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IMPROVING OPERATIONAL PERFORMANCE THROUGH SUPPLY CHAIN COLLABORATION

(Case study on SMEs production and distribution of Bran in Banten province)

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Abstract

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This research aims to determine if there is any influence of trust, and technology to the performance of the company with supply chain collaboration as a variable intervening case study ⁴ on the perpetrators of SMEs production and distribution of the province of Banten.

The variables used in this study were trust, and technology as independent variables, operational performance as dependent variables, and supply chain collaboration as a intervening variable. This research uses quantitative methods using descriptive research and causal research. Data from the 4 variables in the analysis using structural Equation Model (SEM) in Software Smart PLS version 2.0. M3. The number of samples used in this study was 70 respondents.

Based on the results of data analysis, it can be concluded that the influence of Trust and technology has a positive and significant influence on the Supply Chain Collaboration while the influence of trust and technology on the company's operational performance ³ has a significant positive influence relationship. The analysis shows that the Supply Chain Collaboration is able to mediate the influence of Trust, and technology on Operational ³ performance.

Keywords: Trust, Technology, Supply Chain Collaboration, and Operational Performance.

Introduction

SMEs development in Indonesia is one of the priorities in the development of national economy, SMEs is a potential business that is highly encouraged by the Government, because more and more entrepreneurial society then the better and the economy As local resources, local workers, and local financing can be optimally absorbed and beneficial (Sudiarta, et.al : 2014). Tambunan (2012) argues that the challenges faced by SMEs can be an opportunity to develop when the difficulty of distribution and access of raw materials can be addressed. Easy access to information and raw materials can be achieved by establishing partners with other members in the value chain.

As for the process of partnership itself as an interaction between the trust and collaboration between companies (Ryu et al., 2009). Collaboration is one of the strategies for designing and planning supply chain management. Collaboration is based on the thought that one company will not be able to compete successfully if it works alone (Mehrjerdi, 2009), in a supply chain system, the partnership process is defined as the interaction between trust and collaboration between Company (Ryu et al. 2009). The high level of collaboration, both with suppliers and customers, leads to improved performance (Makara, 2015). Good relationships with partners

are built on the basis of trust. Ahda (2009) said that success through cooperation is achieved through improved performance of the company that is based on good relationships.

Supply chain collaboration has become a powerful force capable of stimulating the companies in supplying chains to network building globally, securing the company's strategic position in the supply chain, focusing on development and improving performance Financial (Fawcett et al., 2011). Very few companies have all the resources and capabilities needed to compete on a global scale and the competitiveness of supply chains will depend on access to capabilities that cannot be marketed through collaboration (Salam, 2017). Autry, Rose, & Bell (2014) argues that collaboration is a use aimed at cooperation and maintaining business exchange relationships. To date, experts have focused on the supply chain collaboration research (Fawcett et al., 2011), the level of supply chain collaboration and performance results (Zacharia, Nix, & Lusch, 2009), information technology as the cause of supply chain collaboration (Fawcett et al., 2011)

Besides trust and information is one of the crucial aspects of supply chain management, information technology support allows management to make business decisions quickly and precisely. The progress of information and communication technology included in the Electronic Data Interchange (EDI), and the Internet is an important tool to handle the complete relationship between suppliers and buyers. The complexity of supply chain management forces companies to use online communication systems. Given the important role of information in supporting the supply chain performance, the manager must understand how the information is collected and analyzed (Munizu, 2017).

The supply scheme of raw material from suppliers to the company can be seen on Figure 1.1 below, where every week the raw materials are supplied.

