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THE EFFECT OF INFORMATION SHARING, DECISION SYNCHRONIZATION, AND INCENTIVE ALLIGNMENT ON INTER-ORGANIZATIONAL TRUST

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ABSTRACT

Study aims to determine effect Dividend Policy, Total Assets Turnover, and Earning per Share on Stock Price. Research data obtained from annual financial reports. Quantitative research methods with path analysis. Withdrawal of samples using pooled data. The results of hypothesis can be obtained Total Assets Turnover hasn't significant affect on Dividend Policy, Total Asset Turnover hasn't significant affect on Earning per Share, Earning per Share has no significant on Dividend Policy. Dividend Policy, Total Asset Turnover and Earning Per Share partially and simultant has an affect on Stock Price.

Keywords: *: information sharing, decision synchronization, incentive alignment, inter organizational trust*

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1. INTRODUCTION

Along with an effect of the increasingly complex business competition, the bonds between companies that are incorporated in a supply chain network are getting stronger. In recent years, the management literature has drawn significant number of conclusions in which by relying on the individual strength alone, a company hardly creates a sustainable competitiveness (Hamel & Breen, 2007). Therefore, a solid supply chain management (SCM) application must be implemented to maintain business existence (Miles & Snow, 2007).

Simchi-Levi et al. (2007) define SCM as a set of approaches used to efficiently collaborate with suppliers, manufacturers, warehouses, and retailers so that they are able to produce and distribute products in the right quantities, right locations, and right time of distribution. Excellent collaboration is believed to be able to minimize operational costs for achieving customers satisfaction.

One of the keywords in SCM is the establishment of strong collaboration between parties in a supply chain. Collaboration is a general term that is often used to describe a cooperative relationship carried out by two or more parties. Wood and Gray (1991) describe collaboration as a process in which the involved parties look at the different aspects of a problem and find solutions to these differences and the limitations of their views on what can be done.

To measure the level of collaboration in a supply chain, Simatupang and Sridharan (2004a) propose the application of an index called collaborative practices, which has three important factors, that are information sharing, decision synchronization, and the relationship of each party in collaboration to the rules for applying incentives (incentive alignment*).*

In other supply chain literature, one of the most important things must be possessed by each company in a supply chain network is trust between organizations (Chopra & Meindl, 2007). Kwon and Taewon (2004) state that success in the company's performance (operation performance) in the supply chain also comes from the high value of trust and strong commitment between partners in the supply chain.

Research in regards of the alliance strategy also states that the probability of failure is greater in relationships with low levels of trust (Kwon & Taewon, 2004). While Katinka and Koopman (2003) underlined that relationships accompanied by trust in both the inter and intra-organizational domains are able to support the success of company joint effort strategies such as co-operation and collaboration.. This research aims to analyze the effect of information sharing, decision synchronization, and incentive alignment on inter-organizational trust.

2. LITERATURE REVIEW

Supply Chain

Supply chain is defined as the parts of the business involving either directly or indirectly in the purpose of fulfilling consumers' demand, which includes not only manufactures and suppliers, but also transportations, warehouses, retails, and even consumers (Chopra & Meindl, 2007). The goal of each supply chain is to increase or maximize the entire value generated by the company. This value comes from the decrease in costs along with the increase in products' quality. Chopra and Meindl (2007) state that the generated value from the supply chain is the gap between the end value of the product by the consumers and the cost of establishing the supply chain.

Harrison and Van Hoek (2008) also define supply chain as a network of partnership that simultaneously converts basic commodities (upstream) into finished goods (downstream) which are valued by end consumers. The supply chain concept efficiently integrates among suppliers, manufacture companies, warehouses, and stores, which makes goods are produced and distributed in the right quality, location, and time, to minimize costs into conditions that satisfy the needs of service levels (Simatupang & Sridharan, 2004a).

The other benefits that can be gained from supply chain management include reducing inventory in various ways, ensuring the smoothness of goods supply, which starting from the goods source (manufacturing factories), suppliers, the company itself, wholesalers, retailers, to the end consumers. Another goal of supply chain management is to ensure the movements unit of

adequate quantity and quality from the inventory which includes many things such as planning and communication.

