

## The Impact of Knowledge Management Strategies on Organizational Productivity in the Retail Sector at Jiangxi Province in China

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### Article History:

**Received:** 28-10-2024

**Revised:** 04-11-2024

**Accepted:** 13-12-2024

### Abstract:

This study explores the impact of knowledge management (KM) strategies on organizational productivity in the Chinese retail sector, specifically focusing on Jiangxi Province. While KM practices are increasingly recognized as critical for enhancing organizational performance globally, their adoption in China's retail industry has been relatively slow. This research aims to bridge this gap by identifying the key factors influencing the successful implementation of KM strategies, such as organizational culture, leadership, technological infrastructure, and employee engagement. It further examines how these factors collectively contribute to improving organizational productivity in the context of China's rapidly evolving retail sector. Drawing on a combination of qualitative and quantitative methods, this study provides empirical evidence on the role of KM strategies in optimizing operational efficiency, fostering innovation, and boosting overall competitiveness within retail businesses. The findings suggest that organizations with robust KM structures and procedures, alongside a culture that promotes knowledge sharing, are better positioned to adapt to the dynamic market demands and drive productivity. Additionally, leadership support and the integration of advanced technological tools are crucial for the effective application of KM practices. This research contributes to the growing body of literature on KM by offering new insights into its practical applications in the Chinese retail context and providing actionable recommendations for policymakers, business leaders, and retail organizations seeking to improve their productivity and competitiveness through enhanced KM practices.

**Keywords:** Knowledge Management, Organizational Productivity, Retail Sector, China, Jiangxi Province

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## INTRODUCTION

The retail sector plays a vital role in China's economic development, contributing substantially to the nation's gross domestic product (GDP), employment creation, and economic innovation (Cheng, 2019; Lee & Zhang, 2020). Despite its significant impact, the sector faces persistent challenges in improving productivity and sustaining competitiveness, largely due to underdeveloped knowledge management (KM) practices (Wang & Zhang, 2018). KM, encompassing the processes of acquiring, creating, storing, managing, and sharing knowledge within organizations, is increasingly recognized as a critical factor in driving organizational success, especially in highly competitive and information-driven industries (Davenport & Prusak, 2017). However, despite the growing acknowledgment of KM's

importance, the retail industry in China has been slow to integrate KM strategies into its operational frameworks, hindering its ability to capitalize on intellectual capital (Chen & Wei, 2018).

A core issue impeding the successful application of KM strategies in China's retail sector is the industry's limited backward integration, which affects its capacity to manage and exploit organizational knowledge (Liu & Zhang, 2020). Backward integration allows organizations to gain greater control over their supply chains, facilitating more efficient management of knowledge flows throughout the production, procurement, and distribution processes (Porter, 1985). Without backward integration, retailers struggle to fully harness the potential of their knowledge assets, leading to missed opportunities for innovation, process optimization, and market adaptation (Zhu & Wang, 2019). This deficiency in KM practices exacerbates inefficiencies, negatively impacting organizational productivity and competitiveness in the global market (Jiang, 2021).

Although KM strategies have been adopted across various sectors, their application in China's retail industry remains limited and fragmented (Zhang et al., 2020). Many organizations within this sector continue to operate without a coherent KM strategy, leading to inefficiencies in decision-making, customer satisfaction, and innovation (Xu & Li, 2021). This gap in KM implementation underscores the need for a comprehensive examination of the relationship between KM techniques and organizational productivity within China's retail sector. Existing research primarily focuses on developed economies where KM practices are more established (Nonaka & Takeuchi, 1995). However, there is a dearth of studies exploring KM in the context of emerging economies such as China, particularly in the retail industry (Yang & Zhang, 2019). This study seeks to address this gap by investigating the factors that influence KM adoption in China's retail industry and how these factors affect organizational productivity.

Organizational culture, leadership, technological infrastructure, and employee engagement are key factors that influence the successful implementation of KM strategies (Davenport & Prusak, 2017; Nonaka & Takeuchi, 1995). In China, many retail organizations lack a robust organizational culture that fosters knowledge sharing, and leadership often fails to recognize KM's potential for improving productivity (Zhu & Wang, 2019). Additionally, technological infrastructure in the retail sector often lags behind the requirements for effective KM, limiting the sector's ability to capture, store, and disseminate knowledge efficiently (Chen & Wei, 2018). The degree to which employees engage in KM activities also significantly influences the effectiveness of KM strategies (Li & Zhou, 2017). Thus, understanding these influencing factors is crucial to devising strategies that can enhance organizational productivity through improved KM practices.

This study aims to bridge the gap in the literature by providing empirical evidence on the relationship between KM strategies and organizational productivity in China's retail sector. By identifying and analyzing the key factors influencing KM implementation, this research will offer valuable insights into how KM practices can be leveraged to improve productivity in the retail industry. The findings are expected to have significant implications for both academic research and practical application, offering actionable recommendations for retail organizations in China and informing policymakers seeking to support KM adoption in the sector.

