critical in terms of enabling SMEs to manage environmental uncertainty and move into innovation as well as enhance financial and

DOI: https://doi.org/10.5281/zenodo.21911462

non-financial performance metrics (Zaim et al., 2019; Ranjbarfard et al., 2020). There is, however, inconsistency in turning KM practices into realizable behaviors in various regions and contexts which make it compelling to look at such relationships within particular regional contexts.

SMEs in Africa are a vital economic activity that encourages economic growth, innovativeness, as well as poverty alleviation (African Development Bank, 2021). However, there are some prevailing internal issues faced by the African SMEs like poor infrastructure, finance inaccessibility, institutional volatility, and technological deficiency (Asare et al., 2020). The effects of these contextual variables are a drag on their ability to institutionalize KM practices that are resilient and, hence, their inability to exploit knowledge resources to develop competitive advantages (Boateng et al., 2022). Furthermore, research indicates that culture in most African communities discourages the free flow of knowledge because of business cultures that are hierarchical or fear that intellectual property will be misappropriated (Nwankpa & Roumani, 2020). These factors reveal an emerging importance of region-specific studies that would help to demystify how KM abilities can result in performance amidst these circumstances.

SMEs play an essential role in the economy of a country, providing substantial contribution to employment and income in Nigeria (SMEDAN, 2021). The state of Lagos specifically is the business hub of Nigeria where there is a vast distribution of SME in various industries namely: manufacturing, services, information and communication technology, and trade (National Bureau of Statistics [NBS], 2022). Nevertheless, SMEs in Lagos experience severe constraints such as poor infrastructures, unfavorable business costs, complicated polices, and fierce market rivalries despite this central position (Olawale & Garwe, 2020). Though the urgency in the relevance of knowledge management to Nigerian businesses is yet to fade, the heterogeneity of setting up and implementing KM capabilities in SMEs is quite high, most of the time associated with disparate leadership orientation, organizational culture, and technological adoption maturity levels (Olaore & Adebayo, 2021).

Another contextual issue facing Lagos is the fact that although recognition of the possible advantages of KM is widespread among SMEs, the possibilities to implement useful KM practices usually lack systematic procedures and the means to even out the scales (Ibidunni et al., 2022). A large number of SME owners in Lagos prefer informal knowledge-sharing processes and personal contacts and have a few formal mechanisms of collecting, retaining, and utilizing institutional knowledge (Ogbo et al., 2023). As a result, many useful things are often tacit and stay locked in the mind of individual workers or the owners of the company making it easier to lose knowledge in case of the employee departing or reducing the chance of innovation and performance boost in the company (Akanbi et al., 2023). Besides, digital transformation created a range of new opportunities to learn and to share and receive knowledge, and SMEs in Lagos tend to fall short of the digital skills required, disorganized internet infrastructure, and relative accessibility to digital KM tools (Ogbo et al., 2023).

Some of the studies that have been done on KM practices and its effect on the performance of firms worldwide have not focused on the Nigerian experience, especially how and to what degree certain KM capabilities impact measurable performance among firms in Lagos (SMEs). Literature on the issue in Nigeria is wide, and more often it is related to larger organizations or intersectoral works without separating the peculiarities of SMEs functioning in the highly competitive and volatile business environment of Lagos (Olaore & Adebayo, 2021). Moreover, despite the existence of some studies pointing at the existence of certain correlations between KM and firm performance, little research has been undertaken to delve into the individual elements of the KM capabilities themselves, namely knowledge acquisition, knowledge sharing, and knowledge application and how they uniquely contribute to various elements of SME performance in Lagos (Akanbi et al., 2023). It restricts theoretical

knowledge as well as practice advice to SME owners and policy-makers who want to improve on their competitiveness and sustainability using knowledge management.

Also, research findings concerning the mediating effect of contextual factors (technological readiness, organizational culture, leadership style and industry differences) on the relationship between KM capabilities and firm performance among the Lagos based SMEs are scarce. It is critical to understand these moderating factors since the environment of SMEs in Lagos is rather specific and demonstrates high rates of urbanization with aging through the prism of shifting market demands and large socio-economic diversity (NBS, 2022). In the absence of this detailed conceptualization, KM practice recommendations may be too generic in nature and can therefore be applied less by SME companies who have to contend with local realities.

