

MEDIATING ROLE OF LEARNING ORIENTATION ON THE RELATIONSHIP BETWEEN KNOWLEDGE RETENTION ON MSMEs PERFORMANCE

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Abstract

This study empirically examined the relationship between knowledge retention and MSMEs performance in Kaduna State, Nigeria. This study also examines the mediating role of learning orientation in the relationship between knowledge retention and MSMEs performance. Based on the literature review, this study develops a conceptual model that hypothesizes a positive and significant relationship between knowledge retention and firm performance, and that learning orientation mediates the relationship between knowledge retention and firm performance. A cross-sectional survey was conducted employing a multistage sampling technique to select 417 respondents participating in the Government Enterprise Empowerment Programme (GEEP) 2.0. The results reveal that KR has a significant direct effect on and a strong influence on learning orientation. Importantly, the indirect effect of KR on FP through learning orientation is also significant, confirming L learning orientation as a critical mediating factor. These findings highlight the strategic value of retaining organizational knowledge and fostering a learning-oriented culture to improve firm performance in dynamic environments.

Keywords: Knowledge retention, learning orientation, knowledge management, MSMEs performance

1.0 Introduction

Micro, small, and medium enterprises (MSMEs) are widely regarded as the driving force of the economy, generating employment opportunities and contributing significantly to global economic growth. Their influence extends beyond immediate stakeholders and shapes the overall well-being of economies. In developing nations, MSMEs are often described as the “engine of growth,” propelling economic, social, and political advancement. Despite their contributions, they face persistent challenges that threaten their survival (ILO, 2023; Durst, Edvardsson & Foli, 2023). Their “liability of smallness”—limited finance, market access, productivity, and workforce stability—makes them vulnerable, especially younger firms (Durst et al., 2023). Globally, 20% of U.S. SMEs fail in the first year, with only 25% lasting 15 years (US Bureau of Labor Statistics, 2020; McIntyre, 2020). In Africa, failure rates often exceed 60%, with Nigeria recording 61.05% (Oluwabunmi, 2020). Nearly half of Nigerian MSMEs fail early, with only 10% lasting over ten years (Aremu & Adeyemi, 2011; Ikpoto, 2023). SMEDAN (2017) also notes high failure rates and a 4.5% decline in MSMEs from 2017 to 2020 (Olubiyi 2022). These challenges highlight the need to enhance the resilience of MSMEs.

One critical factor hindering MSME performance and survival is limited operational capability and significant skill gaps in management, technology, knowledge, and mindset (SMEDAN, 2021–2025).

Many small business owners are often unaware of these deficiencies due to a lack of awareness of the skills needed to sustain growth. Consequently, Knowledge Management (KM) has become highly relevant as a strategic response, enabling MSMEs to acquire, retain, transfer, and utilize knowledge resources to compensate for systemic deficits. By embedding KM practices into their operations, MSMEs can strengthen their internal capabilities, foster innovation despite low R&D investment, and enhance their resilience and long-term survival in an environment characterized by weak human capital development and knowledge infrastructure. Despite this recognition, much of the existing literature, theory, and practical frameworks for Knowledge Management (KM) remain disproportionately focused on large corporations and organizations. Consequently, the nuanced realities and unique constraints of smaller firms are underrepresented in KM research (Anand & Walsh, 2020; Dahinine et al., 2023; Durst et al., 2023). This gap is problematic because MSMEs often operate under different structural, cultural, and resource conditions than large enterprises, which likely affects how knowledge is acquired, created, retained, and utilized. The lack of tailored KM insights for MSMEs hampers their ability to develop effective strategies for leveraging knowledge as a performance driver, signalling a clear need for more empirical and contextual studies.

Although knowledge management has been widely examined through processes such as acquisition, creation, transfer, and utilization (Alavi & Leidner, 2001; Yew Wong & Aspinwall, 2004), knowledge retention remains unexplored. Research consistently shows that knowledge retention, despite being a core KM process, has received little scholarly and practical attention compared to other processes (Ensslin, Mussi, Ensslin, Dutra, & Fontana, 2020; Durst et al., 2023). For instance, Durst et al. (2023) noted that between 2012 and 2022, few studies directly addressed KS/KR. Recently some studies were carried out to this effect for instance Caroline, Mugun and Loice (2015) Awolaja, Enitilo and Otulana (2023) Caroline, Mugun and Loice (2015). However, several gaps are evident across the three studies. They overemphasize knowledge retention as a direct input to performance, largely overlooking cultural and strategic enablers such as learning orientation. Intervening mechanisms, such as learning, innovation, and absorptive capacity, remain unexplored. The contexts are narrow Nigeria, Kenya, and Uganda with limited generalizability across MSME sectors.