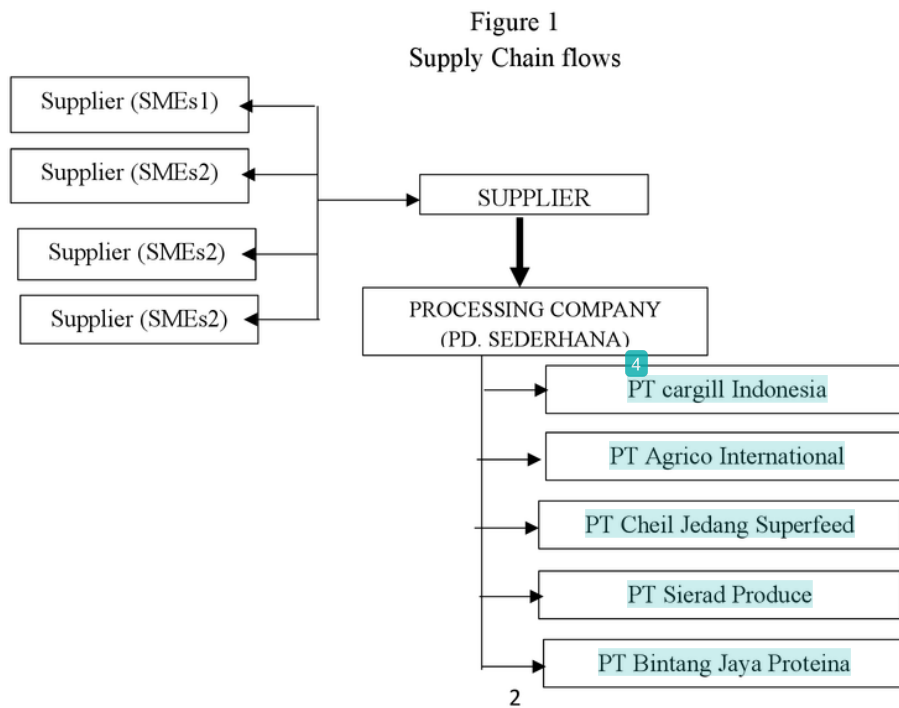
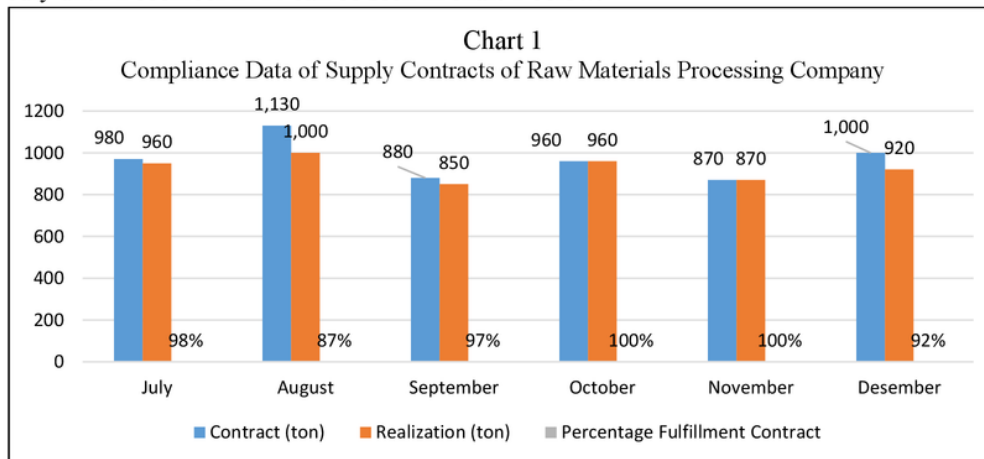


Figure 1 above shows the flow scheme of raw materials from suppliers to PD Sederhana as a processing company, where the raw materials of the suppliers are the people of rice milling SMEs, delivered to the large suppliers who then the raw materials Delivered to PD simplified. The raw material will be in the PD Sederhana, then the production from PD Sederhana will be channeled to large companies, such as PT Cargill Indonesia, PT Agrico International, PT Cheil Jedang Superfeed, PT Sierad Produce, PT. Bintang Jaya Proteina, and others.

But there are constraints in cooperation between the supplier of raw materials with the company is the delay in the supply of raw materials and Tepatan in fulfilling the supply contracts of raw materials. The following data of supply contracts of raw materials in processing company in July until December 2018 can be seen in chart 1 below.



Source: PD Sederhana 2018

From the data above can be seen in the overall fulfillment of supply contracts of raw materials in processing company for the month of July-December 2018, where the 100% contract fulfillment occurs only in October and November while in July, August, September, and December suppliers do not meet contracts. This can cause problems in fulfilling the company's production quota.

1. Literature Review

1.1 Trust

Trust can help the harmony of partner interests, improve stakeholder satisfaction, and support the achievement of common objectives (Maurer, 2010). Further, trust is helping the opportunities arise from cooperation between partners (Maurer, 2010). Trust is a willingness to take risks (and a willingness to rely on business partners where a person has confidence. Trust refers to the extent to which supply chain partners think of each other as credible and charitable partners (Salam, 2017). Trust is the foundation of the business, building trust in long-term relationships with customers is an important factor to create customer loyalty. This belief is not only to be recognized by other parties/business partners, but must be constructed starting from scratch and can be proven. Trust is a form of excellence in committing to an organisational cooperation relationship that arises from a belief that a cooperation relationship

will provide benefits as expected by both parties, measured by indicators Communication, sharing of important information, honesty, responsibility, and experience (Mukhsin, 2017).

2.2 Technology

Information technology is interpreted as a science in the field of information computer-based and its development is very fast. Information technology is a technology used to process data. The processing includes processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information, that is relevant, accurate, and timely information (Uno & Lamatenggo, 2011). The proven technological infrastructures generally facilitate the development of stable and close relationships between channel partners (Salam, 2017). For supply chain relationships in achieving collaboration, electronic mechanisms must also exist so that information can be easily exchanged between partners. One such mechanism is the technology to share information. Information technology has played an important role in enabling collaboration of supply chains based on elements such as electronic data exchange, Internet and so on. IT has also been shown to support exchanges among business partners (Pramatari,2007). In general, IT has been widely recognized as an important factor in the supply chain because of the contributions that can be made in improving the performance of both individual firms and the overall supply chain. (Greetings,2017)

1.3 Supply Chain Collaboration

The partnership relationship, in the context of supply chains, has a long-term orientation that is born from a relational approach, if viewed based on the type of relationship involved, the partnership relationship is divided into contractual, cooperative, collaborative and alliances. Ferrer et al. (2010) looks at the type of collaborative relationship as a more durable relationship in which each party seeks to bring the organization to a new structure with a fully committed, vision of the same mission and a higher level of trust. Supply chain collaboration is defined as a long-term relationship where perpetrators generally conduct work relationships, share information and jointly conduct planning to even modify their business practices to improve performance Together (Whipple, Lynch, & Nyaga, 2010). For a collaborative relationship to succeed, it is important that partners work together to plan and coordinate activities, as well as to resolve problems (Salam, 2017).

