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Knowledge Management Strategies and Organizational Productivity in Jiangxi Province's Retail Sector, China

Luo Zhuo, Ali Khatibi, Jacquline Tham, S. M. Ferdous Azam
Postgraduate Centre, Management and Science University (MSU), University Drive, Off Persiaran Olahraga, 40100 Shah Alam, Selangor

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ABSTRACT

This study investigates the impact of Knowledge Management (KM) strategies on organizational productivity within the retail sector of Jiangxi Province, China. Despite the global recognition of KM's significance in improving organizational performance, its adoption in China's retail industry has been relatively slow. This research seeks to address this gap by identifying the critical factors that influence the successful implementation of KM strategies, including organizational culture, leadership, technological infrastructure, and employee engagement. Furthermore, it explores how these factors collectively contribute to boosting organizational productivity in the rapidly evolving retail environment of China. Using both qualitative and quantitative research methods, the study provides empirical evidence regarding the role of KM in enhancing operational efficiency, enhancing innovation, and improving overall competitiveness in retail businesses. The findings highlight that organizations with strong KM systems, a culture that supports knowledge sharing, and leadership that encourages continuous improvement are better positioned to meet dynamic market demands. Additionally, the integration of advanced technologies is vital for the effective implementation of KM practices. This research contributes to the expanding field of KM by offering fresh insights into its application in China's retail sector and presents actionable recommendations for policymakers, business leaders, and retail companies aiming to enhance their productivity and competitiveness through improved KM strategies.

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

INTRODUCTION

The retail sector plays a vital role in China's economic development, significantly contributing to the nation's gross domestic product (GDP), employment creation, and driving economic innovation (Cheng, 2019; Lee & Zhang, 2020). With its rapid growth, the sector has become an essential pillar in the country's economic transformation, as consumer spending and retail activities continue to grow. However, despite its remarkable contribution to China's economy, the retail industry faces persistent challenges related to improving productivity and maintaining competitiveness in an increasingly complex global marketplace. One of the key factors inhibiting progress in this area is the underdeveloped nature of knowledge management (KM) practices within the industry (Wang & Zhang, 2018). KM refers to the systematic process of acquiring, creating, storing, managing, and sharing knowledge within organizations, and it is increasingly recognized as a crucial driver of organizational success in industries where competition and information are key determinants of success (Davenport & Prusak, 2017). The retail sector, characterized by its dynamic environment and reliance on efficient operations, stands to gain immensely from the effective implementation of KM strategies. However, despite growing acknowledgment of KM's potential, China's retail sector has been relatively slow to integrate these strategies into its operational frameworks, hindering its capacity to fully capitalize on intellectual capital and drive sustainable growth (Chen & Wei, 2018).

A significant challenge faced by many retail organizations in China is their limited backward integration, which impedes their ability to effectively manage and exploit organizational knowledge (Liu & Zhang, 2020). Backward integration, as outlined by Porter (1985), refers to a company's efforts to gain greater control over its supply chains, which in turn facilitates more efficient management of knowledge flows throughout production, procurement, and

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distribution processes. By integrating backward, retailers can better control the knowledge generated throughout the various stages of their value chains, enhancing the potential for process optimization, innovation, and better alignment with market demands. However, without this integration, retail companies often struggle to leverage their knowledge assets effectively, resulting in missed opportunities for innovation, slower response to market changes, and suboptimal operational performance (Zhu & Wang, 2019). This lack of backward integration and its consequent effect on KM practices exacerbate inefficiencies within the sector, further reducing the competitiveness of Chinese retailers in the global market and negatively impacting their productivity (Jiang, 2021). As the retail sector continues to evolve, it becomes increasingly clear that the inability to effectively manage and apply organizational knowledge is a critical barrier to enhancing both operational efficiency and overall market positioning.