Although learning has been identified as a key enabler that facilitates the translation of KM efforts into improved performance outcomes (Calantone Cavusgil & Zhao, 2002; López, Peón, & Ordás, 2005). Accordingly, much of the knowledge management (KM) literature has examined the link between KM processes, such as knowledge

acquisition, creation, retention, transfer, and utilization, and firm performance through the lens of organizational learning (OL) (Liao, 2008; Attia & Eldin, 2018; Patwary, Alwi, Rehman, Rabiul, Babatunde & Alam 2022.; Luxmi, 2014; Rehman, Asghar, & Ahmad, 2015). In this stream of research, organizational learning is commonly positioned as a natural bridge between KM and performance.

However, a closer examination reveals that Learning Orientation (LO) an organization's cultural values and strategic commitment to learning (Sinkula Baker, Noordewier 1997; Calantone et al., 2002) has been largely overlooked in KM research. Where it does appear, learning orientation is typically subsumed under organizational learning or treated as an antecedent of innovation (BoNing et al., 2024; Keskin, 2009), rather than being acknowledged as a central mechanism in the KM performance relationship. This oversight is critical because LO is conceptually distinct from OL. Although research in this area remains limited, a small but growing body of studies suggests that learning orientation (LO) may play a crucial mediating role in the KM–performance relationship.

Although research in this area remains limited, a small but growing body of studies suggests that learning orientation (LO) may play a crucial mediating role in the KM–performance relationship. For instance, Wu and Lin (2013) found that LO mediates the effect of knowledge

sharing on knowledge effectiveness, while Jiménez-Jiménez, Martínez-Costa, and Sanz-Valle (2014) showed that LO facilitates the transformation of reverse knowledge transfer into innovation within multinational firms. Similarly, Ibidunni, Agbi, and Kehinde (2023) demonstrate that LO strengthens the contribution of tacit knowledge to firm performance. Despite these insights, existing studies are limited in three important ways. First, they focus only on knowledge sharing, reverse transfer, or tacit knowledge, rather than examining other KM processes, such as knowledge retention. Second, much of the empirical evidence is drawn from developed economies or multinational corporations, which differ significantly from micro, small, and medium-sized enterprises (MSMEs) in emerging markets. Third, little is known about how LO functions as a mediating mechanism under conditions of resource scarcity, institutional fragility, and external threats, which characterize MSMEs in Nigeria.

Culturally, investments in retention mechanisms (e.g., repositories) signal management's commitment to sustaining learning, thereby embedding it as a norm in the organization. Cognitively, retained knowledge enhances absorptive capacity by expanding prior knowledge and retrieval channels, thereby strengthening the firm's ability to interpret and internalize new insights. According to Doan Rosenthal-Sabroux and Grundstein (2011), cultivating a learning

culture is a pivotal element in fostering and facilitating the knowledge retention process within organizations. However, these developments have ignored the mediating role of learning orientation in the relationship between knowledge retention and firm performance.

This study makes an empirical contribution by testing the relationship between different knowledge retention and firm performance effectiveness, focusing on micro, small, and medium enterprises in Kaduna State, Nigeria. Secondly, the paper demonstrates how learning culture or orientation explains or serves as a link between knowledge retention and firm performance

2.0 Literature Review and Hypotheses Development

This section examines relevant theoretical and empirical studies on knowledge retention, learning orientation, and MSMEs' performance to provide a solid foundation for the study. By integrating insights from organizational learning theory and the resource-based view, the review explains how retained knowledge can be transformed into superior performance outcomes through a strong learning orientation. Based on identified gaps in prior research, this section also develops hypotheses to empirically test the mediating role of learning orientation in the relationship between knowledge retention and MSMEs' performance.

2.1.1 Concept of MSMEs Performance

MSMEs play a vital role in economic development by contributing to technological and industrial development, generating employment, facilitating technology acquisition, building capacity, promoting

economic growth, improving living standards, spreading industrial activity, supporting large-scale industries, promoting exports, transforming rural areas, and offering flexibility and low start-up requirements (Agwu & Emeti, 2014). The contributions of MSMEs to the economy can be categorized into five key areas: job creation, rapid adaptation to new situations due to their inherent flexibility, encouragement of entrepreneurship, product differentiation through boutique production, and functioning as sub-industries within larger enterprises (Erdin and Ozkaya, 2020).