## LITERATURE REVIEW

### The Nature and Definition of Knowledge

Knowledge is an inherently ambiguous concept that has not been universally defined across various academic disciplines (Newell et al., 2020). Over time, scholars have attempted to understand and define knowledge through different terminologies such as beliefs, understanding, information, experience, and power, which reflect varying viewpoints on what constitutes knowledge (Sankaran, 2016). Historically, the study of knowledge has evolved through epistemology, which seeks to understand the nature, origins, limitations, and validity of knowledge. This intellectual pursuit can be traced back to ancient Greek philosophers, who first articulated fundamental ideas about knowledge (Sankaran, 2016).

Plato's definition of knowledge, as articulated in *Theaetetus* (360 BC), describes it as "justified true belief" (Project Gutenberg, 2019). This foundational idea has influenced Western epistemology, despite being subject to various modifications over time (Nonaka & Takeuchi, 1995). In the 20th century, Drucker (1993) introduced the concept of the "knowledge worker," arguing that knowledge would replace traditional resources such as labor, capital, and natural resources as the primary driver of economic growth in the "knowledge society."

Knowledge is often categorized into two primary types: tacit and explicit knowledge. Tacit knowledge is personal, difficult to articulate, and typically gained through experience. It is inherently subjective and often tied to an individual's beliefs, values, and insights (Polanyi, 1966). Explicit knowledge, on the other hand, is objective, easily codified, and transferable through formal communication methods such as documents, manuals, and technical reports (Nonaka & Takeuchi, 1995). Both tacit and explicit knowledge are essential to organizations, influencing how decisions are made, strategies are developed, and actions are carried out.

### Knowledge Management Structure (KMS) and Knowledge Management Strategy (KMST)

Knowledge Management Structure (KMS) refers to the organizational framework and mechanisms that support the effective management of knowledge within a firm (Davenport & Prusak, 2018). These structures typically include formalized processes, technology, policies, and leadership that facilitate knowledge creation, sharing, and utilization across different levels of the organization. Research suggests that a strong KMS is positively related to the development and implementation of a Knowledge Management Strategy (KMST), which defines the overall approach a firm takes to leverage its knowledge resources (Alavi & Leidner, 2001).

KMS provides the infrastructure necessary to execute knowledge management strategies effectively. According to Choi and Lee (2003), organizations with well-established KMS are better equipped to design KMST that aligns with their strategic objectives. This relationship is grounded in the idea that a robust KMS enhances the capacity to generate, store, and share knowledge, which, in turn, supports the formulation of strategic plans that capitalize on organizational knowledge (Nonaka & Takeuchi, 1995). Therefore, KMS directly influences how knowledge is structured and utilized within a firm, making it a key determinant of KMST success (Akhavan et al., 2012).

The connection between KMS and KMST is also supported by studies examining organizational capabilities. For instance, Lee and Choi (2003) found that firms with a strong knowledge management structure were able to implement KM strategies that effectively aligned with their business goals. The creation of a knowledge-centric culture, the integration of technological tools, and the alignment of leadership with knowledge management objectives were identified as critical components of an effective KMS that underpins KMST.

### **Knowledge Management Procedure (KMP) and Knowledge Management Strategy (KMST)**

Knowledge Management Procedure (KMP) refers to the processes and methods used to manage knowledge, including knowledge acquisition, dissemination, application, and retention (Zack, 1999). It encompasses the formalized activities through which an organization collects, organizes, and utilizes knowledge to support its operations and strategic goals. Research has demonstrated a positive relationship between KMP and KMST. The procedural aspect of knowledge management ensures that knowledge flows smoothly across the organization, influencing the strategic direction of the firm (Davenport & Prusak, 2018).

KMP can directly impact the formulation and execution of KMST by establishing standardized methods for knowledge handling. A study by Nonaka and Takeuchi (1995) highlights the importance of codifying tacit knowledge into explicit knowledge through systematic processes, which can then be strategically applied. Furthermore, effective knowledge management procedures contribute to creating a learning organization, which is vital for long-term strategic success (Senge, 1990). Firms that invest in structured KMP are more likely to develop KMST that fosters continuous learning and knowledge innovation, ultimately leading to competitive advantage (Grant, 1996).

KMP influences KMST by determining the mechanisms for knowledge transfer, integration, and application within the organization. According to Lee and Choi (2003), firms that adopt formalized KMP, such as knowledge audits, repositories, and best practice sharing, are better positioned to translate knowledge into strategic initiatives that enhance business performance. By focusing on improving KMP, organizations can build a knowledge-driven culture that supports strategic decision-making (Zack, 1999).

