

# The role of supply chain management practices, supply chain responsiveness, and organizational capabilities on organizational performance

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## ABSTRACT

**Purpose-**Several internal and external elements impact an organization's performance. This study examines organizations' performance using both internal and external elements. Organizational capabilities are the internal aspects of the study, whereas supply chain management practices and supply chain responsiveness are the external factors. These three elements are believed to have a significant impact on an organization's performance.

**Design/Methodology/Approach-**The study population focused on furniture micro, small, and medium-sized enterprises in Yogyakarta, Indonesia. The research data were collected through questionnaires administered to respondents, and the results of 50 respondents were obtained. Then, a model analysis was applied using Smart PLS.

**Findings-**Supply chain management practices positively impact organizational performance, and supply chain responsiveness improves organizational performance. Organizational capabilities also have a favorable effect on organizational performance. If these three elements can be effectively utilized, it will enhance organizational performance.

**Research limitations/implications-**Micro, small, and medium-sized enterprises must understand the importance of supply chain management and maximize its use to promote improvements in organizational performance. Business actors must maximize their efforts to achieve organizational success by considering other aspects, such as organizational capabilities.

**Originality/value-**Research on organizational performance is currently lacking, especially in the case of micro, small, and medium-sized enterprises that are specifically associated with particular industries. Government rules, strategy orientation, and green supply chain management are just a few of the external and internal factors that have been the subject of prior research on organizational performance. As a result, this study examines the characteristics of supply chain management practices, supply chain responsiveness, and organizational capabilities in order to measure the performance of furniture micro, small, and medium-sized enterprises in Yogyakarta, Indonesia.

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## 1. The Introduction

Global business competition requires every company to adapt and innovate (Maier et al., 2016). In addition, businesses in the current era are faced with various changes such as increasing business competition, increasing consumer needs, decreasing product life cycles, and rapid technological changes (Amir, 2015). Every business unit today must find flexible strategies to deal with such changes. Organizational performance is the process of measuring or assessing various indicators within a certain time span (Sangwa & Sangwan, 2018). According to Ibrahim and Daniel (2019), organizational performance refers to an organization's success in achieving its goals. The purpose of measuring organizational performance is to assist organizations in determining the sustainability of their strategies (Epstein et al., 2017). In today's era, business competition has become dynamic and requires every organization to compete competitively by maximizing its performance (Taouab & Issor, 2019). A competitive business focuses on how to increase consumer value by providing products and services that are more valuable than competitors (Chen, 2015).

Generally, every organization aims to obtain maximum profits and minimize expenses. Some organizations face the challenges of change in the era of globalization by incurring large costs in the processes of production, storage, distribution, marketing, and others (Witkowski, 2017). To meet these changes, organizations need to expand their competitive networks by developing strategically aligned capabilities and increasing networks with suppliers, sales partners, and customers to ensure the optimization of the entire supply chain. Consumers' role determines the success or failure of supply chain practices. This raises the demand for organizations to present a new strategy for managing information flow and production, called supply chain management (Witkowski, 2017).

Supply chain management is an activity to manage raw materials from suppliers, which are then processed into semi-finished materials or even finished products, up to the distribution process to consumers (Cole et al., 2019). Furthermore, according to Haddouch et al. (2019), supply chain management practices have to be a complex concept that exists both upstream and downstream. Gunasekaran et al. (2017) state that implementing supply chain management strategies involves collaborating with suppliers, reducing cycle times, outsourcing, maintaining continuous process flow, and exchanging information about technology. Implementing supply chain management into practice is an excellent way to maximize supplier-based management and improve organizational performance and competitiveness. The goal of supply chain management practices is to improve organizational effectiveness, which boosts productivity and competitiveness. Earlier studies have demonstrated the benefits of supply chain management practices on organizational performance (Kumar et al., 2020).

Furthermore, supply chain responsiveness is also considered a part of the organization in changing market needs and overall efficiency. According to Gordon and Rajagopalan (2016), supply chain responsiveness is the ability to constantly respond to demand, adapt to change, and maintain competitive advantage. Supply chain responsiveness can also be interpreted as the supply chain's ability to anticipate changes in consumer demand (Roh et al., 2014). Supply chain responsiveness is a combination of operational responsiveness, logistics processes, and supplier networks (Richey et al., 2022). In a world of competitive business competition, a flexible and responsive supply chain is necessary. According to Sundram et al. (2018), to generate or maintain a competitive advantage, organizations must have the ability to react on timescales that match customer demand and volatility in the market. In terms of timeliness, supply chain responses capture the delivery performance objectives related to shorter consumer wait times (Giannakis et al., 2020; Nenavani & Jain, 2022). Previous research has proven the positive effect of supply chain responsiveness on organizational performance (Chan et al., 2014; Chan et al., 2017).