Firm performance in the context of MSMEs refers to the results of a firm's business activities (Kotane & Kuzimina-Merlino, 2017). It signifies the degree to which a firm effectively accomplishes its goals concerning financial metrics, such as profitability, sales, market share, and economic value added. Furthermore, it encompasses non-financial aspects such as employees' satisfaction, customers' satisfaction, and the broader community (Choongo, 2017; Rosli & Sidek, 2013). Financial performance, as defined by Annastazia and Robert (2014), involves analyzing an enterprise's financial statements, which provide insights into its financial health and operational success. Generally, financial performance is an objective measure of how well enterprises can utilize their assets from their primary enterprise activities and generate future cash inflows to the entity. It is easier for an enterprise to obtain this type of financial information if it maintains proper records. However, MSMEs often do not keep records of their transactions (Tayeh, Al-Jarrah & Tarhini, 2015), forcing researchers to resort to

subjective measures. This study utilized subjective performance metrics, such as profitability, sales, market share, employee satisfaction, and customer satisfaction. This study adapts the measurement scale developed and validated by Suliyanto and Rahab (2012). The scale was specifically designed for assessing the performance of micro, small, and medium-sized enterprises (MSMEs)

2.1.2 Knowledge Retention

The Resource-Based Theory (RBT), suggests that knowledge storage is a critical asset that distinguishes successful organizations from others (Gibson, Gibson, & Webster 2021; Odubuker, Paliszkiewicz & Skarzyńska 2023). Knowledge retention in organizations is fast becoming a global concern as shortages of professionals or knowledge workers persist (Azaki & Rivett 2022). Knowledge retention holds significant potential for organizations, not only in terms of reducing turnover costs but also in sustaining corporate performance (Doan et al., 2011). If knowledge is not retained, organizations will not be able to learn from past experiences and will have to continually reinvent the wheel, unless appropriate knowledge resides within the organization and is easily accessible to the right people to enable them to do their jobs (Du Plessis, 2003; Martins & Meryer, 2011). Liebowitz, (2011) emphasize that firms that prioritise knowledge retention efforts are better positioned to gain a competitive advantage. Consequently, modern small firms, particularly micro, small, and medium-sized enterprises (MSMEs), are increasingly focusing on knowledge retention as a crucial factor for

improving their efficiency and competitiveness. This emphasis is especially relevant to MSMEs, which are characterized by high employee turnover (Lefebvre, Antonova, and Gourova 2007) and are more vulnerable to the departure of key personnel than larger corporations (Doan et al., 2011).

2.1.3 Learning Orientation

Learning orientation (LO) is regarded as a philosophy that guides organizations to prioritize learning in all aspects of business activity (Sitinjak & Ngatno, 2023). This reflects a mindset in which managers view learning as a critical resource for success and recognize the need to discard obsolete knowledge, challenge outdated mental models, and embrace new insights (Bontis, Crossan, & Hulland, 2002). According to Calantone et al. (2002), LO shapes the type of information organizations gather and how such information is interpreted, evaluated, and shared.

Sinkula et al. (1997) highlight three core cultural norms: commitment to learning, shared vision, and open-mindedness. *Commitment to learning* reflects the extent to which an organization values and supports knowledge development. Firms with high commitment treat learning as a strategic investment for survival and long-term growth, motivating employees to enhance their skills beyond their immediate tasks (Baker & Sinkula, 1999). Without this commitment, employees are less inclined to engage in learning, which weakens the organizational adaptability (Real et al., 2014). A *shared vision* provides a common direction for

learning and knowledge creation, giving meaning to organizational tasks and clarifying the type of knowledge that must be pursued (Real et al., 2014). This ensures that learning is collective and purposeful rather than fragmented. In its absence, even motivated employees may struggle to translate ideas into meaningful outcomes (Verona, 1999; Leonard-Barton, 1995). Therefore, a strong shared vision facilitates coherence and transforms knowledge into a source of organizational strength. *Open-mindedness* refers to the willingness to critically question existing routines and accept new ideas. In turbulent environments, where knowledge rapidly becomes obsolete, firms must acquire new knowledge and unlearn outdated practices (Calantone et al., 2002). This dimension reduces rigidity, enhances adaptability, and supports innovations.

Collectively, these three dimensions establish LO as a cultural and strategic capability. By embedding learning into organizational values, aligning members with shared goals, and fostering openness to new ideas, LO strengthens a firm's capacity to remain innovative, adaptable and competitive in dynamic business environments.

2.2 Hypotheses Development

Drawing on insights from organizational learning theory and prior empirical evidence, this section develops testable hypotheses on the relationships among knowledge retention, learning orientation, and MSMEs' performance.