Although KM strategies have been adopted successfully across a range of industries, their application in China's retail sector remains underdeveloped and fragmented (Zhang et al., 2020). In many instances, organizations within the sector continue to operate without a comprehensive KM strategy, which often leads to inefficiencies in decision-making processes, customer satisfaction, and innovation capabilities (Xu & Li, 2021). The absence of a coherent and strategic approach to knowledge management limits the ability of retail businesses to harness their knowledge assets in ways that could lead to improved productivity and competitiveness. This gap in KM adoption underscores the need for further research into the relationship between KM practices and organizational productivity within China's retail sector. While existing studies have primarily focused on developed economies where KM practices are more mature and well-established (Nonaka & Takeuchi, 1995), there remains a lack of studies that specifically explore KM in emerging economies like China, especially in the retail sector (Yang & Zhang, 2019). Therefore, this study aims to fill this gap by investigating the key factors influencing KM adoption in China's retail industry and how these factors impact organizational productivity.

In the context of KM, several factors have been identified as crucial for the successful implementation of KM strategies, including organizational culture, leadership, technological infrastructure, and employee engagement (Davenport & Prusak, 2017; Nonaka & Takeuchi, 1995). In China, many retail organizations still struggle with a lack of organizational culture that supports knowledge sharing and collaboration, which can significantly hinder the effectiveness of KM strategies (Zhu & Wang, 2019). A culture that promotes openness, trust, and continuous learning is essential for facilitating the sharing and utilization of knowledge across organizational boundaries. Furthermore, leadership plays a critical role in the successful adoption of KM strategies. In many cases, retail leaders in China do not fully recognize the potential of KM to improve productivity and drive innovation, which can lead to the neglect of KM as a strategic priority (Zhu & Wang, 2019). Additionally, technological infrastructure in China's retail sector often falls short of the requirements necessary for effective KM implementation. Many retail organizations lack the advanced technological tools needed to efficiently capture, store, and disseminate knowledge, further hindering their ability to optimize knowledge flows (Chen & Wei, 2018). Technological advancements, such as data analytics, cloud computing, and knowledge management systems, are crucial for enabling organizations to effectively manage and utilize their knowledge assets. Moreover, the degree to which employees actively engage in KM activities also plays a significant role in the success of KM strategies. Employee engagement in knowledge-sharing practices is essential for creating an environment in which knowledge can be easily transferred and applied to enhance organizational performance (Li & Zhou, 2017).

In light of these challenges, this study seeks to bridge the gap in existing 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 that influence the implementation of KM practices, this research will offer valuable insights into how retail organizations in China can leverage KM to improve their productivity and competitiveness. The findings of this study are expected to have significant implications not only for academic research but also for the practical application of KM strategies in the retail sector. Policymakers and business leaders will be able to draw on the results of this research to make informed decisions regarding the adoption of KM practices, with the aim of enhancing greater organizational effectiveness and driving long-term success in the increasingly competitive global retail market.

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LITERATURE REVIEW

Knowledge is a diverse and complex concept that remains difficult to define universally across various academic disciplines. Scholars have approached the definition of knowledge from multiple perspectives, often using terms such as beliefs, understanding, information, experience, and power to capture the varying viewpoints on what constitutes knowledge (Sankaran, 2016). The nature of knowledge, its origins, limitations, and validity has been a central theme in epistemology, the branch of philosophy dedicated to understanding the essence of knowledge. The origins of epistemological inquiry can be traced back to ancient Greek philosophers, who laid the groundwork for the ideas that continue to shape modern understandings of knowledge (Sankaran, 2016). One of the earliest and most influential contributions to epistemology came from Plato, who defined knowledge as "justified true belief" in his work *Theaetetus* (360 BC). This foundational definition has significantly influenced Western epistemology and, while it has evolved over time, it remains central to many debates regarding the nature of knowledge (Nonaka & Takeuchi, 1995).

In the 20th century, Peter Drucker (1993) introduced the concept of the "knowledge worker," asserting that knowledge would become the primary driver of economic growth in what he termed the "knowledge society." This idea shifted the focus from traditional resources, such as labor, capital, and natural resources, to intellectual capital as the key factor in economic development. This shift further emphasized the growing importance of knowledge in modern economies and organizations. Over time, knowledge has been categorized into two primary types: tacit and explicit knowledge. Tacit knowledge, as described by Polanyi (1966), is highly personal, often difficult to articulate, and typically gained through experience. It is inherently subjective and shaped by an individual's insights, beliefs, and values. Tacit knowledge, while challenging to transfer, is vital for decision-making and problem-solving in organizations. On the other hand, explicit knowledge is objective, codified, and easily transferable through formal methods, such as documents, manuals, and technical reports (Nonaka & Takeuchi, 1995). Both tacit and explicit knowledge are integral to organizational functioning, influencing decision-making, strategy development, and execution within firms.

