

# The impact of supply chain management strategy, organizational competence on the financial performance of small and medium-sized enterprise (SMEs)

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## **Abstract**

**Purpose:** The goal of this study is to explore how supply chain management strategy impact the financial performance of SMEs, with a particular focus on the impact of organizational competence.

**Design/methodology/approach:** With the goal to investigate that, 440 Chinese listed-SMEs that have used SCM strategies performed in an empirical survey.

**Findings:** The study finds that the effective implementation of SCM strategies and high levels of organizational competence significantly enhance a firm's financial performance. Specifically, SCM strategies optimize resource allocation, reduce operational costs, and improve profit margins. Moreover, enhanced organizational competence strengthens competitive advantage, leading to sustained growth. The paper also emphasizes the need for managers to tailor and refine SCM strategies according to their firm's specific circumstances to maximize financial benefits. In summary, the synergy between SCM strategies and organizational competence is crucial for improving SMEs' financial performance

**Research Limitations/implications:** The research, which concentrated on small and medium-sized businesses, has limitations linked to its territorial and specific to the industry environment, which may limit how broadly applicable its conclusions might be. The regulation suggestions' limited application to other economies and sectors might be attributed to their exclusive focus on China and their absence of a global perspective. In order to get a thorough knowledge of supply chain interactions, future research should strive for a more accurate and diversified sample while taking into account a larger overseas context.

**Practical implications:** The analysis emphasizes how crucial it is for SMEs to make an effort on developing their supply chain competencies, with a particular emphasis on internal skills as well as external integration with suppliers and consumers. It emphasizes the value of supply chain strategies, particularly for resource-constrained enterprises, and suggests that combining with suppliers and consumers following internal integration might improve profitability. In the context of Chinese SMEs enterprises, the research offers insightful information for corporate management by highlighting the best order for integrating internal activities before encouraging outward integration, which improves performance.

**Originality/Value:** This study offers important perspectives into the growth of medium-sized and small-sized enterprises. It also looks into how changes in supply chain management

strategies affect these businesses' financial stability and makes suggestions for developing workable supply chain management plans.

**Keywords:** SCM Strategy; SMEs; China; Organizational competence; Financial performance

## **Introduction**

In today's rapidly changing market environment, small and medium-sized enterprises (SMEs) face significant challenges in maintaining competitiveness and achieving sustainable growth (Naradda Gamage et al., 2020). As critical contributors to national economic development, SMEs must navigate complexities such as resource constraints, technological advancements, and increasingly competitive market conditions (Gherghina et al., 2020). Despite their importance, existing research often overlooks the unique challenges and strategic needs of SMEs, particularly in the context of supply chain management (SCM). The academic achievements of small and medium-sized enterprises (SMEs) is closely related to both customers and suppliers, who expect orders to be delivered on time, steadily, and without interruption (Kot, 2023). The management of supply chains constitutes an essential since it covers the entire process, from the fabrication of items and services to their ingesting (Tan, W. C & Sidhu, M. S., 2022). Following this influence, it is a key driver that has a consequential effect on corporate performance.

Supply chain management initiatives to foster determined functionality and competitiveness through tactical methods. Given the importance of SMEs to national economic development, we need to identify and implement appropriate SCM strategies to ensure the sustainable development of enterprises. A variety of strategies have been proposed for managing supply chain demand and supply, such as enterprise resource planning (ERP), vendor managed inventory (VMI), collaborative planning, forecasting, and replenishment (CPFR), warehouse management systems (WMS), outsourcing strategies, and organizational competence. These strategies help enterprises enhance market competitiveness and achieve sustainable development.