Consequently, this paper attempts to explore the connection between knowledge management capacity and the performance of SMEs in Lagos State in Nigeria. It aims to fill this research gap by reviewing how certain KM dimensions contribute to performance measures like innovation, efficiency in operations and financial performances in SMEs performing in the dynamic environment of Lagos. The results will offer interesting findings and recommendations to business owners, managers, scholars, and policy-makers attempting to exploit the power of knowledge as a competitive capital in their effort to meet sustainable growth and competitiveness in the SME sector in Nigeria.

1.1 Problem Statement

The major contributors to economic growth, innovation and employment at the global scale are Small and Medium Enterprises (SMEs) in which the World Bank (2020) states that SMEs make up about 90 percent of business and generate more than 50 percent of the world jobs. Their presence is even greater in the emerging economies because they form a considerable portion of Gross Domestic Product (GDP) and offer entrepreneurial opportunities (Dahinine, Chouayb, & Bensahel, 2023). Nevertheless, SMEs can hardly maintain their performance as they have little resources, cannot manage efficiently, and do not know how to make use of them and apply knowledge effectively (Samir, 2020).

Knowledge Management (KM) which refers to managing the acquisition, sharing and application of knowledge to enhance decision making, innovation and competitiveness is one of the most critical aspects affecting the performance of SME (Setiyono, Iqbal, Alfisyahr, & Shofyan, 2022). It is found that successful KM may lead to innovative, market-oriented and whole-performance (Chen & Huang, 2009). Nevertheless, the problem of SME implementation of KM practices is the issue of financial hardships, insufficient formal KM planning, change, and technology appropriation problems (Iqbal, Setiyono, & Alfisyahr, 2020). Such obstacles restrict them in using the knowledge as a strategic resource efficiently, which ultimately influences their development and survival (Dahinine et al., 2023).

Both the current literature and data point out the significance of KM, but there is no definite agreement on the direct effects of this approach on the SME performance. Certain studies have stated that KM has a positive impact on the growth and competitiveness of a firm (Marqu es & Garrigos-Simon, 2006), and there are those that consider it to be indirect and contribute to firm growth and competitiveness with the input of other outside factors (market orientation and innovation) (Setiyono, et.al., 2022). SMEs do not have formal KM structures and resources to be able to acquire, share, and use knowledge as compared to large corporations (Gharakhani & Mousakhani, 2012). Most of the SMEs have little technological infrastructure and it is hard to store and exploit knowledge in an efficient manner (Zaied & Zaied, 2012). In addition, knowledge-sharing at SMEs also gets hampered due to the problem of trust which lowers the overall impact of a KM program at large (Ngah, Hoo, & Ibrahim, 2009).

Past studies reveal that market orientation and product innovation are important in improving the performance of SMEs (Chen et al., 2018). Nevertheless, limited research has

focused on the role of these factors as mediators of the interconnection between KM and the performance of SMEs (Astuti, Prasetya, & Wijayanti, 2020). It is important to note that a thorough understanding of such dynamics can be beneficial to SMEs in terms of strategic alignment of its KM processes in way that boosts innovation and competitiveness within the market. Additionally, majority of KM literatures consider the developed economies, whereby, there is improved access to financial and technological resources for SMEs (Iqbal et al., 2020). Nevertheless, the implementation of SMEs in the developing world also has its own obstacles including insufficient finance, the absence of robust regulating systems, and the states of low internet use (Dahinine et al., 2023). A localized research is demanded to determine how KM practice can be accommodated effectively to the constraints and the chances provided in such areas.

This paper shall address these gaps through financial limitations, trust and technology barriers. Lastly, the study will also come up with strategic recommendations that will help when applied to SMEs in emerging economies hence the applicability of the research to business environments that have limited resources and facilities.

The direct effect of KM capabilities on the performance of the SME could be analysed by applying quantitative analysis, which would evaluate whether the KM can contribute to the improved performance on their own or whether supplementary input can be necessary. It will further examine the mediating effect of market orientation and product innovation so as to find how these factors mediate the relationship between KM and performance of SME. Also, the analysis will allow defining critical issues and best practices of KM embrace by SMEs in an empirical manner.

To the best of my knowledge and understanding, solving these problems will give useful ideas to entrepreneurs in small and large organizations, policymakers, and business strategists to develop knowledge-based and competitiveness.

