



Revealing Factors Affecting Supply Chain Performance of Food and Beverage PT. Sriboga Marugame Indonesia

Evita Tri Handayani¹, Dedi Fardiaz²

^{1,2} IPMI Business School

evita.handayani@ipmi.ac.id, dedi.fardiaz@ipmi.ac.id

Article Info

Article history:

Received September, 18th 2023

Revised September, 25th 2023

Accepted October, 25th 2023

Keywords:

Supply Chain Management,
Logistic Performance,
Organizational Performance,
Information Technology,
Resource-Based View,
Competitive Advantage

ABSTRACT

Studies related to SCM have been conducted, but the relationship between competitive advantage and supply chain performance remains to be determined today, and the explanation of to what extent information technology affects competitive advantage within the supply chain needs to be clarified. This study intends to research how supply chain performance influences the logistics performance and company performance of PT. Sriboga Marugame Indonesia as an F&B company. This study uses a quantitative approach with an explanatory design with PT Sriboga Marugame Indonesia employees as the population. The saturated sample technique was used as the population of 97 respondents was limited and could be reached by the researcher. The data analysis method uses PLS-SEM with Smart PLS program version 3.2.9. The research finds that both supply chain management and logistic performance have a significant effect on organizational performance. Moreover, information technology moderates the relationship between supply chain management and organizational performance. However, the impact of logistic performance on organizational performance was unaffected by information technology. The outcome of this study will help PT Sriboga Marugame Indonesia management to enlighten more about the benefit of Information Technology advancement, especially in supply chain management and logistics.



©2023 Authors. Published by Arka Institute. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. (<https://creativecommons.org/licenses/by-nc/4.0/>)

INTRODUCTION

A dependable Supply Chain Management (SCM) system is essential for every business, since it allows for prompt service and an organized stock of goods. Current and future business success are heavily influenced by the retailers' ability to identify and cultivate trustworthy relationships with the right suppliers and partners. In order to meet this set of criteria, supply chain management has become a necessity for businesses everywhere (Quyen, 2020). Supply chain management, or SCM, is a group of businesses that collaborate to make and sell a product (Nupus & Ichwanudin, 2021). Suppliers, producers, distributors, shops, and retailers are typical examples of these types of businesses. The new notion of supply chain management arose from the recognition of the interdependence of all participants in the creation of low-cost, high-quality, and quickly delivered goods. Furthermore, Green Jr et al. (2014) stated that SCM would create a competitive advantage for companies because it would impact improving logistics performance and company operational performance. This research was conducted in the supply chain of PT Sriboga Marugame Indonesia. The company is the master franchisee for the Pizza Hut brand and operates in over 500 stores in Indonesia. It opened its first branch on February 14, 2013, at Taman Angrek Mall, Jakarta. The business's success has continued through its expansion ever since, reaching more than 85 outlet locations all over Indonesia.

Unfortunately, SCM's performance at PT Sriboga Marugame Indonesia has not met the company's expectations. This can be seen from an increase in deliveries that cannot be fulfilled in recent years, as shown in the figure below.

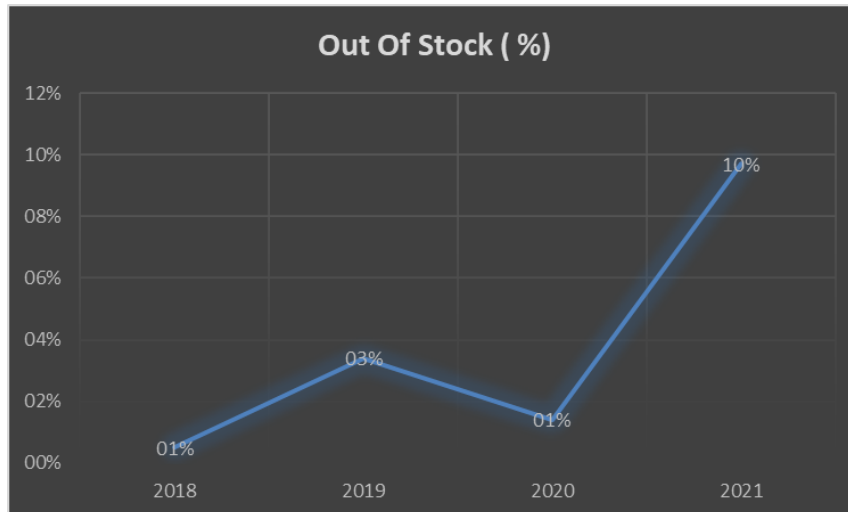


Figure 1 Unfulfilled Number of Deliveries
 Source: Author (2022)

Several factors are causing the number of shipments to be unable to be fulfilled, among others are the unavailability of information in the system regarding forecast usage, the inability of the system to provide real-time stock information, also manual calculation errors for each outlet in calculating the forecast resulting in outlets ordering excess goods.