1.4 Operational Performance

Performance appraisal is one of the ways that management can fulfill its obligations to the funders and also to achieve the objectives set by the company. Operational performance is a working capability demonstrated by the outcome of work. The company's performance is something that the company generates in a period of time by referring to predefined standards. The performance of the business refers to how many companies are oriented to the market and the purpose of profit (Rahadi, 2012). The relationship between the supplier, customer, and company, must be managed well and always improved to establish a sustainable relationship and suppliers are responsible for the quality of the product and to make the product distribution from upstream to downstream In time up to the end user. Thus, the long-term increase in good

relations and the mutual trust between the company, supplier and customers is necessary to achieve efficiency in the performance of the company (Rahmasari, 2011).

2. Hypothesis Development

2.1 Influence of trust on operational performance

Trust is felt increasingly important in a relationship between organizations. Without trust, a relationship between a client and a supplier never runs to maximize its potential power. Trust is described as a willingness to take risks, and trust will arise when a group believes in each other and integrates in interacting fellow partners (Kwon & Suh, 2004) One of the most important things to have Each company in a supply chain network is a trust between the organizations. Trust as a confidence or positive expectation gained through exchanges with partners in a system of supply chains. Success in the performance of the company (Operation Performance) in the supply chain also comes from the high value of trust and strong commitment between partners in the supply chain. In a supply chain system, the partnership process is defined as the interaction between commitments, trust and collaboration between companies. The high level of collaboration, both with suppliers and customers, leads to improved performance. Good relationships with partners are built on the basis of trust. Success through cooperation is achieved through improved operational performance of the company based on good relations (Munizu,2017). Ah (2009) said that success through cooperation is achieved through improved operational performance of the company based on good relationships. Yaqoub (2011) explains that trust proves there is a positive influence on the company's performance. Based on the explanation above, the hypothesis of this research is:

H1: Trust has a positive influence on operational performance

2.2 The Influence of information technology on operational performance

Information technology greatly affects the economic development, business, technology and information that causes increasingly intense competition on every type of business. To deal with economic competition today, policy-making in the company is demanded to always be effective and efficient in maintaining the survival of its corporate life. Information technology can be utilized effectively so as to contribute to performance, then members in the organization must use the technology well (Tripathy, Aich, Chakraborty, & Lee, 2016). The results of the study of Tripathy et al. (2016) proved that information technology positively affects the effectiveness of the company's operations. Based on the explanation above, the hypothesis of this research is:

H2: Information technology has a positive influence on operational performance

2.3 The influence of trust in supply chain collaboration

Good relationships with partners are built on the basis of trust. Similar results are also shown by Ryu et al. (2009) which argues in addition to improving collaboration, trust is very important in building commitments. Companies that believe in their partner integrity will have a higher intention of continuing to cooperate with these partners (Cambra and Polo, 2011; Wu et al. 2014). Commitment and trust are the main factors that support the collaboration of companies with suppliers (Stefani and Sunardi, 2014). The results of the Munizu Research (2017) that proved the belief positively influential on supply chain collaboration. Mamad & Chahdi (2013)

5 confirmed that trust is a major factor in the collaboration of SC members. Similar results are also shown by Ryu et al (2009), which argues in addition to improving collaboration, trust is very important in building commitments. Companies that believe in their partner integrity will have a higher intention of continuing to cooperate with such partners (Wu et al., 2012; Cambra & Polo, 2011). Based on the explanation above, the hypothesis of this research is:

H3: Trust has a positive influence on supply chain collaboration

2.4 The influence of information technology on supply chain collaboration

Information technology facilitates the creation of fast partnerships by providing the right information. If the company wants to lead to an enterprise resource planning (ERP) system The company may need to undertake a restructuring organization. Other implications include IT investment equipment, business process Ulan Engineering, market orientation, employee relations, and labor characteristics. The strategic role of manufacturing information systems, among others, minimizes the company's negative potential, balances competitors, supports business strategies and supports manufacturing-based competitive values. Some of the reasons for the use of information technology in SCM are: marketing, economical, organizational, technology (Suhari, 2016). The results of the study Salam (2017) proved that information technology positively affects supply chain collaboration. Based on the explanation above, the hypothesis of this research is:

H4: Information technology has positive influence on supply chain collaboration

2.5 The influence of supply chain collaboration on operational performance

3 According to Rahadi (2012), supply chain collaboration proved to be related to improving the operational performance of the company (Ryu et al., 2009; Anbanandam et al., 2011). Piriyaikul & Kerdpitak (2011) Finding external collaborations will increase the competitive performance of the community by increasing response ability to customer demand. Singh's Research & Power (2009) predicts that 21% of the company's performance is built from collaborations that are balanced with the supplier and the customer, thereby ignoring supply chain collaboration is not a wise act for the company. This research only takes into account collaboration with suppliers that explain 18.3% of the company's performance variances, approaching numbers obtained by Singh & Power (2009). This collaboration is felt to give a profit. Expert reveals the benefits of implementing collaboration with suppliers to the company's performance. Long term relationship can be created with a continuous relationship between all parties involved in the supply chain management, and with good cooperation (Cooperation) and each other. can be done. Furthermore, that is not less important is an integrated process (Process Integration) of the merger of all activities in supply chain management so that all activities run smoothly (Rachbini, 2016). Based on the explanation above, the hypothesis of this research is:

H5: Supply chain collaboration has positive influence on operational performance

2.6 Theoretical Framework

Theoretical frameworks in this study are as follows:

3. Methodology

In this study presents research that is causal relationship which is a determination of the level of influence that can also be used to make predictions. Researchers can identify facts or events as variables that are affected (dependent variables) and conduct research on the variables that influence (independent variables).