1.2 Objectives of the Study

To analyze the impact of knowledge application on SMEs performance

a. To examine the role of knowledge acquisition on SME's performance
b. To investigate the impact of knowledge storage on SME's performance
c. To analyze the relationship between knowledge creation on SME's performanc

II. Review of Literature

1.2 Empirical Review

The existing research proved without exception that there is a positive correlation between knowledge management (KM) and the performance of small and medium-sized enterprises (SMEs). Kmieciak and Michna (2018) established a relationship between KM orientation and innovativeness in the Polish SMEs. As revealed by Santoro et al. (2019), KM orientation has a positive impact on the ambidextrous entrepreneurship intensity (EI) and high levels of dynamic capabilities increase the levels of firm performance. On the same note, Dezi et al. (2021) found out that external embeddedness and KM positively influence the ambidexterity of SMEs in terms of balancing between knowledge exploitation and exploration that enhance the overall performance. In their study, Ferraris et al. (2019) noted that combining big data analytical functionalities and KM orientation benefits the performance of firms.

Subsequent researchers have also supported the positive effect that KM has on performance of SMEs. Delen et al. (2013) studied the case of Turkish SMEs and found that knowledge utilization has an impact on financial and non-financial performance and the defector organizational culture and structure also determine the ability to use knowledge. Alegre et al. (2013) also indicated that KM practices have an oblique proliferation of sustained competitive advantages in the performance of innovation by proliferating dynamic

capabilities. Schoenherr et al. (2014) confirmed a positive relationship between explicit and tacit knowledge and the supply chain performance. The findings by Byukusenge and Munene (2017) established that innovation is a complete mediator between KM (including the acquisition, sharing and application of knowledge), and business performance in Rwandan SMEs. Azyabi (2018) emphasized the beneficial impact of KM practices as well as capabilities of SME performance in Saudi Arabia. In Pakistani SMEs, Albassami et al. (2019) highlighted KM as one of the most imperative factors of achieving performance improvement via innovations in an organization.

In a study by Obeso et al. (2020) about the impact of KM practice on performance of firms, they discovered that knowledge flow, knowledge storage, and knowledge generation have different impacts or influence. They also found out organizational learning as a mediated variable in the relationship. Bloem and Salimi (2022) examined different KM practices such as knowledge acquisition, conversion, application, and protection roles in various stages of innovations in Dutch SMEs that deal with biotechnology. Hassan and Raziq (2019) showed that the KM practices, more precisely, knowledge acquisition, dissemination, and responsiveness, positively influence radical innovation in SMEs.

Audretsch and Belitski (2021) examined the relationship between knowledge complexity in domains, namely managerial, strategic, and operational, and firm performance and the significance of organizational resilience and agility as the variables that can enable SMEs to adopt knowledge complexity. Kareem et al. (2021) paid attention to Iraqi SMEs and reflected the roles of accounting information system, KM capabilities, and innovation in organizational performance.

In an empirical study on the interaction between the customer KM (CKM), knowledge-oriented leadership (KOL), and quality of innovation, Chaithanapat et al. (2022) established that the innovation quality plays a positive mediating role to the interplay between CKM and firm performance. In contrast, Yusr et al. (2021) hypothesized the relationship between CKM and the performance of product innovation but they did not support the hypothesis statistically, which implied that businesses should be able to utilize the customer knowledge available to them. In a study of project-based SMEs discussed by Ul Zia (2020), the researcher documents that the role of KOL in KM is more salient in SME than in larger organizations, and KM behavior is a mediator between KOL and project-based innovation performance. The authors of the research by Ferraris et al. (2021), who studied R&D internationalization among SMEs, also found out that the combination of the internationalization and KM orientation contributes to increasing innovative performance. Scuotto et al. (2020) looked at the way in which the characteristics of the SMEs KM, by means of upgrading and downgrading tactics, enhance the efficiency of innovation.

There are still huge gaps in the area of research especially related to SMEs with the enormous body of empirical research accumulated in the sphere of Knowledge Management (KM) and its impact on the organizational performance, there are still huge gaps in the area of research especially related to SMEs. However, the enormous achievements of comprehensive research on knowledge management (KM) on big organisations, there have been sparsity empirical insights on how KM capabilities affect the performance of SMEs in diverse economic situations, especially in emerging markets (Akeredolu, Obembe, & Ayeni, 2023).