Organizational ability is defined as skills related to the execution of a series of tasks using available resources to achieve a specific result (Amui et al., 2017). Organizational capabilities enable resource management to achieve collaboration between organizations. Organizational capabilities depend on several factors including organizational goals, leadership, adaptability, and innovation. The concept of organizational capability is incorporated into inter-organizational relationships (Han et al., 2017). Organizational capability also refers to an organization's ability

to use resources to achieve organizational goals (Aleksic & Barisic, 2015). The results of research conducted by Wilden and Gudergan (2015) also Forés and Camisón (2016) showed that organizational capabilities positively affect organizational performance.

This study takes the context of research in furniture micro, small and medium-sized enterprises (MSMEs) in Yogyakarta, Indonesia. The furniture industry relies heavily on operational management and supply chain factors. Furniture MSMEs in Yogyakarta, Indonesia are the object of research because they have not been studied before. Previous research used MSMEs in a country in general and did not specifically mention the field of industry, such as research conducted by Saunila (2014) using MSMEs research objects in Finland. In addition, Prange and Pinho (2017) using MSME objects in Portugal. Researchers use furniture MSMEs objects in Yogyakarta, Indonesia based on data compiled from the Coordinating Ministry for Economic Affairs in 2023, showing that the furniture industry is a labor-intensive sector that supports Indonesia's export progress. This is evidenced by the increasing performance of furniture exports over the past five years. In addition, the Ministry of Cooperatives and Small and Medium Enterprises explained that the furniture industry sector can help increase economic growth in Indonesia, as evidenced by the trend of increasing demand for the environmentally friendly furniture industry worldwide to reach 8.6% in 2024. In addition, based on data collected from the Regional Development Planning Agency in Yogyakarta, Indonesia until 2023, the handicraft industry, which includes furniture, is one of the largest industries in Yogyakarta, Indonesia, increasing in number every year. Based on this description, researchers are interested in conducting deeper research related to organizational performance, especially furniture MSMEs in Yogyakarta, Indonesia, in terms of supply chain management practices, supply chain responsiveness, and organizational capabilities.

## 2. Literature Review and Hypothesis Development

Research by Khan and Qianli (2017) and Khalil et al. (2019) revealed the beneficial impact of supply chain management practices on enhancing organizational performance. To improve organizational performance, businesses should focus on strategic supplier collaborations and continual improvement in their supply chain management practices (Kim & Chai, 2017). Supply chain management practices provide businesses with a competitive edge by enhancing their supply chain collaboration and knowledge. High levels of speed and flexibility in the supply chain will affect the supply chain's responsiveness, according to Wagner et al. (2018). Their main challenges are figuring out which supply chain processes organizations use to boost organizational and operational success.

### **H<sub>1</sub>: Supply Chain Management Practices Has a Positive Effect on Organizational Performance**

Supply chain responsiveness is defined as the ability at which the supply chain can anticipate changes in consumer demand (Richey et al., 2022). Kazancoglu et al. (2022) explained that supply chain responsiveness is the level of speed and flexibility in improving the supply chain practices. Madhani (2019) finds that supply chain responsiveness has a significant effect on competitive advantage and organizational performance. The responsive supply chain model, according to Sinha et al. (2015), is an emerging technology to keep organizations in a future competitive environment and also protects against unexpected events such as sudden changes, thus requiring organizations to manage and implement supply chain practices effectively. Roh et al. (2014) and Chan et al. (2017) in their research proved that supply chain responsiveness improves organizational performance.

### **H<sub>2</sub>: Supply Chain Responsiveness Has a Positive Effect on Organizational Performance**

Corporate ability refers to the ability to perform a coordinated series of tasks utilizing organizational resources to achieve a certain result (Liu & Huang, 2018). Wilden and Gudergan (2015) and Forés and Camisón (2016) find that organizational capabilities positively affect organizational performance. Creating a company's competitive advantage requires individual resources to work together to create integrated organizational capabilities (Minbaeva, 2018).