The condition of the supply chain management problems is also experienced by PT. Sriboga Marugame Indonesia, a company that runs a business in the food and beverage sector. PT. Sriboga Marugame Indonesia has had issues with their supply chain due to a lack of raw materials. This leads to a shortage of raw resources, which in turn extends manufacturing times and drives up prices. Moreover, PT. Sriboga Marugame Indonesia's SCM department has to do better at anticipating the quantity of raw materials that would be required to fulfill customer demand. Demand changes make it difficult to collect reliable data for use in budget projections. Lack of coordination between sales, supply chain, and production divisions is also an obstacle to supply chain implementation for being unable to run efficiently and effectively. The following data is a projection of potential loss due to the unavailability of raw materials, especially if the marketing programme is undergone at that same time as stock out recurrence. For instance, if 1 product is out of stock in 35 outlets all at once, it is estimated that the total income loss could reach 2 billion rupiah.

Beef Karubi	
Forecast /day/outlet	35
Price	77,000
Total Outlet	75
Out of Stock (Days)	10
Potential Loss	2,021,250,000

Several factors cause the number of shipments unable to be fulfilled, among others: the unavailability of information in the system regarding forecast usage, the inability of the system to provide real-time stock information, and manual calculation errors for each outlet in calculating the forecast resulting in outlets ordering excess goods.

The condition of the supply chain management problems above is experienced by PT Sriboga Marugame Indonesia, a company that runs a business in the food and beverage sector. The supply of raw materials is one of the supply chain problems experienced by PT. Sriboga Marugame Indonesia. This causes scarcity of raw materials, long production times, and price increases. In addition, the SCM division of PT. Sriboga Marugame Indonesia is weak in forecasting the need for raw materials that must be provided to meet consumer demand. With high demand fluctuations, obtaining accurate data for later use as a spending forecast is very difficult. Lack of coordination between sales, supply chain, and production divisions also hinders supply chain implementation's inability to run efficiently and

effectively. Therefore, it is very important for PT Sriboga Marugame Indonesia to be able to solve supply chain problems because the worse SCM handles are, the greater of an effect it will have on the company's logistical performance and bottom line. This is as stated by Green Jr et al. (2014) that logistical performance and financial results both benefit from SCM.

The results of previous research conducted by Ringim et al. (2020) stated that supply chain management significantly and positively influenced organizational performance. Then, the same effect was also found by Rajamma & Shivalingam (2020); Reddy & Reddy (2021); Aljubairi & Mugharbil (2021) showing that the level of SCM practice was significant for organizational performance. According to Aljubairi and Mugharbil (2021) study, supply chain management methods have a direct influence on performance, whereas IT mitigates this effect and also has an impact on performance enhancement. The findings also corroborate the claims made by Green et al. (2008), namely that supply chain management strategy has a positive effect on logistics performance, and that logistics performance has a positive effect on supply chain management strategy.

Furthermore, according to Singh & Teng (2016), applying information technology can also increase supply chain performance by reducing transaction costs. However, the explanation of to what extent information technology affects competitive advantage within the supply chain needs to be clarified, thus creating a research gap to address (Fosso et al., 2015). Meanwhile, the relationship between competitive advantage and supply chain performance has been debated today. Tripathy et al. (2016) suggested a strong influence of competitive advantage to supply chain performance because it could strengthen customer and supplier relationships. However, the result was debated by Anatan (2014) who said that competitive advantage strongly influences supply chain performance. Therefore, it also results in a research gap to address.

Based on the introduction above, the author aims to research how supply chain performance influences logistics performance and company performance of F&B business, that is, PT. Sriboga Marugame Indonesia. To make this research more novel and original, the author adds a new variable of information technology as a moderating variable in strengthening the relationship between logistics performance and company performance. Therefore, the author proposes research entitled revealing factors affecting supply chain performance of food and beverage businesses of PT. Sriboga Marugame Indonesia with information technology as a moderating variable.

Despite the importance of business competitiveness, discussion about supply chain competitiveness and its relationship with performance still needs to be completed. The relationship between competitive advantage and supply chain performance remains debatable today, and the explanation of to what extent information technology affects competitive advantage within the supply chain is not clear, thus creating a research gap to address. Ringim et al. (2020) found that Supply Chain Management significantly and positively impacts competitive advantage and performance. Then Rajamma & Shivalingam (2020) show that the SCM practice level is significant for performance organizations. According to Tarigan et al. (2021), supply chain practices have a direct effect on store performance. Moreover, the impact of supply chain management practices on retailer performance is mitigated by advances in information technology. Last but not least, advancements in IT have an effect on retailers' productivity. According to Green et al. (2008), a company's financial results may be improved by focusing on logistics, since both logistics performance and supply chain management strategy have a favorable effect on marketing results. Supply chain management strategy and logistics implementation did not directly impact financial performance. Reddy and Reddy (2021) find evidence of a statistically significant correlation between successful supply chain management and overall business success. Aljubairi & Mugharbil (2021) added that there is a positive relationship and impact between supply chain management practices and organizational performance. The novelty of this research lies in its new variable of information technology as a mediating variable in explaining the impact of supply chain management on company performance through information technology. Furthermore, this research focuses specifically on the food and beverage of PT. Sriboga Marugame Indonesia.