3.1 Research variable

The variables in this study consisted of:

- Trust variable adopted and adapted from the research Ahda, 2009 and Salam, 2017) consist of five indicators of open communication (Trust1), information sharing (Trust2), honesty (Trust3), Support (Trust4), and Reliability (Trust1).
- Technology variable adopted and adapted from research (Salam, 2017) consists of five indicators, the importance of technology in a business relationship (Tech1), the company connected electronically (Tech2), Information systems Integration (Tech3), communication Between companies using the Internet (Tech4), Technology success (Tech5)
- Supply chain collaboration variable adopted and adapted from research (Salam, 2017) consists of five indicators ie; Process of sharing resources (Scc1), Strategic objective Development (Scc2), Supplier performance Monitoring (Scc3), "reward" and risk (Scc4)-related arrangements, plus value sharing (Scc5)
- Operational performance variable adopted and adapted from research (Lenny Koh et al., 2007), consist of five indicators; Flexibility (Op1), Lead Time Reduction (Op2), Forecasting (forecasting) (Op3), resource planning and cost saving (Op4), and stock level reduction (Op5).

3.2 Data types and sources

Data types and sources this research mostly uses primary data obtained in the field. The primary Data in this research is the answer of the respondents about the performance analysis of the company's SMEs production and distribution of Bran in Banten province. Data retrieval is performed using a prepared questionnaire. The secondary data used in this research is the fulfillment data of supply contracts for raw materials and the transparency data on sourcing raw materials.

3.3 Population and Sample

Population

Population is a generalization area consisting of: objects / subjects that have certain quantities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2013). The population in this study is the SMEs of Banten Province production and distribution of Bran.

Sample

The sample in this study uses the Purposive random sampling method, researchers first determine the part used as a basis before making a random selection. In this study what is meant is the SMEs of Banten Province production and distribution of Bran. After doing the part purposively the researcher then randomly chooses the element. The sampling method used is based on Slovin's opinion. The total number of SMEs actors (the population) is 225 SMEs of Banten Province production and distribution of Bran, with an alpha level of 10%. The number of samples obtained was 70 respondent suppliers. To determine the number of samples in this study, the Slovin formula (Sugiono, 2011) was used which was formulated as follows:

$$n = \frac{N}{1 + N (e)^2}$$

Where:

n : Sample size

N : Population size

e : Error sampling rate, for example 10%

$$n = \frac{225}{1 + 225 (0,01)^2}$$
$$n = \frac{225}{3,25}$$
$$n = 69,23 \text{ rounded to } 70$$

4. Result and Discussion

4.1 Validity and Reliability Test

Validity Test

Validity test is used to measure the validity or validity of a questionnaire. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. Testing the validity of the data in this study is to use the SmartPLS software with Outer Model, namely Convergent validity seen by the square root of average variance extracted (AVE) value of each construct where the value must be greater than 0.5 (Kock and Lynn, 2012 in Ghozali and Latan, 2014). Another way is to compare the square root of average variance extracted (AVE) values of each construct (latent variable) with the correlation between constructs and other constructs in the model. If the square root value of AVE for each construct is greater than the correlation value between constructs with other constructs in the model, then each statement indicator is valid (Kock and Lynn, 2012 in Ghozali and Latan, 2014) or said to have Discriminant values good validity.

Table 1
Discriminant validity

Average Variance Extracted (AVE)						
Mean, STDEV, T-Values, P-Val...	Confidence Intervals	Confidence Intervals Bias C...	Samples	Copy to Clipboard:		
	Original Sampl...	Sample Mean (...)	Standard Devia...	T Statistics (O...	P Values	
Operational Performance	0.773	0.773	0.038	20.087	0.000	
Supply Chain Collaboration	0.725	0.733	0.045	16.094	0.000	
Technology	0.770	0.776	0.046	16.641	0.000	
Trust	0.714	0.722	0.040	18.029	0.000	

Source: Primary Data processed with SmartPLS (2019)

Table 1 explains the values of AVE and AVE roots of the construct of Trust, Technology, Supply chain collaboration and Company Operational Performance. It can be seen that each construct (variable) has a AVE value above 0.5. This shows that each construct has a good validity value from each indicator or a questionnaire used to determine the variables of Trustworthiness, Technology, Supply chain collaboration and operational performance can be said to be valid. Another way that can be used to assess the validity of a construct is to compare the square root of AVE contained in Table 1 with the correlation of latent variables contained in Table 2.