Complexity shows itself in many different methods in a constantly shifting market circumstances, notably the durability of goods, budgetary criteria, technological breakthroughs, and an array of data circulates across multiple businesses. To tackle with the ambiguity, small and medium-sized enterprises (SMEs) are obliged to employ efficient supply chain management algorithms. According to the research of Hong et al (2018), the performance of SMEs depends on the ability of the organization to execute supply chain management strategies. The capacity to perform effectively organize and manage creativity, science, advertising strategy, manufacturing procedures, and commerce has become essential in supply chain management. Companies are required to aggressively leverage this essential competence to boost competitiveness as they strive for endured corporate growth in the terrain of market mutation. The primary goal of the content of this paper is to learn about the interaction between organizational traits and supply chain management (SCM) methods, with a particular emphasis on the organizations that possess the ability to adapt dynamically to factories and commercial circumstances. We intend to suggest strategic adjustments in logistics policies that optimize supply chain performance and productivity by thoroughly evaluating the mutual influence of supply chain management strategies and manufacturers' organizational competence. the finals of a permanently changing market environment, efficient supply chain management tactics may considerably improve an organization's profitable growth. The effectiveness of supply chain management strategies depends on multiple factors, such as supply chain operations, specific business requirements and values, and core objectives. By adopting strategies such as collaborative planning, forecasting, and replenishment (CPFR), companies can

strengthen supply chain collaboration and information sharing, improve the accuracy of production plans, increase the flexibility of resource allocation, and thereby reduce inventory and costs. In summary, implementing effective supply chain management strategies is crucial for improving a company's financial performance, enhancing competitiveness, and achieving sustainable development. Companies should pay attention to and actively adopt these strategies to remain unbeatable in the fierce market competition.

It is expected that the use of supply chain management tactics, such as delegating redundant jobs, polishing distribution procedures and trimming labor and fixed expenditures, will result in improved financial viability. Small and medium-sized businesses should be proactive in the development and execution of logistics strategies in order to improve their economic performance and achieve long-term commercial success. A rising variety of small and medium-sized businesses have properly gained an edge in the market by enacting supply chain strategies focused on cost optimization, increased manufacturing efficiency, and the reinforcement of positive relationships dealing with consumers and contractors. Demand and supply planning strategies (Saleheen et al., 2014) have been widely applied in various organizational relationships within the supply chain and have become essential components of vendor managed inventory (VMI), enterprise resource planning (ERP), collaborative planning forecasting and replenishment (CPFR), warehouse management systems (WMS), and outsourcing strategies, contributing to improved company performance.

Developing plans for the development of key logistics facilities and key logistics policies that determine the strategic direction of the company (orji, 2020) are also crucial for enterprise success. In contemporary markets, small and medium-sized businesses should prioritize investing in equipment and aggressively adopt supply chain management methods that guarantees sustainable growth for the foreseeable strong and resilient company development.

This study is based on Resource-Based View (RBV) and Dynamic Capabilities Theory. These theories emphasize the key role of internal resources and capabilities in gaining competitive advantage. Resource-based theory proposes that enterprises can achieve sustainable competitive advantage by managing and utilizing their unique resources and capabilities. The dynamic capability theory further emphasizes that enterprises need to flexibly adjust their resources and strategies to meet challenges in the changing market environment, so as to maintain competitiveness. In conjunction with these theoretical frameworks, this study will explore how small and medium-sized enterprises (SMEs) can improve their financial performance and competitive advantage through supply chain management strategies (SCM).

## **Literature Review**

### ***Vendor Managed Inventory***

Vendor Managed Inventory, recognized as an interactive strategy, was designed for continuous enhancement of inventory control, aiming to achieve the most cost-effective solutions for both consumers and vendors. Under this approach, the vendor assumed responsibility for inventory management within the scope of a mutual agreement, persistently monitored the execution of the agreement, and made flexible adjustments to its terms as needed (Zhao, 2019). In this method, the supplier collected data on the demand or inventory levels of the recipient's goods and subsequently developed a replenishment schedule designed to reduce inventory carrying costs (Dai, Z. 2020). VMI was effective in eliminating expenses related to transportation, purchasing, and warehousing, while simultaneously improving customer satisfaction, operational scheduling, and the accuracy of demand forecasting (Mateen & Chatterjee, 2015).

Reliable supply chain management methods had a significant impact on company revenue and customer loyalty, making them a crucial element in the success of business endeavors.

Consequently, VMI emerged as an invaluable analytical tool that assisted manufacturers in maintaining their competitive edge in the market (Karimi et al., 2022). The implementation of VMI was seen as a strategic move that not only optimized inventory levels but also strengthened the collaborative relationship between vendors and their clients, fostering a win-win scenario that contributed to the overall efficiency and profitability of the supply chain.