Organizational plans that are consistent with supply chain strategies should strengthen the supply chain's competitive position and, in turn, boost the performance of each individual supply chain partner (Hajiesmaeili et al., 2016). According to Wisner (2003) postulated model, a company's success may be predicted by its supply chain management approach. Measures of growth, profitability, and market share will become more integrated into the evaluation of the buying and supply management

departments. The study results by Aljubairi & Mugharbil (2021) show a very positive impact on supply chain management on the organization's overall work. Management systems affect logistics, transportation, warehouse operations, employee work, the automated world, decision-making processes and the supply of materials and products to their respective stakeholders. The results show a unanimous response to the argument that all stakeholders, including outside distributors, investors and suppliers, should also be connected to the system to update their share of work. This will allow other stakeholders to work accordingly. The quality of work will increase, and all stakeholders will work as one unit for the company to increase productivity. The study's results by Ploenhad et al. (2019) support this research which states that effective SCM practices can improve organizational performance. This is in line with Azmi & Qamari (2020) saying that companies can provide opportunities to improve their performance by implementing good SCM practices. Therefore, based on those findings, the following hypothesis is proposed.

H1: Supply chain management significantly and positively affects Organizational Performance

Hajiesmaeili et al. (2016) investigated the connection between performance and logistical competence, and identified two distinct categories, according to a focus on either demand or supply. The logistics strategy is a crucial aspect for a company to reach certain logistical capabilities and plays a significant influence in the company's decision-making process. In light of the research presented, it seems reasonable to associate a company's level of success in competitive logistics with the sort of supply chain it employs. The logistics performance construct incorporates performance metrics such as customer satisfaction, delivery speed, delivery dependability, and delivery flexibility to reflect the organization's performance relative to its ability to deliver goods and services in precise quantities and at the specific times required by the customer. The success of a company's marketing strategy is measured by how well it increases sales and gains market share in comparison to rivals. A company's financial performance indicates how well it does in terms of making money and making a return on investment when compared to its rivals (Hajiesmaeili et al., 2016). Schramm-Klein & Morschett (2006) provide a metric for gauging the connection between a retail company's logistics quality and its overall success. Wisner (2003) postulated that there is a positive correlation between logistics performance and the quality of logistics, the effectiveness of marketing, and the profitability of a business. Green et al. (2008) found that successful logistics has a beneficial effect on overall company performance. The following hypothesis is thus offered on the basis of these observations.

H2: Logistic performance significantly and positively affects Organizational Performance

Supply chain management (SCM), as defined by Khaddam et al. (2020), is one method used to coordinate the timely delivery of products by coordinating the activities of suppliers, manufacturers, warehouses, and customers. Multinational corporations manage their mindset to maintain this globalization environment by employing IT to minimize system-wide expenses while satisfying facility-level demands. According to Basheer et al. (2019), supply chain technology has evolved from a nice-to-have into a vital component of running a successful firm. The technical operations are crucial not only to the corporate operations but also to the delivery of high-quality information. If businesses are serious about integrating supply chain management (SCM) into their existing structures, Queiroz & Wamba (2019) say they need to give serious thought to the need of deploying information technology. According to Zhou et al. (2017), businesses that make an effort to exhibit and use cutting-edge IT in their resource arrangement process are more likely to impact the acquisition of competitive advantage. There has been a rise in interest in the intersection of information technology and supply chain management as businesses see the value in streamlined processes both upstream and downstream (Konovalenko & Ludwig, 2019). The following hypothesis is thus offered on the basis of these observations.

H3: Information Technology significantly and positively moderates supply chain Management to Organizational Performance

According to Ainomugisha (2022) and Dubey & Singhal (2015), a well-designed logistics information technology and information system improves the effectiveness, safety, and security of the logistics information system as a whole. Logistics companies in developed countries such as the United States take on-time delivery, total order cycle time, inventory accuracy, backorders, and fill rates so

seriously (Rey et al., 2021). According to Kechil et al. (2022), if information technology in logistics is kept from decision-makers, it can improve supply chain decision-making. Therefore, there is a need to increase communication and cooperation among stakeholders and raise their understanding of the financial advantages of using digital technology. As a result, the logistics ecosystem is full with wasted resources and ineffective processes. To further enhance the logistics performance of the company, Mlimbila and Mbamba (2018) suggested that logistics companies invest in training their staff to make better use of and better manage information systems and associated IT capabilities. The findings of Ndonye (2014) of study indicated a significant influence of information technology on logistics performance. Therefore, based on those findings, the following hypothesis is proposed.

H4: Information Technology significantly and positively moderates Logistic Performance to Organizational Performance

Based on the descriptions above that have been explained, the following framework is made:

