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# THE EFFECT OF IMPLEMENTATION SUPPLY CHAIN MANAGEMENT CAPABILITIES AND TOTAL QUALITY MANAGEMENT ON FIRM PERFORMANCE

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#### **ABSTRACT**

**Background**: For any company that faces free competition, a promotion of quality performance will certainly have to take over demand for consumers and win them over again. Through implementation of the total quality management, it can be done by maximizing the criteria. That results through performance and execution of involvement from any part of the corporate organization.

**Purpose**: Moreover, involvement from supply chain management capabilities can increase efficiency and effectiveness in companies. This could have an effect on the growing cooperation between fast and proper organizations and decision making, through a management fungus that can be applied to companies and a direct influence on the continuity of the criteria enhancement embodied in firm performance.

**Design/methodology/approach**: The empirical data was obtained from the distribution of the Questionnaire, 105 respondents, as employees of the company on the move of the distribution industry across the country. The study uses confirmatory factor analysis to do the construct and design test, the connectedness and interconnectedness between variables throughout the least square.

**Findings/Result**: The study is conducted according to perspective impacts produced at a company's top management level on the quality aspect that is expected to have impact on later research in coordinating management.

Conclusion: This study highlights the significant role of Total Quality Management (TQM) in enhancing firm performance within the distribution industry. While Supply Chain Management (SCM) capabilities positively influence TQM, their direct impact on firm performance is not significant. The findings underscore that firms aiming for long-term sustainability and competitive advantage should focus on integrating TQM practices to improve operational efficiency and product/service quality. Additionally, leveraging the Resource-Based View (RBV) strategy can help companies achieve strategic efficiency and maintain competitiveness in dynamic market environments.

Originality/value (State of the art): This study contributes to the literature by examining the interconnectedness of SCM capabilities, TQM, and firm performance in the distribution industry, particularly in the context of post-pandemic challenges. Its originality lies in combining empirical data with advanced statistical methods, structural equation modeling (SEM), to validate these relationships. The study offers practical insights for top management to prioritize quality management strategies and resource optimization to enhance organizational performance and sustain competitive advantages.

Keywords: Supply Chain Management Capabilities, Total Quality Management, Firm Performance

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### INTRODUCTION

The COVID-19 pandemic directly affects the economy by disrupting the supply chain. The industry that directly experiences its effects is the distribution industry. According to Kotler (2001), the Distribution Industry is a series of interdependent organizational activities involved in a process chain that delivers goods or services ready for consumption and use. Every party involved in distribution directly must ensure that the work runs smoothly, which can be seen from the efficiency and effectiveness of the generated output, as the entire chain runs in tandem and continuously until reaching the consumers.

As a direct consequence of the COVID-19 pandemic, there has been a decline in the performance of companies, marked by a decrease in the sales levels of products or services, which in turn leads to a decline in productivity and performance within a company. Consequently, several companies have collapsed, while others have struggled to survive in this industry in order to remain in existence. Therefore, it is advisable for each company to create added value through the creation of competitive advantages to foster competition among industry peers, utilizing entrepreneurial aspects. As a direct consequence of the COVID-19 pandemic, there has been a decline in the performance of companies, marked by a decrease in the sales levels of products or services, which in turn leads to a decline in productivity and performance within a company. Consequently, several companies have collapsed, while others have struggled to survive in this industry in order to remain in existence. Therefore, it is advisable for each company to create added value through the creation of competitive advantages to foster competition among industry peers, utilizing entrepreneurial aspects. According to Ehrhart & Macey (2013), the level of performance effectiveness in an organizational corporate environment can influence the success rate of an organization in achieving efficiency and making quick and accurate decisions. This is also aligned with the principle of Supply Chain Management capabilities, as stated by Ramlawati et al. (2022), which can serve as a benchmark for success in implementing supply chain efficiency that can provide customer satisfaction. In facilitating overall supply chain activities, according to Asamoah et al. (2021), through the competitive advantage generated within a company, supply chain capabilities can be effectively executed with the available resources. This ability can be observed in how organizations identify, utilize, and integrate internal and external information and resources, aiming to facilitate overall supply chain activities.

In addition to the efficiency pursued by a company, another important aspect to consider is the quality of organizational performance, which is directly related to the implementation of *Total Quality Management* concepts. This can maximize the organizational performance outcomes through performance and focus on the quality of products or services, as stated by Sinambela & Darmawan (2021).

The creation of a company's competitive advantage is necessary to foster innovation that relates to the company's behavior. This is crucial for the long-term sustainability of the company through the Resource-Based View (RBV) theory approach. Understanding the RBV theory can be interpreted as measuring the performance of a company built with a system that helps the company achieve performance effectiveness and strategic efficiency based on the success level in business. Organizational performance can help achieve the company's targets by implementing every capability possessed to attain the desired outcomes, as stated by Chumphong Research Assistant et al. (n.d.-a, 2020).