III. Research Methods

3.1 Research Design

Research design establishes the general strategy and decides how the study will gather and analyze data. A survey research methodology is used in this study. A survey study design was selected to produce a more robust data presentation and a closer approximation of the actuality experienced (Odunmbaku et al 2021). This research design is suitable for this study because it allows the researcher between the dependent variable, SME performance and independent variables, such as Knowledge management capabilities. The population under study refers to a specific group or category of subjects or variables. The population of this study is made up of entrepreneurs in computer village, Ikeja Lagos. The population under investigation in this study comprises all SMEs in computer village Ikeja, Lagos totaling 11,663 SMEs operator according to ministry for commerce, industry, and cooperatives. The sample size is a subset extracted from the population under study, from which generalization's may be derived (Apuke,2017). A sample is a condensed, controllable representation of a larger group. We calculate the sample size for the investigation via the Taro Yamane formula.

n=N/1+N(e)2

n=11,663+11663(0.05*0.05)

n=11,663+11663(0.0025)

n=11,663+29.16

n=11,663/30.16

n=386.736(population size)

Sampling frame is the list of all members to be studied in the population. For this research work, the study sample frame used was the entrepreneurs in computer village, Ikeja Lagos. Sampling is a technique for choosing certain individuals or small portion of the population in order to draw conclusions about the population as a whole. The sampling method to be used in this study is simple random sampling. simple random sampling is a type of probability sampling, where the researcher selects individuals at random from a population. Simple random techniques were used because the population is homogeneous, it gives each member of the population equal chance of being selected.

Data analysis is the process of evaluating, transforming, and interpreting data in order to get relevant information and support decision making. Quantitative methods will be used to examine the relationship between two events, where the second event results from the first. Quantitative analysis addresses specific and clearly defined questions. Standard deviation, mean, and regression analysis was used to test the proposed associations. The data collected was evaluated using SmartPLS4.

IV. Result and Discussion

Table 1. Responses Gotten from Knowledge Management Capabilities

SN	KNOWLEDGE APPLICATION	SA	A	N	D	SD
1	Acquired knowledge is effectively integrated into our business.	117 31.2	211 56.3	40 10.7	4 1.1	3 0.8
2	Employees utilize the information gained from training in their daily tasks	155 41.3	181 48.3	34 9.1	2 0.5	3 0.8
3	Our company adapts quickly to new knowledge to improve products or services	149 39.7	194 51.7	25 6.7	4 1.1	3 0.8

4	We leverage customer feedback to make informed business decisions.	170 45.3	169 45.1	32 8.5	2 0.5	2 0.5
	KNOWLEDGE ACQUISTION	SA	A	N	D	SD
5	Employees are encouraged to learn from one another through formal or informal knowledge sharing sessions.	171 45.6	177 47.2	20 5.3	6 1.6	1 0.3
6	We invest in market research and competitive intelligence to enhance our knowledge base	173 46.1	166 44.3	29 7.7	3 0.8	4 1.1
7	We participate in training, workshops, and industry events to gain new insights	185 49.3	162 43.2	25 6.7		3 0.8
8	We actively seek customer feedback to improve our knowledge	194 51.7	159 42.4	17 4.5	3 0.8	2 0.5
	KNOWLEDGE STORAGE	SA	A	N	D	SD
9	We use documentation, reports, and digital platforms to store and retrieve knowledge	165 44.0	187 49.9	20 5.3	1 0.3	2 0.5
10	Past experiences and lessons learned are well documented for future use	173 46.1	170 45.3	27 7.2	3 0.8	2 0.5
11	Employees can easily access stored knowledge when needed	160 42.7	191 50.9	19 5.1	4 1.1	1 1.1
12	Our organization maintains accessible records of critical information	179 47.7	168 44.8	22 5.9	3 0.8	3 0.8
	KNOWLEDGE CREATION	SA	A	N	D	SD
13	Our company encourages the development of new ideas and solutions	209 55.7	140 37.3	20 5.3	3 0.8	3 0.8
14	We invest in research and development to generate new knowledge	173 46.1	168 44.8	31 8.3	1 0.3	2 0.5
15	Our organization encourages innovation and creativity among employees	170 45.3	175 46.7	27 7.2		3 0.8
16	Knowledge creation is considered a key factor for our SMEs competitive advantage	170 45.3	172 45.9	30 8.0	1 0.3	2 0.5
	SMEs performance	SA	A	N	D	SD
17	Reduction of management costs	105 28.0	216 57.6	49 13.1	4 1.1	1 0.3
18	Reduction of time between when an order is placed and when it is received	123 32.8	198 52.8	49 13.1	2 0.5	3 0.8
19	Reduction of rate of damaged materials	121 32.3	192 51.2	56 14.9	1 0.3	5 1.3
20	Reduction of rate of late delivery	98 25.9	231 60.9	45 11.9	4 1.1	1 0.3

In Table 1, respondents reported a strong application of knowledge application within their SMEs. Approximately 87.5% (sum of SA and A) agreed that acquired knowledge is effectively integrated into business operations, and an even higher 89.6% stated that

employees utilize training knowledge in their daily tasks. Furthermore, 91.4% acknowledged that their company adapts quickly to new knowledge to improve products or services, while 90.4% noted that customer feedback is actively leveraged to inform decisions. These results reflect a high level of commitment among SMEs to apply and capitalize on acquired knowledge to enhance operational and strategic outcomes.