### ***Enterprise Resource Planning***

Enterprise Resource Planning (ERP) was an integrated management system that enabled enterprises to effectively centralize and coordinate various departments and business processes (Tarigan et al., 2021). Through the ERP system, enterprises were able to track and manage various resources in real-time, including human resources, logistics, supply chain, and finance. This capability allowed them to improve production efficiency and financial performance. The application of the ERP system helped enterprises achieve more efficient resource utilization, reduce duplication of work and data redundancy, and enhance the accuracy and response speed of production planning. Consequently, Enterprise Resource Planning (ERP), as an important strategic tool for supply chain management, played a crucial role in improving enterprise performance and competitiveness (Tarigan et al., 2021).

### ***Collaborative Planning Forecasting and Replenishment***

Collaborative Planning Forecasting and Replenishment (CPFR) was a supply chain management practice that aimed to improve communication and coordination among supply chain partners, including joint planning, forecasting, and inventory replenishment, to ensure the right product was available at the right time and quality (Pretel et al., 2022). CPFR was an effective way for small and medium-sized enterprises (SMEs) to implement supply chain management strategies, which had a positive impact on the financial performance of these enterprises (Sajja, 2021). The CPFR approach sought to enhance external collaboration between suppliers and retailers by employing time-phased forecasting and multilevel inventory planning to generate integrated supply chain plans across extended planning horizons (Panahifar et al., 2020). In addition, CPFR improved partnerships between enterprises and customers or suppliers, enhanced supply chain collaboration and information sharing, and further increased productivity and resource utilization. In summary, medium-sized companies that implemented CPFR as an approach to supply chain management were anticipated to mitigate inflation, promote their financial standing, and move toward sustainable growth.

### ***Warehouse Management System***

Warehouse Management System (WMS), as a supply chain management strategy, had a positive impact on the financial performance of small and medium-sized enterprises (SMEs) (Anantadjaya et al., 2021). The features of the Warehouse Management System (WMS) included real-time monitoring, automated operations, and data accuracy, which reduced warehouse management costs and optimized inventory management. These features helped SMEs improve work efficiency, reduce costs, and enhance sales efficiency, allowing them to make orders and replenishment decisions based on real-time data, further improving financial performance (Andiyappillai, 2020a; Andiyappillai, 2020b). Therefore, small and medium-sized enterprises (SMEs) were encouraged to actively adopt WMS systems to achieve the goals of financial performance optimization and sustainable development.

***Outsourcing***

Outsourcing was the practice of entrusting certain business operations or functions of an enterprise to external suppliers for management and execution. Its features included specialization, cost savings, and flexibility. For enterprises, the adoption of outsourcing strategies had a positive impact on financial performance. Outsourcing reduced the operating costs of enterprises, and by entrusting non-core business activities to professional suppliers, small and medium-sized enterprises (SMEs) were able to save on manpower, equipment, and time costs (Paek et al., 2019).

***Organizational Competence***

Organizational capability was a key factor that affected the operational effectiveness of small and medium-sized enterprises (SMEs), involving the integration, coordination, and management of resources (Schilling, 2017; González-Varona et al., 2021). To achieve efficient operations, enterprises needed to establish a clear organizational structure, assign responsibilities, and implement effective communication mechanisms. In this way, enterprises were able to better integrate resources, improve work efficiency, and effectively respond to market changes and competitive pressures, thereby enhancing corporate financial performance (Hindasah & Nuryakin, 2020).

The characteristics of organizational capability mainly included flexibility, adaptability, and collaboration. By optimizing the organizational structure and responsibility assignments, SMEs achieved efficient operation of work processes and improved decision-making outcomes, reducing repetitive labor and resource waste, thereby achieving better results and functionality. Research by Shin et al. (2015) found that organizational capability had a positive impact on the operational performance of SMEs.