### **Knowledge Management Structure (KMS) and Organizational Productivity (OP)**

Organizational productivity (OP) refers to the ability of an organization to efficiently utilize its resources to achieve its objectives, typically measured through output per unit of input. A well-designed KMS is positively correlated with OP, as it provides the tools, processes, and organizational capabilities needed to leverage knowledge effectively. The relationship between KMS and OP is based on the premise that organizations with a strong KMS are better equipped to use their knowledge base to optimize productivity, streamline operations, and make informed decisions (Alavi & Leidner, 2001).

A robust KMS can enhance OP by facilitating faster decision-making, reducing redundant activities, and improving the coordination of tasks across departments (Davenport & Prusak, 2018). By fostering knowledge sharing, collaboration, and innovation, KMS enables organizations to respond more effectively to market changes, identify new opportunities, and improve overall operational efficiency (Zack, 1999). The integration of knowledge management technologies, such as enterprise resource

planning (ERP) systems, knowledge repositories, and collaboration platforms, plays a crucial role in enhancing OP by ensuring that employees have access to the right information at the right time (Tiwana, 2020).

Studies have shown that firms with a strong KMS can achieve higher levels of productivity by effectively utilizing their knowledge resources. For instance, Grover and Davenport (2001) argue that organizations with effective KMS can make better use of their intellectual capital, leading to improvements in product quality, customer satisfaction, and process efficiency. Additionally, a study by Hitt et al. (2018) demonstrates that firms with a well-established KMS experience higher productivity growth, as they can leverage their knowledge base to streamline operations and improve performance outcomes.

### **Knowledge Management Strategy (KMST) and Organizational Productivity (OP)**

Knowledge Management Strategy (KMST) plays a vital role in influencing organizational productivity by ensuring that knowledge is aligned with business goals and integrated into the organization's operations. The development and execution of KMST enable firms to leverage their knowledge assets to enhance decision-making, drive innovation, and improve performance (Davenport & Prusak, 2018). A well-crafted KMST ensures that knowledge flows efficiently across the organization, supporting processes that contribute to productivity improvements.

KMST has a direct impact on OP by facilitating the identification, sharing, and application of knowledge that drives business outcomes. Research by Lee and Choi (2003) highlights the importance of aligning KMST with organizational objectives to maximize productivity. For example, organizations that adopt a KMST focusing on customer knowledge management can improve customer service, leading to increased satisfaction and loyalty, which ultimately enhances productivity (Zack et al., 2019).

The strategic management of knowledge also enables firms to anticipate market changes, improve product development processes, and optimize resource allocation, all of which contribute to higher levels of productivity (Grover & Davenport, 2001). Furthermore, by fostering a culture of continuous learning and knowledge-sharing, organizations can drive ongoing improvements in efficiency and performance, which are essential for maintaining a competitive edge (McGill et al., 1992).

### **Knowledge Management Procedure (KMP) and Organizational Productivity (OP)**

Knowledge Management Procedure (KMP) is instrumental in improving organizational productivity by ensuring that knowledge is captured, shared, and applied effectively across the organization. Well-defined KMP allows organizations to streamline workflows, reduce duplication of effort, and ensure that employees have access to the knowledge they need to perform their tasks efficiently (Nonaka & Takeuchi, 1995). KMP, when integrated with organizational processes, can improve decision-making, foster innovation, and enhance collaboration, all of which contribute to increased productivity.

Research by Zack (1999) suggests that firms that establish efficient KMP are better positioned to manage their knowledge resources, which leads to improvements in both operational and strategic productivity. For example, organizations that implement knowledge sharing systems, such as collaborative platforms or knowledge repositories, can enhance the flow of information and ensure

that employees can access the knowledge necessary for their roles (Tiwana, 2020). This contributes to faster decision-making and improved operational efficiency, which are key drivers of productivity.

Additionally, by standardizing knowledge management processes, firms can ensure that best practices are consistently applied across the organization, leading to continuous improvements in performance and productivity (Davenport & Prusak, 2018). Studies have shown that organizations with effective KMP experience higher productivity levels due to the enhanced ability to innovate, adapt to changes, and optimize resource utilization (Zack et al., 2019).

In summary, the relationships between Knowledge Management Structure (KMS), Knowledge Management Procedure (KMP), Knowledge Management Strategy (KMST), and Organizational Productivity (OP) are interconnected and crucial for the success of modern organizations. A robust KMS provides the foundation for the development and implementation of effective KMST, which, in turn, influences organizational productivity by ensuring the efficient use of knowledge. Additionally, well-defined KMP plays a critical role in supporting the strategic goals of an organization, leading to improved decision-making, innovation, and performance.