Collaboration is carried out by bringing together various parties with different interests to create a common vision, construct an agreement on an issue or problem, compose solutions to the problem, and prioritize shared values to make decisions that benefit all parties (Simatupang & Sridharan, 2008). Supply chain collaboration connects two or more supply chain members in building commitment and maintaining the processed relationship with strategic goals, by using their core capabilities to deal with changes and challenges accordingly (Bowersox et al., 2003).

Matthew and Cheung (2008) suggest the benefits of supply chain collaboration are: first, collaboration increases profit sharing. Second, the increased collaboration is able to reduce the company's costs. Third, long-term partnership collaboration is the best solution for developing business processes, as well as reducing costs and adding value for partners. According to Simatupang and Sridharan (2004a), the concept of collaboration is categorized into three interrelated dimensions, which are information sharing, decision synchronization, and incentive alignment.

Information sharing

Information sharing is the intensity and capacity of the company in its interactions to share information with partners related to joint business strategies (Simatupang & Sridharan, 2008). Information sharing enables supply chain members to obtain, maintain, and convey the necessary information to ensure effective decision making, in which information sharing is a factor that can strengthen the elements of collaboration in overall.

Decision Synchronization

Decision synchronization provides guidance/framework on how to plan and implement the proper processes for each member in the supply chain (Simatupang & Sridharan, 2004b). Decision synchronization is defined as an attitude to facilitate coordination in decisions planning and execution between involved supply chain members (Simatupang et al., 2004). This definition is supported by Lee (2002) in which independent decision making will only contribute to a less optimal decision-making and will only affect the involving party, while joint decision-making creates synergistic benefits for supply members chain as a whole.

Alignment Incentive

Incentive alignment aims to provide a mechanism to equalize the existing shared benefits and burdens in the process of change within the supply chain (Simatupang & Sridharan, 2004a). Incentive alignment is the attitude of dealing with problems in motivating participating members to create value that benefits all members. Incentive alignment is the activity of sharing costs, risks, and benefits among members who participate in their SC business (Simatupang & Sridharan, 2008).

Inter-Organizational Trust

Trust is defined as an attitude towards the needs of one party that will be fulfilled in the future by the actions of the other party (Dash et al., 2007). Trust is mentioned in various studies concerning cooperative relationships as a determining variable for the success and the quality of long-term relationships (Jonsson & Zineldin, 2003). Even in managing the supply chain, Heizer and Render (2004) say that trust holds important role in an effective and efficient supply chain.

Trust is considered essential in the inter-organizational relationships (Blomqvist & Levy, 2006). Trust between organizations is needed in collaboration between these organizations to implement operational activities and plan strategic formulations, such as conducting product development research, trying to deliver goods just in time, or relating to relationship marketing (Dodgson, 1993). Sydow and Windeler (1998) argue that inter-organizational trust is also manifested in a belief that partners do have certain abilities.

Trust can be seen from two sides at once, which both as the facilitator in forming collaboration through open communication, information sharing, and as for the conflict management (Blomqvist & Levy, 2006). This makes trust a main requirement in building inter-organizational cooperation (Blomqvist & Levy, 2006). Another view states that trust is the result of ongoing interactions between members of the organization. In this view, trust will only grow

after the interaction process (Chopra & Meindl, 2007). This research looks at trust from a second point of view, that is as a result of continuous interaction. This is because the collaboration that is formed in a supply chain is not always started by trust. As initially, it is possible that the collaboration is based on a contractual agreement or a compulsion to obtain the unique resources owned by the collaborating partners. Trust will then arise after the repetitive interactions.