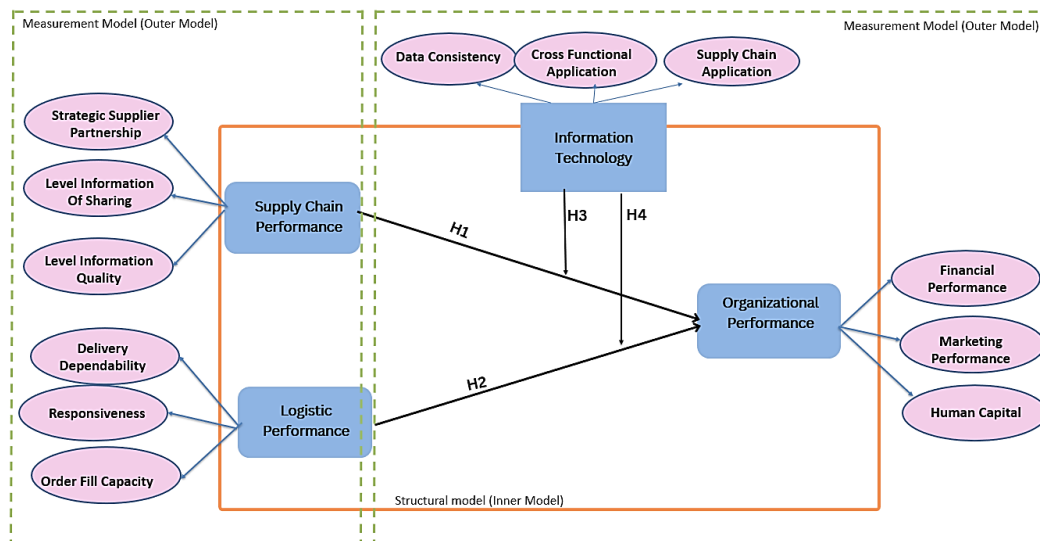


Figure 2 Research Framework
Source: Author (2022)

RESEARCH METHODS

This study uses a quantitative approach with an explanatory or causal design. According to Malhotra et al. (2018), the exploratory research design is a type of research design that is carried out to provide insight and understanding of the problem situations faced by researchers. This research employs a quantitative approach. In this study, IT serves as a moderating factor. Organizational success is the dependent variable, while the study's independent variables include effectiveness in supply chain management and logistics. The data collection method used in this study was primary data sources. In this study, preliminary data were collected through a survey conducted using an online questionnaire with the help of Google Forms. This questionnaire is closed, and answers are available with alternative solutions using a Likert scale. A five-point Likert scale is used in research to increase the level and quality of responses by respondents and reduce the level of frustration or the level of frustration when respondents fill out the survey.

All of PT. Sriboga Marugame Indonesia's workers were selected as the study's population. The researcher plans to use a non-probability sampling strategy. Purposive sampling, a kind of non-probability sampling in which the sample is chosen at random by the researcher, is used here. The author used a saturated sample technique to determine the number of pieces in this study, in which all populations were chosen as samples. In this study, data and hypotheses are analyzed utilizing a Structural Equation Model (SEM) strategy, measurement model, and Smart PLS software version 3.2.9 to quantify the strength of each research variable. The goal is to facilitate direct examination of such things as latent and indicator variables and measurement mistakes by researchers (to find out how research variables influence each other).

RESULTS AND DISCUSSION

Descriptive Statistic

The study's descriptive statistics will be used to calculate the range, mode, mean, and standard deviation of the collected data. Below is a table displaying the outcomes of descriptive statistical tests.

Table 1. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Supply Chain Management	97	1,67	5,00	3,9233	,71480
Logistics Performance	97	1,44	5,00	4,2658	,58587
Information Technology	97	1,78	5,00	4,0536	,63246
Organizational Performance	97	1,89	5,00	4,1076	,52010
Valid N (listwise)	97				

Source: Results of Data Processing with SPSS 24 (2023)

It is known that the Supply Chain Management variable has a minimum value of 1.67 and a maximum of 5.00, with a standard deviation value of 0.71480 and an average (mean) value of 3.9233. The Logistics Performance variable has a minimum value of 1.44 and a maximum of 5.00, with a standard deviation of 0.58587 and an average value (mean) of 4.2658. It is known that in measuring the Logistics Performance variable as seen from the average score of 4.2658. The minimum value of the Information Technology variable is 1.78, and the maximum is 5.00, with a standard deviation value of 0.63246 and an average value (mean) of 4.0536. Finally, the minimum value for the Organizational Performance variable is 1.89, and the maximum is 5.00 with a standard deviation value of 0.52010 and an average value (mean) of 4.1076.

PLS-SEM Analysis

The values of the loading or outer loading factors were used to test convergent validity, the cross-loading was used to test discriminant validity, the composite reliability, Cronbach's alpha, and the AVE (Average Variance Extracted) values were used to test reliability, and the results of the PLS algorithm's calculations were used to test the data analysis needs of this study.

1. Measurement Model (Outer Model)

To determine the nature of the link between the indicators and their latent variables, the measurement model (the outer model) is analyzed. As a result, the evaluation of this outer model establishes the relationships between the latent variables of each hand. The analysis is performed to check whether the obtained measurement findings can be practically implemented (valid and reliable).

Table 2 Average Variance Extracted (AVE)

Variable	AVE Value
Supply Chain Management	0.694
Logistics Performance	0.645
Information Technology	0.613
Organizational Performance	0.591

Source: Results of Data Processing with SmartPLS 3.2.9 (2023)

The AVE value provides an explanation for the results of discriminant validity testing, revealing that the AVE Value of the research model for all variables is greater than 0.5, signifying that the value AVE for discriminant validity testing has been met for further testing, and this holds true for the variables of Supply Chain Management, Logistics Performance, Information Technology, and Organizational Performance. This means that we have finished both the discriminant validity test and the concurrent validity test.