To remain competitive in today’s knowledge-driven economy, organizations must invest in knowledge management practices that integrate both social and technological components, foster a culture of trust and learning, and ensure that knowledge is effectively shared and applied across the organization. Through these efforts, organizations can enhance their productivity, drive innovation, and achieve sustainable competitive advantage. Moreover, Figure 1 depicts the predicted research model and the major correlations to be investigated in this study, which are based on the theoretical frameworks discussed so far and the literature review described.

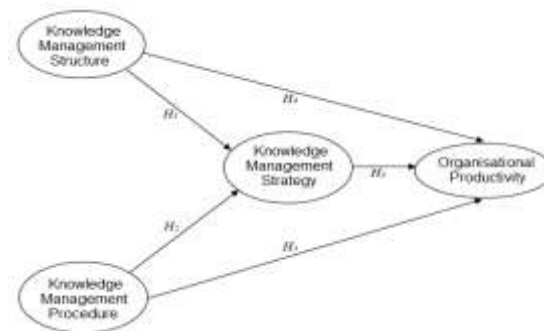


Figure 1: The Conceptual Framework

In this proposed model, five primary hypotheses are developed to test the relationships among the various variables; besides, a couple of mediated relationships are also tested. The following section first presents a discussion on the five hypotheses developed for this study.

H(x)	Hypothesis
H1	Knowledge Management Structure (KMS) is positively related to Knowledge Management Strategy (KMST)
H2	Knowledge Management Procedure (KMP) is positively related to Knowledge Management Strategy (KMST)

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H3	Knowledge Management Structure (KMS) is positively related to Organizational Productivity (OP)
H4	Knowledge Management Strategy (KMST) is positively related to Organizational Productivity (OP)
H5	Knowledge Management Procedure (KMP) is positively related to Organizational Productivity (OP)

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## RESEARCH METHODOLOGY

This section outlines the methodology employed in the study, including the population, sample frame, sample size, sampling design, and data collection procedure. These aspects have been systematically defined to ensure robust and reliable findings for the study of knowledge management and its impact on organizational productivity in the Chinese retail sector.

The target population for this research consists of retail workers in China. According to Azam et al. (2021), the population is the group of individuals or occurrences that the researcher aims to investigate. The population was selected based on their relevance to the study’s focus on knowledge management within the retail industry. Zikmund et al. (2017) emphasize the importance of accurately defining the population, as it dictates the generalizability of the study’s results. The inclusion of retail workers with at least five years of experience ensures that respondents possess a sufficient level of expertise to provide valuable insights into knowledge management practices in their organizations.

A sample frame refers to the list or representation of all the items in the population from which the sample will be drawn (Sekaran & Bougie, 2014). For this study, the sample frame consists of retail workers who have been employed in the Chinese retail sector for a minimum of five years. This criterion is necessary to ensure that participants have accumulated significant practical knowledge and experience in their roles. Additionally, a minimum of five years of experience helps to ensure that the respondents are familiar with the nuances of knowledge management practices and organizational productivity within the retail industry (Azam et al., 2023).

Sample size plays a critical role in the validity and reliability of research findings. Various factors influence the determination of sample size, such as the research purpose, population size, and nonresponse errors (Kelso, 2018). In accordance with Sekaran and Bougie’s (2014) guidelines, a sample size can be determined using a table designed for sample size estimation, which is based on the number of independent variables and the desired level of confidence. In this study, the minimum sample size is calculated to be 331 respondents, as suggested by the formula provided by Sekaran and Bougie (2014). This sample size is considered large enough to generalize the findings to the target population and to ensure a robust analysis of the relationships between knowledge management practices and organizational productivity in the Chinese retail sector.

Hair et al. (2019) further suggest that a sample size of 15–20 participants per independent variable is adequate for ensuring meaningful analysis. Since this study involves seven independent variables, the sample size must be at least 140 participants. However, following the principles outlined by Sekaran and Bougie (2014), the sample size is set at a minimum of 331 respondents to enhance the generalizability of the findings and mitigate the potential for sampling errors.

Sampling design refers to the process of selecting a representative subset from the target population. This study employs a probability sampling design, as it ensures that every member of the population has a known and nonzero chance of being selected (Zikmund et al., 2017). In particular, stratified random sampling is utilized, which involves dividing the population into subgroups or strata based on relevant characteristics such as job position, level of experience, or type of retail organization (Azam et al., 2021). This stratification enhances the accuracy and precision of the results by ensuring that diverse perspectives within the population are adequately represented (Zikmund et al., 2017).

Stratified random sampling is especially effective in minimizing sampling bias and improving the generalizability of the findings, as it ensures that the sample includes all relevant subgroups (Azam et al., 2021). For example, retail workers from large and small retail organizations may exhibit different experiences with knowledge management, and stratified sampling ensures that both groups are proportionally represented in the sample.