## **Supply Chain Management Capabilities**

According to Asamoah et al. (2021), Supply Chain Management Capabilites can be interpreted as the ability possessed by the organization to utilize and maximize its resources aimed at realizing integrated resources and facilitating all aspects of the organization to synergize with each other. According to Yu et al. (2018), Supply Chain

Management Capabilities have an important role in the company, which is shown by building strategic relationships with customers and producers, which of course can provide a fast and precise market response and provide flexibility for the company, because one of the capabilities needed by companies in competing is to respond to any dynamic environmental changes and respond to changes that are not past (Sutrisno, 2020). According to Saragih et al. (2020), based on the results of his research, it shows that Supply Chain Management affects Firm Performance, this is evidenced by the positive environment that can make it easier to hone the abilities of each part of the organization. The results of this study are also reinforced by research conducted (Suhendra et al., n.d., 2022), with the results of his research showing that the effectiveness of the application of Supply Chain Management Capabilities and the efficiency of operational costs carried out have a positive and significant effect on company performance.

H1: The Effect of Supply Chain Management Capabilities on Total Quality Management

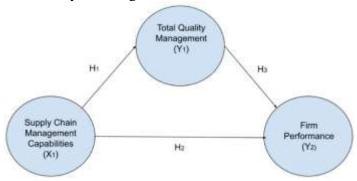
## **Total Quality Management**

According to Tsou et al. (2021), with the application of Total Quality Management in the company can achieve long-term sustainability through the resulting Competitive Advantage. Meanwhile, according to Pambreni et al. (2019), through the Total Quality Management approach in the company, this can maximize the competitiveness of the organization with the processes carried out. Continuous improvement can be improved in terms of product quality, service, people, process, and environment. There are several measurement indicators in the application of the Total Quality Management concept according to Bouranta et al. (2019), including Process Management, Employee Quality Management and Customer Focus. According to Ramlawati et al. (2022), based on the results of the research conducted, it explains that Total Quality Management has a positive influence on the competitive advantage that the company produces; this is evidenced by the optimization of performance carried out by the company by providing an increase in innovative capacity and increasing the competitiveness of the company. According to research conducted by Tsou et al. (2021b), companies will experience an increase in performance in their business if they implement Total Quality Management implementation practices.

H2: The Effect of Supply Chain Management Capabilities on Firm Performance

## Firm Performance

According to Chumphong Research Assistant et al. (n.d.-a, 2020), firm performances can be created through innovations made to company behavior with the aim of long-term company sustainability. This is based on the Resource-based view (RBV) theory approach, which can be interpreted as a company performance measurement system that can help companies to provide the effectiveness of company performance and by measuring the efficiency of strategies seen based on the level of success in business.



**Figure 1.** Conceptual Framework

Judging from the conceptual framework picture, it shows that there is an influence of the *Supply Chain Management Capabilities* variable on *Total Quality Management*, there is an influence of *Supply Chain Management Capabilities* on *Firm Performance*, and there is an influence of the *Total Quality Management* variable on *Firm performance*.

#### **METHODS**

In this study, the method to be used is a method with quantitative research. The hypothesis used by researchers to test the hypothesis that has been made with the title of the effect of the implementation of Supply Chain Management Capabilities and Total Quality Management on Firm Performance. The population determined in the research conducted is employees with upper-level positions as employees who work in a distribution company spread throughout Indonesia. The sample used in this study is to be used as the basis for taking non-probability by means of quota sampling, while the method used in this study is lemeshow. The scale measurement used in this study uses a Likert scale, aims to facilitate researchers in measuring the opinions, perceptions, and attitudes of respondents regarding the social phenomena raised; there are several instruments for assessing the answers given, including (1) Strongly Disagree, (2) Disagree, (3) Disagree Somewhat, (4) Neutral, (5) Agree Somewhat, (6) Agree, and (7) Strongly Agree. The descriptive analysis technique uses Structural Equation Modeling (SEM) using multivariate analysis techniques. This research is based on Partial Least Square (PLS). Data is obtained through the distribution of questionnaires that have been distributed to the target population online via Google Form without going through intermediaries. The total number of respondents obtained was 105, who worked in industrial companies spread across various regions in Indonesia.

## RESULT AND DISCUSSION

Competition *created* through market conditions caused by the times and changes in people's habit patterns forces companies engaged in the industrial sector to provide their competitive advantages to win free competition and can survive in the long term. The results of the research that has been carried out show that some of the variables found can affect other variables. As is the case that the company will experience an increase in its business if it implements total quality management implementation practices in its company by getting an increase, there is a significant influence between total quality management and firm performance (Tsou et al., 2021).