Table 3. Fornell-Larcker Validity Result

	Information Technology	Logistic Performance	Organizational Performance	Supply Chain Management
Information Technology	0.983			
Logistic Performance	0.804	0.903		
Organizational Performance	0.701	0.809	0.889	
Supply Chain Management	0.755	0.667	0.765	0.833

Source: Results of Data Processing with SmartPLS 3.2.9 (2022)

It can be concluded that the root value of each variable is higher than the correlation; therefore, the model has good discriminant validity. The composite reliability and Cronbach's alpha values for each indicator block were used in the PLS method to determine the reliability of the indicators in this research.

Table 4. Composite Reliability and Cronbach's Alpha Result

Variable	Composite Reliability	Cronbach's Alpha
Supply Chain Management	0.953	0.945
Logistics Performance	0.942	0.931
Information Technology	0.934	0.921
Organizational Performance	0.928	0.913

Source: PLS-SEM Result (2022)

The study model's composite reliability value reveals that all variables have reliability values over 0.7, with the Organizational Performance (Y) variable having the lowest value at 0.928 and the Supply Chain Management variable having the greatest value at 0.953 (X1). Cronbach's alpha shows that all variables in the study model have reliability coefficients over 0.6 with the Organizational Performance (Y) variable having the lowest value at 0.913 and the Supply Chain Management variable having the greatest value at 0.945 (X1). These results show that the study model satisfies the reliability criteria and is a reliable measuring instrument according to the Composite reliability and Cronbach's alpha measures.

2. Structural Model or Inner Model

The relationship between latent variables is defined by this model, sometimes called the inner model. This test examines the nature and magnitude of the impact of the latent independent factors on the latent dependent variables.

Table 5. Determination Coefficient Test Results

Variable	R Square value
Organizational Performance	0.883

Source: Results of Data Processing with SmartPLS 3.2.9 (2022)

The Organizational Performance variable has an R-square value of 0.883. This means that the Supply Chain Management and Logistics Performance factors can impact 88.3% of the Organizational Performance variables, while the remaining 11.7% are influenced by variables other than those analyzed.

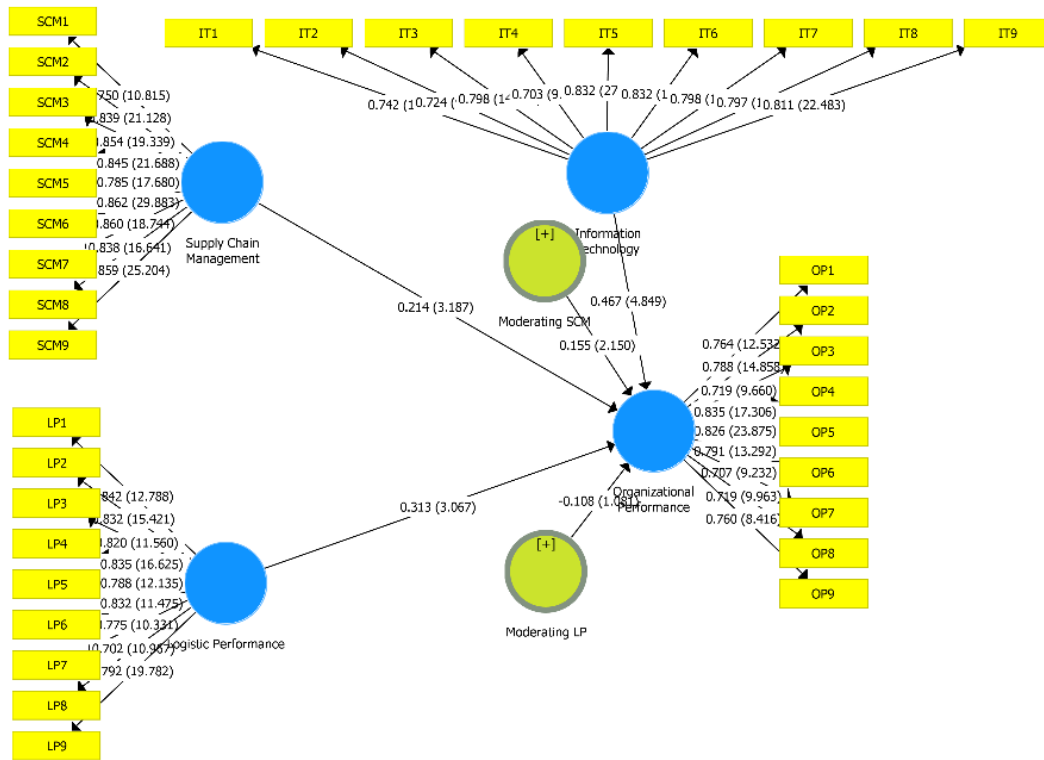


Figure 3. Research Path Diagram
Source: Results of Data Processing with SmartPLS 3.2.9 (2022)

The significance level of the association is also obtained as a result of data processing to determine if the hypothesis is significant or not. The path coefficient column assesses the link between variables, whereas the T-statistic or P-value column assesses the level of significance, as seen below.

