

# Analysis of the Effect of Supply Chain Management on Supply Chain Performance in the Coffee Shop Business in Ambon City

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Article Info Volume 83

Page Number: 9594 - 9603

Publication Issue: March - April 2020

#### Abstract:

The company that implementSupply Chain Management (SCM) aims to improve competitiveness that is realized in improving operational performance. Trust in the concept of the supply chain is defined as "a process of exchange of cooperation that can be trusted so that both parties are equally satisfied and benefit together". In addition to trust, companies should build commitment between company employees and between the company and its customers. This is required because the company cannot build or maintain good relations with other parties without a work commitment. This study aimed to analyze the influence of trust and commitment to supply chain performance in the Ambon City Coffee Shop Business conducted at 30 Coffee Shop Businesses in the City. The results of tests conducted using SEM (Structural Equation Modeling) and Partial Least Square analysis tools concluded: Trust has a positive and significant effect on supply chain performance for suppliers of Coffee Shop Business in Ambon City. This is consistent with research conducted by previous researchers (Harry Susanto and MutiaFaiz) in which trust is an important point in building a partnership, because this affects the level of customer satisfaction with suppliers, and this hypothesis is accepted. The second result is commitment that has a positive but not significant effect on supply chain performance for suppliers. This is seen by the indicators that exist in the commitment: affective commitment, continuous commitment and normative commitment, so that this hypothesis is rejected.

Article History

ArticleReceived: 24 July 2019 Revised: 12 September 2019 Accepted: 15 February 2020 Publication: 11 April 2020

Keywords: Trust, Commitment, Supply Chain Performance.

### I. Introduction

The problem often faced in the coffee shop business is a problem like in general, namely: lack of access to capital / limited capital, most of the capital used by coffee shop entrepreneurs is from their own capital. Entrepreneurs do not dare to borrow capital from banks because they do not understand the procedures. Then, the problem of

procurement of raw materials, especially on raw materials that are difficult to obtain and are seasonal, This makes the price fluctuating on raw materials and can have a direct impact on the continuity of production. The issue of partnership becomes important, because it is difficult to bring together farmers (producers of raw materials) and raw material processing companies in a true



partnership, because they have different interests and desires. The most important and easy thing to start a coffee business is that you must first learn about coffee through the internet or through a coffee shop that opens classes about coffee and baristas, or uses consulting services. The Coffee Shop Business is a business that uses "supply chain performance" as a business development process. Therefore, maintaining good relations with the company's partners is one of the important things that should be considered by business people because a success in partnership cannot be achieved instantly. Success through cooperation is achieved through improving company performance based on good relations (Ahda, 2009). In the current global competition, the company is expected to have a joint commitment made, in order to create trust between the company and its customers. Trust in the concept of the supply chain is defined as "a process of exchange of cooperation that can be trusted so that both parties are equally satisfied and benefit together". In addition to trust, companies should build commitment between company employees and between the company and its customers. This is required because the company cannot build or maintain good relations with other parties without commitment.Based on the background above, the main problems in this study were: What is the effect of trust on supply chain performance in the Ambon City Coffee Shop Business, and how does the influence of commitment on supply chain performance in the Ambon City Coffee Shop **Business?** 

# II. Conceptual Description Trust

Trust is generally seen as a fundamental element for the success of a relationship. A relationship will not last for a long period without trust. In a reciprocal relationship between the two

parties, especially in this case, the relationship between business people and their partners, trust is needed even though trust is not easy to give. Trust develops into an increasingly important theme in an organizational relationship, especially in changes in the design of an increasingly flat organizational structure (Ahda, 2009). Trust will arise from a belief that a cooperative relationship will provide benefits as expected by both parties (Wahyuni et al., 2003). Butler (1991) states that there are eleven (11) conditions of organizational trust that should be fulfilled, namely: wise in choosing, availability, competency, consistency, honesty, integrity, loyalty, openness, overall trust, fulfillment of promises, and acceptance (a condition). Trust is defined as the willingness to trust others where someone can have confidence (Moorman et I., 1993 in Ahda, 2009).