Table 2
Correlations of Latent Variables

Discriminant Validity					
	Fornell-Larcker Criterion	Heterotrait-Monotrait Ratio (HTMT)			
		Operational Pe...	Supply Chain ...	Technology	Trust
Operational Performance		0.849	0.000	0.000	0.000
Supply Chain Collaboration		1.062	0.799	0.000	0.000
Technology		1.041	1.043	0.845	0.000
Trust		1.025	1.063	1.030	0.803

Source: Primary data processed with SmartPLS (2019)

The result is that the AVE root is smaller when compared to latent variable correlation, it can be interpreted that the statement in the questionnaire is declared to remain valid because all of the construction in the estimated model meets one of the Applicable criteria.

Reliability Test

The reliability test is intended to measure internal consistency a questionnaire that is an indicator of a variable or construct. A questionnaire is said to be reliable if a person's answer to a statement results in the same answer from time to time. Testing data reliability In this study using SmartPLS software with test Composite reliability criteria. A data is said to be reliable if Composite reliability is greater than 0.7 (Hulland, 1999; Hair et al., 2013 in Ghozali and Latan, 2014).

Table 3
Composite Reliability

Construct Reliability and Validity				
Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted
	Cronbach's Al...	rho_A	Composite Rel...	Average Varian...
Operational Performance	0.923	0.933	0.928	0.721
Supply Chain Collaboration	0.873	0.881	0.875	0.638
Technology	0.924	0.929	0.925	0.714
Trust	0.899	0.905	0.900	0.645

Source: Primary data processed with SmartPLS (2019)

From Table 3, it can be seen that each construct or latent variable has a composite reliability value above 0.7 which indicates that the internal consistency of the independent variables (Trust, Technology, Supply chain collaboration) with the dependent variable (Corporate Operational Performance) has good reliability.

4.2 Data Analysis

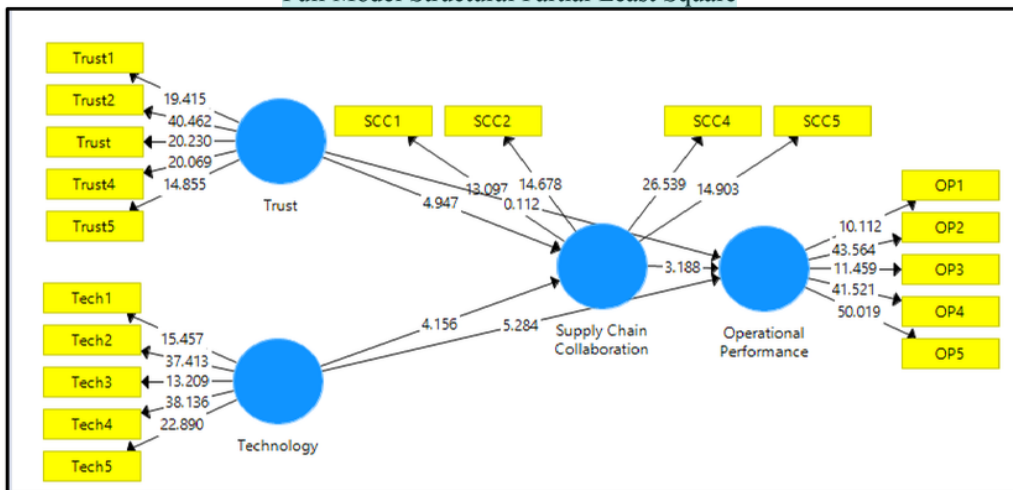
Measurement Model

Measurement model is carried out to test the relationship (loading value) between indicators and constructs (latent variables). In evaluating the outer model in PLS, there are three criteria, one of which is seeing convergent validity, while the other two criteria, namely Discriminant

validity in the form of square root of average variance extracted (AVE) and Composite Reliability were discussed earlier when testing data quality. For the convergent validity of the measurement model with reflexive indicators are assessed based on the correlation between item scores / component scores estimated with SmartPLS software. Individual reflexive measures are said to be high if they correlate more than 0.7 with the measured construct (latent variable). However, according to (Hulland, 1999; Hair et al., 2013 in Ghozali and Latan, 2014) for the initial research stage of development, the measurement scale of loading values 0.5 to 0.6 is considered quite adequate.

The following can be seen overall the correlation of each variable in Figure 3, which is a picture that states the influence of trust, technology, supply chain collaboration and company performance.

Figure 3
Full Model Structural Partial Least Square



Source: Primary data processed with SmartPLS (2019)

Where:

- Trust = Trust
- Tech = Technology
- SCC = Supply Chain Collaboration
- OP = Operational Performance

The following can be seen as a whole the correlation of each variable in Figure 2 is the picture that states the influence of the independent variable (Trust, technology and supply chain collaboration) and the dependent variable (Operational Performance).