Organizational capabilities enable the management of resources to achieve the goals of collaboration between organizations. Organizational capability also means the organization's ability to use resources to achieve organizational goals (Aleksic & Barisic, 2015).

### H<sub>3</sub>: Organizational Capabilities Has a Positive Effect on Organizational Performance

This study analyzes the factors that affect organizational performance in furniture MSMEs in Yogyakarta, Indonesia. Factors that are thought to affect an organization's performance include supply chain management practices, supply chain responsiveness, and organizational capabilities. Figure 1 illustrates the conceptual framework of the study.

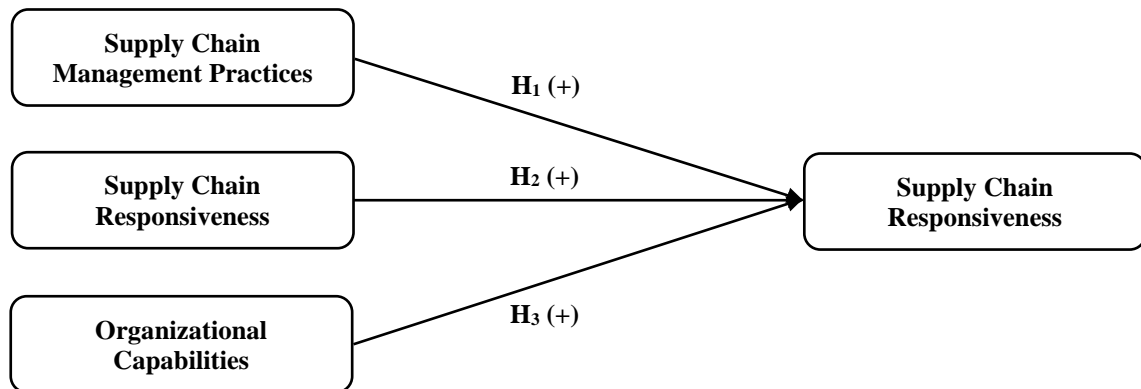


Figure 1. Research Framework

### 3. Research Methodology

The population of this study was furniture MSMEs in Yogyakarta, Indonesia. The research sample was taken using the provisions proposed by Roscoe (1975), with a minimum sample number of 30–500 respondents. The criterion used in sampling was purposive sampling. The criteria to become respondents in this study include MSMEs registered with the Yogyakarta Cooperatives and SMEs Office, and their managers have attended training or seminars on operational management, and MSMEs that have carried out their operations for at least three years, assuming they have information and experience related to supply chain management. Based on these criteria, 50 samples were obtained in this study.

The data collection method used in this study used questionnaires distributed directly to furniture MSMEs in Yogyakarta, Indonesia. The questionnaire contained statements representing each research variable. The variable of supply chain management practice consists of 14 indicators developed from Li et al. (2006), the variable of supply chain responsiveness consists of 18 indicators developed from Thatte et al. (2013), the variable of organizational capability consists of three indicators developed from Tuan and Yoshi (2010), and the variable of organizational performance consists of seven indicators developed from Li et al. (2006) and Ho (2008). The measurement scale for each indicator uses a Likert scale with five scoring points.

Research data were tested for validity, reliability, and hypotheses. Validity testing in this study was conducted using the loading factor value of each variable indicator. According to Henseler et al. (2009), an indicator can be removed from the research model if it has a loading factor value below 0.4 and the indicator is considered good if it has a loading factor value above 0.7. After the validity testing, reliability testing was performed. Cronbach's alpha values and composite reliability were used in this study's validity testing. If the composite reliability value is greater than 0.7 and the Cronbach's alpha value is greater than 0.6, the variable is considered good (Hair et al., 2014). Subsequently, the p value of every hypothesis was used to inform hypothesis testing. A p value of less than 0.05 is required for a hypothesis to be accepted (Chin et al., 2013).

#### 4. Result and Discussion

##### Validity Test

The validity test results are shown in Table 1 and Figure 2. Each indicator that represents the variables of supply chain management practices (SCMP), supply chain responsiveness (SCR), organizational capability (OC), and organizational performance (OP) is deemed valid based on the findings of the validity test. This is seen from each indicator's loading factor value, which was higher than 0.7.