***Research and Development***

The financial performance of small and medium-sized enterprises (SMEs) was closely linked to their organizational competence, which included research and development (R&D) capabilities, technology commercialization capabilities, production capabilities, and marketing capabilities (Davicik et al., 2021; Kim et al., 2020; Bhatti et al., 2020). R&D covered all business processes involving new product or packaging planning and development, improvements or solutions for existing products or business issues, understanding consumer needs and behavior in existing markets, and developing new markets (Davicik et al., 2021). In short, R&D was scientific research and experimental activities aimed at innovation and improvement of products, services, or processes (Akinwale et al., 2012).

SMEs contributed to economic expansion while continuously boosting their competitive edge in the marketplace by proactively engaging in experimental research and development activities. At the same time, R&D helped enterprises deeply understand consumer needs and behavior, further expand new markets, and lay the foundation for sustainable development. In summary, for SMEs, improving R&D capabilities was a key way to enhance financial performance, strengthen market competitiveness, and achieve sustainable development.

***Technology Commercialization***

Technological commercialization was the process of converting scientific research results or technologies into products or services with commercial value, covering various aspects such as technology development, product production, and sales (Kim et al., 2019; Kim et al., 2022). Realizing technological commercialization allowed enterprises to fully utilize research and development resources and increased support for small and medium-sized enterprises (Davicik et al., 2021). Consequently, when striving to achieve long-term competitive advantage and



sustained economic growth, SMEs needed to prioritize and engage with invention commercialization subsidiaries as a crucial aspect of their overall strategic planning. This not only improved corporate financial performance and facilitated sustainable development but also promoted technological innovation and enhanced the core competitiveness of enterprises. Through technological commercialization, small and medium-sized enterprises converted research and development results into market-competitive products and services, thereby expanding market share and achieving long-term enterprise development. Small and medium-sized enterprises were encouraged to seize the opportunity to benefit from technology industrialization in a contemporary, technology-dependent environment. By diligently devoting resources to research and development projects, they eventually turned intellectual assets into products and services capable of generating revenue for the business, thereby enhancing the enterprise's fundamental ability to compete and achieve permanent sustainable growth.

### ***Production***

In terms of supply chain management and organizational competence, production was understood as the process of converting resources into final products or services, covering the entire process from raw material procurement to product manufacturing and delivery (Kumar et al., 2006). Medium- to small-sized enterprises ensured equilibrium among their manufacturing affiliations and diverse elements through efficient administration and integration.

Furthermore, continuous optimization of production processes and technologies not only helped to improve product quality but also enhanced market competitiveness (Surya et al., 2021). This was because high-quality products attracted more customers, expanded market share, and thereby increased the competitiveness of enterprises. In a highly competitive marketplace, such medium- and small-sized enterprises had to dedicate special attention to maintaining and strengthening their manufacturing capacity while continually evolving manufacturing operations and functional extents. By delivering more outstanding services and products, they were able to achieve the goals of sustainable expansion and market competitiveness optimization.

### ***Marketing Capabilities***

Marketing capabilities were of great significance for enterprises to cope with changes in the external environment. Strong marketing capabilities helped enterprises respond quickly to market changes, optimize resource allocation, and innovate processes. Moreover, through in-depth market research, enterprises were able to fully understand consumer needs, differentiate and evaluate their own product perspectives, and improve and develop new products based on consumer feedback. This approach promoted the faster market launch of innovative products and services by small and medium-sized enterprises, thereby enhancing market competitiveness.

As a result, in the face of intense marketplace rivalry, medium-sized and small businesses prioritized and proactively engaged in the development of marketing capabilities to ensure continued expansion and profitable operation.

### ***Business Operational Performance***

Productivity was considered a key indicator of corporate welfare and was typically measured through cost, quality, adaptability, and speed (Alfalla-Luque et al., 2015; Shukor et al., 2021). This implied that supply chain integration had a significant impact on corporate productivity. According to the research of Muangmee et al (2022), supply chain management (SCM)

competitiveness and integration practices had a positive effect on increasing productivity. Other studies also confirmed that supply chain integration strategies had a significant impact on two important functions of enterprises (Munir et al., 2020; Prajogo et al., 2012), as well as on financial indicators indirectly related to these factors.

