

# An Empirical of Supply Chain Management Strategy as Mediation on Organizational and Operation Performance: A Study on Indonesia's Retail Shops

J.E.Sutanto

*Universitas Ciputra Surabaya-Indonesia,*

Correspondence e-mail: [je.sutanto@ciputra.ac.id](mailto:je.sutanto@ciputra.ac.id)

**Abstract**— According to the Indonesian Retail Entrepreneurs Association, the retail business or retail business in Indonesia has continued to develop in the last five years in line with the growth of the Indonesian economy. The retail industry is defined here as an industry that sells products and services that have been added value to meet the needs of individuals, families, groups or end users. Besides that, the retail industry in Indonesia provides a large contribution to the Gross Domestic Product and also absorbs a large number of workers. Purpose, An empirical of supply chain management strategy as mediation on organizational and operation performance: a study on Indonesia's retail shops. Methodology/approach, the study sample consists of 175 companies operating in retail shops in East Java. As a standard research instrument, it was used as the data collection was used as the data collection, which was distributed to the managers or supervisors of retail shops. Findings, the results of hypothesis testing have a positive and significant effect on supply chain management strategy as mediation on organizational and operation performance of supply chain at retail shops. Research limitations, it was found that supply chain management strategy has a mediating role in the relationship on supply chain organizational and supply chain operation performance at retail shops. The novelty of this research model is that the SC organizational variable generally becomes the dependent variable, but in this study the SC organizational variable is the independent variable.

**Keywords**— *structural equation model, supply chain management, organizational, operations performance, retail shops, customer.*

## 1. Introduction

The trade sector, including the retail industry, is an important industrial sector and should be considered, especially in its contribution to the Indonesian economy. There are various types of modern retail formats conducting business activities in Indonesia, but generally three types are found, namely minimarkets, supermarkets and hypermarkets. The retail sector or retail trade has a fairly large position and has the opportunity to develop from year to year. The growth of modern retail annually records a range of 10% to 30%. This is shown by the expansion of modern retail into rural areas and into residential areas.

A retail company or retailer is a marketing system in which sales transactions are directed to consumers. Another term can be referred to as B2C (Business to Consumer). Here the consumer is the last party to use this product and is not sold anymore. The retail business in 2019 will continue to improve and we hope that before the Presidential Election, consumption will increase, especially food by April Wahyu Widati as Chairman of Aprindo, East Java. We hope that retail can grow 11-12 percent in 2019. That figure is also good because the current conditions are quite tough. Today's business sector continues to compete to create a variety of consumer needs that are increasingly high and are getting smarter in choosing their needs. Every business will always make improvements to continuous innovation [1].

The problems that often arise are related to high logistics costs and delivery times. This is influenced by conventional logistics facilities, such as ports and related connectivity between production centers and consumption. Supply chain management is an approach to optimize the integration can be carried

out in the right quantity, in the right location, at the right time and minimizing costs and providing customer service [2], [3],[4] and retailers, finished product, customers, distribution networks and internal activities of organizations and suppliers [5], [6].

The competition in the business world is getting tougher, making companies have to find ways to run their business efficiently and carry out the right strategy in overcoming the prevailing environment [7].

Organizations are starting to realize that today's dynamic global market between suppliers, manufacturers, warehouses and storage, so that the production and distribution of goods competition is not sufficient to increase efficiency in an organization, but the entire supply chain must be made competitive [8]. Organizations that have a strong culture will have an effect on improving employee performance. [9], states that there is an interplay between organizational culture, strategy and performance. [10], the organization also carries out activities to evaluate operational performance ranging from internal production processes, employee motivation, increased productivity, product quality, delivery strategies to customer satisfaction.

In this study, the impact of SCM strategy as mediation has been investigated on the organizational and operations performance of supply chain in the retail shops. Thus, the important aim of this research is to provide new insights and framework for explaining this relationship for each variable, which in this research.

## 2. Literature Review

### 2.1. Supply Chain Management (SCM)

SCM is an activity that describes from upstream, internal production process until downstream, where the process of activities from suppliers, manufacturers, distributors, retail out-let, and finally to the customer or user. SCM is an approach to streamline the integration of suppliers, manufacturers, warehouses, so that products can be delivered in the right quantity, location, time, thus minimizing costs and ultimately providing customer satisfaction.[11], [12], [13];[14]. SCM is a combination of several topics consisting of topics of partial disciplines such as operations, purchasing,

management information systems and others [12]. SCM is a set of integrated methods to be efficiency between vendors, production process, warehouses and retailers, resulting in optimization of inventories starting from the supply of raw materials, work in process, finished goods and the process of distributing manufactured goods to consumers at an economical cost [15], Then there is another opinion that SCM has three core elements: value creation, collaboration and integration of key business processes as well as SCM describes as network administration between interdependent organizations including material suppliers, procurement, manufacturing capabilities, logistics, and information from innovative manufacturers to end consumers.[14], [15].

[18] which states that SCM has a positive effect on firm performance and competitive advantage. According to [19], mention that the implementation of good SCM can improve firm performance, both financial and operational performance. Not only on firm performance and competitive advantage, but also the implementation of good SCM is able to maintain customer loyalty [20].

In the supply chain there are several main players who are companies that have the same interests. [15] that are: supplies; production process; delivery; retail outlet; and customers.