Outer Model Variable

From the Figure 3 of the Structural Partial Least Square above each of the variables described its Outer loadingvalue as in table 4 below;

Table 4
Variable values Outer Loadings Trust, commitment, technology, performance operational
Company and supply chain collaboration

Outer Loadings				
Matrix	Operational Pe...	Supply Chain ...	Technology	Trust
OP1	0.746	0.000	0.000	0.000
OP2	0.900	0.000	0.000	0.000
OP3	0.793	0.000	0.000	0.000
OP4	0.887	0.000	0.000	0.000
OP5	0.902	0.000	0.000	0.000
SCC1	0.000	0.753	0.000	0.000
SCC2	0.000	0.732	0.000	0.000
SCC4	0.000	0.870	0.000	0.000
SCC3	0.000	0.827	0.000	0.000
Tech1	0.000	0.000	0.781	0.000
Tech2	0.000	0.000	0.856	0.000
Tech3	0.000	0.000	0.768	0.000
Tech4	0.000	0.000	0.935	0.000
Tech5	0.000	0.000	0.871	0.000
Trust	0.000	0.000	0.000	0.793
Trust1	0.000	0.000	0.000	0.797
Trust2	0.000	0.000	0.000	0.902
Trust4	0.000	0.000	0.000	0.822
Trust5	0.000	0.000	0.000	0.688

Source: Primary Data processed with SmartPLS (2019)

Outer Model Trust variable

Trust variable is explained by 5 indicators of the statement consisting of Trust1 up to Trust5 shown with Figure 3. The indicator is considered reliable if it has a correlation value above 0.7. However in the development phase of correlation 0.5 is still acceptable (Ghozali and Latan, 2014).

The results of processing using Smart PLS can be seen in Table 4, where the outer loadings value of the confidence variable indicator has no value less than 0.5 and shows the value of the outer model or the correlation with the variable as a whole has fulfilled Convergent validity. This can also be seen in Table 4, where the t-statistic value of the indicators Trust1 up to Trust5 is greater than t-table (with a level of sig = 1.96 and n sample = 70). So it can be concluded that the trust variable meets the requirements of the adequacy of the model or Discriminant validity.

Outer Model Technology variable

TEK variable is explained by 5 indicators consisting of Tech1 through Tech5 shown in Figure 3. The test of outer loading aims to see the correlation between score items or indicators with construct scores. The indicator is considered reliable if it has a correlation value above 0.7. However, in the development stage 0.5 correlation is still acceptable (Ghozali and Latan, 2014).

The results of processing using Smart PLS can be seen in Table 4, where the outer loadings value of the technology variable indicator does not have a value less than 0.5 and shows the value of the outer model or the correlation with the variable as a whole has fulfilled Convergent validity. This can also be seen in Table 4, where the t-statistic value of the indicators Tech1 to Tech5 is greater than t-table (with a level of sig = 1.96 and n sample = 70). So it can be concluded that the technology meets the requirements of the adequacy of the model or Discriminant validity.

Outer Model Supply Chain Collaboration variable

The supply chain collaboration variable is explained by 5 indicators consisting of Trust1 up to Trust5 shown in Figure 3. The test of outer loading aims to see the correlation between score

items or indicators with construct scores. The indicator is considered reliable if it has a correlation value above 0.7. However, in the development stage 0.5 correlation is still acceptable (Ghozali and Latan, 2014).

The results of processing using SmartPLS can be seen in Table 4, where the outer loadings of the indicator are 5 indicator variables. The supply chain collaboration has one indicator namely SCC3 which is less than 0.7 while the four indicators show the outer model value or the correlation with the variable as a whole has met Convergent validity. This can also be seen in Table 4 the t-statistic value of the Trust indicators is greater than t-table (with a level of sig = 1.96 and n sample = 70). So that it can be concluded that the supply chain Collaboration variable meets the requirements from the adequacy of the model or Discriminant validity.

Outer Model Operational Performance variable

The Company Performance Variable is explained by 5 statement indicators consisting of SCC1 to SCC5 shown in Figure 3. The test of outer loading aims to see the correlation between score items or indicators with construct scores. The indicator is considered reliable if it has a correlation value above 0.7. However, in the development stage 0.5 correlations are still acceptable (Ghozali and Latan, 2014; p.91).

The results of processing using Smart PLS can be seen in Table 4 where the value of outer loadings from the indicator of the Company Performance variable is not less than 0.5 and shows the value of the outer model or the correlation with the variable as a whole has fulfilled Convergent validity. This can also be seen in Table 4 where the t-statistic value of the indicators OP1 to OP5 is greater than the T-table (with a level of sig = 1.96 and n sample = 70). So it can be concluded that the Company's Operational Performance variables have met the requirements of the adequacy of the model or Discriminant validity.

4.3 Hypothesis Testing through the Inner Model

Inner model according to (Ghozali and Latan, 2014) is a picture of the relationship between latent variables based on substantive theory. Inner models are sometimes also called inner relations, structural models and substantive theories. Testing the inner model or structural model is done to see the relationship between the construct, significance value and R-square of the research model. The inner models in this study are as follows:

Table 5
Result For Inner Weight

Path Coefficients						
	Original Sampl...	Sample Mean (...)	Standard Devia...	T Statistics (O...	P Values	
Supply Chain Collaboration -> Operational Performance	0.436	0.449	0.137	3.188	0.002	
Technology -> Operational Performance	0.547	0.545	0.104	5.284	0.000	
Technology -> Supply Chain Collaboration	0.436	0.448	0.105	4.156	0.000	
Trust -> Operational Performance	0.012	0.001	0.107	0.112	0.911	
Trust -> Supply Chain Collaboration	0.537	0.527	0.109	4.947	0.000	

Source: Primary data processed with SmartPLS (2019)