**Table 1. Validity Test Result**

Indicator	Supply Chain Management Practices	Supply Chain Responsiveness	Organizational Capabilities	Organizational Performance
SCMP 1	0.797			
SCMP 2	0.810			
SCMP 3	0.849			
SCMP 4	0.833			
SCMP 5	0.762			
SCMP 6	0.706			
SCMP 7	0.801			
SCMP 8	0.790			
SCMP 9	0.843			
SCMP 10	0.766			
SCMP 11	0.807			
SCMP 12	0.778			
SCMP 13	0.800			
SCMP 14	0.733			
SCR 1		0.734		
SCR 2		0.769		
SCR 3		0.849		
SCR 4		0.849		
SCR 5		0.804		
SCR 6		0.812		
SCR 7		0.755		
SCR 8		0.827		
SCR 9		0.872		
SCR 10		0.781		
SCR 11		0.733		
SCR 12		0.707		
SCR 13		0.728		
SCR 14		0.799		
SCR 15		0.703		
SCR 16		0.723		
SCR 17		0.845		
SCR 18		0.818		
OC 1			0.788	
OC 2			0.886	
OC 3			0.804	
OP 1				0.775
OP 2				0.790
OP 3				0.877
OP 4				0.908
OP 5				0.890
OP 6				0.864
OP 7				0.888

Source: Primary Data Processed (2024)

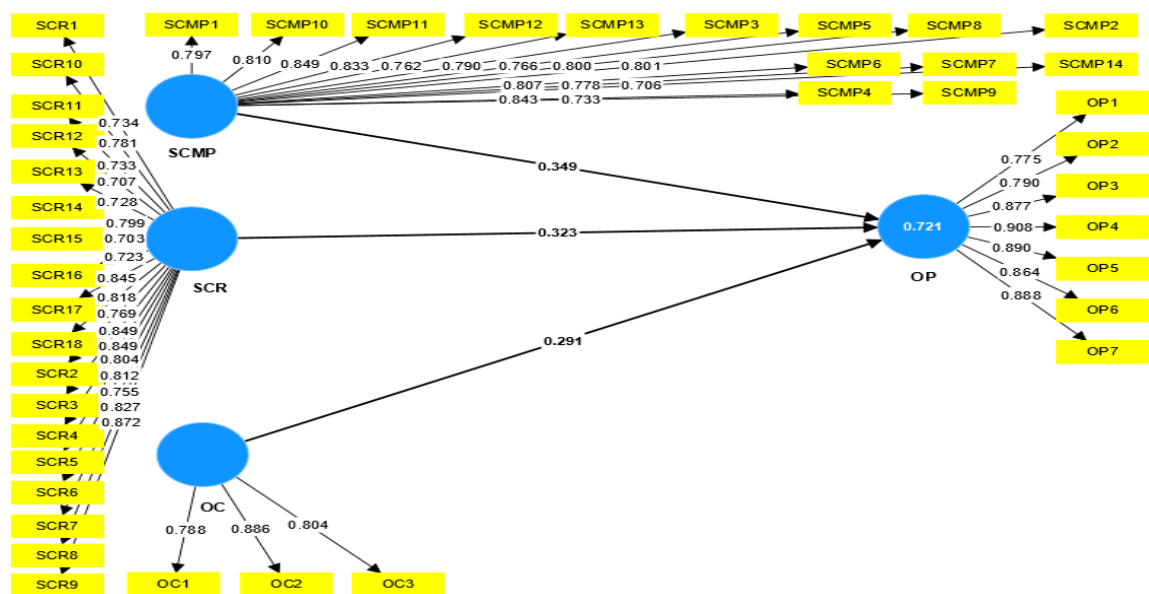


Figure 2. Measurement Model

**Reliability Test**

The reliability testing results are displayed in Table 2. Supply chain management practices, supply chain responsiveness, organizational capabilities, and organizational performance have shown to be reliable, according to the reliability testing results. The composite reliability and Cronbach's alpha values of each of these variables were higher than 0.6 and 0.7.

Table 2. Reliability Test Result

Variable	Composite Reliability	Cronbach's Alpha
Supply Chain Management Practices	0.962	0.954
Supply Chain Responsiveness	0.964	0.963
Organizational Capabilities	0.805	0.771
Organizational Performance	0.942	0.939

Source: Primary Data Processed (2024)

**Hypothesis Test**

The results of the hypothesis testing are shown in Table 3. The three hypotheses developed in this study can all be accepted, according on the results of the hypothesis testing. It has been shown that supply chain management practices improve organizational performance (the first hypothesis is accepted). It has been shown that supply chain responsiveness improves organizational performance (the second hypothesis is accepted). It has been shown that organizational capabilities positively impact organizational performance (third hypothesis accepted).