Knowledge Management (KM) refers to the systematic process through which organizations acquire, create, store, manage, and share knowledge. It encompasses a range of practices and activities aimed at ensuring that the right knowledge is available to the right people at the right time. Knowledge Management Structure (KMS) refers to the organizational framework and mechanisms that support effective knowledge management within an organization (Davenport & Prusak, 2018). A strong KMS typically includes formalized processes, technology, policies, and leadership that facilitate knowledge creation, sharing, and utilization across different levels of the organization. Research has shown that a robust KMS positively influences the development and execution of a Knowledge Management Strategy (KMST), which outlines the overall approach an organization takes to leverage its knowledge resources (Alavi & Leidner, 2001). KMS provides the necessary infrastructure for the successful execution of KMST, enabling organizations to generate, store, and share knowledge, ultimately driving strategic initiatives (Nonaka & Takeuchi, 1995). This relationship between KMS and KMST suggests that organizations with a strong knowledge management structure are better equipped to develop strategies that align with their business objectives, enhancing their ability to harness knowledge for competitive advantage (Choi & Lee, 2003).

The link between KMS and KMST is also evident in studies on organizational capabilities. Lee and Choi (2003) found that firms with well-established KMS could implement KM strategies that effectively aligned with their business goals. Key components of a successful KMS include enhancing a knowledge-centric organizational culture, integrating technological tools, and ensuring that leadership supports knowledge management objectives. These factors collectively contribute to the development of a KMST that drives organizational success. Furthermore, KMS plays a crucial role in the creation of a culture of knowledge sharing, which is essential for the effective management of intellectual capital and the overall performance of the organization. When KMS is aligned with strategic goals, it enhances an organization's ability to use knowledge resources for decision-making, innovation, and process improvement.

Knowledge Management Procedure (KMP) is another critical aspect of KM, referring to the processes and methods through which knowledge is managed, including acquisition, dissemination, application, and retention (Zack, 1999). KMP involves formalized activities that enable organizations to collect, organize, and apply knowledge to support

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their operations and strategic objectives. Studies suggest a positive relationship between KMP and KMST, with well-defined knowledge management procedures facilitating the smooth flow of knowledge across the organization and influencing the strategic direction of the firm (Davenport & Prusak, 2018). For instance, Nonaka and Takeuchi (1995) emphasized the importance of codifying tacit knowledge into explicit knowledge through structured processes, making it more accessible and applicable to organizational goals. This systematic approach to knowledge management ensures that knowledge is captured and shared in ways that align with the firm's broader strategy.

KMP also plays a critical role in creating a learning organization, which is essential for long-term success in a competitive business environment (Senge, 1990). Firms that invest in structured KMP are better positioned to enhance continuous learning and knowledge innovation, which contribute to sustained competitive advantage (Grant, 1996). The process of knowledge transfer, integration, and application within an organization can be greatly enhanced by formalized KMP. Lee and Choi (2003) found that firms that adopt formalized KMP practices, such as knowledge audits, repositories, and best practice sharing, can effectively translate knowledge into strategic initiatives, ultimately improving business performance. Knowledge sharing platforms and repositories enable employees to access the information they need, promoting collaboration, faster decision-making, and improved operational efficiency.

Organizational productivity (OP) refers to an organization's ability to efficiently utilize its resources to achieve its objectives, typically measured in terms of output per unit of input. A strong KMS is positively correlated with OP, as it provides the tools, processes, and organizational capabilities necessary to leverage knowledge effectively. A robust KMS enhances OP by facilitating quicker decision-making, reducing redundancy, and improving task coordination across departments (Davenport & Prusak, 2018). Knowledge sharing, collaboration, and innovation are all facilitated by a well-established KMS, enabling organizations to respond more effectively to market changes, identify new opportunities, and improve overall efficiency (Zack, 1999). The integration of technologies such as enterprise resource planning (ERP) systems, knowledge repositories, and collaboration platforms enhances OP by ensuring employees have access to the right information when needed, improving decision-making and operational processes (Tiwana, 2020).