- a. Step 1: The vendors network starts here, which is the source that provides inventory, where a new supply chain will begin. This inventory can be in the form of raw materials, work-in-process, finished goods, and others.
- b. Step 1-2-3: Vendors – production process – logistic goods that have been produced by manufacturers have started to be distributed to customers.
- c. Step 1-2-3-4: Vendors-production process - delivery- wholesalers usually have their own warehouse facilities or can rent from other parties.
- d. Step 1-2-3-4-5: Vendors-production process – delivery - customer - retailers to users.

### 2.2. Supply Chain Management Strategy (SCMS)

Strategy is an action plan of an organization to achieve its mission [21]. Strategy is a pattern or plan that combines the main goals, policies and actions of the organization [22]. [23], stated that company

performance is oriented towards supply chain capabilities, in order to achieve the final needs of the supply chain. [24], SCMS is very important and must be developed for the organization to achieve better performance. [25]. SCMS are very much needed in relation to company performance and in addition, supply chain management strategies are now a strategic tool to increase competitive position and become a major concern for companies that have top level management positions. However, a comprehensive supply chain management strategy should be taken into consideration as well. [26], hypothesized Supply Chain Management Strategy (SCMS) has a positive effect on the firm's performance. [27], Supply Chain Management Strategy (SCMS) has a positive relationship with commitment for supply chain management. [28], SCMS, a positive effect on management of supply efforts and logistics capabilities and can result in increased company performance.[29], Supply Chain Management Strategy (SCMS) is described as a strategy that regulates two things (regulating universality and integration in business activities starting from the process of buying, producing, selling and reaching consumers or users and setting the optimal value for end users, and in addition to increasing the existence of cooperation with parties. external companies and maintaining mutual trust [30],[26].

[31] states that there is a positive influence between logistics strategy on organizational performance. [32], [33] focus more on the logistics process for the long-term supply chain, in an effort to better meet customer needs. [34] are more oriented towards the importance of logistics transportation in the supply chain because logistics service providers always collaborate between suppliers, producers, sellers and end consumers. They have also provided an explanation that logistics service providers must concentrate on sustainable supply chain performance, which is based on improving organizational performance. According to [35], he has conducted a study related to the impact of supply chain management strategies on logistics performance and organizational performance. Their conclusion is that the analytical model built, namely the supply chain management strategy has an effect on organizational performance, which is based on the statement that supply chain management strategy and logistics performance affect marketing performance. Therefore, this study hypothesizes:

H1 : SCOR has an impact positive and significant on SCMS of retail companies

### 2.3. Supply Chain Organizational (SCOR)

The definition of an organization is the form of very human association for the attainment of a common purpose, cooperative activities, work relationships, organization is not a goal but a tool to achieve goals, a forum and a process of cooperation, a series of hexarchy is dynamic; and doing business with efficiency and competitiveness and the release of human imagination. Supply chain is a mechanism for the flow of materials, information, payments and services from suppliers of raw materials, to factories that produce products, then to warehouses to consumers. The supply chain organization manages a supply chain activity to maximize customer value and achieve a high and sustainable competitive level

Facing the rapidly changing business environment, corporate organizations always strive to build competitive advantages in a sustainable manner in improving product and service quality, speed of service time, and cost efficiency. For organizational size is one of the dominant organizational aspects to discuss in the literature and [36] represents that the size of the organization is influenced by the type of organizational design adopted, whereas if the organization is large it tends to have a more complex organizational structure compared to small organizations. Organizational performance refers to how the organization successfully meets financial objectives and market criteria [37]. [38], dividing organizational performance into two dimensions, namely logistics performance and marketing performance, logistics performance is when a company is able to deliver goods and services in the right amount and right time according to consumer demand, while performance marketing is when the company is able to increase of revenue compared with its competitors. [39], discusses the measurement of the performance of an organization.

Supply Chain Organization (SCOR) as creating a value and trust system [40]. However, several findings indicate that there are changes in the internal organization that must be made and must have a mindset for SCM implementation [41]. Many argue that if organizational members understand, and viewpoints about the supply chain, then interrelationships between supply chain

management may become difficult.

SCOR is the organization must facilitate for improvement in order to occur efficiency and effectiveness on supply chain management such as knowledges, skills, and abilities help implementation supply chain management activities [42]. The supply chain of the good organization, so environmental factors must be built first before supply chain management activities are operationalized [40]. Therefore, this study hypothesizes:

H2 : SCOR has an impact positive and significant on SCOP of retail companies

#### **2.4. Supply Chain Operational Performance (SCOP)**

Organizational theorists state that if an organization wants to change, the people in it must also change [43]. Operational performance is the implementation of managerial activities that are delivered in the selection, design, renewal, operation and supervision of production systems. In addition, it also assesses the level of operational performance in terms of customer satisfaction, employee morale, productivity, quality and delivery performance [10]. One of the performance indicators of achieving good performance is operational performance, which is the company's ability to achieve effective use of existing resources in the company so that company goals are achieved. An organizational operational performance is conceptualized along the dimensions of cost, quality, flexibility and delivery. [44]. operational performance will increase if companies prioritize the quality of the products they produce and market, plus in the modern era like today consumers have an increasingly intelligent mind set in seeing and choosing which products match their expectations, for that companies are required to be able to meet these expectations by producing products that have good product quality so that they are not unable to compete with competitors [10]. SCOP has received recognition from top management for its strategic and tactical impact in managing flows from upstream to downstream including products, services, finance, and information across suppliers and customers [45]. [46], there is a lag time that reflects the operational performance of the supply chain, so managerial effectiveness must be a special consideration.