#### Commitment

Commitment is defined (Morgan and Hunt, 1994) as the belief of one party that building relationships with the other party is important and influences the optimal benefits obtained by both parties in the relationship. Morgan and Hunt (1994) further argue that commitment with cooperation is defined as an eternal desire to maintain a valuable partnership. Collaboration with valuable suppliers distributor is in accordance with the commitment that the cooperation commitment only exists when the collaboration is considered important. The study of Anderson and Weitz (1994, in Ahda, 2009) defines commitment as a desire to sacrifice in short-term to obtainlong-term benefits both from the supplier and distributor sides.

### **Supply Chain Performance**

Performance is the result of quality and quantity of work achieved by an employee in carrying out their duties in accordance with the responsibilities given. Performance is a process of how the work takes place to achieve work results.



Ronald H. Ballou et al. (2005, p: 2) in his book *Business Logistics* / *Supply Chain Management* defines the supply chain as a whole series of activities related to the flow of transformation of goods from the raw material stage to the end user, as well as the information flow. Materials / goods flow together from upstream to downstream in the supply chain. Meanwhile, supply chain management according to Ballou (2005) is the integration of all activities in the supply chain, to improve relations to get a competitive advantage.

According to Mentzer (in Ballou, 2005, p: 5), supply chain management is defined as systematic, strategic coordination of traditional business functions and tactics through business functions within a company and through business in the supply chain, with the aim of improving the long-term performance of individual companies and the supply chain as a whole.

### **Theoretical Framework**

Based on the theory used above, the development of the theoretical framework can be seen below:

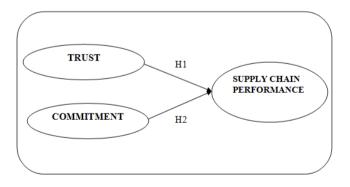


Figure 1. Research Model

### III. METHOD

# Types of research

This research was a survey research using an instrument designed in the form of a questionnaire as a primary data collection tool. In addition to collecting data with questionnaires, researchers also conducted interviews to obtain primary data from the company.

### Sample

This study used the probability sampling method. The main respondents in this study were suppliers of Coffee Shop Business in Ambon city. The sampling technique in this study used the saturation sample technique, which is a sampling technique when all members of the population are used as samples. This is often done if the population is relatively small, less than 30 people (respondents), or research that wants to make generalizations with very small errors.

### **Analysis Method**

# Partial Least Square (PLS)

Patrial Least Square (PLS) is a method introduced by Herman O. A Wold for the creation and development of models and methods for the social sciences with prediction-oriented a approach. PLS has the distribution-free research data assumption, it means that the research data does not ignore one particular distribution (for example a normal distribution). PLS is an alternative method of Structural Modeling (SEM) that can be used to overcome the problem of relationships between complex variables that have small data sample sizes (30 to 100) because SEM has a minimum data sample size of 100 (Hair et. al., 2010).

### V .RESULTS AND DISCUSSION

# **Descriptive statistics**

Descriptive statistical processing includes the mean and standard deviation. The results of this processing can be seen in table 4.2, which explains that the majority of respondents' answers regarding trust with a mean value (3.66), which means that trust is perceived by the company as a factor that affects company performance and has the highest value.



Then, according to respondents' answers about commitment, the mean value is (3.63), which means commitment is one of the factors that affect company performance. A summary of the results of descriptive statistics can be seen in Table 1

**Table 1.Descriptive Statistics Results** 

Variable	Mean	Std. deviation
TRUST 1	3,000	0,931
TRUST 2	3,800	0,792
TRUST 3	4,200	0,792
TRUST	3,667	
COM 1	3,100	0,943
COM 2	3,800	0,872
COM 3	4,000	1,095
COM	3,633	
SCP 1	3,300	1,100
SCP 2	3,400	0,987
SCP 3	3,900	0,943
SCP 4	3,000	1,125
SCP 5	3,800	1,013
SCP 6	3,600	1,052
SCP	3,500	

Source: Primary data processed,

2019

## **Data Analysis**

Data processing techniques using SEM approach based on Partial Least Square (PLS) require 2 steps to assess Fit Model in a research model. The steps are as follows:

# Assessing Outer Models or Measurement Models

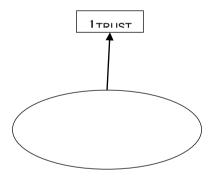
Data analysis techniques using XLSTAT PLS PM have three performance to assess the outer model, namely Convergent Validity, Discriminant Validity and Composite Reliability. Convergent Validity of the measurement model with reflexive indicators is assessed based on the correlation between item scores / component scores estimated with PLS software. The size of the individual reflection is said to be high if it

correlates more than 0.70 with the construction measured. However, according to Chin 1998 (in Ghazali, 2006) the measurement scale development of 0.5 to 0.6 was considered sufficient for the initial stages of research.