Table 3. Hypothesis Test Result

Hypothesis	Original Sample	Sample Mean	Standard Deviation	T Statistic	P Value
Supply Chain Management Practices → Organizational Performance	0.394	0.362	0.098	3.542	0.000
Supply Chain Responsiveness → Organizational Performance	0.323	0.316	0.140	2.312	0.021
Organizational Capabilities → Organizational Performance	0.291	0.289	0.135	2.154	0.031

Source: Primary Data Processed (2024)

## Discussion

### **The Effect of Supply Chain Management Practices on Organizational Performance**

The first hypothesis test shown the beneficial impact of supply chain management practices on organizational performance. This indicates that furniture MSMEs in Yogyakarta, Indonesia use of supply chain management practices has an important positive effect on enhancing organizational performance. It has been shown by Chardine-Baumann and Botta-Genoulaz (2014) and Zaid et al. (2018) that supply chain management practices improve organizational performance. Supply chain management practices are gaining influence in organizations due to their many advantages and enhanced performance, including lower operating costs, enhanced brand recognition, higher employee job satisfaction, higher customer satisfaction, and more market opportunities (Younis et al., 2016). The implementation of education and monitoring programs with suppliers can assist organizations in providing the final product, thereby improving organizational performance (Gawankar et al., 2020).

### **The Effect of Supply Chain Responsiveness on Organizational Performance**

The results of the second hypothesis test show the beneficial impact of supply chain responsiveness on organizational performance. This indicates that furniture MSMEs in Yogyakarta, Indonesia use of supply chain responsiveness has an important effect on enhancing organizational performance. The ability of the supply chain to anticipate changes in consumer demand is known as supply chain responsiveness (Richey et al., 2022). Kazancoglu et al. (2022) define supply chain responsiveness as the level of agility and quickness in improving supply chain practices. Organizational effectiveness in gaining a competitive advantage is impacted by effective supply chain responsiveness (Madhani, 2019). The responsive supply chain model is an emerging technology that will assist firms in being competitive in the future (Sinha et al., 2015). It also guards against unforeseen events, such as abrupt changes, which means that organizations will need to manage and implement supply chain practices effectively (Sinha et al., 2015). Roh et al. (2014) and Chan et al. (2017) proved that supply chain responsiveness positively affects organizational performance.

### **The Effect of Organizational Capabilities on Organizational Performance**

The results of testing the third hypothesis prove that organizational capabilities had a positive effect on organizational performance. This means that the organizational capabilities possessed by furniture MSMEs in Yogyakarta, Indonesia have a significant impact on improving organizational performance. The results of this study support research from Wilden and Gudergan (2015) and Forés and Camisón (2016) which shows organizational ability has a positive effect on organizational performance. This indicates that organization have sufficient knowledge about organizational capabilities which in turn can improve organizational performance (Imran et al., 2017). With the existence of good enough organizational capabilities, it will cause a good organizational performance effect. Relationships across organizations integrate the idea of organizational capabilities (Han et al., 2017). An organization's ability to use resources to accomplish its objectives is another definition of organizational capability (Aleksic & Barisic, 2015).

## 5. Conclusion

Supply chain management practices, supply chain responsiveness, and organizational capabilities all have a favorable impact on organizational performance, according to the test results previously mentioned. In other words, these three elements support the development of organizational performance when they are able to maximize supply chain management practices, enhance supply chain responsiveness, and strengthen organizational capabilities. In order to increase performance, furniture MSMEs in Yogyakarta, Indonesia is therefore anticipated to enhance and optimize all three of these aspects.

This study had some limitations. These limitations include the object of research that only focuses on furniture MSMEs in Yogyakarta, Indonesia. Therefore, the results of this study cannot be used as a benchmark to assess performance in various organizations. In addition, the next

limitation is that the number of samples is still minimal, so there is still a need for further research. For future research, it is recommended to use objects that are different from those used in this study. Research objects that can be used include food and manufacturing industries, as conducted by Diab et al. (2015) and Alam (2022). Subsequent studies are advised to use variables that have not been examined in this study to measure organizational performance. variables suggested for subsequent research include green supply chain management and competitive advantage, as in Younis et al. (2016) and (Singh et al., 2014).

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