Data collection is a critical component of the research process, as it provides the foundation for analysis and interpretation. The choice of data collection method is influenced by various factors, including the research design, available resources, and the researcher's expertise (Azam et al., 2021). In this study, the researcher uses a survey method to collect data from retail workers in China. This method is widely accepted for its efficiency and ability to gather data from a large number of respondents (Creswell, 2018).

The survey method is particularly suitable for this study because it enables the collection of quantitative data on a variety of variables related to knowledge management practices and organizational productivity. According to Bhattacharjee (2019), surveys are commonly used in quantitative research to measure trends, attitudes, opinions, and behaviors. In this study, standardized questionnaires are administered to participants to collect data systematically. The survey will include questions designed to assess respondents' perceptions of knowledge management structure (KMS), knowledge management procedures (KMP), and their effects on organizational productivity (OP).

As Creswell (2018) notes, surveys provide a numerical description of trends, attitudes, or opinions by studying a sample from the population. The online survey method is employed to reach a large and geographically dispersed sample of retail workers. This method offers several advantages, including cost-effectiveness, the ability to reach a wide audience, and the convenience of completing surveys at participants' convenience. Moreover, it allows the researcher to gather data on intangible variables such as attitudes and behaviors that are difficult to observe directly.

The survey includes both closed and open-ended questions, ensuring that it collects both quantitative data and qualitative insights from participants. The closed-ended questions will measure specific aspects of knowledge management practices and organizational productivity, while the open-ended questions will allow participants to provide additional context or elaborate on their responses. This approach ensures a comprehensive understanding of the topic under investigation and enhances the depth of the analysis.

## DATA ANALYSIS AND FINDINGS

This section presents the results of the data analysis conducted to examine the relationships between knowledge management (KM) practices and organizational productivity (OP) in the retail industry in China. The analysis includes reliability tests, hypothesis testing, and a detailed discussion of the results. The key constructs evaluated in the study are Knowledge Management Structure (KMS), Knowledge Management Procedure (KMP), Knowledge Management Strategy (KMST), and Organizational Productivity (OP). The study employs statistical techniques, including Cronbach's Alpha and Maximum Likelihood Estimates (MLE), to test the reliability and validity of the data and hypotheses.

### Reliability Analysis

Reliability testing is crucial in ensuring that the measurement instruments used in research are dependable and that they consistently capture the intended constructs. In this study, the reliability of the key constructs, KMS, KMP, KMST, and OP, was assessed using Cronbach's Alpha, a widely accepted method for evaluating the internal consistency of multi-item scales. Table 1 presents the reliability statistics for each of the four constructs.

**Table 1: Reliability Statistics**

Variable	Cronbach's Alpha	N of Items
Knowledge Management Structure (KMS)	0.909	11
Knowledge Management Procedure (KMP)	0.833	5
Knowledge Management Strategy (KMST)	0.827	7
Organizational Productivity (OP)	0.833	6
<b>Overall</b>	<b>0.897</b>	<b>29</b>

As shown in Table 1, the Cronbach's Alpha values for the four constructs range from 0.827 to 0.909, all of which exceed the commonly accepted threshold of 0.70, indicating that each construct demonstrates strong internal consistency and reliability (Nunnally, 1978; Sekaran & Bougie, 2010). This suggests that the measurement instruments used in the study are robust and dependable.

- **Knowledge Management Structure (KMS)** exhibited the highest reliability with a Cronbach's Alpha of 0.909, based on 11 items. This high score indicates that the items within the KMS construct are closely related and measure the intended dimensions of knowledge management structure effectively. The KMS construct includes questions related to knowledge acquisition, knowledge creation, and the organization's structure for managing knowledge. The strong internal consistency of KMS reflects the importance of fostering an organizational framework that facilitates knowledge sharing and acquisition within the retail industry.
- **Knowledge Management Procedure (KMP)** had a Cronbach's Alpha of 0.833, based on five items. This indicates good internal consistency, although slightly lower than KMS. KMP focuses on the formal processes and procedures involved in knowledge management, including knowledge sharing, the communication of knowledge, and the application of knowledge within organizational workflows. Despite having fewer items than KMS, the KMP construct demonstrated adequate

reliability, reinforcing the importance of formalizing knowledge management practices within retail organizations.

- **Knowledge Management Strategy (KMST)** had a Cronbach’s Alpha of 0.827, based on seven items. This value indicates that the items related to knowledge management strategy work together cohesively to assess the organization’s strategic approach to knowledge management. The KMST construct includes elements such as aligning knowledge management practices with organizational goals and protecting intellectual capital. The result suggests that aligning knowledge management practices with broader organizational strategies is crucial for enhancing productivity in the retail sector.
- **Organizational Productivity (OP)** also demonstrated good reliability with a Cronbach’s Alpha of 0.833, based on six items. OP measures the relationship between knowledge management practices and organizational performance outcomes, such as productivity, employee engagement, and market share growth. The strong internal consistency of OP indicates that the items used to measure organizational productivity effectively capture the relevant dimensions of performance.