Based on these research findings, it was clear that supply chain management (SCM) had an independent and positive promotional effect on a company's performance. As a result, when assessing the overall operational efficiency of medium-sized companies, these components should have been thoroughly considered, and their beneficial contribution and function fully utilized. Simultaneously, the integration of organizational functions should have been prioritized to improve performance and remain competitive in the face of strong market rivalry.

### **Hypothesis Development**

Resource shortages are unable to meet all organizations in such a harsh market competitive environment, thus Gupta et al (2020) believes that companies may tackle the shortage of innovative skills through various supply chain tactics. A supply chain strategy, as previously said, is necessary for organizations to improve their efficiency and, as a consequence, their ability to perform. Based on the reasoning, the following hypothesis was created.

Hypothesis 1: The SCM strategy will impact on financial performance in SMEs

The supply chain strategy directly affects entire company efficiency, including quality, cost, delivery, and flexibility, based on the organization's competence. Supply chain methods may improve overall business performance, according to Lee (2021) depending on the organization's research, technology commercialization, and marketing competence. By utilizing each company's unique organizational competence, supply chain strategies may increase business success by reducing costs, improving quality, improving delivery performance, and providing flexibility. The supply chain therefore functions as a tool for enhancing business performance. These rationales led to the development of the following theory.

Hypothesis 2: Organizational competence will have a positive effect on financial performance in SMEs.

A company's supply chain strategy is impacted by environmental uncertainty. Supply chain strategies may boost a company's ability to compete by improving its financial performance, according to Asnordin et al (2020) Companies may improve their performance and reduce environmental unpredictability by looking for supply chain solutions that provide faster delivery and adaptable customer response times. The third hypothesis is stated as follows:

Hypothesis 3: SCM strategy will impact on organizational competency.

Dynamic market environments can be difficult due to changes in quality, price, technology advancements, and cross-industry information flow. It is difficult to anticipate accurately, which puts a lot of pressure on organizations. The organizational capacities of SMEs determine their capacity to implement SCM techniques. Business success depends on the management and systematization of organizational competence; SCM depends on the mediation of internal competencies such as R&D, technology commercialization, manufacturing, and marketing skills (Asnordin et al., 2021)(Lee, R., 2021). These rationales led to the development of the following theory.

Hypothesis 4: Organizational competencies play a mediating role in the impact of SCM strategy on financial performance in SMEs.

### Research Model

As previously mentioned, the purpose of this study was to determine the empirical effects of supply chain management strategy on the operational and financial performance of SMEs, based on constructs from previous studies. The independent variables are supply chain management strategy, include VMI, ERP, CPFR, WMS, and outsourcing; the mediating effect variables are organizational competence, include R&D, technology commercialization, production and marketing, which are also components of the organizational competence. while the dependent variable is represented by operational performance and financial performance. as showed Figure 1.1