Studies have shown that firms with a well-implemented KMS achieve higher levels of productivity by better utilizing their knowledge resources. Grover and Davenport (2001) argue that firms with effective KMS can optimize their intellectual capital, leading to improved product quality, customer satisfaction, and process efficiency. Additionally, research by Hitt et al. (2018) demonstrates that firms with strong KMS experience higher productivity growth, as they are able to leverage their knowledge base to streamline operations and improve performance outcomes. In organizations where knowledge flows freely and is strategically applied, productivity is enhanced, contributing to a competitive advantage.

KMST, as an integral part of knowledge management, plays a critical role in influencing organizational productivity. By aligning knowledge management efforts with organizational goals, KMST ensures that knowledge is leveraged to improve decision-making, enhance innovation, and enhance performance (Davenport & Prusak, 2018). A well-designed KMST ensures that knowledge flows efficiently across the organization, supporting processes that contribute to productivity improvements. Lee and Choi (2003) highlight the importance of aligning KMST with organizational objectives to maximize productivity. For example, organizations that adopt a KMST focused on customer knowledge management can improve customer service, leading to higher satisfaction and loyalty, which in turn enhances productivity (Zack et al., 2019).

The strategic management of knowledge also enables firms to anticipate market changes, optimize product development processes, and allocate resources more efficiently, all of which contribute to increased productivity (Grover & Davenport, 2001). By enhancing a culture of continuous learning and knowledge sharing, organizations can drive ongoing improvements in efficiency and performance, which are vital for maintaining a competitive edge (McGill et al., 1992). A well-executed KMST ensures that knowledge is applied to strategic initiatives, such as process innovation, resource optimization, and customer engagement, all of which lead to better organizational outcomes and enhanced productivity.

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KMP also plays a key role in enhancing organizational productivity by ensuring that knowledge is captured, shared, and applied effectively across the organization. Efficient 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). When KMP is integrated with organizational processes, it leads to improved decision-making, increased collaboration, and enhanced innovation, all of which contribute to higher productivity. Organizations that implement knowledge-sharing systems, such as collaborative platforms and knowledge repositories, can enhance the flow of information, enabling faster decision-making and improved operational efficiency (Tiwana, 2020).

In conclusion, the relationships between Knowledge Management Structure (KMS), Knowledge Management Procedure (KMP), Knowledge Management Strategy (KMST), and Organizational Productivity (OP) are interrelated and critical for modern organizations. A strong KMS lays the foundation for effective KMST, which in turn influences productivity by ensuring the efficient use of knowledge. Furthermore, well-defined KMP supports organizational processes, enhancing decision-making, innovation, and performance. To thrive in today's knowledge-driven economy, organizations must invest in knowledge management practices that enhance a culture of learning, trust, and collaboration, ensuring that knowledge is effectively shared and applied across the organization. These efforts will enhance productivity, drive innovation, and create a 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.

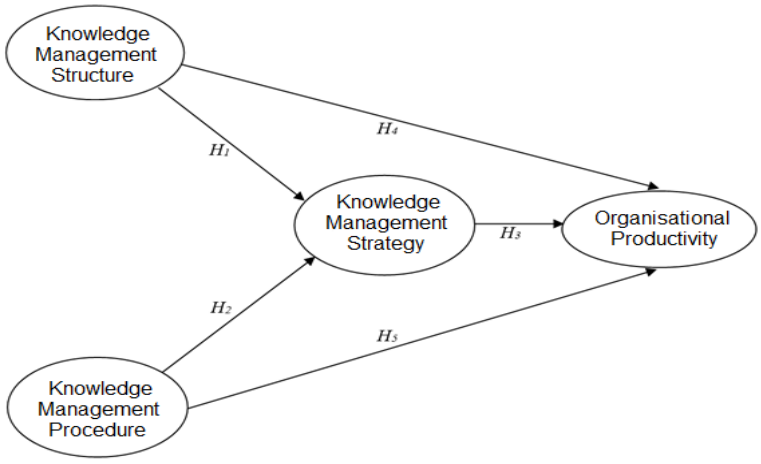

Figure 1: The Conceptual Framework

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)
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