2.2.1 Knowledge retention and firm performance

According to the Resource-Based Theory (RBT), knowledge storage is a critical asset that distinguishes successful organizations from others (Gibson et al., 2021). Knowledge retention, as a sub-discipline of knowledge management, is not fully covered in academic research or published business case studies (Ensslin et al., 2020; Durst et al., 2023). There is also a dearth of research linking knowledge retention and firm performance, especially within the context of small firms from a developing country perspective (Doan et al., 2011), as most of the existing research has focused on large organizations, while very few studies have mentioned this issue in Small and Medium-Sized Enterprises (MSMEs). Although Awolaja, Enitilo and Otulana (2023) in their empirical study found that knowledge retention strategies effectively enhance MSMEs performance. This is consistent with the findings of Caroline, Mugun, & Loice, 2015; Picho, Paliszkiewicz, & Skarzyńska, 2023) that knowledge retention has an influence on firm performance. Jayawickrama, et al., investigated various approaches to knowledge retention and the factors that influence knowledge retention in Small and Medium-sized Enterprises (SMEs), with a specific focus on the context of implementing Enterprise Resource Planning (ERP) systems and the findings provided insights into the elements and factors that support the retention of ERP package knowledge and business process knowledge in SMEs These elements are; knowledge retention tools, effective documentation, the expertise and skills of the employees, and understanding of knowledge retention challenges the study also reveals

two additional influencing factors which include project management and organizational culture.

H₁: *Knowledge retention has a significant impact on firm performance in Kaduna State, Nigeria.*

2.2.2 Knowledge Retention and Learning Orientation

Knowledge retention (KR) ensures that critical experiences, best practices, and organizational know-how are captured and preserved (Argote, 2013). Alongside other KM processes, KR provides the structural and procedural infrastructure for a learning culture (Abualoush et al., 2018; Attia & Eldin, 2018; Patwary et al., 2022). This infrastructure forms a knowledge base that employees and managers can draw upon, reducing redundancy and guiding future learning processes. Without it, learning may become fragmented and short-lived. Retained knowledge also reduces the “cost of learning,” making prior lessons accessible and preventing knowledge loss, which facilitates ongoing learning by ensuring employees are not starting from scratch. Additionally, KR provides a collective reference point that aligns members with organizational priorities and creates historical benchmarks that support critical reflection, enabling firms to question assumptions and embrace new ideas.

By retaining knowledge, organisations signal the value of learning, strengthening employees’ commitment to learning, as they see that efforts and lessons are preserved for future use. KR also provides a collective knowledge base that aligns members with organizational goals and reinforces a shared vision. Finally, by creating historical benchmarks and making

prior experiences accessible, KR enables critical reflection and encourages open-mindedness, allowing organizations to question past routines and adapt to new challenges. Thus, KR lays the foundation for a learning-oriented culture that transforms retained knowledge into actionable insights that can enhance firm performance.

H₂: *Knowledge retention significantly impacts learning orientation in Kaduna State, Nigeria.*

2.2.3 Learning orientation as a mediator

Learning has been identified as a key enabler that facilitates the translation of KM efforts into improved performance outcomes (Calantone et al., 2002; López, Peón, & Ordás, 2005). Successful learning depends on the interplay between the process approach (organizational learning) and cultural approach (learning orientation). Accordingly, much of the knowledge management (KM) literature has examined the link between KM processes—such as knowledge acquisition, creation, retention, transfer, and utilization—and firm performance through the lens of organizational learning (Liao, 2008; Attia & Eldin, 2018; Patwary et al., 2020; Patwary et al., 2022; Luxmi, 2014; Rehman, Asghar, & Ahmad, 2015). In this stream of research, organizational learning is commonly positioned as a natural bridge between KM and performance. However, a closer examination reveals that Learning Orientation—an organization's cultural values and strategic commitment to learning (Sinkula et al., 1997; Calantone et al., 2002)—has been largely overlooked in KM studies. Where it does appear, learning orientation is typically subsumed

under organizational learning or treated as an antecedent of innovation (BoNing et al., 2024; Keskin, 2009), rather than being acknowledged as a central mechanism in the KM–performance relationship. This oversight is critical because learning orientation is conceptually distinct from organizational learning (Ejdys & Gedvilaite, 2017; Marvondo et al., 2004; Sinkula et al., 1997). Organizational learning refers to the processes and routines through which firms acquire and apply knowledge (Argote, 2013), whereas learning orientation reflects the cultural mindset that determines whether these processes are embraced, resisted, or fully utilized (Sinkula et al., 1997). It is the basic attitude toward learning (Real et al., 2014), explaining *why* organizations choose to learn, whereas organizational learning explains *how* they learn (Alegre & Chiva, 2009). Learning orientation serves as a cultural antecedent to organizational learning, establishing values that encourage and sustain learning behavior (Sinkula et al., 1997; Calantone et al., 2002). Without a strong learning orientation, KM practices, including KR, risk becoming mechanical, underutilized, or decoupled from performance outcomes. Various scholars have long acknowledged the importance of learning orientation to overall firm performance. According to Calantone et al. (2002), firms with a strong learning orientation are not simply collectors or storehouses of knowledge but processors of knowledge.