SCOP is defined as the result of systematic, effective and efficient, strategic for collaboration with other businesses within organizations. Supply chain operational performance consists of processes and activities starting from purchasing raw materials to finished goods, and finally reaching consumers [47],[48],[49],[8],[50]. SCOP greatly impacts on improving company performance, so that in its implementation there are many benefits for the company, especially: cost savings, increased revenue, and reducing the occurrence of defects in products and these are the main advantages of implementing supply chain management [51]. While the long-term and short-term goals of SCM, identified organizational performance measures are financial and market performance and customer satisfaction. Customer satisfaction indicators are measured by the total product value to customers; meet quality standards according to consumer demand, retention of loyal customers and alignment of organizational goals [52],[53].

Many studies indicate that organizations need to be more focused in supply chain operation performance because it has an important role in company performance [54],[55],[56].

Meanwhile, according to [44], both Finland and Thailand already believe in the effective use of IT and working together with an organization-wide strategy will lead to better Supply Chain Operational Performance. (SCOP). The fact is there is implementation, Supply Chain management performance measurement tools, most of them consist of simple Likert scale based on research instruments [8], but [57], Supply Chain Operational Performance (SCOP) there is effect on financial performance. Therefore, this study hypothesizes:

H3 : SCMS has an impact positive and significant on SCOP of retail companies

H4 : SCMS has an impact positive and significant as mediation role in the relationship between SCOR on SCOP.

### **3. Research Methods**

#### **3.1. Population and Sample**

In the process of this research, the number of respondents used as a sample was 175 respondents. While the sampling technique was done by

purposive sampling. There are retail locations in several cities or regencies in East Java, namely of the city: Surabaya, Malang, Madiun, Sidoarjo, Jember, Pasuruan, Gresik, and Kediri. The criteria for respondents to fill out instruments or questionnaires are the position of retail shop Supervisor and the retail shop has been operational for a minimum of 3 years. Data analysis using the SmartPLS version 3 program.

### 3.2. Validity and Reliability Test of Instrument

Validity and reliability tests are carried out to ensure that the research instrument to be used must be declared valid and reliable. The definition of valid, namely as to the extent to which items in an instrument reflect the content where the instrument will be generalized, while reliable, concerns the extent to which the measurement of a phenomenon provides stable and consistent results.

### 3.3. Framework Research

The research frameworks used in this study is shown in Figure 1.

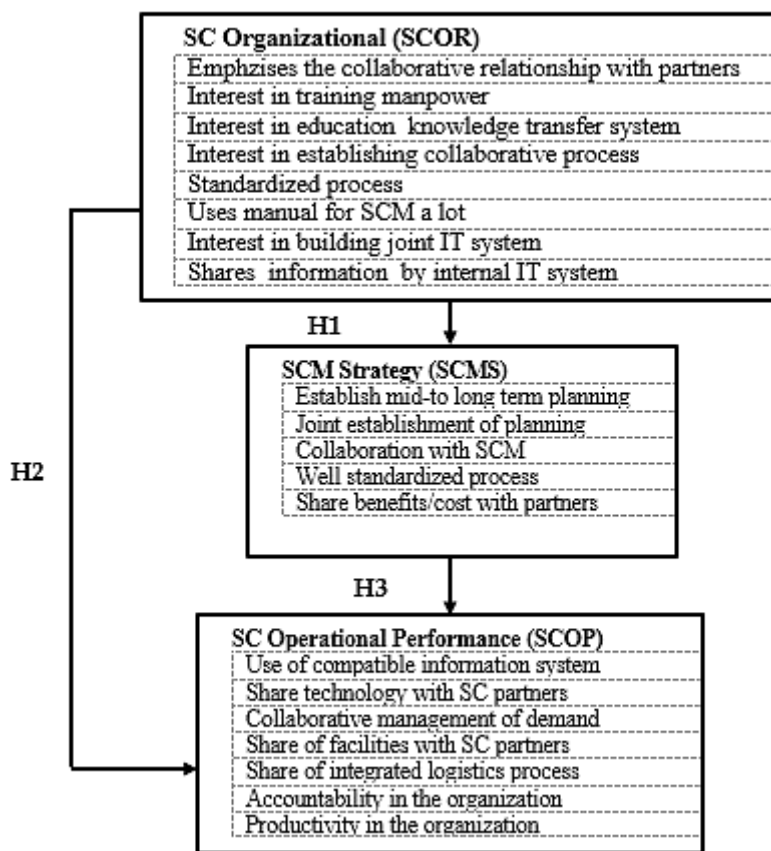


Figure 1. Research Framework

## 4. Results and Discussions

### 4.1. Validity and Reliability Testing

Ghozali [58] validity test is used to measure whether an instrument is valid or not. An instrument is said as it is. [58]. Reliability test is an instrument that can be relied upon if a statement is consistent over time.

to be valid if the questions or statements on the instrument can show something to measure. Meanwhile, the reliability test states that the instrument used to obtain reliable information as a data collection tool is also able to reveal information