The methodology employed in this study is designed to ensure that the research findings on knowledge management and its impact on organizational productivity in the Chinese retail sector are both reliable and valid. The target population for this research consists of retail workers in China, specifically those with at least five years of experience in the sector. According to Azam et al. (2021), the population refers to the group of individuals or occurrences that are relevant to the research question. By focusing on experienced retail workers, the study aims to gather insights from individuals who are familiar with the nuances of knowledge management practices and organizational productivity in the retail environment. Zikmund et al. (2017) argue that the accuracy of the population definition is crucial for ensuring the generalizability of the findings, as it influences the applicability of the results to the broader population.

To construct a sample frame, which is a representation of the entire population from which the sample will be drawn (Sekaran & Bougie, 2014), the study focuses on retail workers who meet the five-year experience requirement. This criterion ensures that participants possess substantial practical knowledge and experience in their roles, which is essential for understanding how knowledge management practices are applied in the retail sector. Additionally, the minimum five years of experience helps ensure that respondents have a deep understanding of how knowledge management influences organizational productivity over time, particularly in a rapidly evolving retail industry such as China's (Azam et al., 2023).

Sample size is a critical aspect of the research design, as it directly impacts the validity and reliability of the study's results. The sample size is determined by various factors, including the population size, research purpose, and desired level of confidence (Kelso, 2018). According to Sekaran and Bougie (2014), the minimum sample size can be calculated using a formula that accounts for the number of independent variables and the desired confidence level. In this study, the minimum sample size is calculated to be 331 respondents, which is large enough to ensure a robust analysis of the relationships between knowledge management practices and organizational productivity. The larger sample size enhances the generalizability of the findings and minimizes potential sampling errors.

Hair et al. (2019) further emphasize that a sample size of 15–20 participants per independent variable is necessary for meaningful analysis. Since this study involves seven independent variables, a sample size of at least 140 participants would be adequate. However, based on Sekaran and Bougie's (2014) formula and the desire for more robust findings, the sample size is set at a minimum of 331 respondents to further enhance the study's reliability and validity.

The study employs a probability sampling design, specifically stratified random sampling, which ensures that each member of the population has a known and non-zero chance of being selected (Zikmund et al., 2017). Stratified random sampling is particularly useful for ensuring that diverse perspectives are represented in the sample, as it involves dividing the population into subgroups based on characteristics such as job position, experience level, or the type of retail organization. This approach minimizes sampling bias by ensuring that relevant subgroups, such as workers from both large and small retail organizations, are proportionally represented. Azam et al. (2021) note that this method improves the accuracy of the findings and enhances the precision of the results by capturing the full spectrum of experiences within the population.

Data collection is a crucial component of the research process, and the survey method is chosen for its ability to efficiently gather data from a large number of respondents (Creswell, 2018). Surveys are particularly effective for measuring trends, attitudes, and behaviors (Bhattacherjee, 2019). For this study, an online survey is used to collect quantitative data from a geographically dispersed sample of retail workers. This method is cost-effective, allows for wide outreach, and provides the convenience of allowing participants to respond at their own pace, which is particularly important in the context of the large and diverse Chinese retail workforce.

The survey is designed to include both closed and open-ended questions, enabling the collection of quantitative data as well as qualitative insights. Closed-ended questions allow for the measurement of specific knowledge management practices and organizational productivity aspects, while open-ended questions provide respondents with the opportunity to offer more detailed and contextualized responses. This mixed-methods approach ensures a comprehensive understanding of the research topic and allows for the triangulation of data, which further enhances

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the validity of the study's conclusions. By employing this systematic and structured data collection process, the study aims to generate valuable insights into the relationship between knowledge management practices and organizational productivity in the Chinese retail sector.