H₃: *Learning orientation mediates the relationship between knowledge retention and firm performance in Kaduna State, Nigeria.*

3.0 Research Methodology

This study adopts a survey research design to collect primary data for empirical analysis. A sample of 417 respondents was drawn from a population of 7,351 registered entrepreneurs under the Government Enterprise and Empowerment Program (GEEP) 2.0 operating in Kaduna State. A multistage sampling technique was employed, as it is particularly suitable in contexts where accessing specific subgroups of the population at the initial stage of data collection is difficult. The unit of analysis comprises owners and/or managers of small-scale firms, based on the premise that owner-managers function as key repositories of organizational knowledge and are often the primary source of knowledge within their firms. The collected data were subsequently screened and analyzed using SmartPLS 4.

Regarding variable measurement, the questionnaire was developed through a systematic process, with careful consideration given to language clarity, question sequencing, response format, scale types, instrument design, and overall research context. Measurement items were adapted from established studies in the literature and assessed using a five-point Likert scale. Firm performance was measured using a six-item scale adapted from Suliyanto and Rahab (2012), learning orientation was captured using eleven items adapted from Sinkula et al. (1997), while knowledge retention was measured with seven items adapted from Ode and Ayavoo (2020) which is presented in table 1, appendix I.

4.0 Data Analysis and Result

This section presents the procedures and outcomes of the data analysis conducted to test the study's hypotheses. Using SmartPLS 4, the measurement and structural models are evaluated, and the empirical results on the relationships among knowledge retention, learning orientation, and MSMEs' performance are reported.

The evaluation of the Measurement Model involves assessing the indicator reliability, internal consistency reliability, convergent validity, and discriminant validity of the research variables. Indicator reliability, measured by indicator loadings, Cronbach's alpha, and Composite Reliability (CR), should be over 0.70, while indicators below 0.70 can be considered for deletion. Convergent validity, which indicates how well constructs converge to explain item variance, is achieved when AVE values are 0.50 or higher. Discriminant validity, which evaluates whether constructs possess distinct identities, is assessed through cross loadings. (Hair, Hult, Ringle, Sarstedt, Danks & Ray, 2021; Ringle, Sarstedt, Sinkovics, & Sinkovics, 2023).

Learning orientation (LO) is measured as a reflective-reflective higher-order construct (HOC) in this study based on three lower-order constructs: commitment to learning (CL), shared vision (SV), and open-mindedness (OM). Its reliability and validity were assessed alongside other constructs (Sarsdedt et al., 2019) using the disjoint two-stage. In stage two of the disjoint two-stage process, the LVS was used to measure the learning orientation. The reliability of the

higher-order construct was assessed using factor loadings, Cronbach's alpha, and composite reliability. The factor loadings of CL, SV, and OM were over 0.5, as recommended by Hair et al. (2010), and the composite reliability value was greater than 0.70 (Hair et al., 2017). PLS SEM Algorithm graphical output.

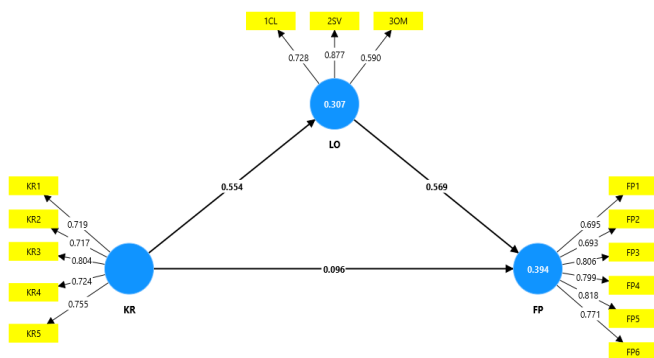


Fig 2: PLS algorithm

Table 1: Internal Consistency (Composite reliability) and Average Variance Extracted (AVE)

Construct	Items	Loadings	Composite reliability	AVE
Firm Performance	FP1	0.695	0.894	0.586
	FP2	0.693		
	FP3	0.806		
	FP4	0.799		
	FP5	0.818		
	FP6	0.771		
Knowledge Retention	KR1	0.695	0.861	0.554
	KR2	0.693		
	KR3	0.806		
	KR4	0.799		
	KR5	0.755		
Learning Orientation	OL1	0.728	0.781	0.549
	OL2	0.877		
	OL3	0.59		

Source: Researcher's Computation, 2025

Figure 2 presents the graphical output of the measurement model, and Table 1 presents the indicator reliability, internal consistency reliability, and convergent validity. Items KR6 and KR7 were deleted

from the model because they loaded less than 0.7. However, Items FP1, FP2, and OM3 loaded below 0.7 but above 0.5 and were not deleted because their deletion did not improve their reliability or the AVE (Hair, Hult, Ringle & Sarstedt, 2017). As such, the reliability of the constructs was achieved. Equally, from Table 1, convergent validity was also achieved, and the individual items converged to measure their respective parent constructs, yielding AVE values above the threshold of 0.500 (Ringle et al., 2023). Cross-loadings were used to check discriminant validity. Cross loadings confirm discriminant validity when items load the highest on their intended constructs. All indicators loaded highest on their respective constructs and lower on other constructs. According to Hair et al. (2017), discriminant validity is supported when an item's outer loading on its associated construct is greater than its loadings on other constructs. This ensures that constructs are empirically distinct and accurately measured.