**Table 1.** Result of Validity and Reliability Test

Variables	Indicator	Validity Testing			Reliability Testing		
		Pearson Correlation	Sig.	Remarks	Cronbach's Alpha If Deleted	Cronbach's Alpha	Remarks
SC Organizational (SCOR)	SCOR1	0.855	0.000		0.761		
	SCOR2	0.901	0.000		0.764		
	SCOR3	0.904	0.000		0.758		
	SCOR4	0.764	0.000	valid	0.775	0.794	reliable
	SCOR5	0.851	0.000		0.772		
	SCOR6	0.858	0.000		0.770		
	SCOR7	0.725	0.000		0.776		
	SCOR8	0.895	0.000		0.768		
SCMS1	0.681	0.000	0.788				
SCMS2	0.839	0.000	0.767				
SCMS3	0.731	0.000	valid		0.792		
SCMS4	0.892	0.000		0.756			
SCMS5	0.892	0.000		0.756			
SC Operational Performance (SCOP)	SCOP1	0.809	0.000		0.755		
	SCOP2	0.824	0.000		0.759		
	SCOP3	0.837	0.000		0.763		
	SCOP4	0.857	0.000	valid	0.762	0.793	reliable
	SCOP5	0,873	0.000		0.759		
	SCOP6	0.763	0.000		0.779		
	SCOP7	0.683	0.000		0.82		

Based on Table 1, validity testing of indicators for each variable having a significance value of  $0.000 < 0.05$ . Therefore, all indicators are declared valid. While reliability testing for all indicators of Cronbach Alpha value. 0.6, and Cronbach Alpha If Deleted  $<$  Cronbach Alpha, so that all indicators are also declared reliable.

#### 4.2. Evaluate of the Outer Model

Outer model in partial least square analysis is a measurement model to assess the validity and reliability of a model. It is in the partial least square measurement model is useful for testing the validity and reliability through the estimation results of algorithmic literacy. Here are the results of the estimation algorithm partial least square model (Figure 2).

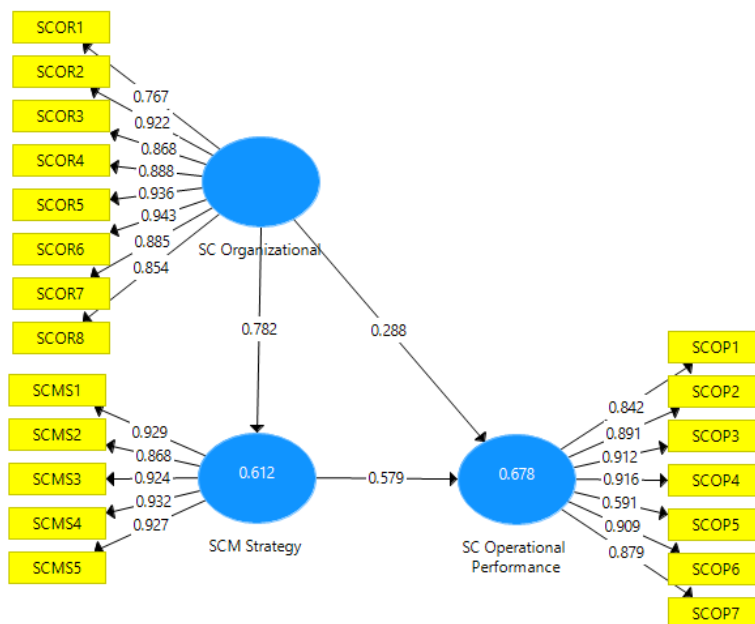


Figure 2. Path Analysis Diagram (Outer Model)

The evaluation carried out in the outer model includes testing, and results are as follows:

4.3. Convergent Validity

The measurement of convergent validity is evaluated using the outer loading value with the limit that the minimum outer loading value is greater

than 0.5. Meanwhile, if the outer loading value is greater than 0.7. Another evaluation for convergent validity can be done with the average variance extracted (AVE) value which must be greater than 0.50 [57]. The following is the outer loading and average variance extracted value for each research variable in the structural model see Table 2.

Table 2. Value of Outer Loading, T-Statistics and AVE

Indicator	Outer Loading	T-Statistics	AVE
SCOR1	0.767	16.890	0.782
SCOR2	0.922	48.065	
SCOR3	0.868	21.698	
SCOR4	0.888	38.875	
SCOR5	0.936	75.936	
SCOR6	0.943	85.147	
SCOR7	0.885	37.914	
SCOR8	0.854	38.003	
SCMS1	0.929	36.508	0.840
SCMS2	0.868	23.286	
SCMS3	0.924	50.457	
SCMS4	0.932	50.817	
SCMS5	0.927	48.566	
SCOP1	0.842	28.985	0.731
SCOP2	0.891	33.640	
SCOP3	0.912	50.409	
SCOP4	0.916	54.185	
SCOP5	0.591	9.739	
SCOP6	0.909	63.737	
SCOP7	0.879	42.019	

Based on Table 2, it is known that the outer loading value of each question indicator for all variables that compose the structural model already has a value

greater than 0.5, so it can be said that the question indicators in the structural model have met convergent validity. Another evaluation on the

average variance extracted value for each variable all also had a value greater than 0.50, which also concluded that the measurement of the research variables in the model had met the convergent validity.

#### 4.4. Discriminant Validity

After evaluating convergent validity, the next step is evaluating discriminant validity using cross loading and Fornel-Larcker value evaluations as a measure. The results are as follows at Table 3.