A majority of SMEs demonstrate proactive efforts in acquiring knowledge. Between 89%–94% of respondents agreed or strongly agreed across items that employees are encouraged to share knowledge, and that the organization invests in market research, training, and actively seeks customer feedback. For instance, 98.1**%** said their companies seek customer feedback, while 94.4% noted participation in training and events to gain new insights. This indicates a robust knowledge acquisition culture within SMEs, which supports innovation and adaptability.

SMEs also show strength in knowledge storage practices. Across all items, approximately 90–94% of respondents agreed or strongly agreed that documentation and digital platforms are used to store and retrieve knowledge, that lessons are documented, and that employees can access this stored information when needed. For example, 94.9% agreed that employees have easy access to stored knowledge. These findings highlight the importance SMEs place on institutional memory and knowledge accessibility to enhance efficiency and reduce redundancy.

Respondents indicated high levels of knowledge creation within their SMEs. Over 90% of participants agreed or strongly agreed that their companies encourage the development of new ideas and innovation, invest in R&D, and view knowledge creation as key to competitiveness. Notably, 93% affirmed that innovation and creativity are promoted. These results suggest SMEs prioritize internal knowledge generation as a driver of growth and differentiation.

Knowledge management also contributes to operational efficiency. Across all indicators (cost reduction, faster order processing, reduced damage rates, and timely delivery), between 84%–87% of respondents agreed that improvements were achieved. For example, 86.9% noted reduced delivery delays. These outcomes reinforce the role of knowledge practices in enhancing operational performance.

Table 2. Analysis of variance

ANOVA						
	model	sum of squares	df	mean square	f	sig
1.	regression	11.372	1	11.372	79.863	0.000
	residual	53.111	373	142		
	total	64.482	374			

a. Dependent variable: operational performance
b. Predictors: (constant) knowledge application

This F-statistic (F = 79.863, Sig = 0.000) shows that the influence of Knowledge Application on Operational Performance reaches statistical significance. Hence, the null hypothesis is rejected, indicating that Knowledge Application significantly predicts Operational Performance.

Table 3. Model Estimation

Coefficients[a]											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.811	0.149		18.992	<0.001					
	knowledge application	0.307	0.034	0.0420	8.937	<0.001	0.420	0.420	0.420	1.000	1.000

a. Dependent variable: operational performance

The regression output shows that Knowledge Application significantly and positively influences operational performance. The unstandardized coefficient (B) is 0.307, indicating that a one-unit increase in the application of knowledge leads to a 0.307 unit increase in operational performance. The standardized beta coefficient is 0.420, reflecting a moderately strong effect size.

The relationship is statistically significant, with a t-value of 8.937 and a p-value < 0.001, suggesting a very high level of confidence in the result. The zero-order, partial, and part correlations (all 0.420) confirm a consistent and robust association. The Tolerance (1.000) and VIF (1.000) values indicate no multicollinearity, further validating the strength of the model.

Table 4. Model Summary

Model Summary				
Model	R	Square	Adjusted R square	Std. Error of the estimate
1	299	0.084	0.087	0.39680

b. Predictors: (constant) knowledge acquisition

The first model in the model summary includes the predictor: knowledge acquisition. The R value is 0.299, indicating a weak to moderate positive correlation between knowledge acquisition and the dependent variable.

The R-squared value is 0.084, which means that 8.4% of the variance in the dependent variable can be explained by knowledge acquisition. The adjusted R-squared value is 0.087, which is slightly higher—this suggests that, even after adjusting for the number of predictors, the model maintains a small but positive explanatory power.

Table 5. Analysis of variance

ANOVA						
	model	sum of squares	df	mean square	f	sig
1.	regression	5.752	1	5.752	36.533	0.000
	residual	58.730	373	157		
	total	64.482	374			

a. Dependent variable: SMEs performance

b. Predictors: (constant) knowledge acquisition

The F-statistic (F = 36.541, Sig = 0.000) indicates that the influence of Knowledge Acquisition on Operational Performance is statistically significant. Therefore, the null hypothesis is rejected, suggesting that Knowledge Acquisition has a significant effect on Operational Performance.

Table 6. Model Estimation

Coefficients[a]											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.160	0.161		19.686	<0.001					
	knowledge acquisition	0.219	0.036	0.299	6.044	<0.001	0.299	0.299	0.299	1.000	1.000

c. Dependent variable: SMEs performance

The analysis reveals that Knowledge Acquisition has a moderate and statistically significant positive impact on operational performance.