Table 6. Path Coefficient, t-Statistics, and P-Values Results

	Original Sample	T Statistics	P-Values	Conclusion
Supply Chain Management → Organizational Performance	0.214	3.187	0.002	H1 Accepted
Logistics Performance → Organizational Performance	0.313	3.067	0.002	H2 Accepted
Supply Chain Management X Information Technology → Organizational Performance	0.155	2.150	0.032	H3 Accepted
Logistics Performance X Information Technology → Organizational Performance	0.108	1.081	0.280	H4 Rejected

Source: Results of Data Processing with SmartPLS 3.2.9 (2022)

First Hypothesis (H1)

The Supply Chain Management variable on Organizational Performance has a path coefficient value of +0.214 with a t-value of 3.187 > 1.99 and a p-value of 0.002 < 0.05, according to the findings of testing the first hypothesis in Table 6. Thus, Supply Chain Management has a substantial and beneficial impact on organizational performance.

Second Hypothesis (H2)

The Logistics Performance variable on Organizational Performance has a path coefficient value of +0.313 with a t-value of 3.067 > 1.99 and a p-value of 0.002 < 0.05, according to the findings of testing the second hypothesis in Table 6. As a result, Logistics Performance has a large and positive influence on Organizational Performance.

Third Hypothesis (H3)

The Information Technology variable mediating Supply Chain Management on Organizational Performance has a path coefficient value of +0.155 with a t-value of 2.150 > 1.99 and a p-value of 0.032 < 0.05, according to the findings of testing the third hypothesis in Table 6. As a result, information technology enhances the impact of supply chain management on organizational performance.

Fourth Hypothesis (H4)

Based on the findings of testing the fourth hypothesis in Table 6, it is known that the Information Technology variable has a path coefficient value of +0.108, a t-value of 1.081 < 1.99, and a p-value of 0.280 > 0.05 in mediating Logistics Performance on Organizational Performance. As a result, information technology is powerless to mitigate the impact of logistics performance on organizational performance.

Table 7. F² Result

	Organizational Performance
Supply Chain Management	0.149
Logistics Performance	0.185

Source: Results of Data Processing with SmartPLS 3.2.9 (2022)

The Supply Chain Management variable has a medium impact size of 0.149 in determining Organizational Performance. The Logistics Performance variable has a medium impact size of 0.185 on Organizational Performance.

Discussion**Supply Chain Management has a significant and positive effect on Organizational Performance**

Supply Chain Management has a significant and positive influence on Organizational Performance. In other words, if the corporation manages SCM effectively, improved earnings and increased operations, representing organizational performance, can occur. Conversely, a lack of adequate SCM deployment might impede operational performance. These findings show that the understanding of PT. Sriboga Marugame Indonesia, the staff about supply chain management is vital. This information serves as a reference for workers to use in the organization's supply chain management processes, resulting in a positive organizational supply chain processing effect and, eventually, an influence on increasing the organization's operational performance. Suppliers, production, warehousing, and storage are all linked in Supply Chain Management to save costs and deliver good customer service. Organizational competitive advantage may be gained by optimizing the presence of supply chain management methods.

The findings of this study support Ahmad & Karadas (2021) belief that SCM methods may improve a company's operational performance and provide competitive advantages (Khalil et al., 2019). Aljubairi & Mugharbil (2021) findings suggested that supply chain management had a highly favorable influence on an organization's operations. Logistics, transportation, warehouse operations, employee labor, the automated world, decision-making processes, and the supply of resources and goods to their respective stakeholders are all affected by management systems. The findings provide a powerful answer to the idea that all stakeholders, including outside distributors, investors, and suppliers, should be linked to the system to update their work share. Ploenhad et al. (2019) research results support this research, which argues that effective SCM techniques can increase organizational performance. This study backs up Azmi & Qamari (2020) research claimed that firms might improve their financial and operational performance by applying robust SCM methods. These findings are consistent with earlier research and will provide a further foundation for future theoretical and practical advancements.

Logistics Performance has a significant and positive effect on Organizational Performance

Logistics Performance has a substantial and positive influence on Organizational Performance. This shows that the business unit's logistics performance has successfully utilized its resources and carried out its logistical operations, affecting the improvement in organizational performance. Logistics is critical to acquiring and retaining consumers. Logistics is a component of an integrated supply chain (Sweeney et al., 2018), and it is in charge of planning, implementing, and controlling the efficiency and effectiveness of product movement and storage, as well as maintaining necessary information to suit

customer demands (Liu et al., 2018). Customer satisfaction, delivery speed, delivery dependability, and delivery flexibility are all performance metrics that contribute to the logistics performance construct, which measures an organization's capacity to meet customers' needs in terms of the timely and accurate delivery of products and services.

These findings confirm those of Schramm-Klein & Morschett (2006), who discovered a link between logistics quality and corporate organizational success in the retail industry. These findings are consistent with earlier studies in the literature review and will give additional support for future theoretical and practical advancements.