### **Outer Model of Construction Trust**

Trust can be explained by 3 indicators consisting of open communication, honesty and responsibility. The test of outer loading aimed to see the correlation between score items or indicators with construction scores. An indicator is reliable if it has a value above 0.7 but in the development stage, correlation 0.50 is still acceptable (Ghazali, 2006). The following figure is a summary of data processing to see the outer model of the trust variable.

Figure 2 Outer Model of Construction Trust



Source: Output XLSTAT PLS PM 2014

Figure 2 shows the relationship between the indicators and their respective construction, where all of these relationships meet the convergent validity requirements of 0.5. The details about the outer loading value along with the t-statistic value of the construction trust indicators can be seen in table 2

Table 2TheResults of Convergent Validity (Trust)

	•		
Latent		Standardized	Critical
Variable	Manifest	Loadings	Ratio



	Variables		(CR)
	TRUST		
	1	0,845	7,467
TRUST	TRUST		
	2	0,708	2,877
	TRUST		
	3	0,675	2,847

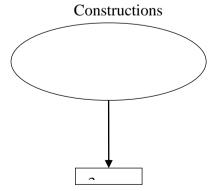
Source: Processed Primary Data, 2019

The original sample estimate or loading factor of all indicators is at the recommended level (0.50) and the t-statistic value is above 1.96. Estimation of i-statistics of existing indicators has also been above the t-table value specified (1.96), so it can be concluded that the construction of trust meets the requirements of convergent validity or in other words the construction of trust has a good convergent validity.

### Outer ModelofConstruction Commitment

The construction of commitment can be explained by 3 indicators consisting of affective commitment, continuous commitment, and normative commitment. The test of outer loading aims to see the correlation between the score of an item or indicator with the construction score. The indicator is considered reliable if it has a correlation value above (0.70) but in the development stage, the correlation (0.50) is still acceptable (Ghazali, 2006). The following figure is a summary of data processing to see the outer model of the commitment variable.

Figure 3 Outer Modelof Commitment



Source: Output XLSTAT PLS PM 2014
Figure 5.2 looks at the relationship between the indicators with each construction, where all of these relationships meet the requirements of convergent validity that is above 0.5. The details of the outer loading value along with the t-statistic value of the constructioncommitment indicators can be seen in table 3

Table 3TheResults of Convergent Validity (Commitments)

Latent			Critical
Variable	Manifest	Standardized	Ratio
	Variables	Loadings	(CR)
COM	COM 1	0,590	2,005
	COM 2	0,714	3,284
	COM 3	0,857	3,302

Source: Processed Primary data, 2019

The original sample estimate or loading factor value of all indicators is at the recommended level (0.50) and the t-statistic value above (1.96). The estimation of t-statistics of the indicators have also been above the specified table value (1.96), so it can be concluded that the quality strategy construction has met the requirements of good convergent validity.

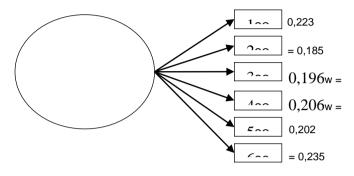
# Outer Model of Supply Chain Performance Structure

The construction of supply chain performance is explained by 4 indicators consisting of cost, quality / asset, flexibility and relability. The test of outer loading aims to see the correlation between the score of an item or indicator with construction the score. Indicatorsare considered reliable if theyhave a correlation value above (0.7) but in the development stage, correlation (0.50) is still acceptable (Ghazali, 2006). Based on the results of the processed data, the indicators are not reliable in the construction of supply chain performance because the value of the correlation



is influenced by consumer responses through questionnaires. The following figure is a summary of data processing to see the outer model of variables of supply chain performance.

Figure 4 Outer Supply Chain Performance Model



Source: Output XLSTAT PLS PM 2014

The processing results show the value of the outer model or correlation between indicators and latent construction that generally do not meet convergent validity. Correlation value for each indicator is below the proposed value that is equal to 0.50, so it can be concluded that the supply chain performance construction can be said to be inappropriate or not good. It can be seen in the table 4.