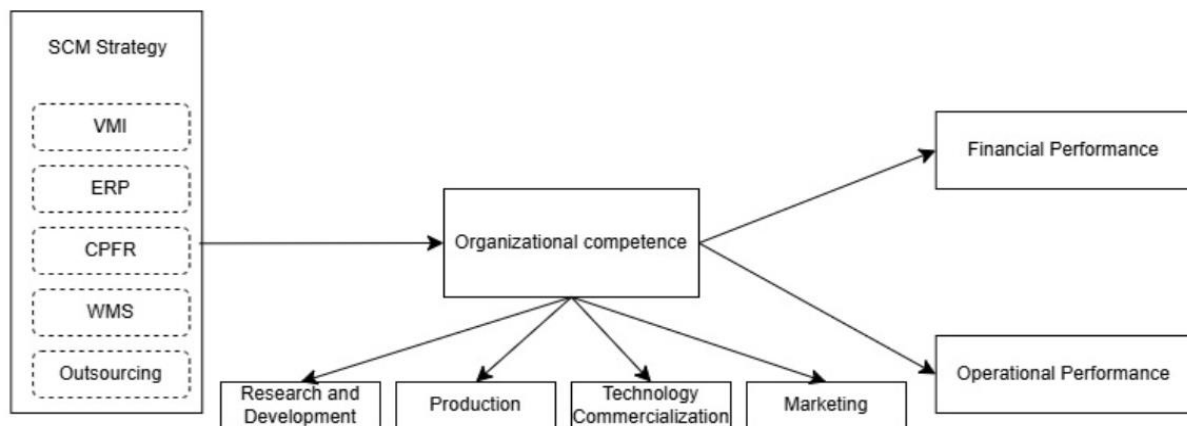


Figure 1.1 Research Model

### Research Framework

The purpose of the above paper is to explore the consequences of methods for supply chain management and operational abilities on the achievements of medium-sized and small-size enterprises. In this process, we focused on the following key factors: supplier inventory management (SMI), enterprise resource planning (ERP), collaborative planning, forecasting, and replenishment (CRFR), warehouse management systems (WMS), and outsourcing. Additionally, we considered the roles of research and development (R&D), technology commercialization, manufacturing, and marketing competence in supply chain management, which collectively affect the organizational excellence performance of enterprises. Finally, we examined what happens of supply chain management methods around the overall success of SMEs using financial and operational results as dependent variables. In today's constantly changing market environment, successful supply chain management strategies are crucial for businesses. By gaining a deeper understanding of how these strategies affect a company's operational and financial performance, enterprises can better adjust their strategies to achieve higher efficiency, competitiveness, and sustainability. Therefore, it is essential for SMEs to understand and implement effective supply chain management strategies.



## **Research Methodology**

### ***Research Design***

This study employs a quantitative research design to examine the relationship between supply chain management strategies and the financial performance of SMEs. The research adopts a cross-sectional survey approach, allowing for the collection of data at a specific point in time.

### ***Sample Size and Selection***

The target population for this study consists of manufacturing SMEs in China that have implemented SCM strategies. A stratified random sampling technique is used to select 440 SMEs from various industries, ensuring representation across different sectors.

### ***Data Collection***

Data is collected through a structured questionnaire survey distributed to the management and staff of the selected SMEs. The questionnaire includes items related to SCM strategies, organizational competencies, and financial performance, measured on a five-point Likert scale.

### ***Data Analysis***

The collected data will be analysed using structural equation modeling (SEM) to test the hypothesized relationships among the variables. SEM allows for the assessment of the measurement model and the structural model, providing a comprehensive analysis of the research hypotheses.

## **Conclusion**

Supply chain management may be affected by various factors, including vendor managed inventory (VMI), enterprise resource planning (ERP), collaborative planning, forecasting, and replenishment (CPFR), warehouse management systems (WMS), and outsourcing. The companies could boost their operational efficiency and profitability by using these managing their supply chains tactics. Throughout the supply chain, the corporation maintains interconnected connections with manufacturing, distribution, and sales operations. As a result, SMEs should utilize their organizational skills to support supply chain management (SCM) initiatives in order to improve corporate financial performance. This will help enterprises stand out in the fierce market competition and achieve sustainable development.

### ***Theoretical implications***

This study emphasizes the significance of deeper integration with suppliers and external clients when analyzing elements including an organization's operational performance, organizational competencies, and supply chain strategy. This goes beyond analyzing current internal clients and supply partners to categorize these elements precisely and make their relationships more apparent.

This is essential to managing a corporation. It's advisable for firms to integrate internal competencies before advancing with integration from elsewhere with both vendors and clients. Internal integration can optimize the benefits of the vendor and consumer integration, particularly in the early phases when the manufacturer's resources are few.

### ***Practical and Social Implications***

The practical importance demonstrates that in attempt to improve internal organizational capacities, strengthen external integration with vendors and clients, and boost financial results of companies, Chinese small and medium-sized businesses should integrate their supply chains.

Also emphasized was the significance of utilizing supply chain techniques. Integrating with suppliers and customers after integrating internal processes helps optimize financial performance for small and medium-sized enterprises (SMEs) with limited resources or in the early phases of supply chain integration. All things considered, these results demonstrate how important organizational skills and supply chain management tactics are to the overall financial success of Chinese SMEs.

### ***Limitations and suggestions for Future Research***

This research has a few limitations. Since the study focused on a specific sample from SMEs in China, the findings may not apply to other countries or industries. For future studies, it would be beneficial to use the approach of this study in various countries and industries to enhance the generalizability of the results.

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