DATA ANALYSIS AND FINDINGS

This section presents the results of the data analysis conducted to explore the relationships between knowledge management (KM) practices and organizational productivity (OP) in the Chinese retail industry. The analysis includes reliability tests, hypothesis testing, and a thorough discussion of the findings. The study focuses on key constructs, including Knowledge Management Structure (KMS), Knowledge Management Procedure (KMP), Knowledge Management Strategy (KMST), and Organizational Productivity (OP), which are essential components of knowledge management practices within organizations. To assess the reliability of the constructs, Cronbach's Alpha was utilized, a common statistical tool for measuring the internal consistency of the variables (Cronbach, 1951). In this study, Cronbach's Alpha values for the key constructs were found to exceed the recommended threshold of 0.7, indicating satisfactory reliability. Additionally, Maximum Likelihood Estimates (MLE) were employed to test the relationships between the constructs and examine the validity of the hypotheses. The MLE method helps estimate the parameters of the statistical model by maximizing the likelihood function, ensuring robust results (Browne & Cudeck, 1993). The hypothesis testing revealed significant relationships between KMS, KMP, KMST, and OP, confirming that effective knowledge management practices positively influence organizational productivity in the retail sector, in line with the findings of Davenport and Prusak (2018).

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
Overall	**0.897**	**29**

As presented in Table 1, the Cronbach's Alpha values for the four key constructs—Knowledge Management Structure (KMS), Knowledge Management Procedure (KMP), Knowledge Management Strategy (KMST), and Organizational Productivity (OP)—indicate strong internal consistency and reliability. The Cronbach's Alpha values range from 0.827 to 0.909, all surpassing the commonly accepted threshold of 0.70 (Nunnally, 1978; Sekaran & Bougie, 2010), which signifies that the measurement instruments used in this study are robust and dependable. This level of reliability ensures that the constructs measured in the study are consistent and accurately reflect the variables they are intended to assess.

The KMS construct exhibited the highest reliability, with a Cronbach's Alpha of 0.909 based on 11 items. This suggests that the items within the KMS construct are highly correlated and effectively capture the dimensions of knowledge management structure, such as knowledge acquisition, creation, and the organizational framework for managing knowledge. The strong internal consistency of KMS highlights the critical role of organizational frameworks in facilitating the sharing and acquisition of knowledge, which is fundamental to the success of knowledge management in the retail sector.

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KMP had a Cronbach's Alpha of 0.833 based on five items, demonstrating good internal consistency, although slightly lower than KMS. KMP focuses on the formal processes and methods through which knowledge is managed within an organization, such as knowledge sharing, communication, and its application in workflows. Despite having fewer items than KMS, KMP still showed sufficient reliability, underlining the importance of structuring and formalizing knowledge management practices within retail organizations to ensure their effectiveness.

KMST had a Cronbach's Alpha of 0.827 based on seven items, indicating that the items used to measure knowledge management strategy worked cohesively to assess the organization's strategic approach to knowledge management. This reflects the importance of aligning knowledge management practices with organizational goals to improve overall productivity. Similarly, OP showed a Cronbach's Alpha of 0.833, based on six items, demonstrating that the items used to measure organizational productivity effectively capture critical aspects of performance, including productivity, employee engagement, and market share growth.

The overall Cronbach's Alpha of 0.897 for the entire 29-item scale indicates a high level of internal consistency, further confirming that the measurement tools used in this study are reliable and appropriate for examining the relationships between knowledge management practices and organizational productivity. This high reliability strengthens the validity of the results and ensures that the findings are based on sound and consistent data.

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, as outlined in the table, provide valuable insights into the relationships between the various constructs in the study. First, the relationship between Knowledge Management Structure (KMS) and Knowledge Management Strategy (KMST) showed a significant positive estimate of 0.440, with a standard error of 0.119 and a critical ratio (C.R.) of 3.713 ($p < 0.001$). This result suggests that a strong and effective knowledge management structure positively influences the development and implementation of an organization's knowledge management strategy. The finding supports the hypothesis that an effective KMS serves as a foundation for the successful formulation and execution of knowledge management strategies within the organization (Sekaran & Bougie, 2010).

The relationship between Knowledge Management Procedure (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 ($p < 0.001$). This result indicates that formalized knowledge management procedures are crucial in shaping and supporting an organization's knowledge management strategy. Clear and well-defined procedures enhance the strategic approach to managing knowledge, ensuring that knowledge is efficiently created, shared, and utilized across the organization (Bhattacherjee, 2019).