Table 4.The Results of Convergent Validity (Supply Chain Performance)

(Supply Chain I chomiance)								
			Critical					
Latent	Manifest	Standardized	Ratio					
Variable	Variables	Loadings	(CR)					
	SCP 1	0,814	9,393					
	SCP 2	0,684	6,149					
	SCP 3	0,532	2,685					
SCP	SCP 4	0,793	8,247					
	SCP 5	0,825	9,550					
	SCP 6	0,843	16,127					

Source: Processed Primer Data, 2019

The original sample estimate or loading factor value of all indicators is at the recommended level (0.50) and the t-statistic value above (1.96). The estimation based on-indicator t-statistic estimation is already above the specified

table value (1.96), so it can be concluded that the delivery strategy construction has met the requirements of good convergent validity.

# **Testing the Inner Model or Structural Model**

Testing the inner model or structural model is done to see the relationship among the construction, the significance value and the R-square of the research model. Structural models are evaluated using R-square for the dependent construction, Stone Q-square test for predictive relevance and t test as well as the significance of the structural path coefficient parameters.

Assessment of the model with PLS starts with looking at the R-square for each latent construction of depen. Changes in the value of R-square can be used to assess the effect of certain independent latent construction. There are dependent latent construction whether they have substantive effects. The following table is the result of R-square estimation using XLSTAT PLS PM 2014.

Table 5R-square Value (R<sup>2</sup>) (Supply Chain Performance)

$\mathbb{R}^2$	F	Pr> F	R <sup>2</sup> (Bootstrap)
0,579	18,557	0,000	0,613

Source: Output XLSTAT PLS PM 2014.

The table above shows the R<sup>2</sup> value of supply chain performance construction is 0.579. The higher the value of R<sup>2</sup>, the greater the independent construction can explain the dependent construction, so the better the structural equation. R<sup>2</sup> value of the internal business process construction is 0.579, which means that 57.9% of the variance in operational performance is explained by the construction of the supply chain performance while the remaining 42.1% is explained by other constructions.

### **PLS Full Model Analysis**

The results for the full model in this study are reflected in the figure below, a relationship modelthat states the various relationships among



trust, commitment and supply chain performance

is formed.

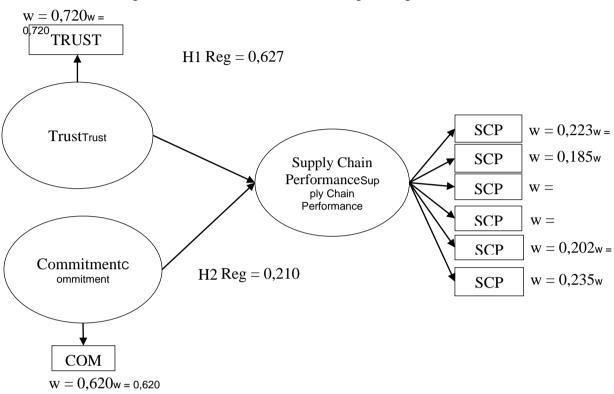


Figure 5 Full PLS Model Relationship among Constructions

### **Hypothesis test**

The significance of the parameters estimated gives very useful information about the relationship among the research constructions. The limit for rejecting and accepting the proposed hypothesis is  $\pm$  1.658, where if the value of t is in the range of values - 1.658 and 1.658 then the hypothesis will be rejected or in other words accept the null hypothesis (H0). Table 5 gives estimated output for testing structural models.

## **Hypothesis 1**

The results of testing the first hypothesis (H1) obtained t value of 0.627 shows that trust affects the performance of the supply chain. The influence of the construction of trust on supply chain performance is positive (0,000) and significant at 4,703 (4,233> 1,658).

Table 6The result of *Inner Weights* (Trust)

_						•	<i>*</i>
	Latent	Valu	T	Pr>	Critic		

e		t	al	Hypothes
			ratio	is
			(CR)	
0,62	4,23	0,00		Accepted
7	3	0	4,703	
		0,62 4,23	0,62 4,23 0,00	0,62 4,23 0,00 ratio (CR)

Source: Output XLSTAT PLS PM 2014

### **Hypothesis 2**

The results of testing the second hypothesis (H2) obtained t value of 0.210. It shows that commitment affects the performance of the supply chain. The effect of the construction of commitment on supply chain performance was positive (0.168) but it is not significant at 1,300 (1,417 < 1,658).