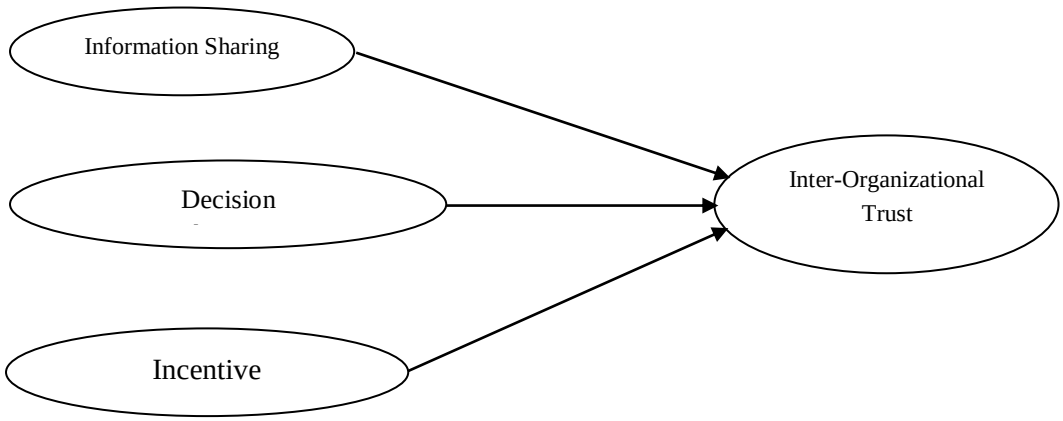

Figure 1. Research Model

Research Hypothesis

Research conducted by Blomqvist and Levy (2006) find that trust is able to facilitate open communication and information sharing, where information sharing is one of the variables which supports collaboration in the supply chain. Likewise, the theoretical basis for the research by Blomqvist and Levy (2006) attests that trust is a main necessity in building coordination between organizations.

This finding also strengthens one of the theories about the origin of the trust growth in business, that is the deterrence based view proposed by Chopra and Meindl (2007), in which by using formal contracts to collaborate first ,and to build trust between parties one another. they must show their trust naturally (not artificially).

Likewise with the research statement of Kwon and Taewon (2004) which states that the efforts to collaborate among supply chain strategies are one of the best ways to minimize uncertainty and are able to increase the value of trust between and within the organizations.

Hypothesis 1: Information sharing has a positive effect on inter-organizational trust.

Hypothesis 2: Decision synchronization has a positive effect on inter-organizational trust.

Hypothesis 3: Incentive alignment has a positive effect on inter-organizational trust.

3. RESEARCH METHOD

Population

The population in this research are all members of the company which include general managers, owners, and the board of directors, as well as administrative staffs of the company, especially those related to supplier-retailer or retailer-supplier relationships in Ambon City..

Because the population in this research tends to be endogenous, the sampling technique used is purposive sampling, with certain considerations that are believed capable to provide comprehensive data. Respondents in this research are general managers, owners, and the board of directors, as well as administrative staff of the company, especially those related to supplier-retailer or retailer-supplier relationships in Ambon City with a total of 51 people.

Data Quality Test

Testing the Outer Model or Measurement Model

There are three criteria to test the outer model, which are Convergent Validity, Discriminant Validity, and Composite Reliability. Convergent validity of the measurement model with reflexive

indicators is tested based on the correlation between item or component scores which are calculated by PLS. Discriminant Validity of the measurement model with reflexive indicators is tested based on the Cross Loading measurements with constructs. Another method to test Discriminant Validity is to compare the Root Of Average Variance Extracted (AVE) value of each construct with the correlation between the construct and other constructs in the model. This is to see if the AVE value of each construct is greater than the correlation value between the construct and other constructs in the model.

Composite reliability indicator block that measures a construct can be evaluated with the internal consistency developed by Wert et al. (1979) in (Ghozali, 2006*)*.

Testing the Inner Model or Structural Model

Testing the inner model or structural model is conducted to see the relationship between constructs, significance value, and R-square of the research model. The structural model is evaluated using R-square for the dependent construct and t-test as well as the significance of the structural path parameter coefficients.