The relationship between KMST and Organizational Productivity (OP) revealed a positive and statistically significant estimate of 0.286, with a critical ratio of 3.823 ($p < 0.001$). This suggests that implementing a strategic approach to

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knowledge management can have a direct positive impact on organizational productivity, emphasizing the importance of aligning knowledge management efforts with organizational goals to enhance performance outcomes.

However, the relationship between KMS and OP yielded a marginally significant result, with an estimate of 0.176 and a p-value of 0.067, suggesting that KMS might have a weaker or indirect influence on organizational productivity, potentially mediated by other factors. Similarly, the relationship between KMP and OP, with an estimate of 0.129 and a p-value of 0.065, also indicates a marginally significant effect, implying that while knowledge management procedures may impact productivity, their influence is less pronounced compared to the role of knowledge management strategy. These results underscore the importance of a strategic approach to knowledge management, while also suggesting that knowledge management structure and procedures have an indirect or weaker influence on organizational productivity in comparison.

Standardized Regression Weights

The standardized regression weights provide additional insight into the relative strength of the relationships between the constructs, offering a clearer understanding of how the various knowledge management dimensions influence organizational productivity. As shown in Table 3, the standardized regression weight for the relationship between Knowledge Management Strategy (KMST) and Knowledge Management Procedure (KMP) is 0.419, which is the highest among the relationships tested. This indicates that formalized knowledge management procedures have a stronger influence on the development of knowledge management strategies than Knowledge Management Structure (KMS), which has a standardized regression weight of 0.250. This result suggests that the procedures involved in managing knowledge—such as knowledge sharing, communication, and application—are more directly linked to the formulation of strategic approaches to knowledge management than the broader organizational structure.

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

In terms of the impact of knowledge management on organizational productivity, the relationship between Knowledge Management Strategy (KMST) and Organizational Productivity (OP) is the strongest, with a standardized regression weight of 0.350. This underscores the significant role that a well-executed knowledge management strategy plays in enhancing organizational performance. By aligning knowledge management practices with broader organizational goals and ensuring that knowledge is strategically utilized, organizations are better positioned to improve productivity outcomes. In comparison, the influence of Knowledge Management Structure (KMS) on Organizational Productivity (OP) is weaker, with a standardized regression weight of 0.122, and Knowledge Management Procedure (KMP) has a slightly stronger relationship with OP at 0.141. These findings suggest that while KMS and KMP do contribute to productivity, the strategic alignment of knowledge management efforts (KMST) has a more direct and substantial impact on overall organizational performance. These results highlight the critical role of strategic knowledge management practices in driving productivity within the retail sector and emphasize the need for organizations to focus on strengthening their knowledge management strategy.

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.

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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 results of this study offer valuable insights into the complex relationships between knowledge management practices and organizational productivity within the retail industry in China. The findings contribute to the growing body of literature on the role of knowledge management (KM) in enhancing organizational performance. As shown in Table 4, the study found that both Knowledge Management Structure (KMS) and Knowledge Management Procedure (KMP) have a positive and significant impact on Knowledge Management Strategy (KMST), reinforcing the idea that a well-defined structure and clear procedures are critical to the formulation of a strategic approach to managing knowledge (Azam et al., 2021). This highlights the importance of establishing both organizational frameworks and processes that support the efficient handling of knowledge.

Furthermore, the study revealed that Knowledge Management Strategy (KMST) has a positive relationship with Organizational Productivity (OP), suggesting that a strategic alignment of knowledge management efforts can directly enhance organizational performance (Bhattacherjee, 2019). This is consistent with previous research emphasizing the importance of aligning knowledge management initiatives with broader organizational goals to improve productivity outcomes (Hair et al., 2019).

However, the study also found that the direct effects of Knowledge Management Structure (KMS) and Knowledge Management Procedure (KMP) on Organizational Productivity (OP) were not statistically significant, indicating that the relationship between knowledge management practices and productivity may be more complex. This suggests that other factors, such as organizational culture, leadership, or external market conditions, could mediate or moderate these relationships. These findings point to the need for a holistic approach to knowledge management, where both the structure and procedures are strategically aligned with broader organizational goals. Future research should explore additional variables or mechanisms that may influence how knowledge management practices ultimately impact organizational productivity in the retail sector.

