

Inter Organisational Relationship: Factors Influencing Supplier Relationship Management (SRM) in Palm Oil Manufacturing

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ABSTRACT

There has been a growing trend towards long-term relationships between manufacturers and their suppliers. Although many articles have been written about the benefits of this shift to manufacturers, little is known about the benefits to supplier firms. Hence, this study empirically assesses the impact of long-term relationships of a supplier (client) on the performance (competitiveness) of the supplier firm using the supplier relationship management (SRM) practiced by the manufacturer, Felda Palm Industries (FPI) at Bukit Mendi, Pahang. SRM is also beneficial to the manufacturer if there is a long-term business relationship with suppliers, since they will be able to manage their cost efficiently and produce better quality of products. The aim of this study is to determine the factors that influence the competitiveness of the suppliers at FPI Bukit Mendi. The factors are the relationship-based information (shared information), inter organisational trust and relationship flexibility. Findings revealed that there are positive and significant relationships between two of the factors such as relationship-based information and inter organisational trust with the competitiveness of the suppliers at FPI Bukit Mendi. Besides that, high inter organisational trust was found to be very important to sustain a long term relationship. Finding also showed that there is significant relationship between the relationship flexibility with the competitiveness of the suppliers at FPI Bukit Mendi. This result may be due to the ability of suppliers to adapt and acquire additional task, skills and training that are necessary to create flexible relationship with suppliers.

KEYWORDS: Supplier Relationship Management, Felda Palm Industries, Relationship-Based Information, Inter Organisational Trust.

INTRODUCTION

Input is one of the elements in the production process. The process model demonstrates that every output is a result of applying process to some inputs. These processes are applied to increase the value of the inputs. Obviously, the process has to be under control. For those who are performing the process have to be competent and adequate resources need to be in place. However, if the inputs are not suitable, the outputs will not meet customer needs and expectations. Without the right input, the right output should not be expected. For external inputs such as raw materials, the suppliers need to choose carefully. The purchasing of this input is vital aspect of business that most organizations have someone to handle, even in small companies. Better quality inputs must be chosen for a company as was described by [9]. They proposed that the intangible resources have become essential in real-life market settings with heterogeneous demand across and within industries, the existence of information asymmetries. Thus, supplier relationship management (SRM) is important to integrate from the purchasing of input up to producing the output.

SRM is the supply chain management process that provides the structure for how relationships with suppliers are developed and maintained. As further proposed by [14], SRM has been adopted by many leading industries that have encouraged the evolution of a company's procurement which firms turn their business in search for performance improvements. Thus, there has been a growing trend towards long-term relationships between manufacturers and their suppliers. Although many articles have been written about the benefits of this shift to manufacturers, little is known about the benefits to supplier firms. The aims for good purchasing start with balance relationships that include short term goals and long term goals for both parties.

As stated by [4], the definition of competitive advantage emphasizes on the implementation of a value creating strategy not simultaneously being implemented by any current or potential competitors. In order to create a competitiveness among the competitors, firms need to have a value creation strategy which able the firm to improve their performance and profitability. Hence, creating a positive and supportive relationship with the suppliers, manufacturer can gain benefit from the supplier's expertise and the industry experiences as well.

While building these mutually beneficial relationships, the industry can improve communications with the suppliers and gain all the benefits that come from increasing information flow in both directions. On the other hand, encouraging the suppliers and recognizing their improvements will give advantage to the industry from the feedback of suppliers and the opportunities they can share. Hence, the objective of this paper is to determine the factors that influence the competitiveness of the suppliers at Felda Palm Industries (FPI) Bukit Mendi. This paper will empirically assesses the impact of long-term relationships of a supplier (client) on the performance (competitiveness) of the supplier firm using the SRM which practiced by the manufacturer (FPI) at Bukit Mendi, Pahang. In addition, we postulate that the research conducted will help to identify how manufacturers and suppliers can sustain long term competitive advantage by developing quality relationships with each other.

The remaining of the paper is organized as follows. Section 2 outlines the literature review. Section 3 depicts the methodology under consideration and section 4 analyzes the empirical results. Finally, section 5 offer recommendations and conclusions.

LITERATURE REVIEW

SRM represents an opportunity to build on the success of strategic sourcing and traditional procurement initiatives that involve developing partnerships with the key suppliers to reduce costs and create value for both parties based on a mutual commitment to long-term collaboration and shared success [16]. The SRM is very important in an organization. In [17] proposed that the importance of relationships in supply chains has always been seen as essential for the delivery of construction projects. This is because construction projects involve complex interaction processes, supplies of raw materials, information, products and services between supply chain actors that create an immense structure of supply networks. In [11] also claimed that consequently, enhancement of supplier performance on an ongoing basis has become a paramount objective for manufacturing firms because this enables them to gain and maintain competitive advantage in downstream markets. It shows that it is important for a company to have a good and long term business relationship with their suppliers.