Analysis Method

Partial Least Square (PLS) was first developed by Herman O. A. Wold on the field of econometrics in the 1960s. PLS is a powerful analytical model because it can be used on any type of data scale (nominal, ordinal, interval and ratio) as well as more flexible assumption requirements.

PLS does not assume that the data must follow a certain distribution, for instance normal distribution. The PLS approach is distribution free and the sample size is flexible.

4. RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistical processing includes the mean, standard deviation. The results of this processing can be seen in table 1 which explains that most of the respondents' answers regarding information sharing have an average value of (3.487), which means that information sharing is perceived by the company as in a high value. Respondents' answers concerning the decision synchronization have an average value of (3.263), which means that the decision synchronization is perceived by the company as in a high value. Respondents' answers about the incentive alignment have an average value of (2.876), which means that the incentive alignment is perceived by the company as in a high value. Then the respondent's answers related to inter-organizational trust have an average value of (3.190), which means that internal business process is perceived by the company as in a high value.

Table 1. Descriptive Statistical Results

Variable	Mean	Std. deviation
Information Sharing	3,487	0,720
Decision Synchronisation	3,263	0,719
Incentive Allignment	2,876	0,824
Inter-Organizational Trust	3,190	0,783

Source: Processed Primary data, 2020.

Data Quality Test Results

The validity test is conducted through the evaluation of the measurement model (outer) with the use of convergent validity. Composite reliability of the measurement model with reflexive indicators can be seen from the correlation between each indicator score and its construct score (Ghozali, 2008). Individual reflexive measure is said to be high if it has a correlation of more than (0.70) with the measured construct, however, according to Chin (1998), for research in the early development stage, measurement scale in value of 0.5 to 0.6 is considered sufficient. The results of the validity test using the convergent validity value calculated by PLS can be seen in table 2.

Table 2. Convergent Validity Results

	Information Sharing	Decision Sychronization	Incentive Allignment	Inter-Organizational Trust
BI1	**0.716**	0.527	0.538	0.458
BI2	**0.632**	0.421	0.501	0.382
BI3	**0.507**	0.251	0.305	0.334
BI4	**0.746**	0.388	0.373	0.530
BI5	**0.733**	0.456	0.422	0.499
BI6	**0.810**	0.692	0.486	0.537
BI7	**0.825**	0.424	0.572	0.569
SK1	0.646	**0.869**	0.456	0.487
SK2	0.166	**0.579**	0.143	0.285
SK3	0.546	**0.877**	0.405	0.529
SK4	0.554	**0.849**	0.399	0.377
SK5	0.491	**0.688**	0.412	0.285
PI1	0.665	0.565	**0.785**	0.576
PI2	0.432	0.264	**0.866**	0.494
IP3	0.460	0.316	**0.841**	0.463
KAO1	0.567	0.342	0.409	**0.727**
KAO2	0.427	0.337	0.488	**0.766**
KAO4	0.461	0.261	0.437	**0.686**
KAO5	0.451	0.247	0.395	**0.676**
KAO7	0.331	0.285	0.332	**0.681**
KAO8	0.578	0.640	0.559	**0.761**

Source: Processed Primary data, 2020.

The indicators used to measure the information sharing construct have a correlation range between (0.507) to (0.825) which is more than the recommended number (0.500). This indicates that the questions regarding information sharing to measure the information sharing construct is considered valid. The indicators used to measure the decision synchronization construct have a correlation range between (0.579) to (0.877) which is more than the recommended number (0.500). This displays that the questions concerning decision synchronization to measure the decision synchronization construct is considered valid. The indicators used to measure the incentive alignment construct have a correlation range between (0.785) to (0.866) which is more than the recommended number (0.500). This shows that the questions about the incentive alignment to measure the incentive alignment contruct is considered valid. The KAO3 and KAO6 indicators used to measure the inter-organizational trust construct have a correlation value below the recommended number of 0.479 and 0.470 < 0.500, Thus these two items are presented as invalid, while the other indicators have a correlation range between (0.676) to (0.766) which is more than the recommended number (0.500). This proves that questions about inter-organizational trust to measure the collaborative construct of inter-organizational trust is considered valid.