According to table 5 it is seen that Trust relationship with SCC positive on coefficient = 0.012 with t count = 0.112 and (Pvalue; = 0.911) on t = 1.96. Indicates that the Trust did not significantly affect the OP. Trust relationship with SCC positive on coefficient = 0.537 with t count = 4,947 and (Pvalue; = 0.000) on t = 1.96. Indicates that the Trust is positively and significantly influential in the SCC. Tech relationship with a positive OP on coefficient = 0.547 with t count = 5,284 and (Pvalue; = 0.000) on t = 1.96. Shows that Tech spirit is positive and significant in the OP. The Tech relationship with the SCC is positive at coefficient = 0.436 with t count = 4.156 and (Pvalue; = 0.000) on t = 1.96. Shows that Tech spirit is positive and significant in the SCC. SCC relationship with a positive OP on coefficient = 0.436 with t count = 3.188 and (Pvalue; = 0.002) on t = 1.96. Shows that the SCC is positive and significant in the OP. In judging the model with PLS starts with viewing R-Square for each of the dependent latent variables that are referred to in table 6.

Table 6
R-Square

R Square Adjusted					
Mean, STDEV, T-Values, P-Value...	Confidence Intervals	Confidence Intervals Bias C...	Samples	Copy to Clipboard:	
	Original Sampl...	Sample Mean (...)	Standard Devia...	T Statistics (O...	P Values
Operational Performance	0.959	0.963	0.009	112.327	0.000
Supply Chain Collaboration	0.919	0.926	0.017	53.137	0.000

Source: Primary data processed with SmartPLS (2019)

Table 6 shows the R-square value of operational performance of 0.959 and 0.919 supply chain collaboration. The higher the R-square, the greater the independent variable can explain the dependent variable, so the better the structural equation.

4.4 Discussion of Research Finding

4.4.1 Influence of trust on company operational performance

The results of the study prove that trust has a positive effect on company performance. This means that the better the trust will improve the company's performance. Trust is defined as an attitude that the needs of one party will be met in the future by the actions carried out by the other party. Trust is mentioned in various collaborative research relationships as a critical determinant of success and the quality of long-term relationships. Even in managing the supply chain, Trust is very important in an effective and efficient supply chain. Trust is felt increasingly important in a relationship between organizations. Without trust, a relationship between client and supplier never runs to maximize its potential strength. Trust is described as a willingness to take risks, and trust will arise if a group of mutual trust and integration in interacting with partners (Kwon & Suh, 2004) These results are consistent with research (Yaqoub, 2011) which proves that trust has a positive effect on the company's operational performance.

4.4.2 Influence of Information Technology on Company Operational Performance

The results of the study prove that information technology has a positive effect on company performance. This means that the better information technology will improve operational performance. Information technology greatly affects the development of the economy, business, technology and information that causes increasingly intense competition in each type of business. To face today's economic competition, policy making in companies is demanded to be always effective and efficient in maintaining the survival of the company. Information technology can be used effectively so that it can contribute to performance, so members in the organization must use the technology properly (Tripathy et al., 2016). These results are consistent with research (Tripathy et al., 2016) proving that information technology has a positive effect on company effectiveness.

4.4.3 Influence of trust in supply chain collaboration

The results of the study prove that trust has a positive effect on supply chain collaboration. This means that the better the trust will increase supply chain collaboration. One of the most important things for each company to have in a supply chain network is trust between organizations. Trust as a belief that will provide positive results for the organization. Trust as a positive belief or hope obtained through exchanges with partners in a supply chain system. Success in company performance (operation performance) in the supply chain also comes from the high value of trust and strong commitment among partners in the supply chain. In a supply chain system, the partnership process is defined as the interaction between commitment, trust and collaboration between companies. The high level of collaboration, both with suppliers and customers, leads to improved performance. A good relationship with partners is built on trust. Success through cooperation is achieved through improving company performance based on good relations (Munizu, 2017). These results are consistent with research studies (Munizu, 2017) which prove that trust has a positive effect on supply chain collaboration.

4.4.4 Influence of information technology on supply chain collaboration

Information technology facilitates the formation of partnerships quickly by providing appropriate information. If the company wants to lead to an enterprise resource planning (ERP) system the company may have to restructure the organization. Other implications are the need for IT investment, business process engineering, market orientation, employee relations, and workforce characteristics. The strategic role of manufacturing information systems includes minimizing the company's negative potential, balancing it with competitors, supporting business strategies and supporting manufacturing-based competitive values. Some reasons for the use of information technology in SCM are: marketing, economical, organizational, technology (Suhari, 2016). These results are in line with Salam's (2017) research proving that information technology has a positive effect on supply chain collaboration. The findings of this study are consistent with Wu et al. (2014) that information technology (IT) is one of the main facilitators of supply chain strategic excellence. Good coordination mechanisms between actors in the supply chain through online information networks play an important role in increasing the effectiveness of material, information and money flows. The rapid development of information technology encourages the integration of information technology into supply

chain management and is able to increase the profitability and effectiveness of companies (Marinagi et al. 2014).

4.4.5 Influence of supply chain collaboration on operational performance

The results prove that supply chain collaboration has a positive effect on company performance. This means that the better supply chain collaboration will improve the company's operational performance. Companies with good supply chain practices in the sense of being able to implement partnership relationships with suppliers and customers, Request just in time, have a variety of strategic plans, use supply chain strategies and safety stock storage strategies, have e-proucement, work with several suppliers, use contract employees, subcontracting with other companies, working with third parties as logistics providers, and having many suppliers will be able to improve the performance of their company's SCM.