Information Technology Moderates the Effect of Supply Chain Management on Organizational Performance significantly and positively

According to the hypothesis testing results in Table 6, information technology considerably and favorably moderates the influence of supply chain management on organizational performance. In a business, information technology is used in the belief that human resources which utilize the system would provide better results and perform better. In this study, information technology aids in producing more accurate and timely information for making good judgments. Information technology is being used at the operational level to improve organizational performance. These findings confirm prior studies, providing more evidence for theoretical and practical advancements in the future.

According to Queiroz & Wamba (2019), firms considering introducing SCM into their organizational structures must examine the prerequisites of deploying information technology. According to Zhou et al. (2017), firms that attempt to showcase and implement current information technology in the process of organizing their resources are more likely than their competitors to impact the acquisition of competitive advantage.

Information Technology Does Not Moderate the Effect of Logistics Performance on Organizational Performance significantly and positively

Table 6 shows that the hypothesized relationship between Logistics Performance and Organizational Performance cannot be significantly and positively modified by Information Technology. This explains why information technology cannot mitigate the impact of logistics performance on organizational performance. In other words, enhancing Logistics Performance can increase Organizational Performance without needing Information Technology. Information technology does not moderate the effect of logistic performance on organizational performance at PT. Sriboga Marugame Indonesia. This condition can be explained because the current logistics performance is more dominant, requiring the support of transportation facilities, primarily related to the logistics transportation process from the storage warehouse to the consumer. Thus, the availability and feasibility of transportation equipment is a priority scale so that companies can deliver goods to consumers on time, deliver in good quality, and deliver goods to consumers by the quantity ordered. Therefore, logistics transportation becomes the primary driving tool to improve logistics performance in companies so that it has an impact on improving organizational performance in companies. The critical role of logistics transportation makes it a primary key to the success of any logistics chain. Differences in the production location of goods, storage of raw materials, and areas of sellers and buyers make logistics transportation very important to company management so that logistics performance increases.

The results of this study support Safitri & Huda (2022) research found that information technology does not affect supply chain performance. Information technology is not proven as a moderator due to companies' low adoption of information technology in supporting logistics performance. Besides that, there still needs to be more experts in managing and supporting the process of implementing information technology, especially in logistics.

CONCLUSION

The research shows that effective supply chain management has a major impact on business results. After further investigation, it was shown that logistics performance substantially and favorably impacted overall business results. The connection between supply chain management and business results is bolstered by modern IT infrastructure. Finally, it was determined that IT did not attenuate the impact of logistical performance on organizational effectiveness.

For future research, more research will expand this research by including mediating variables other than those used in this study, such as innovation, green marketing, knowledge management methods, and supply chain collaboration. Furthermore, further studies expand the object and area of study and can carry out investigations by developing the research sample, enabling more representative research.

REFERENCES

- Ahmad, A. F., & Karadas, G. (2021). Managers' Perceptions Regarding The Effect Of Leadership On Organizational Performance: Mediating Role Of Green Supply Chain Management Practices. *SAGE Open*, 11(2).
- Ainomugisha, E. (2022). *Information Technology Adoption, Supply Chain Integration and Logistics Performance: A case of Logistics firms in Uganda*.
- Aljubairi, F., & Mugharbil, H. (2021). Measuring The Impact of Supply Chain Practices on Organizational Performance. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(15), 239–245.
- Anatan, L. (2014). Factors Influencing Supply Chain Competitive Advantage and Performance. *International Journal of Business and Information*, 9(3), 311–334.
- Azmi, I. M., & Qamari, I. N. (2020). Effect of Supply Chain Management on Competitive Advantage and Organizational Performance. *International Conference on Sustainable Innovation 2020- Accounting and Management (ICoSIAMS 2020)*, 334–339.
- Basheer, M., Siam, M., Awn, A., & Hassan, S. (2019). Exploring the role of TQM and supply chain practices for firm supply performance in the presence of information technology capabilities and supply chain technology adoption: A case of textile firms in Pakistan. *Uncertain Supply Chain Management*, 7(2), 275–288.
- Dubey, S., & Singhal, V. (2015). Impact of Internet of Things on Logistics Management: A Framework for Logistics Information System. *Artificial Intelligence for a Sustainable Industry 4.0*, 26(12), 933–944.
- Fosso Wamba, S., Akter, S., Coltman, T., & W.T. Ngai, E. (2015). Guest editorial: information technology-enabled supply chain management. *Production Planning & Control*, 26(12), 933–944. <https://doi.org/10.1080/09537287.2014.1002025>
- Green Jr, K. W., Zelbst, P. J., Meacham, J., & Bhadauria, V. S. (2014). Green supply chain management practices: impact on performance. *Supply Chain Management: An International Journal*, 17(3), 290–305.
- Green, K. W., Whitten, D., & Inman, R. (2008). The Impact of Logistics Performance on Organizational Performance in a Supply Chain Context. *Supply Chain Management: An International Journal*, 13, 317–327.
- Hajiesmaeili, M. R., Abbasi, M., Safaiepour, L., Fani, M., Abdoljabari, M., & Hosseini, S. M. (2016). Spiritual health concept in Iranian society: Evolutionary concept analysis and narrative review. *Medical Ethics Journal*, 10(35), 77–115.
- Kechil, N. A., Zulfakar, M. H., Muhammad, A., Ab Talib, M. S., & Nasir, S. (2022). Effects of Information Technology on Logistics Firms' Performance in Shah Alam, Selangor, Malaysia. *Journal of Academic Research in Accounting Finance and Management Sciences*, 12(3), 430–447.