Table 1. Results of Hypothesis-testing

Hypothesis	Relationship	Coefficient	T-stat	P-value	Conclusion
$H_1$	$(X_1) \rightarrow (Y^1)$	0.784	12.871	0.00	Significant
$H_2$	$(X_1) \rightarrow (Y^2)$	0.105	0.851	0.395	Not Significant
H <sub>3</sub>	$(Y^1) \rightarrow (Y^2)$	0.674	7.168	0.00	Significant

**Table 2. Confirmation Factor Analysist** 

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Variabel	Indicator	Factor Analysis	
Supply Chain Management	X 1.3	0.806	
Capabilities			
	X 1.4	0.817	
	X 1.5	0.753	
	X 1.6	0.781	
Total Quality	Y1.1	0.886	
Management	Y1.2	0.903	

	Y1.5	0.922
	Y1.6	0.828
Firm Performance	Y2.1	0.861
	Y2.2	0.850
	Y2.3	0.846
	Y2.5	0.741

Table 1. Reliability and Validity Models

Variabel	Cronbach's Alpha	Average Variance Extracted	Composite Reliability	R-Square
Supply Chain Management Capabilities	0.798	0.623	0.801	
Total Quality Management	0.907	0.636	0.911	0.614
Firm Performance	0.853	0.581	0.860	0.572

Table 1. hypothesis testing

Hypothesis	Description	P-Value	T-Statistic	Information
H1	Supply Chain Management	0.000	12.871	Supported
	Capabilities -> Total Quality			
	Management			
H2	Supply Chain Management	0.395	0.105	Not Supported
	Capabilities -> Firm			
	Performance			
Н3	Total Quality Management -	0.000	7.168	Supported
	> Firm Performance			

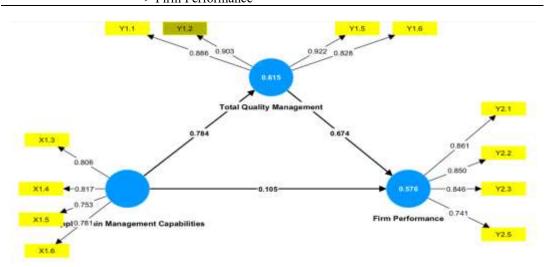


Figure 1. Partial Least Square Model

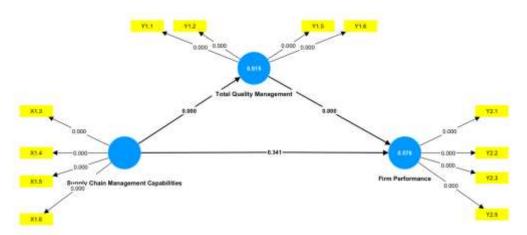


Figure 2. Bootstrapping Models

The significance of the research hypothesis used can be known so that the hypothesis test carried out can use analysis of the t-statistic value and p-values. In testing the hypothesis of *Supply Chain Management* on *Total Quality Management* carried out, it is found that the value of the p-value is in accordance with the criteria, so it can be concluded that the first hypothesis (H1) passes and has an effect. So it can be said that *Supply Chain Management* has a positive effect on *Total Quality Management*.

In testing the hypothesis of Supply Chain Management on Firm Performance, the results show that the value of the p-value exceeds the standard limit criteria that have been determined. So it can be concluded that the second hypothesis (H2) is unsuccessful and rejected, so it can be concluded that Supply Chain Management on Firm Performance has no positive effect. In testing the Total Quality Management hypothesis on Firm Performance, the results show that the value of the p-value is in accordance with the specified criteria and fulfills it. So that the third hypothesis (H3) can be accepted and a positive influence between Total Quality Management on firm performance can be established.

#### CONCLUSIONS AND RECOMMENDATIONS

Distribution industry companies play an important role in the wheels of the economy. This industry is directly related to the supply chain in running a business. It should be understood that a company must have a competitive advantage in winning the competition in the free market; in producing a competitive advantage in the company, this can be achieved with good company performance shown by the influence of Supply Chain Management and Total Quality Management. How the company is efficient in its resources and efficiency related to the supply chain so that it can provide the lowest price on a product or service to be sold. According to Chumphong Research Assistant et al. (n.d.-a, 2020) In measuring the sustainability of companies that can survive in the long term and win the competition perfectly, the application of the Resourced based View (RBV) strategy can help companies to make efficiency and effectiveness of Firm Performance, through this implementation, it is hoped that the results targeted by the company can be achieved.

It is recommended for companies to create a competitive advantage through the Resourced Based View (RBV) strategy to provide a differentiating value for the company and win free competition between industries. In addition, the company is advised to make efficiency its resources and supply chain in distributing products or services that are distributed to consumers. The company must also approach more to target consumers, with the aim of knowing more about the needs they have.

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