In some studies the company's performance using financial performance and non-financial criteria. According to Rahadi (2012), the company in implementing Supply Chain Management (SCM), aims to improve competitiveness that is realized in improving company performance. Information sharing is an important element in supply chain management, because transparent and accurate information sharing can accelerate the supply chain process from suppliers to the market or to consumers. Long-term relationships can be created with a continuous relationship between all parties involved in supply chain management, and with good and mutually beneficial cooperation can be done. Furthermore, no less important is the integrated process (Process Integration) of the overall merging of all activities in the supply chain management so that all activities run smoothly (Rachbini, 2016). The short-term goals of SCM are basically to increase productivity and reduce inventory and time management, while the long-term goals are to increase market share and supply chain integration for all members of the supply chain (Li et al, 2006).

Influence Analysis

An influence analysis needs to be done to determine the magnitude of the influence of exogenous variables on endogenous variables both directly and indirectly presented in the following Table 7.

Table 7
Direct and indirect influences

Indirect Effects						
Mean, STDEV, T-Values, P-Value...	Confidence Intervals	Confidence Intervals Bias C...	Samples	Copy to Clipboard:	Excel Format	
	Original Sampl...	Sample Mean (...)	Standard Devia...	T Statistics (O...	P Values	
Supply Chain Collaboration -> Operational Performance	0.000	0.000	0.000	0.000	0.000	
Technology -> Operational Performance	0.190	0.202	0.084	2.252	0.028	
Technology -> Supply Chain Collaboration	0.000	0.000	0.000	0.000	0.000	
Trust -> Operational Performance	0.234	0.236	0.084	2.791	0.007	
Trust -> Supply Chain Collaboration	0.000	0.000	0.000	0.000	0.000	

Source: Primary data processed with SmartPLS (2019)

Based on table 7 above, it shows that Supply Chain Collaboration (SCC) is able to mediate the influence of Trust (Trust) on Operational Performance (OP), based on $t\text{-Stat} = 2,791 > t\text{-count}$

of 1.96 with $p\text{Value} = 0.007 < 0.05$, The results of the study prove that supply chain collaboration mediates trust in operational performance. This means that the better supply chain collaboration will mediate trust in improving performance. Trust between organizations is able to help improve supply chain performance in several ways, namely: firstly sharing information is often implemented to help improve performance (information sharing).

Furthermore, in terms of increasing overall supply chain productivity, the parts in the supply chain often do joint forecasting. This element is related to performance improvements that occur due to the trust between organizations. From several theoretical points of view above, it can be concluded that collaborating in the supply chain or in the context of improving performance, trust between organizations absolutely must be applied in every interaction in the supply chain (Yaqoub, 2011).

Likewise, Supply Chain Collaboration (SCC) is able to mediate the influence of Technology (Tech) on Operational Performance (OP), based on $t\text{-Stat} = 2.252 > t\text{-count of } 1.96$ with $p\text{Value} = 0.028 < 0.05$. The results prove that supply chain collaboration mediates information technology on operational performance. This means that the better supply chain collaboration will mediate information technology in improving operational performance. Companies with good operational performance in the sense of being able to apply flexibility in various ways, reducing production lead time, forecasting production, natural resource planning and cost savings and reducing inventory levels will be able to improve their company's SCM performance. A competitive supply chain in the market might be characterized by efficient use of resources so that it will lead to lower product costs, better product quality, faster response and lead to higher market share. Through SCM practice, it will provide an opportunity for companies to increase their sales. High-level logistics integrity with suppliers and customers leads to superior business performance (Tripathy et.al, 2014).

5. Conclusion

Higher trust among members of the supply chain can lead to better operational performance. Increased trust can also lead to stronger commitment of supply chain members. In addition, the better use of information technology can encourage an increase in operational performance. Implementation of IT in general is believed to be a major factor in successful performance. Superior technology can encourage company performance. Excellent technology can encourage better supply chain collaboration. Trust variables also have a significant influence on operational performance through supply chain collaboration. The indirect effect of trust variables through supply chain collaboration is greater than the direct effect on increasing company performance, so also the indirect effect of technology variables through supply chain collaboration is greater than the direct effect on improving operational performance. The results of the influence analysis test show that supply chain collaboration is able to mediate the influence of Trust on operational performance, as well as supply chain collaboration able to mediate the influence of Technology on operational performance.

6. Managerial Implications

The results of this study can have implications for the management's very important role in maintaining the trust, technology and performance of the company in the collaboration of

supply chain performance. Improved supply chain performance will be characterized by increasingly flexible, and reliable companies in meeting customer demand. In addition, at the same time the product delivery performance is getting better, and operational costs are declining, and optimal utility in the operating process. The results of this study cannot be generalized in other cases outside the object of this study or other companies, the company becomes a necessity in optimizing company performance. This study also has implications for the important role of management in building and maintaining trust in all members of the supply chain system. In addition, the use of information technology in supply chain systems becomes an urgent matter to achieve optimal performance. Improved company performance will be characterized by increasingly flexible, and reliable companies in meeting customer demand. The combination of trust and the use of information technology will provide positive results for improving supply chain performance. This can be observed in better product delivery (on-time delivery), declining operational costs, and optimal utility in operations or production processes.

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