**Table 3.** Value of Cross Loading

Indicator	SC <i>Organizational</i>	SCM <i>Strategy</i>	SC <i>Operational Performance</i>
SCOR1	<b>0.767</b>	0.580	0.615
SCOR2	<b>0.922</b>	0.676	0.648
SCOR3	<b>0.868</b>	0.625	0.603
SCOR4	<b>0.888</b>	0.632	0.610
SCOR5	<b>0.936</b>	0.701	0.647
SCOR6	<b>0.943</b>	0.709	0.693
SCOR7	<b>0.885</b>	0.712	0.631
SCOR8	<b>0.854</b>	0.843	0.757
SCMS1	0.732	<b>0.929</b>	0.742
SCMS2	0.662	<b>0.868</b>	0.632
SCMS3	0.742	<b>0.924</b>	0.782
SCMS4	0.734	<b>0.932</b>	0.768
SCMS5	0.709	<b>0.927</b>	0.748
SCOP1	0.583	0.646	<b>0.842</b>
SCOP2	0.636	0.626	<b>0.891</b>
SCOP3	0.605	0.641	<b>0.912</b>
SCOP4	0.652	0.657	<b>0.916</b>
SCOP5	0.371	0.310	<b>0.591</b>
SCOP6	0.763	0.871	<b>0.909</b>
SCOP7	0.711	0.858	<b>0.879</b>

Based on Table 3, the evaluation of discriminant validity by using cross loading, it is known that the largest outer loading value has been generated by each indicator item for each variable that is

measured conceptually, so referring to this result shows that the valuation of discriminant validity with cross loading values can be fulfilled properly.

**Table 4.** Fornell-Larcker

Variable	SC <i>Organizational</i>	SCM <i>Strategy</i>	SC <i>Operational Performance</i>
<i>SC Organizational</i>	<b>0.884</b>		
<i>SCM Strategy</i>	0.782	<b>0.916</b>	
<i>SC Operational Performance</i>	0.741	0.804	<b>0.855</b>

Based on Table 4 the Fornell-Larcker evaluation, it is known that the AVE root value of each research variable shown on the diagonal line has a greater value than the correlation between the research variables. Referring to these results, the Fornel-

Larcker evaluation concludes that the discriminant validity of the research model analyzed by PLS can be fulfilled.



**4.5. Composite Reliability**

For the outer model, the final, can be assessed by looking at the composite reliability and alpha

cronbach. The value of each composite for reliability and Cronbach's alpha was greater than 0.70 [57]. The following is the value of composite reliability and Cronbach alpha for each variable.

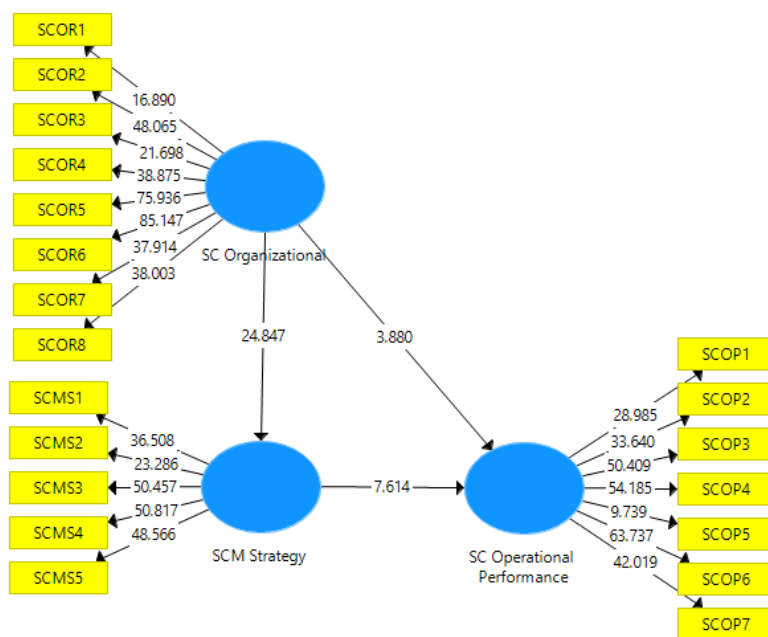
**Table 5.** Composite Reliability and Cronbach Alpha

Variable	Cronbach's Alpha	Composite Reliability
SC Organizational	0.960	0.966
SCM Strategy	0.952	0.963
SC Operational Performance	0.937	0.949

Based on Table 5, that each variable used in the research model composite reliability value and Cronbach alpha value greater than 0.6. Referring to the results of this evaluation, it can be concluded that each research variable has also met composite reliability

**4.6. Evaluate of the Inner Model**

In this evaluation, a description of the R-square results and hypothesis testing obtained from the SmartPLS bootstrapping process will be given with the following results.



**Figure 3.** Path Analysis Diagram (Inner Model)

**4.7. R-Square**

In assessing the goodness of fit, it is by looking at the R-square value generated through the SmartPLS estimation on each path. Based on data processing using the PLS method, the R-square is obtained as follows:

**Table 5.** Value R Square

	R Square
SCM Strategy	0.612

SC Operational Performance 0.678

The total coefficient of determination is obtained as follows

$$R^2 \text{ total} = 1 - (P_{e1}^2 \times P_{e2}^2)$$

$$R^2 \text{ total} = 1 - (0.623 \times 0.567)$$

$$R^2 \text{ total} = 1 - 0.353 = 0.647$$

Based on the calculation results, the total coefficient of determination ( $R^2$  total) is 0.647 which means that the diversity of all research data can be explained by the structural model compiled by 64.70%.

**4.8. Direct Effect**

testing the research hypothesis based on direct effect evaluation are as follows (Table 6).