Table 7.The Result of *Inner Weights* (Commitment)

Latent	Val	T	Pr>	Critic	
Variable	ue		t	al	Hypothe



				ratio	sis
				(CR)	
Commitm		1,41	0,16	1,30	
ent	0,210	7	8	0	Rejecte
					d

Source: Output XLSTAT PLS PM 2014

### Discussion

# Influence of Trust on Supply Chain Performance

Based on the results of the first hypothesis (H1) test, it can be explained and indicated that trust has a positive and significant effect on supply chain performance in the Coffee Shop Business in Ambon City.Trust affects supply chain performance. This is consistent with research conducted by previous researchers (Harry Susanto and MutiaFaiz). In the process of supply chain performance, trust is an important point in building a partnership, because this affects the level of customer satisfaction with suppliers. Therefore, it can be said that trust that is built properly will improve supply chain performance. Therefore, the research shows that Trust has a positive and significant effect on Supply Chain Performance, and the hypothesis (H1) in this study is accepted.

# **Effect of Commitment on Supply Chain Performance**

Based on testing the second hypothesis (H2) in this study, which states that commitment has a positive but has no significant effect on supply chain performance. This is supported by research data obtained from the Coffee Shop Business in Ambon City. In other words, commitments built by suppliers can affect supply chain performance positively but are insignificant. It is supported by indicators in commitment, namely affective commitment, continuous commitment, and normative commitment.

Affective commitment is one's emotional involvement in the organization in the form of feelings of love for the organization and

continuous commitment, is defined as one's perception of costs and risks by forgetting one's own needs. Meanwhile, normative commitmentis a moral dimension that based on the feeling of obligation and responsibility to the organization that employs it. From the results of this second hypothesis research, it can be said that commitment has a positive but not significant effect on supply chain performance, so this hypothesis is rejected.

### VI. Conclusion

Based on the results of research conducted on 30 different Coffee Shop Businesses in Ambon City that tests the influence of the dimensions of trust and commitment on supply chain performance, the authors can conclude the results of tests conducted with SEM (Structural Equation Modeling) and using Partial Least Square analysis tools. The conclusions are:

- a. Trust has a positive and significant effect on supply chain performance for the Coffee Shop Business in Ambon City. This is consistent with research conducted by previous researchers (Harry Susanto and MutiaFaiz). Trust is an important point in building a partnership, because this affects the level of customer satisfaction with suppliers, and this hypothesis is accepted.
- b. Commitment has a positive but has no significant effect on supply chain performance for suppliers. This is supported by the indicators that exist in the commitment of affective commitment, continuous commitment and normative commitment, so that this hypothesis is rejected.

### **REFERENCES**

[1] Ahda, F. A. 2009. PengaruhBentukRantaiPasokandanKualitasHu



- bungan Perusahaan
  PemasokdalamMewujudkanKinerjaPemasaran
  melaluiPeningkatanKinerjaRantaiPasokan
  [Effect of Supply Chain Forms and Quality of
  Supplier Company Relations in Realizing
  Marketing Performance through Enhancing
  Supply Chain
  Performance]."Tesistidakdipulblikasikan,
  Magister Manajemen, Undip.
- [2] Anderson, Erin and Barton Weitz.1989. Determinants of Continuity in Convensional industrial Channnel Dyads," *Marketing Science*, 8 (4), 310. 23.
- [3] Arifin. 2004. 
  "PengaruhBentukRantaiPasokandanKualitasH ubungan Perusahaan PemasokdalamMewujudkanKinerjaPemasaran MelaluiPeningkatanKinerjaRantaiPasokan" 
  ["The Effect of Supply Chain Shape and Quality of Supplier Company Relations in Realizing Marketing Performance Through Enhancing Supply Chain Performance"]. 
  JurnalSainsPemasaran Indonesia, Vol. 3, No. 2, h. 165-180.
- [4] Butler, W. S, J. E Raymod, and R. W. Rich. 1992. "The relationship between forecast pispersion and forecast uncertainly: evidence from a survey data—arch model." Journal of Applied Econometrics, Vol. 7, p: 131-198.
- [5] Chopra, S.And P. Meindl. 2007. Supply chain management: strategy, planning, and operations. New Jersey: Pearson Education, Inc.Chow, W. S, C. N. Madu, C.H. Kuei, M. H. Luc, C. Lind, And H. Tseng. 2008. "Supplychain management in the US and Taiwan: An Emprical Study." Vol. 36, h. 665-679. http://www.elsevier.com/locace/omega. Diaksestanggal 5 Januari 2010.
- [6] Cook, Robert L., Michael S. Graver. 2002. "Subscribtion Supply Chain", Mid American Journal of Business, Vol. 17, No. 2, p: 37-45.
- [7] Dwyer, F. Robert, Tanner, J. F. Boston. 1999. Bussines marketing: Connecting strategy, relationships, and learning. Book 3. Boston: McGraw-Hill.