The unstandardized coefficient (B) is 0.219, indicating that a one-unit increase in knowledge acquisition leads to a 0.219 unit increase in operational performance. The standardized beta coefficient is 0.299, reflecting a moderate effect size.

This effect is statistically significant, as evidenced by a t-value of 6.044 and a p-value < 0.001, indicating a high degree of confidence in the observed relationship. The zero-order, partial, and part correlations (all at 0.299) further support the positive association between knowledge acquisition and operational outcomes. Additionally, Tolerance (1.000) and VIF (1.000) values confirm there are no multicollinearity concerns in the model.

Table 7. Analysis of variance

ANOVA						
model		sum of squares	df	mean square	f	sig
1.	regression	4.801	1	4.801	30.002	0.000
	residual	59.682	373	0.160		
	total	64.482	374			

a Dependent variable: SME performance

b Predictors: (constant) knowledge storage

The F-statistic (F = 30.002, Sig = 0.000) denotes that the role of Knowledge Storage in Operational Performance is found to be statistically significant. Therefore, Null hypothesis is rejected and indicates that Knowledge Storage has a significant influence on Operational Performance.

Table 8. Model Estimation

Coefficients[a]											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	Constant)	3.153	0.178		17.694	<0.001					
	storage of knowledge	0.222	0.041	0.273	5.477	<0.001	0.273	0.273	0.273	1.000	1.000

d. Dependent Variable: SME Performance

The regression findings indicate that Knowledge Storage has a positive substantial impaction on operations implementation. The unstandardized coefficient (B) equals 0.222, which implies that one-unit change in the level of knowledge storage practices causes an increase of 0.222 units in the operations performance. The standardized value of beta coefficient is 0.273, which implies that the effect size is moderate. The t-value of 5.477 and the p-value being less than 0.001 show that the relationship is statistically significant and hence, there is a high confidence on the result. The zero-order, partial and part correlations (all with 0.273) imply a positive and consistent correlation. Additionally, Tolerance (1.000) value as well as VIF (1.000) value demonstrates that multicollinearity is not be considered as a problem in this model.

Table 9. Analysis of Variance

ANOVA						
	model	sum of squares	df	mean square	f	sig
1.	regression	4.084	1	4.084	25.221	0.000
	residual	60.398	373	0.162		
	total	64.482	374			

a Dependent Variable: SME Performance

b predictors: (constant) knowledge creation

This is shown by F-statistic (F = 25.221, Sig = 0.000) which suggests that the effect of Knowledge Creation on Operational Performance is significant. Thus, the null hypothesis is not accepted that implies that Knowledge Creation impacts Operational Performance largely.

Table 10: Model Estimation

Coefficients[a]											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.271	0.171		19.152	<0.001					
	knowledge creation	0.194	0.039	0.252	5.022	<0.001	0.252	0.252	0.252	1.000	1.000

e. Dependent variable: SMEs performance

The regression findings reveal that Knowledge Creation is an influential positive predictor to the operational performance. The B coefficient is unstandardized and hence a one-unit rise in knowledge creation will increase operational performance by 0.194 unit. The standardized beta value is 0.252 and it shows a moderate effect size. This association is also statistically significant where the t-value is 5.022 and its p-value is less than 0.001. The correlation figures (zero-order, partial, and part = 0.252) also validate that there is a similar and positive relationship between the variables. Based on values of Tolerance (1.000) and VIF (1.000) there is no issue of multicollinearity and the model is considered as being statistically vigilant.

V. Conclusion

This study found out that there was a positive and significant relationship between knowledge management capabilities and SME performance. Precisely, all the four dimensions of KM, namely, knowledge application, accumulation, storage, and creation, was identified as the enhancement of diverse performances of SMEs, including innovation, efficiency, decision-making, and competitive edge. The evidence supports the fact that SMEs will significantly benefit by adopting effective knowledge management models. Through conscious adoption and learning of new things, maintenance of effective knowledge, and promotion of a culture of innovation, SME firms can play a strong role in their strategic placement and sustainability in a dynamic business environment.

In addition, the study will add value to the literature on KM since the research makes the point that knowledge as an intangible organisational asset should be intentionally managed. The same can be said especially with SMEs in a resource-constrained environment where smart knowledge management can help this disparity between constraints and performance excellence.