The next examination of discriminant validity evaluation is to compare the AVE value of each construct with the correlation square between the constructs.

Table 3. Discriminant Validity Results

	Information Sharing	Decision Sychronization	Incentive Allignment	Inter-Organizational Trust	Mean Communalities (AVE)
Information Sharing	**1**	0.406	0.407	0.449	0.514
Decision Sychronization	0.406	**1**	0.225	0.274	0.611
Incentive Allignment	0.407	0.225	**1**	0.388	0.691

Inter-Organizational Trust	0.449	0.274	0.388	**1**	0.514
Mean Communalities (AVE)	0.514	0.611	0.691	0.514	**0**

Source: Processed Primary data, 2020.

The AVE value for the information sharing construct is (0.514) while the correlation square between the information sharing construct with the other constructs (first row in the table) is smaller than the construct AVE value. The AVE value for the decision synchronization construct is (0.611) while the correlation square between the decision synchronization construct and the other constructs (second row in the table) is smaller than the construct AVE value. The AVE value for the incentive alignment construct is (0.547) while the correlation square between the incentive alignment construct and the other constructs (third row in the table) is smaller than the construct AVE value. The AVE value for the inter-organizational trust construct is (0.514) while the correlation squaee between the inter-organizational trust construct with the other constructs (fourth row in the table) is smaller than the construct AVE value. These results indicate that the constructs in this research have a positive discriminant validity.

Furthermore, the reliability test is conducted by looking at the composite reliability value generated from the PLS calculation for each construct. The value of a construct is considered reliable if it gives a composite reliability value > 0.80 (Werst, et.al 1974 in Imam, 2008).

Table 4. Reliability Test Results

Latent variable	Dimensions	Cronbach's alpha	D.G. rho (PCA)
Information Sharing	7	0.838	0.879
Decision Sychronization	5	0.836	0.886
Incentive Allignment	3	0.777	0.872
Inter-Organizational Trust	6	0.813	0.865

Source: Processed Primary data, 2020.

The information sharing construct has a composite reliability value (0.879) above (0.70) which is a cutoff value, so all the questions regarding information sharing are reliable. The decision synchronization construct has a composite reliability value (0.886) above (0.70) which is a cutoff value, so all the questions concerning decision synchronization are reliable. The incentive alignment construct has a composite reliability value (0.827) above (0.70) which is a cutoff value, so all the questions about incentive alignment are reliable. Furthermore, the inter-organizational trust construct has a composite reliability value (0.865) above (0.70) which is cutoff value, so all the questions related to inter-organizational trust are reliable.

Testing the Inner Model or Structural Model

Testing the inner model or structural model is conducted to see the relationship between constructs, significance value and R-square of the research model. The structural model is evaluated using R-square for the dependent construct. The assessment of the model with PLS is started by looking at the R-square for each dependent latent construct. Changes in the R-square value can be used to assess the effect of certain independent latent constructs on the dependent latent construct whether it has a substantive effect. The following table is the result of R-square estimation using XLSTAT PLS PM 2020.

Table 6. R-Square Value (R2) (Inter-Organizational Trust)

R^2	F	Pr > F	Critical Ratio (CR)
0,523	17,153	0,000	7,259

Source: XLSTAT PLS PM 2020 Output.

The table above shows the R2 value of the inter-organizational trust construct which is 0.523. The higher the value of R2, the greater the independent construct can explain the dependent construct, resulting in the better the structural equation. The R2 value of inter-organizational trust is 0.523 which means that 52.3% of the inter-organizational trust variance is explained by the information sharing construct, decision synchronization, and incentive alignment, while the remaining 47.7% is explained by the other constructs.

Hypothesis 1

The first hypothesis (H1) states that information sharing construct has a positive effect on inter-organizational trust. The information sharing construct has a positive effect (0.387) and has a significance at 0.013 (2.573 > 1.658). Hypothesis 1 is accepted.