Table 2: Discriminant Validity - Cross loadings

Construct	Items	FP	KR	LO
Firm Performance	FP1	0.357	0.511	0.728
	FP2	0.612	0.442	0.877
	FP3	0.385	0.256	0.59
	FP4	0.695	0.267	0.464
	FP5	0.693	0.274	0.361
	FP6	0.806	0.305	0.524
Knowledge Retention	KR1	0.799	0.408	0.504
	KR2	0.818	0.306	0.49
	KR3	0.771	0.321	0.494
	KR4	0.237	0.719	0.409
	KR5	0.278	0.717	0.382
Learning Orientation	CL1	0.366	0.804	0.448
	SV2	0.293	0.724	0.387

OM3 0.343 0.755 **0.433**

4.2 Structural model

This section presents the structural equation model of the data analysis. Specifically, standard bootstrapping procedure was employed using 5000 bootstrap samples for 391 cases to assess the significance of the path coefficients of the direct and mediating relationships (Henseler *et al.*, 2009; Hair *et al.*, 2014).

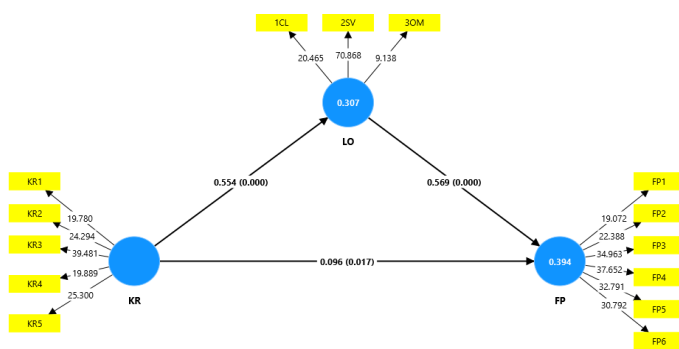


Fig 3: Bootstrapping

Table 4: Test of hypotheses

Hypotheses	Relationships	Beta Value	T statistics	p values	Decision
H ₀₁	KR → FP	0.096	2.121	0.017	Accepted
H ₀₂	KR → LO	0.554	13.470	0.000	Accepted
H ₀₃	KR → LO → FP	0.316	8.461	0.000	Accepted

The findings presented in Table 4 and Figure 1 confirm all four hypothesized relationships in the structural model. First, knowledge retention (KR) has a significant positive direct effect on firm performance (FP), as indicated by a t-statistic of 2.121 and a p-value of 0.017. Second, KR significantly influences learning orientation (LO), with a very strong effect ($t = 13.470$, $p = 0.000$), suggesting that firms that retain knowledge effectively are more likely to develop strong learning orientations. Third, LO also has a significant positive effect on FP ($t = 12.086$, $p = 0.000$), reinforcing its role

as a key driver of performance. Lastly, the mediating effect of LO in the relationship between KR and FP is significant ($t = 8.461$, $p = 0.000$), indicating that LO partially explains how knowledge retention translates into better firm outcomes. Overall, the results demonstrate that knowledge retention improves performance both directly and indirectly by fostering a learning-oriented culture.

5. Discussion, Conclusion and Contributions

This section discusses the study's findings in relation to existing literature and theoretical expectations, highlighting their implications for knowledge retention, learning orientation, and MSMEs' performance. It then concludes by summarizing the key insights of the study and outlines its theoretical, practical, and policy contributions, as well as directions for future research.

5.1 Discussion of Results

The current study aimed to examine the mediating role of learning orientation on the relationship between knowledge retention on firm performance. The hypothesized relationships were tested using PLS-SEM technique. The findings show that Knowledge Retention (KR) has both a direct and significant indirect effect on Firm Performance (FP), with Learning Orientation (LO) acting as a powerful mediator:

The direct positive effect ($KR \rightarrow FP$) indicates that MSMEs that effectively retain critical knowledge such as institutional memory, best practices, or lessons learned experience improved performance outcomes. This includes better decision-making, consistent

operational processes, and reduced redundancy. Findings of this research contribute to the literature in a variety of way. First, the study supports and extends the KBV by showing that knowledge retention, as a strategic intangible asset, significantly contributes to firm performance. However, this effect is enhanced when mediated by learning orientation. The findings obtained in this study is consistent with the findings of Awolaja et al., (2023) which found that knowledge storage/retention influences firm performance. The findings also support previous studies suggesting that knowledge retention is a fundamental success factor and a key facilitator of firm performance (Caroline, et al., 2015 and Picho, et al., 2023). However, this finding contradicts the Obeso et al (2020) which found that KR does not have a direct effect on firm performance