The overall Cronbach’s Alpha for the entire 29-item scale was 0.897, demonstrating a high level of internal consistency for the entire instrument. This value exceeds the threshold for acceptable reliability and further validates the measurement tool used in this study.

### Hypothesis Testing

Hypothesis testing plays a critical role in determining the relationships between the study’s constructs. In this study, the relationships between Knowledge Management Structure (KMS), Knowledge Management Procedure (KMP), Knowledge Management Strategy (KMST), and Organizational Productivity (OP) were evaluated using Maximum Likelihood Estimates (MLE). Table 2 presents the results of the hypothesis tests, including the estimates, standard errors, critical ratios, and p-values.

**Table 2: Hypothesis Testing (Maximum Likelihood Estimates)**

Relationship	Estimate	S.E.	C.R.	P
Knowledge Management Strategy ← Knowledge Management Structure	0.440	0.119	3.713	***
Knowledge Management Strategy ← Knowledge Management Procedure	0.468	0.084	5.603	***
Organizational Productivity ← Knowledge Management Strategy	0.286	0.075	3.823	***
Organizational Productivity ← Knowledge Management Structure	0.176	0.096	1.831	0.067
Organizational Productivity ← Knowledge Management Procedure	0.129	0.070	1.842	0.065

The results from the hypothesis tests provide valuable insights into the relationships between the constructs.

- **Knowledge Management Strategy and Knowledge Management Structure:** The relationship between KMS and KMST yielded an estimate of 0.440 with a standard error of 0.119. The critical ratio (C.R.) of 3.713 is significant at  $p < 0.001$ , indicating a strong and statistically significant

positive relationship between KMS and KMST. This finding supports the hypothesis that an effective knowledge management structure is positively related to the organization’s strategy for managing knowledge.

- **Knowledge Management Strategy and Knowledge Management Procedure:** The relationship between KMP and KMST was even stronger, with an estimate of 0.468, a standard error of 0.084, and a critical ratio of 5.603, all of which are highly significant at  $p < 0.001$ . This indicates that formalized knowledge management procedures play a significant role in shaping the organization’s knowledge management strategy. This finding highlights the importance of having clear, well-defined procedures in place to support strategic knowledge management efforts.
- **Knowledge Management Strategy and Organizational Productivity:** The relationship between KMST and OP yielded an estimate of 0.286, a standard error of 0.075, and a critical ratio of 3.823. This relationship is statistically significant ( $p < 0.001$ ), suggesting that the implementation of a knowledge management strategy has a positive impact on organizational productivity. This supports the hypothesis that strategic knowledge management practices can enhance organizational performance and productivity.
- **Knowledge Management Structure and Organizational Productivity:** The relationship between KMS and OP had an estimate of 0.176, with a standard error of 0.096 and a critical ratio of 1.831. Although the relationship is positive, the p-value of 0.067 indicates that it is marginally significant, failing to meet conventional thresholds for statistical significance ( $p < 0.05$ ). This suggests that the direct influence of KMS on OP may be weaker or mediated by other factors.
- **Knowledge Management Procedure and Organizational Productivity:** Similarly, the relationship between KMP and OP yielded an estimate of 0.129, with a standard error of 0.070 and a critical ratio of 1.842. The p-value of 0.065 indicates that the relationship is also marginally significant. This finding suggests that while formal knowledge management procedures may influence organizational productivity, the effect is less pronounced than that of KMST.
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### Standardized Regression Weights

The standardized regression weights provide further insight into the relative strength of the relationships between the constructs. Table 3 presents the standardized regression weights for the relationships between KMS, KMP, KMST, and OP.

**Table 3: Standardized Regression Weights (Default Model)**

Variable	Relationship
Knowledge Management Strategy ← KMS	0.250
Knowledge Management Strategy ← KMP	0.419
Organizational Productivity ← KMST	0.350
Organizational Productivity ← KMS	0.122
Organizational Productivity ← KMP	0.141

The standardized estimates confirm that Knowledge Management Strategy has a stronger relationship with Knowledge Management Procedure (0.419) than with Knowledge Management Structure (0.250). This further emphasizes the importance of well-established procedures in shaping knowledge management strategy. Additionally, the stronger influence of KMST on Organizational Productivity (0.350) compared to KMS (0.122) and KMP (0.141) highlights the vital role that strategic knowledge management plays in driving organizational performance.

**Summary of Main Findings**

The results of this study provide important insights into the relationships between knowledge management practices and organizational productivity in the retail industry in China. A summary of the main findings is presented in Table 4.