References

Ahmed F, Shah S Z A, & Mahmood Z (2020). Sharing and creating of knowledge: A systematic literature review. VINE Journal of Information and Knowledge Management Systems, 50 (2), 287bed#94 border ethunesck feed共ibles pet Masonry tipopox ls half a month ago, 305. https://doi.org/10.1108/VJIKMS-06-2019-0094

Andreeva, T., & Kianto, A. (2012). Does knowledge management really matter? Linking knowledge management practices, competitiveness, and economic performance. Journal of Knowledge Management, 16(4), 617-636.

Antunes, M. & Pinheiro, P. et al. (2020). Knowledge management in SMEs systematic review. Dolgochas K 769 et 795 https://doi.org/10.1108/JKM-02-2019- 0102

Azyabi, N. (2018). The role of the knowledge management practices in SMEs performance in Saudi Arabia. Journal of Small Business and Enterprise Development 25 (3), 469485.

Castaneda, D. I., & Cuellar, S. (2020). KM as an intercessor between organizational culture and performance in small-to-medium enterprises of Colombia. Such principles or expectations would help in enhancing the knowledge management on an international level. Journal of Knowledge Management, 24(5), 10601079. https://doi.org/10.1108/JKM-03-2020-0168

Chaithanapat, P., & Rakthin, S. (2021). What is Customer knowledge management capability and firm performance; A dynamic capabilities perspective. journal of business researchers, vol. 135, 309-320. https://doi.org/10.1016/j.jbusres.2021.06.041

Dahinine, Chouayb & Bensahel (2023) explores the question of whether it is possible to prepare those who are supposed to teach. Experience improvement and SME performance: A systematic review on the emerging economies. D. Stern, International Journal of Management Reviews, 25(1), 72 98.

Durst, S., et al. (2023). Knowledge management in small companies: New findings and the prospects of the research. Dunphy, S, Probst, G, Chung, C-T: Journal of Knowledge Management, 27(1), 1-26.

E. Ode & R. Ayavoo, (2020). Knowledge application as mediating variable of the association between knowledge management practices and firm innovation. 210 Journal of Innovation & Knowledge, 5 (3), 210 218, 2019 https://doi.org/10.1016/j.jik.2019.08.002, 2019.

E., Byukusenge, & J. C. Munene (2017). Innovation as mediator role between knowledge

management and business performance. Hourphilly, Journal of Business Research, 74, 50-59. https: //doi.org/10.1016/j.jbusres.2017.01.013
Ferraris A, Santoro G, Papa A. Big data analytics abilities and knowledge management: their effect on the performance of firms within the manufacturing industry. Technological forecasting and social change, 144, 489498. Doi.org/10.1016/j.techfore.2019.01.020
Ferraris, A., et al. (2021). Internationalization of R & D in SMEs and the knowledge management orientation. Journal of Business Research 2021, 129 611619. https://doi.org/10.1016/j.jbusres.2021.03.056.
G. Martn de Castro, (2015). Innovation and knowledge management in services firm. journal of business research 2015 June; 68(7): 1459-1463. doi: 10.1016/j.jbusres.2015.01.017.
Gholami, M.H.; Asli, M.N.; Nazari-Shirkouhi, S.; Noruzy, A. Investigating the influence of knowledge management practices on organizational performance: An empirical study. Acta Polytech. Hung. 2013, 10, 205–216.
Grant, R. M. (1996). In the direction of knowledge-based theory of the firm. Strategic Management Journal, 17 (S2), 109-122 doi 10.1002/smj.4250171110.
H. Zaim; MuHamm add, S. (2020). Knowledge management procedures and organizational performance; knowledge usage as a mediator. Knowledge management Journal of. 24 (2), 339-355. https://doi.org/10.1108/JKM-07-2018-0464
Haasz, G., & Baracskai, Z. (2022). Collaborative knowledge platform: When the learning route provides data for the knowledge-based system. Knowledge Management Research & Practice, 20(6), 925 934. https://doi.org/10.1080/14778 238.2022.2079567
In 2022 National Bureau of Statistics stated. Statistics of Micro, Small and Medium Enterprises (MSMEs) In Nigeria. Abuja: National Bureau of statistics.
Kalling, T. Knowledge management and the occasional links with performance. J. Knowl. Manag. 2003, 7, 67–81.
Korimbocus M, Towokul T, Nagowah S (2020) A Survey of Knowledge Capture and Knowledge Sharing Techniques in Agile Software Companies In Advanced Computing and Intelligent Engineering (pp. 567–578)
L, Dezi, A. Ferraris, A. Papa, & D. Vrontis (2021). External embeddedness and knowledge management were used as antecedents of ambidexterity and performance among Italian SMEs. Journal of Business Research 129, 658-665.
Lam, L., Nguyen, P., Le, N., and Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: its implication for open innovation. J. Open Innov. Technol. Mark. Complex. 7:66. doi: 10.3390/joitmc7010066
Mohrman, S.A.; Finegold, D.; Mohrman, A.M., Jr. An empirical model of the organization knowledge system in new product development firms. J. Eng. Technol. Manag. 2003, 20, 7–38.
Nguyen, T. T. H., & Chou, T. H. (2021). Service innovation: customer knowledge management and SME: the resource basis of holding view. DOI: 10.1007/s11628-020-00430-9 Service Business Vol 15 N 1, 2020) 17-42.
Nonaka I. and Takeuchi H. (1995). The knowledge creating company: How Japanese companies develop the dynamics of innovation. Oxford University Press.
Obeso, C., et al. (2020). The mediating role of organizational learning in knowledge management processes and performance of firm. Giolbel, A. C., Haegele, V. and Shang, C. (2019), Journal of Knowledge Management, 24(4), 769 790. https://doi.org/10.1108/JKM-04-2019-0185
Obeso, M., Hernandez-Linares, R., Lopez-Fernandez, M.C. & Serrano-Bedia, A.M. (2020), "Knowledge management processes and organizational performance: the mediating role of organizational learning", Journal of Knowledge Management, Vol. 24 No. 8, pp. 1859-1880.
Ode, E. and Ayavoo, R. (2020), "The mediating role of knowledge application in the