Second, the study shows that retained knowledge provides a foundational base upon which a firm's learning orientation can thrive. Employees and managers in firms with good knowledge retention practices are more likely to value continuous learning, reflect on past experiences, and engage in collaborative problem-solving. The study integrates two significant but often separately examined constructs knowledge management (KM) processes and learning orientation (LO) into a unified framework, providing deeper insights into how they interact to impact firm performance. While no studies explicitly test knowledge retention, related constructs like knowledge management and organizational learning highlight mechanisms that align with retention: for instance, Mauludin, Mukhlis, & Handayati, (2023) suggest that

effective knowledge management including retaining critical operational insights strengthens learning orientation by providing a foundation for continuous improvement. According to Adegbui et al (2018) retained knowledge (e.g., past successes/failures, customer preferences) equips MSMEs to make informed decisions. The strong path coefficient suggests that KR does not merely function as a passive storage mechanism but actively shapes employees' attitudes toward learning. By ensuring that valuable lessons are not lost, firms signal that learning efforts are worthwhile and contribute to organizational progress. This reinforces the psychological contract employees hold with their organizations, motivating them to remain open-minded, committed, and adaptable in their work practices. In this sense, knowledge retention serves as both the foundation and catalyst for a learning-oriented culture.

Third, Indirect effect ($KR \rightarrow LO \rightarrow FP$) confirms that retained knowledge improves performance most effectively when it is processed and leveraged through a strong learning orientation. This reinforces the importance of not just storing knowledge but actively using it to inform strategic actions. Several studies validate the finding that learning orientation (LO) mediates the relationship between knowledge-related variables (such as knowledge retention) and MSME performance, though direct studies using knowledge retention as the antecedent are rare. Although previous studies found learning orientation as a mediator knowledge transfer process and innovation. Retained knowledge alone does not automatically improve

performance; knowledge must be accessed, interpreted, and applied effectively. KR ensures that organizational experiences, best practices, and critical know-how are stored systematically, but without a cultural and cognitive framework to leverage this stored knowledge, it may remain unused or underutilized. Knowledge retention provides the repositories, documentation, and organizational memory from which knowledge can be shared. Without retention, there is little to transfer, since knowledge may be lost when employees leave or when lessons are not documented.

By establishing the role of learning orientation as a mediating capability, the study reinforces the DCT perspective that firms must not only possess knowledge resources but also develop internal capabilities (like learning) to effectively leverage those resources in dynamic environments. It also aligns with the argument by Real, Roldán, and Leal (2014) that learning orientation plays a crucial role in ensuring that retained knowledge is effectively applied to enhance organizational performance. It underscores the importance of maintaining organizational memory and fostering a learning culture to maximize the performance impact of retained knowledge. Kamasak and Bulutlar (2010) highlighted that learning-oriented firms are more likely to exploit knowledge received from external and internal sources, translating it into competitive advantages. The dynamic capabilities theory (DCT) emphasize that effective identification of opportunities requires firms to internalize external knowledge, which is facilitated by a strong learning

orientation (Teece, 2007). Knowledge retention ensures that valuable experiences, customer insights, and market intelligence are stored for future use. Learning orientation helps firms extract patterns and insights from retained knowledge to anticipate market trends and customer needs. As Teece (2007) highlighted that firms with strong sensing capabilities use retained knowledge and learning orientation to detect and respond to market changes early.

Retained knowledge, combined with a strong learning orientation, enhances a firm's ability to exploit best practices and innovate processes. Eisenhardt and Martin (2000) asserted that learning-oriented firms leverage retained knowledge to rapidly adjust strategies and introduce innovations. Knowledge retention, without active learning, risks becoming obsolete. Learning orientation ensures that retained knowledge is continuously updated and integrated into organizational routines hence Zollo and Winter (2002) noted that dynamic capabilities emerge from continuously learning from retained knowledge and adjusting organizational routines.