Direct effect evaluation is used to test the research hypotheses that have been formulated. The results of

**Table 6.** Result of Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Remarks
SC Organizational → SC Operational Performance	0.288	0.292	0.074	3.880	0.000	positive & significant
SC Organizational → SCM Strategy	0.782	0.785	0.031	24.847	0.000	positive & significant
SCM Strategy → SC Operational Performance	0.579	0.577	0.076	7.614	0.000	positive & significant

Based on Table 6, the results of the calculation for hypothesis H1, H2, and H3, with the following criteria are the original sample (O) is positive, T Statistics (|O/STDEV|) is more than 1.96; and P-Values < 0.05. Therefore, the three hypotheses are declared positive and significant.

**4.9. Indirect Effect**

The results of the indirect effect in the partial least square analysis are shown in the specific indirect effect output as follows (Table 7).

**Table 7.** Result of Indirect Effects

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Remarks
SC Organizational → SCM Strategy → SC operational Performance	0.452	0.452	0.060	7.572	0.000	positive & significant

Based on Table 7, the results of the calculation for hypotheses H4, with the following criteria are the original sample (O) is positive, T Statistics (|O/STDEV|) is more than 1.96. When compared to the direct and indirect effects, the result is the effect of direct effect is 7.572 > 3.880, so that indirect effect of SC Organizational → SCM Strategy → SC operational Performance results are a positive and significant.

organizational on supply chain management strategy and supply chain operational performance of the retail shop. The retail business or retail business in Indonesia has continued to develop in the last five years in line with the growth of the Indonesian economy. In order to be sustainable and growing, amongst retail is an important link in the distribution process of goods and is the last link in a process distribution. Through retail, a product can meet directly with its users.

**5. Conclusion and Implications**

**5.1. Conclusion and Discussion**

With changes in business realities in relation to globalization, supply chain issues have become a priority scale for company owners. Based on this study also tried to evaluate the effect of supply chain

Based on the study obtained from the test of the research model, it was concluded: first, supply chain organizations have a positive and significant, besides that the highest value of effect on supply chain management strategy [27], [29], [31]. Then followed SCM strategy have a positive and significant effect on SC operational performance

and the lowest value, namely SC organizational have a positive and significant effect on SC operational performance [47],[48],[49]. Second, indirect effect SC organizational with mediation variable of SCM strategy have a positive and significant effect on SC operational performance. In addition, focus on retail stores, managers or supervisors pay special attention to suppliers and customers in implementing the supply chain, so that optimal results [51], [52]. Finally, identifying the influence of the supply chain organization on the supply chain management strategy and operational performance of the retail store supply chain helps managers or supervisors to focus on adding value to consumers and improving performance [51].

## 5.2. Managerial Implications

These results also have implications for those who manage the retail supply chain system, especially for modern retailers that continue to grow in Indonesia. First, this study examines the effect of SCOR on SCMS has a positive and significant effect on retail companies [9], [10]. The findings indicate that retail companies in Indonesia need to integrate the application of SCMS into their business functions because the influence has very high value [41]. Second, the findings also show that SCOR has a positive and significant effect on SCOP. Third, SCMS has a higher impact on SCOP, so it can be made by implementing SCMS as a mediation variable is appropriate and realizing the benefits for the company. These findings are important in understanding why retail companies in Indonesia continue to grow and have high market share and profits. Ultimately, this SCMS implementation will play an important role in improving SCOP [54],[55].

## 5.3. Limitations and Future Research

Although this study provides some important findings for modern retail companies in Indonesia, several limitations need to be considered. First, research respondents are consumers in modern retail in Indonesia. Therefore, the findings of this study do not apply to countries and modern retail companies other than Indonesia. Second, the market in Indonesia is relatively large. As a result, a total of 175 modern retail consumers. Meanwhile, the small sample size is a consideration of the findings of this study. Again, researchers need to be careful about the generalizability of study results.

Further study is needed because modern retail companies in Indonesia are a model for modern retail development. The results of these studies can be used as a reference for further research. Based on the author's view, the following are directions for further research. First, further studies can focus on variables that have not been studied, including IT applications, financial performance, sustainable supply chain performance, and others. Second, this research is quantitative. Further studies can combine qualitative and quantitative methods to gain deeper and richer insights into different perspectives. Finally, in today's era of industrial digitization, companies are increasingly investing in Industry 4.0.

**Conflict of interest:** The authors do not have any current or potential conflicts of interest.

## References

- [1] Ariani, D., & Dwiyanto, B., M. Analisis pengaruh supply chain management terhadap kinerja perusahaan (Studi pada industri kecil dan menengah makanan olahan khas Padang Sumatera Barat), *Jurnal Studi Manajemen dan Organisasi*. 10(2), 132-141, 2010.
- [2] Currie, G., Dingwall, R., & Kitchener, M. Let us dance: Organization studies, medical sociology and health policy. *Soc Sci Med*. 74 (3), 273-80, 2014.
- [3] Rachbini, W. Supply chain management dan kinerja perusahaan. *Jurnal Riset Manajemen dan Bisnis*, 1(10), 23-30, 2016.
- [4] Widyanto, A. Peran supply chain management dalam sistem produksi dan operasi perusahaan. *Jurnal Manajemen Bisnis*. 16(2), 91-98, 2012.
- [5] Imideeva, I., Ayzhy, E., Badaraev, R., Liktan, V., & Choduraa Manchyk, C. Demographic factor influence in the supply chain strategies and economic system. *International Journal of Supply Chain Management (IJSCM)*. 9(5), 21-527, 2020.
- [6] Levkina, E. V. & Titova, N.Y. Efficiency assessment of supply chain policy in the fishing industry functioning at the meso level. *International Journal of Supply Chain Management (IJSCM)*. 8(6), 487-492, 2019.
- [7] Lestari, S. Pengelolaan diversitas karyawan dalam membangun keunggulan kompetitif. *Jurnal Fokus Bisnis*. 14(1), 35-59, 2015.
- [8] Yu, W., Jacobs, M.A., Salisbury, W.D., & Enns, H. The effects of supply chain integration on customer satisfaction and financial performance: An organizational learning perspective. *International Journal of Production Economics*, 146(1), 346-358, 2013.