Table 7. Results of Inner Weights (Inter-Organizational Trust)

Latent variable	Value	T	Pr > |t|	Result
Information Sharing	0,387	2,573	0,013	Accepted

Source: XLSTAT PLS PM 2020 Output.

Hypothesis 2

The second hypothesis (H2) states that the decision synchronization construct has a positive effect on inter-organizational trust. The decision synchronization construct has a positive effect (0.127) and has no significance at 0.339 (0.965 > 1.658). Hypothesis 2 is rejected.

Tabel 8. Results of Inner Weights (Inter-Organizational Trust)

Latent variable	Value	T	Pr > |t|	Result
Decision Synchronization	0,127	0,965	0,339	Rejected

Source: XLSTAT PLS PM 2020 Output.

Hypothesis 3

The third hypothesis (H3) states that the incentive alignment construct has a positive effect on inter-organizational trust. The incentive alignment construct has a positive effect (0, 316) and has a significance at 0.021 (2.396 > 1.658). Hypothesis 3 accepted.

Tabel 9. Results of Inner Weights (Inter-Organizational Trust)

Latent variable	Value	T	Pr > |t|	Result
Incentive Alignment	0,316	2,396	0,021	Accepted

Source: XLSTAT PLS PM 2020 Output..

Full Model

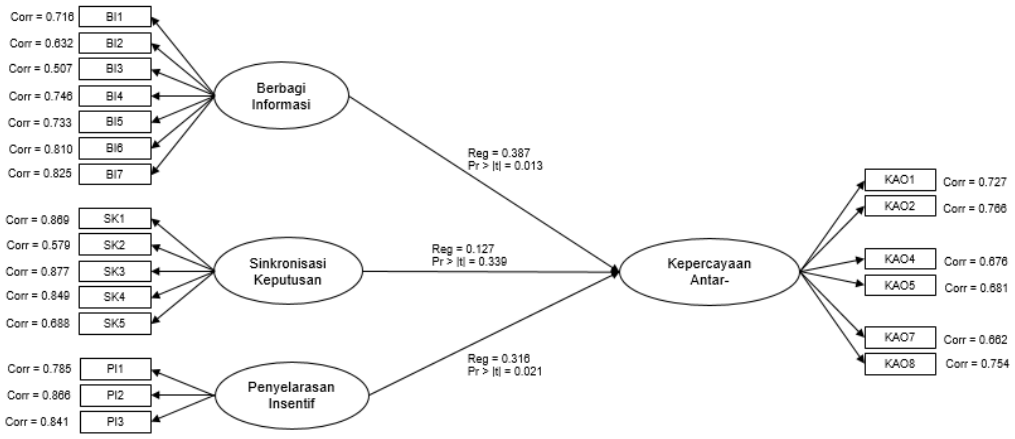

Figure 2. Full Model

Discussion

The data analysis results indicate that the first hypothesis (H1) is acceptable since the information sharing construct has a positive effect on inter-organizational trust. The third hypothesis (H3) is also acceptable because the decision synchronization construct has a positive effect on inter-organizational trust. While the second hypothesis (H2) is rejected for a reason that the incentive alignment construct does not have a positive effect on inter-organizational trust. The results support some of the research conducted by Yaqoub A. M (2012). Kwon and Taewon (2004) state that the alliance strategy will fail if there is no trust in doing business among partners. Relationships that are based on trust between inter and intra-organizational members are able to support the success of the company joint effort strategies such as co-operation and collaboration.

5. CONCLUSION

This research contains a model that examines the effect of supply chain collaboration on inter-organizational trust and the effect of inter-organizational trust on the performance of an operasion. The test results using Partial Least Square conclude that:

a. Information sharing has effect on inter-organizational trust. The results are consistent with the research conducted by Yoqoub A. M (2012).
b. Decision synchronization has no effect on inter-organizational trust. The results are inconsistent with the research conducted by Yoqoub A. M (2012).
c. Incentive allignment has effect on inter-organizational trust. The results are consistent with research conducted by Yoqoub A. M (2012).

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