5.2 Conclusion

Many authors have suggested that knowledge retention is an important antecedent of a firm's performance (Bairi, Murali Manohar & Kundu, 2011; Doan, et al 2011; Ramona, & Alexandra, 2019; Caroline, Mugun, & Loice, 2015 and Picho, et al., 2023; Olalekan, et al., 2023). In recent years, many authors have discussed the influence of different knowledge management practices on various organisational outcomes. Despite

the increased research interest in knowledge retention practices, very limited studies have provided empirical evidence linking knowledge retention with firm performance especially in the context of the micro, small and medium enterprise and from a developing country perspective and more importantly establishing the mediating effect of learning orientation on the relationship between knowledge retention and firm performance. By proposing a model demonstrating the mediating effect of learning orientation on the relationship between knowledge retention and firm performance this study fills the gaps in existing literature. The empirical findings of this study confirm all the three hypotheses proposed for this study. Through the mediation analysis, this study confirms the mediator role of learning orientation in MSMEs. This study underscores that knowledge retention is valuable, but its true impact on firm performance is unlocked through learning orientation. The findings provide robust support for both KBV and DCT, suggesting that sustainable performance is achieved not just through knowledge possession, but through its active transformation

The empirical study yielded some important results, the theoretical, practical, and contextual contributions for scholars and managers are explained below

This study makes a significant theoretical contribution by extending the Knowledge-Based View (KBV) of the firm. While KBV posits that knowledge is the most strategically significant resource for achieving competitive advantage, the findings of this study reveal that not all knowledge processes independently

contribute to firm performance. Instead, the results emphasize that knowledge retention, in particular, plays a critical role when mediated by learning orientation (LO). This suggests that the value of knowledge resources is maximized only when firms possess the capacity to learn, adapt, and utilize retained knowledge highlighting the dynamic nature of resource deployment. This insight complements and extends the Dynamic Capabilities Theory (DCT), which stresses that firms must develop internal competencies, such as learning orientation, to transform and integrate knowledge into performance outcomes, particularly in changing environments. Thus, the study bridges KBV and DCT by showing that knowledge retention alone is insufficient without the organizational capability to harness it effectively through learning.

5.3 Contributions

Practically, the study offers actionable insights for managers and policymakers aiming to improve the performance of micro, small, and medium-sized enterprises (MSMEs), particularly in developing economies like Nigeria. The findings show that knowledge retention and the ability to learn from retained knowledge are key drivers of performance. Therefore, MSME development programs, such as the Government Enterprise and Empowerment Program (GEEP), should go beyond offering financial support to incorporate structured knowledge management and learning interventions. Business training modules should emphasize strategies for capturing, storing, and institutionalizing knowledge, as well as fostering a learning culture that includes shared vision and open-

mindfulness. This implies that development agencies and SME-support institutions need to integrate knowledge and learning tools into their capacity-building models.

The study contributes to the relatively under-researched area of KM and LO within the context of MSMEs in Sub-Saharan Africa. While most existing research focuses on large firms in developed economies, this study provides empirical evidence from a large sample of entrepreneurs in Kaduna State, Nigeria. This adds contextual richness and relevance to the global body of KM literature. By highlighting the mediating role of LO in the relationship between KR and FP in a resource-constrained environment, the study informs scholars and practitioners of the unique challenges and opportunities that MSMEs face in leveraging intangible resources. It underscores the importance of tailoring KM and learning strategies to local realities, including infrastructural limitations, managerial competence gaps, and socio-economic barriers.

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Appendix

Table 1: Variable Measurement

Construct	Code	Items
Firm Performance	FP1	Our products reach a wider market
	FP2	Our sales increased as compared to last year
	FP3	Our profits have increased as compared to last year

Knowledge Retention	FP4	The level of complaints from our customers decreased as compared to previous years.	0.810
	FP5	The number of our employees has increased as compared to previous years.	0.808
	FP6	The number of our customers has increased as compared to previous years	0.763
	KR1	We have processes to protect knowledge from theft from within the organization	
	KR2	We have processes to protect knowledge from theft from outside the organization	0.653
	KR3	We have incentives that encourage the protection of knowledge	0.686
Learning Orientation	KR4	We have processes to protect knowledge from inappropriate use outside the organization	0.767
	KR5	We have processes to protect knowledge from inappropriate use inside the organization	0.692
	KR6	We have tools available to access the stored knowledge.	0.748
	KR7	We have technology that restricts access to some sources of knowledge	0.685
	CL1	Our managers basically agree that our ability to learn is the key to our competitive advantage.	0.879
	CL2	The basic values of our firm include learning as key to improvement.	0.872
	CL3	We believe employee learning is an investment, not an expense.	0.87
	CL4	Learning in our organization is seen as a key commodity necessary to guarantee organizational survival	0.922
	SV1	There is a commonality of purpose in our firm.	0.672
	SV2	There is total agreement on our vision across all levels, functions, and divisions.	0.721
	SV3	Our employees are committed to the goals of this organization.	0.838
	SV4	Our employees view themselves as partners in charting the direction of our firm.	0.751
	OM1	We are not afraid to reflect critically on the shared assumptions we have made about our customers.	0.849
	OM2	Our employees realize that the very way they perceive the marketplace must be continually questioned.	0.837
	OM3	We hardly collectively question our own biases about the way we interpret customer information	0.736

Source: Researcher's Compilation, 2025