- [9] Thoyib, A. Hubungan kepemimpinan, budaya, strategi, dan kinerja: Pendekatan konsep, *Jurnal Manajemen & Kewirausahaan*. 7(1), 60-73, 2010.
- [10] Fakultas, M., N. Model peningkatan kinerja operasional melalui praktek-praktek manajemen kualitas pada industri kecil menengah (IKM) di kota Semarang. *2<sup>nd</sup> Conference in Business, Accounting, and Management*. 422 – 434, 2015.
- [11] Ashby, A., Leat, M., & Smith, M., H.. Making connections: A review of supply chain management and sustainability literature, *Supply Chain Management*. 17(5), 497 -516, 2012.
- [12] Bagher, A., N. The effect of supply chain capabilities on performance of food companies. *J Fin Mark*. 2(4), 1-9, 2018.
- [13] Farsijanti, H., & Ali, F., H. Identification and prioritization of the factors affecting the achievement of supply chain management to the world class and providing appropriate solutions. *Quar Ind Manag Pers*. 6, 25-44, 2012.
- [14] Patell, E., Nathan, O. & Moses, O. Supply chain management as having three core elements: value creation, integration of key business processes and collaboration. *International Journal of Supply Chain Management (IJSCM)*.7(6), 82-92, 2018.
- [15] Abbas, F, J., Nobanee, H., Khan, M., & Varas, J. The influence of supply chain management and net trade cycle on financial performance. *International Journal of Supply Chain Management (IJSCM)*.6(4), 51-59, 2017.
- [16] Huang, M.C., Yen, G.F., & Liu, T.C. (2014). Reexamining supply chain integration and the supplier's performance relationships under uncertainty”, *Supply Chain Management: An International Journal*, 19(1), 64-78. 2014.
- [17] Shafiei, M., & Tarmost, P. The impact of supply chain management processes on the competitive advantage of organizational performance. *Quan Stud Manag*. 5(2), 105-124, 2014.
- [18] Thatte, A. A., Rao, S. S., & Ragu-Nathan, T. S. Impact of SCM practices of a firm on supply chain responsiveness and competitive advantage of a firm. *Journal of Applied Business Research*. 29(2), 499–530, 2013.
- [19] Maulina, E, & Natakusumah, K. Determinants of supply chain operational performance. *Uncertain Supply Chain Management*. 8(1), 117-130, 2020
- [20] Ruslim, T., S. Analisis pengaruh supply chain management terhadap loyalitas pelanggan *Journal of Industrial Engineering & Management System*. 6(1), 33-46, 2013.
- [21] Heizer, J. & Render, B. *Operations management*. Edition 11<sup>th</sup>.Jakarta: Penerbit Salemba Empat Jakarta, 2015.
- [22] Rita. Pengaruh strategi inovasi terhadap kinerja operasional perusahaan manufaktur.*Binus Business Review*. 1(2), 474-487, 2010.
- [23] Zebst, P., J., Green Jr, K., W, Sower, V. E., & Baker, G. RFID utilization and information sharing: the impact on supply chain performance. *Journal of Business & Industrial Marketing*. 25(8), 582–589, 2010.
- [24] Patel, H., H. Behavioral aspects of supply chain management: Strategy, commitment, integration and firm performance – A Conceptual framework. *International Journal of Supply Chain Management*. 4(4), 370-375, 2017.
- [25] Egdair, I., M., M., Rajemi, M., F. & Nadarajan, S. Enterprise resource planning, organizational factors and organizational performance. *International Journal of Supply Chain Management (IJSCM)*. 9(6), 136-141, 2020.
- [26] Droge, C., Vickery, S., & Jacobs, M. An empirical study: does supply chain integration mediate the relationship between product/process strategy and service performance? *International Journal of Production Economics*, 137 (2), 250–262, 2012.
- [27] Ryu, K., Lee, H., & Gon Kim, W. The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*. 24(2), 200-223, 2012.
- [28] Sezhiyan, D.M., Page, T., & Iskanius, P. ‘The impact of supply effort management, logistics capability, and supply chain management strategies on firm performance’, *Int. J. Electronic Transport*. 1(1), 26–44, 2011.
- [29] Ilic, D., Tesic, A. The relationship between supply chain management strategy, marketing, logistics and company performance for breweries in Serbia. *Economics of Agriculture*. 4(63), 1157-1168, 2016.
- [30] Divyaranjani, R. Supply chain performance of customer and supplier relationship on Indian Retail Sector. *International Journal of Supply Chain Management (IJSCM)*. 7(2), 168-175, 2018.
- [31] Kocaoğlu, B, Gülsün, B & Tanyaş, M. A SCOR based approach for measuring a benchmarkable supply chain performance,” *J. Intell. Manuf*. 24(1), 113–132, 2013.
- [32] Ramprabha, K. An empirical study on the relationship of shopping motives on the retail store dimensions with special reference to women shoppers in Puducherry, *International Journal of Supply Chain Management (IJSCM)*.7(6),33 -37, 2018.
- [33] Manina, N.V., & Shevrov, Y.V. Study of the foreign system of state regulation of the innovative business environment and the