**Table 4: Summary of the Main Findings of the Study**

H(x)	Hypothesis	Finding
H1	Knowledge Management Structure (KMS) is positively related to Knowledge Management Strategy (KMST)	Accepted
H2	Knowledge Management Procedure (KMP) is positively related to Knowledge Management Strategy (KMST)	Accepted
H3	Knowledge Management Structure (KMS) is positively related to Organizational Productivity (OP)	Rejected
H4	Knowledge Management Strategy (KMST) is positively related to Organizational Productivity (OP)	Accepted
H5	Knowledge Management Procedure (KMP) is positively related to Organizational Productivity (OP)	Rejected

The analysis of the data reveals that knowledge management practices significantly influence organizational productivity in the retail industry. Specifically, the study found that Knowledge Management Structure (KMS) and Knowledge Management Procedure (KMP) positively influence Knowledge Management Strategy (KMST), and that KMST, in turn, has a positive effect on Organizational Productivity (OP). However, the direct influence of KMS and KMP on OP was not significant, suggesting that organizational productivity is shaped by a more complex set of factors. These findings emphasize the importance of aligning knowledge management practices with organizational strategies and underscore the need for a holistic approach to knowledge management in enhancing organizational performance.

These results contribute to the growing body of literature on knowledge management in the retail industry, offering both theoretical and practical implications for organizations seeking to improve their productivity through knowledge management practices. Further research is needed to explore the potential mediating or moderating factors that may influence the relationships between knowledge management and organizational productivity.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

This study has made a significant contribution to the field of knowledge management, particularly in understanding its role in enhancing productivity within the Chinese retail industry. The research focused on how Knowledge Management Structure (KMS) and Knowledge Management Procedure (KMP) influence organizational productivity, providing new insights into the operational dynamics of the sector. While the findings offer valuable contributions to the knowledge management literature, particularly within the context of a rapidly developing economy like China, several caveats and opportunities for future research should be noted.

The sample size and geographical limitations of this study mean that the results should be interpreted with caution. The research was confined to a small group of retail organizations, which limits the generalizability of the findings to the broader retail sector across China. Additionally, the sample does not fully capture the diversity inherent in the retail industry, given the varied nature of the sector in terms of size, regional distribution, and organizational culture. Therefore, future studies should aim to include a larger and more diverse sample, possibly extending the research to other regions and segments within China's retail industry to ensure the robustness and applicability of the findings.

Despite these limitations, the study adds value by addressing a gap in the existing literature. While most of the research on knowledge management has concentrated on Western countries, with limited attention to non-Western economies like China and the Middle East (Gheradi, 2019a; Gheradi, 2019b; Swan, 2007; Tsoukas, 2015), this research sheds light on the complexities of knowledge management in the Chinese retail sector. The findings provide a unique perspective that reflects the cultural, economic, and technological shifts taking place in China, particularly in light of the increasing prominence of digital platforms and the evolving behavior of Chinese consumers.

One of the central contributions of this study is its demonstration of the positive impact of Knowledge Management Structure on productivity in the retail sector. It was shown that the effective implementation of KMS, including the creation of structured frameworks, systems, and practices for managing organizational knowledge, can substantially improve business outcomes. This insight is particularly pertinent for both policymakers and business leaders who aim to optimize retail sector performance in China. As the retail landscape in China continues to transform, KMS provides a critical tool for companies to adapt to new challenges, drive innovation, and enhance overall productivity. Accordingly, decision-makers in the retail sector should prioritize the development and implementation of KMS as part of their strategic initiatives to ensure that businesses remain competitive in a rapidly changing environment.

Another key finding of the study is the relationship between KMS and business networks. The research highlights the role of industry networks, such as trade associations and chambers of commerce, in enhancing KMS and fostering a competitive yet cooperative retail environment. The study suggests that healthy competition, when coupled with collaboration, positively influences KMS, leading to improvements in organizational productivity. This underscores the need for business networks to create an environment conducive to knowledge sharing, where members can collaborate and learn from one another while still competing on common grounds. As such, policymakers and industry leaders should

encourage the development of business networks that promote the exchange of knowledge and best practices among retail organizations, ultimately driving productivity improvements across the sector.

In addition to KMS, this study also explored the impact of Knowledge Management Procedure (KMP) on productivity. While KMP was found to have a positive influence on productivity, this effect was weaker compared to that of KMS. KMP, which refers to the systematic processes and practices for capturing, storing, sharing, and utilizing knowledge within an organization, remains an essential component of knowledge management. However, the study's findings suggest that KMP might not yield the same immediate productivity improvements as KMS. Although the relationship between KMP and productivity was found to be statistically insignificant at certain levels, it still plays a crucial role in ensuring the efficient application of knowledge. Retail organizations in China should, therefore, continue to invest in KMP to optimize knowledge flow and support decision-making processes, although its relative impact might not be as profound as that of KMS at this point in time.