relationship between knowledge management practices and firm innovation", Journal of Innovation and Knowledge, Vol. 5 No. 3, pp. 210-218, doi: 10.1016/j.jik.2019.08.002.
Otundo, J. (2023). Knowledge management for competitiveness and organizational performance. International Journal of Research in Education Humanities and Commerce, 4(2), 12-18. https://doi. org/10.37602/ijrehc.2023.4202
Pratten J. D. (1991). The growth of small firm. European Small Business Journal, 9 (1), 15 27. doi: 10.1177/026624269100900103.
Ranjbarfard M, Aghdasi M, López-Sáez P, Emilio Navas López J (2014) The barriers of knowledge generation, storage, distribution and application that impede learning in gas and petroleum companies. J Knowl Manag 1
Rasula, J.; Vuksic, V.B.; Stemberger, M.I. The impact of knowledge management on organizational performance. Econ. Bus. Rev. 2012, 14, 147.
Santoro, G., Ferraris, A., Giacosa, E. & Giovinco, G. (2019). The way SMEs are involved in open innovation: A survey methodology. Article Report New Zealand Journal of Education, 51, 189 https://doi.org/10.1002/j.2043-2393.2016.00206.x
Sarwat N, Abbas M (2020) Individual knowledge creation ability: dispositional antecedents and relationship to innovative performance. Eur J Innov Manag 24(5):1763–1781
Teece, D. J., Pisano, G. and Shuen, A. (1997). Strategic management and Dynamic capabilities. Strategic Management Journal, 18 (7) 509 533. https://doi.org/10.1002/ (SICI)1097 0266 (199708)18 7
Ul Zia, A. (2020). Knowledge-based leadership and knowledge management behaviour in enterprises of projects-based SMEs. European Business review, 32, 205-225, 2019. https://doi.org/10.1108/EBR-01-2019-0015
V. Scuotto et al. (2020). The ability of knowledge management and the influence on innovation performance of SMEs. Journal of knowledge management 24(8), 1815 1836, doi.org/10.1108/JKM-11-2019-0664.
Wernerfelt, B. (1984). Resource based view of the firm. Journal of Strategic Management,5, 2, 171-180. doi:10.1002/smj.4250050207
World Bank. (2020). Finance of the Small and Medium Enterprises (SMEs). The information is retrieved at https://www.worldbank.org/en/topic/smefinance
Yang, J., Xiu, P., Sun, L., Ying, L. and Muthu, B. (2022), "Social media data analytics for business decision making system to competitive analysis", Information Processing and Management, Vol. 59 No. 1, p. 102751, doi: 10.1016/j.ipm.2021.102751.
Yumhi, Y., Dharmawan, D., Febrian, W. D., & Sutisna, A. J. (2024). Application of Rapid Application Development Method in Designing a Knowledge Management System to Improve Employee Performance in National Construction Company. Jurnal Informasi Dan Teknologi, 6(1), 155-160. https://doi.org/10.60083/ jidt.v6i1.491