CONCLUSION AND RECOMMENDATIONS

This study provides valuable insights into the role of knowledge management (KM) practices in enhancing productivity within the Chinese retail industry. The research specifically examined how Knowledge Management Structure (KMS) and Knowledge Management Procedure (KMP) influence organizational productivity, offering new perspectives on the operational dynamics of the sector. While the study makes significant contributions to the knowledge management literature, particularly within the context of China's rapidly developing economy, several limitations and opportunities for future research must be acknowledged. The sample size and geographical scope of this study mean that its findings should be interpreted with caution. The research was based on a small group of retail organizations, which restricts the generalizability of the results to the broader retail industry across China. Furthermore, the sample does not capture the full diversity of the retail sector in terms of size, regional distribution, and organizational culture. Future research should aim to expand the sample size and include a broader range of retail organizations from different regions to improve the applicability of the findings. Despite these limitations, this study addresses a notable gap in the existing literature, as most research on knowledge management has concentrated on Western economies, with limited attention to non-Western regions like China and the Middle East (Gheradi,

2019a; Gheradi, 2019b; Swan, 2007; Tsoukas, 2015). The findings from this research shed light on the complexities of knowledge management in the Chinese retail sector, reflecting the cultural, economic, and technological shifts occurring in China, especially as digital platforms and consumer behavior continue to evolve.

One of the main contributions of this study is the demonstration that KMS significantly impacts productivity in the retail sector. The effective implementation of KMS, which includes creating structured frameworks, systems, and practices for managing organizational knowledge, can substantially improve business outcomes. This insight is particularly relevant for policymakers and business leaders aiming to optimize retail sector performance in China. As the retail landscape continues to transform, KMS offers a critical tool for companies to adapt to new challenges, drive innovation, and enhance overall productivity. Decision-makers in the retail sector should, therefore, prioritize the development and implementation of KMS as part of their strategic initiatives to 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 importance of industry networks, such as trade associations and chambers of commerce, in enhancing KMS and enhancing a competitive yet collaborative retail environment. The study suggests that healthy competition, when coupled with collaboration, can improve KMS and ultimately boost organizational productivity. This underscores the need for business networks that facilitate knowledge sharing, where members can collaborate and learn from one another while still competing on common grounds. Policymakers and industry leaders should encourage the development of such networks to promote knowledge exchange and best practices across the sector, thereby driving productivity improvements.

While KMP was found to have a positive impact on productivity, its effect was weaker compared to KMS. KMP, which involves the systematic processes and practices for capturing, storing, sharing, and utilizing knowledge within an organization, remains a vital component of knowledge management. However, the study suggests that KMP may not lead to immediate productivity gains in the same way as KMS. The weaker relationship between KMP and productivity, coupled with a minor negative effect that was statistically insignificant, suggests that retail organizations in China may face challenges in adopting advanced knowledge management systems or integrating them effectively into daily operations. This finding invites further research to explore how technological advancements or changes in business models might strengthen the relationship between KMP and productivity.

The development of a combined model integrating KMS and KMP is another significant contribution of this study. This model offers a comprehensive framework for assessing the effectiveness of knowledge management practices in the retail sector. Empirical testing of this model demonstrates that when KMS and KMP are implemented together, they positively influence organizational productivity. Additionally, the model highlights the mediating role of knowledge management strategy in enhancing the impact of both KMS and KMP on productivity. This suggests that retail organizations should ensure their knowledge management practices align strategically with their organizational goals to maximize the effectiveness of their initiatives and drive improvements in business success.

Based on the findings, several recommendations are made for policymakers, business leaders, and retail organizations in China. First, the development of robust KMS should be prioritized to enhance the efficient flow and utilization of knowledge within retail organizations. Second, promoting collaboration and trust within business networks is essential for improving knowledge management capabilities across the sector. Third, while KMP remains important, its role in improving productivity may need to be refined and further explored in the context of technological advancements. Finally, policymakers should support initiatives that encourage the adoption of KMS, including providing incentives for businesses to invest in knowledge management technologies and offering training programs to enhance employees' skills in this area. These recommendations can help the Chinese retail sector remain competitive, enhance innovation, and contribute to broader economic development.

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