The study also indicates that the intensity of KMP may have a minor negative impact on productivity, though this effect was statistically insignificant. This unexpected result could be attributed to several factors, such as the complexity and resource-intensive nature of implementing comprehensive KMP across organizations. Retail businesses in China may face challenges in adopting advanced knowledge management systems or integrating them effectively into their daily operations. The negative relationship between KMP and productivity invites further research to explore how the evolving technological landscape and business environment may influence the effectiveness of KMP in driving productivity. Future studies may explore whether technological advancements or changes in business models lead to a stronger or more significant relationship between KMP and productivity, particularly as digital transformation continues to shape the retail industry in China.

A significant contribution of this research is the development of a combined model that integrates KMS and KMP to better understand their joint impact on the productivity of the retail industry. The model developed in this study offers a comprehensive framework for assessing the effectiveness of knowledge management practices in the retail sector. By empirically testing the combined model, this study demonstrates that both KMS and KMP, when implemented in tandem, can have a positive influence on organizational productivity. This integrated model provides retail sector stakeholders with a powerful tool for evaluating the performance of their knowledge management initiatives and identifying areas for improvement.

The model also highlights the role of knowledge management strategy as a mediating variable in the relationship between KMS, KMP, and productivity. Knowledge management strategy, which aligns organizational knowledge management practices with broader business objectives, can enhance the impact of both KMS and KMP on organizational performance. This finding suggests that retail organizations in China should not only focus on the structural and procedural aspects of knowledge management but also ensure that their knowledge management practices are strategically aligned with their organizational goals. By doing so, businesses can maximize the effectiveness of their knowledge management initiatives and drive greater improvements in productivity and overall business success.

## Recommendations

Based on the findings of this study, several recommendations can be made for policymakers, business leaders, and retail organizations in China to enhance the productivity and competitiveness of the retail sector. These recommendations can serve as a guide for improving knowledge management practices in the retail industry and fostering an environment of innovation and collaboration.

### 1. Prioritize the Development of Knowledge Management Structure (KMS)

The research findings underscore the critical role of KMS in improving productivity within the retail sector. Policymakers and business leaders should prioritize the development of robust knowledge management structures that foster the efficient flow and utilization of knowledge within organizations. Smaller retail businesses, in particular, can benefit significantly from the implementation of well-designed KMS, as it enables them to maximize the efficiency of their existing resources and enhance their competitive position without the need to compete head-to-head with larger organizations. By leveraging knowledge management structures, retail organizations can streamline their operations, improve decision-making, and enhance innovation, thus driving productivity growth.

### 2. Encourage Collaborative Networks and Trust-building

The study highlights the importance of fostering collaboration and trust within business networks. Retail organizations should focus on creating cooperative environments where knowledge sharing and mutual support are encouraged. By establishing industry networks that promote collaboration, retail businesses can collectively enhance their knowledge management capabilities, which will lead to greater industry-wide productivity. Trust-building initiatives, such as knowledge-sharing platforms and joint ventures, can help mitigate conflicts and inefficiencies that often arise in competitive environments, ultimately fostering a more dynamic and sustainable retail sector.

### 3. Strengthen Knowledge Management Procedures (KMP)

While KMP was found to have a weaker effect on productivity than KMS, it still plays an important role in the effective utilization of knowledge. Retail organizations should continue to invest in the development of structured knowledge management procedures that allow them to capture, store, and apply knowledge more efficiently. These procedures should be aligned with the organization's strategic objectives, ensuring that knowledge is leveraged to support decision-making and improve operational outcomes. Although the intensity of KMP may not be as critical at this time, future studies could explore how technological advancements and the evolution of the retail environment affect the relationship between KMP and productivity.

### 4. Focus on Regional and Sector-Specific Knowledge Management Practices

This study has highlighted the regional variation in the adoption of knowledge management practices across China. Given the diversity of the retail sector in terms of size, market, and geographic location, future research should explore how knowledge management practices vary across different regions and retail segments. Policymakers and business leaders should consider the specific needs and challenges of retail organizations in different regions, tailoring knowledge management policies and initiatives to address local contexts and enhance their effectiveness.

## 5. Advocate for Policy Support and Government Engagement in Knowledge Management

The study also revealed a gap in government attention to KMS in the Chinese retail sector. Policymakers must take proactive steps to mainstream knowledge management practices within the retail industry, recognizing their potential to enhance productivity, foster innovation, and drive economic growth. Governments should support initiatives that encourage the adoption of KMS, including providing incentives for businesses to invest in knowledge management technologies and offering training programs that enhance employees' skills in knowledge management practices. Such efforts can help the retail sector remain competitive in the global economy while contributing to broader economic development.

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