- [8] Ghazali, G. 2006. Structural Equation Modeling: MetodeAlternatifdenganPatrial Least Square. Semarang: BadanPenerbitUniversitasDiponegoro
- [9] Hair, J. F., Black, W. C., Babin, B. J., danAndreson, R. E. 2010. Multivariate Data Analysis, 7<sup>th</sup> edition. NJ: PrearsonPrentice Hall
- [10] Heyzer, J. And R. Render. 2005. *Operations Management*. 7th ed. New Jersey: Pearson Education, Inc.
- [11] Johnson, Jean L. 1999. "Strategic Integration in Industrial Distribution Channel: Managing the Interfirm Relationship as Strategic Asset, Journal of The Academi of Marketing Science," vol.27 no. 1, p: 14-18.
- [12] Levi, D. S., P. Kaminsky, E. S. Levi. 2003. *Designing & Managing The Supply Chain*, 2nd ed., McGraw-Hill Companies, Inc.
- [13] Maryanto, S. 2005. "Upayapeningkatankinerjapemasarandenganbe ntukrantaipasokandankualitashubunganperusa haanmelaluikinerjarantaipasokan." ["Efforts to improve marketing performance in the form of supply chain and the quality of corporate relations through supply chain performance."] Kompak, No. 13, h. 110-127, ed. Januari-April 2005.
- [14] Morgan, R., Hunt, S. 1994. "The Commitment Trust Theory of Relationship Marketing," Journal of Marketing, Vol. 58, July, p. 20-38.
- [15] Prof. Drs. SutrisnoHadiNotowidagdo, MA. 2007. IlmuStatistikadanMetodologiRiset [Statistics and Research Methodology], Yogyakarta: PenerbitAndi Publisher
- [16] Ronald, H. B. 2007. *Bussines logistics (SCM)*, 5th ed. India: Pearson Education.
- [17] Parsons, L. J., Hansens, M. Dominique, Schultz, L. Randall. 2001. *Market respons models [Market response models]*. 2nd ed. Boston: Kluwer academic pulbisher.
- [18] Soetomo, Harsini. 2004. Relationship
  Marketing Pada Upscale Retailing:
  HubunganAntaraKepuasanKonsumenDengan
  Loyalitas [The Relationship Between
  Consumer Satisfaction and Loyalty], Media



- RisetBisnis Dan Manajemen, Volume. 4 No.3, Desember 2004.
- M. [19] Susanto, H. Dan Faiz. 2006. "AnalisisFaktor Faktor yang MempengaruhiKomitmenPenyalurSebagaiUpa yaMeningkatkanHubunganJangkaPanjangdeng anPemasok." ["Analysis of Factors Influencing the Commitment of Distributors as an Effort to Improve Long-term Relationships Suppliers."] Jurnalbisnisstrategi, Vol. 15, No. 2, h. 21-31.
- [20] Yamin, S. danKurniawan, H. 2009. Sructural Equation Modeling:

  BelajarLebihMudahTeknikAnalisis Data Kuesionerdengan LISREL-PLS, Buku Seri Kedua, Jakarta: SalembaInfotek
- [21] Wahyuni, Sari, Pervez N Ghauri, and Theo J.B.M Postma.(2003). "An investigation into factors influencing international strategic alliance process," GadjahMada International Journal of Bussiness, Vol. 5, No.3, pp.273-299.