- formation of key areas of innovation policy of small business in Russia. *Problems of Modern Economics*. 4(44), 175, 2012.
- [34] Lai, K., & Cheng, T.C.E. Supply chain performance in transport logistics: An assessment by service providers, *International Journal of Logistics Research and Applications* .6(3), 151-164, 2010.
- [35] Prajogo, D. & Olhager, J. "Supply chain integration and performance: The effects of long-term relationships, information technology and sharing, and logistics integration," *Int. J. Prod. Econ.* 135(1), 514–522, 2012.
- [36] Choi, E. K., & Joung, H. W. Employee job satisfaction and customer-oriented behavior: A study of frontline employees in the foodservice industry. *Journal of Human Resources in Hospitality & Tourism*, 16(3), 235-251, 2017.
- [37] Yesil, & Kaya. The effect of organizational culture on firm financial performance: Evidence from a developing country. *Procedia-Social and Behavioral Sciences*, 81, 428-437, 2013.
- [38] Bavarsad, B., Rahimi, F., & Mennatyan, M. A. Developing a MIMIC model for E-shopping purchase intention", *World Applied Programming*. 3(7), 293-301, 2013.
- [39] Zangoueznezhad, A., Moshabaki, A. Human resource management based on the index of Islamic human development: The Holy Quran's approach. *International Journal of Social Economics*. 38, 962-972, 2011.
- [40] Lee, T., & Nam, H. *An empirical study on the impact of individual and organizational supply chain orientation on supply chain management*", *The Asian Journal of Shipping and Logistics*. 32(4), 249-255, 2016.
- [41] Omar, M.K., Bakar, A., & Rashid, A., M. Employability skill acquisition among Malaysian community college students. *Journal of the Social Sciences*, 8(3), 472-478, 2012.
- [42] Richey, R. G., Roath, A. S., Whipple, J. M., & Fawcett, S. E. Exploring a governance theory of supply chain management: Barriers and facilitators to integration." *Journal of Business Logistics*. 31(1), 237-256, 2010.
- [43] Chen, A. S. Y., & Hou, Y. H. The effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *The Leadership Quarterly*, 27(1), 1- 13, 2016.
- [44] Wiengarten, F., Humphreys, P., Cao, G. & Fynes, B., McKittrick, A. Collaborate supply chain practices and performance: Exploring the key role of information quality. *Supply Chain Management: An International Journal*. 15(6), 463-473, 2010.
- [45] Battor, M., & Battor, M. The impact of customer relationship management capability on innovation and performance advantages: testing a mediated model. *Journal of Marketing Management*. 26(9-10), 842-857, 2010.
- [46] Cao, M. & Zhang, Q. "Supply chain collaboration: Impact on collaborative advantage and firm performance," *Journal of Operations Management*. 29(3), 163-180, 2011.
- [47] Chuang, Nakatani, & Zhou. An exploratory study of the extent of information technology adoption in SMEs: an application of upper echelon theory". *Journal of Enterprise Information Management*, 22(1/2), 183-196, 2019.
- [48] Boutayeb, F. Estimating the returns to education in Algeria. *Asian Journal of Economic Modelling*. 5(2), 147-153, 2017.
- [49] Gong, J., Ogasawara, T., & Suzuki, S. Supply chain management performance and its influential factors: Cross national comparison between Japan and China. *Brazilian Journal of Operations & Production Management*. 8(2), 67-87, 2011.
- [50] Linic, S., Christopher, P., & Ingram, D. B. Plasmonic-metal nanostructures for efficient conversion of solar to chemical energy. *Nature Materials*. 10(2), 911-912, 2011.
- [51] Djatna, T., Marimin, Asrol, M., Baidawi, T. Harison, & Safriyana. .SCOR-based information modeling for managing supply chain performance of palm oil industry at Riau and Jambi Provinces, Indonesia. *International Journal of Supply Chain Management (IJSCM)*. 9(5), 75-89, 2020.
- [52] Imran, M., Hamid, S., & Aziz, A. The influence of TQM on export performance of SMEs: Empirical evidence from manufacturing sector in Pakistan using PLS-SEM. *Management Science Letters*. 8(5), 483-496, 2018.
- [53] Tenreng, M, Idrus, A., Annas Lalo, A. & Badruddin, S. Perceived service quality, supply chain collaboration, supply chain management as antecedents of loyalty and customer satisfaction: exploring moderating role of WOM. *International Journal of Supply Chain Management (IJSCM)*. 8(6), 412 – 419, 2019.
- [54] Asad, M., & Siddiqui, D. A. Determinants of mutual funds' performance in Pakistan. *International Journal of Social and Administrative Sciences*, 4(2), 85-107, 2019.
- [55] Beske, P., & Seuring, S. Putting sustainability into supply chain management. *Supply Chain Management: An International Journal*. 19(3), 322-331, 2014.
- [56] Deshpande, A. Supply chain management dimensions, supply chain performance and organizational performance: An integrated framework. *International Journal of Business and Management*. 7(8), 2 -19, 2012.

- [57] Suryanto, T., Haseeb, M., & Hartani, N. H. The correlates of developing green supply chain management practices: Firms level analysis in Malaysia. *International Journal of Supply Chain Management (IJSCM)*. 7(5), 316, 2018.
- [58] Ghozali, I. *Aplikasi analisis multivariate dengan program IBM SPSS 23 (Edisi 8)*. Cetakan ke VIII. Semarang: Badan Penerbit Universitas Diponegoro, 2016.