- Khaddam, A., Irtaimah, H., & Bader, B. (2020). The mediating role of information technology. *Uncertain Supply Chain Management*, 8(3), 547–562.
- Khalil, M. K., Khalil, R., & Khan, S. N. (2019). A study on the effect of supply chain management practices on organizational performance with the mediating role of innovation in SMEs - Scopus Indexed. *Uncertain Supply Chain Management*, 7(2), 179–190.
- Konovalenko, I., & Ludwig, A. (2019). Event processing in supply chain management—The status quo and research outlook. *Event Processing in Supply Chain Management—The Status Quo and Research Outlook*, 105, 229–249.
- Liu, B., Lin, Y., Chan, K. C., & Fung, H.-G. (2018). The Dark Side of Rent-Seeking: The Impact of Rent-Seeking on Earnings Management. *Journal of Business Research*, 91, 94–107.
- Malhotra, N. K., Nunan, D., & Birks, D. F. (2018). *Marketing Research: An Applied Approach*. Pearson Education Limited.
- Mlimbila, J., & Mbamba, U. O. (2018). The role of information systems usage in enhancing port logistics performance: evidence from the Dar Es Salaam port, Tanzania. *Journal of Shipping and Trade*, 3(1), 1–20.
- Ndonye, S. K. (2014). Influence Of Information Technology On Logistics Performance In Kenya With Reference To Cargo Transportation. *Journal of Supply Chain Management*, 1(2), 1– 18.
- Nupus, H., & Ichwanudin, W. (2021). Business Network Accessibility, Customer Relationship Management and Value Co-creation on Family Business Performance. *Research Horizon*, 1(4), 126–135. <https://doi.org/10.54518/rh.1.4.2021.126-135>
- Ploenhad, J., Laoprawatchai, P., Thongrawd, C., & Jermstittiparsert, K. (2019). Mediating role of competitive advantage on the relationship of supply chain management and organizational performance on the food industry of Thailand. *International Journal of Supply Chain Management*, 8(4), 216–226.
- Queiroz, M. M., & Wamba, S. F. (2019). Blockchain adoption challenges in supply chain: An empirical investigation of the main drivers in India and the USA. *International Journal of Information Management*, 46, 70–82.
- Quyen, T. (2020). The Relationship between Green Procurement Practices and Organizational Performance in the Manufacturing Industry of Vietnam. *Arthatama*, 4(1), 1–16.
- Rajamma, V. S., & Shivalingam. (2020). Impact of Supply Chain Management Practices on the Overall Performance of the Organization. *International Journal of Business and Management Invention (IJBMI)*, 9(5), 45–49.
- Reddy, M. S., & Reddy, P. R. (2021). Supply Chain Management and Organizational Performance: an Empirical Investigation with Special to E-Commerce Organizations in India. *International Journal of Management and Humanities*, 5(6), 17–21.
- Rey, A., Panetti, E., Maglio, R., & Ferretti, M. (2021). Determinants in adopting the Internet of Things in the transport and logistics industry. *Journal of Business Research*, 131, 584–590.
- Ringim, K. J., Abdullahi, N., & Kura, K. M. (2020). Impact of supply chain management practices on competitive advantage and performance of food and beverages organizations in Brunei Darussalam. *KASU Journal of Supply Chain Management*, 1(1), 21–47.

- Safitri, W., & Huda, M. (2022). Teknologi Informasi dalam Integrasi Supply Chain dan Pertukaran Informasi Terhadap Performa Supply Chain. *Jurnal Sekretari Dan Manajemen*, 6(1), 32–40.
- Schramm-Klein, & Morschett. (2006). The Relationship between Marketing Performance, Logistics Performance and Company Performance for Retail Companies. *The International Review of Retail Distribution and Consumer Research*, 16(2), 277–296.
- Singh, A., & Teng, J. T. (2016). Enhancing supply chain outcomes through Information Technology and Trust. *Computers in Human Behavior*, 54, 290–300.
- Sweeney, E., Grant, D. B., & Mangan, D. J. (2018). Strategic adoption of logistics and supply chain management. *International Journal of Operations & Production Management*, 38(3), 852–873. <https://doi.org/10.1108/IJOPM-05-2016-0258>
- Tarigan, Z., Jiputra, J., & Siagian, H. (2021). The effect of supply chain practices on retailer performance with information technology as moderating variable. *International Journal of Data and Network Science*, 5(1), 47–54.
- Tripathy, A., Agrawal, A., & Rath, S. K. (2016). Classification of Sentiment Reviews using n-gram Machine Learning Approach. *Expert Systems with Applications*, 57, 117–126.
- Wisner, J. D. (2003). A structural equation model of supply chain management strategies and firm performance. *Journal of Business Logistics*, 24(1), 1–26.
- Zhou, T., Liu, F., Bhaskar, H., & Yang, J. (2017). Robust visual tracking via online discriminative and low-rank dictionary learning. *IEEE Transactions on Cybernetics*, 48(9), 2643–2655.