In [10] suggested that developing relationship with suppliers will be critical for the functioning of firms. There are four underlying reasons for supplier relationships. These are increased cost efficiency, increased effectiveness, enabling technologies and increased competitiveness. Adding to that, in [10] highlighted cost theory can be used to explain the increase in efficiencies associated with supplier relationships. Transaction cost theory suggests that properties of transactions (i.e., asset specificity, uncertainty and infrequency) determine governance structure. The supplier relationship management that company approaches is discrete transaction between two parties from a rational stand point. However, the decision of sourcing, producing or anything was based on the production cost optimization because both the company and their suppliers need to manage their cost effectively to lower the cost.

In order to address issues like the information sharing between the company and their suppliers, in [3] argued that the supplier relationship management, mutual supplier-buyer relationships provide benefits in terms of sharing and exchange information with the emphasis on building a satisfactory outcome together. The information sharing is important in in order to prevent miscommunication and to help the suppliers deliver the correct item with the agreed price. The information sharing also important to make the flow of the business transaction become more effective. In [6] claimed that time delays, distorted demand signals and poor visibility of exceptional conditions result in critical information gaps and serious challenges for supply chain (SC) managers which including misinformation and ultimately mistrust. This highlighted the importance of relationship-based information in SRM. Sharing information with the suppliers will help both of them either the factory or the suppliers to become more knowledgeable. It is because the factory able to know more about the product being supplied or other information about their suppliers, and the suppliers will be able to know more about the factory.

Another determinant in the competitiveness of the supplier is inter organizational trust. According to [7], relationship marketing is interested not only in classic underlying parameters of economic exchanges but also take into account non-economic characteristics especially trust and commitment, where it seen as important characteristics in social exchange-based relationships. In [15] stated an interorganizational trust is an important factor affecting the actions and performance of organizations engaged in dyadic and network relationships such as strategic alliances. While [12] proposed that trust is a key factor for the development of partnerships among the different agents of a supply chain, distinguished between interpersonal and inter-firm trust.

Trust has been related to desirable outcomes including firms' performance, reduced conflicts, competitive advantage and other favorable economic outcomes. According to [18] suggests that trust in business-to-business (B2B) ecommerce is relevant and important in exchange relationships. It reduces transaction costs of an exchange, which resulting in efficient transactions.

In [8] believed that the company perspectives to buyer-supplier relationship governance were particularly useful in connection to efficiency, flexibility and overall performance issues. The relationship flexibility is also important to determine the competitiveness. This is highlighted by [16] who proposed the changing market

conditions result in changing demands on the purchasers' side can be an additional reason for the necessity of specific investments during the course of a relationship. This shows that when there is a relationship, the supplier will be able to invest their time and effort to learn about the factory's business practices in order to become more competitive in the industry. It also has been argued by [13] which if it is a common purpose of networks to experiment with new ways by which inter-firm relationships are structured, then relational capability emerges as a strategic asset both for large and small firms, bringing flexibility in resource combination and coordination.

Besides that, relationship flexibility is important because with the advancement of technology nowadays really need the suppliers or the manufacturer to become flexible in their relationship. In [13] claimed that the increasing pressure of new technologies and the need to reduce costs forced the firms to improve the flexibility of their structures.

METHODOLOGY

Population

The population for in this study are all the suppliers in FPI Bukit Mendi, Pahang. It is estimated there are 700 suppliers at FPI Bukit Mendi (Data was received by the record from Procurement Department of FPI Bukit Mendi). These suppliers were chosen as the subject in order to measure the supplier's competitiveness after they have a business relationship with FPI Bukit Mendi. Out of the population, about 200 respondents were chosen as a sample size. According to [20], the appropriate sample size for most research is larger than 30 and less than 500. Thus, this amount of respondents (200) can be considered as an appropriate sample size to analyze the data.

Data Collection

The primary data used in this study was originated by the researcher in addressing the problem that has been investigated. The quantitative data was chosen as the information which has been obtained by distributing the written set of question among respondent known as questionnaire. The questionnaire is the best way to get an effective result and researcher will get to know how to measure the variable of interest and what were required in the study. In the design of the questionnaire, all related information must be included and it must be related to the study. The quantitative research is a research methodology that seeks to quantify the data and typically applies some form of statistical analysis. The questionnaires were distributed personally hand-to-hand to the suppliers at FPI Bukit Mendi to avoid the reluctant of answering among them. Nonetheless, this approach was ineffective as the suppliers seldom came to the factory by themselves. Most of the suppliers delivered their supplies through courier service by Felda Courier Sdn Bhd. Hence, another approach was chosen through post mailing and sending emails to the suppliers. These approaches were found to be more effective.

Instrument

The instrument used in this study was the questionnaire. It involves questioning respondent to secure the desired information using the data collection. The questionnaire was designed and distributed to the sample which is part of the total population. Several sections were divided in the questionnaire and every section represents each of the variables in the research. All the questions have been developed by adopting the questions from previous researches. Subsequently, questions were measured using a Likert scale technique. Answers were provided in 7 Likert scale which are 1 as strongly disagree until 7 as strongly agree. The questionnaire was divided to 5 sections which are demographic section, competitiveness of the suppliers, relation based information and relationship flexibility. There were 5 questions in each section. The data gathered during fieldwork will be analyzed by using Statistical Package for Social Science (SPSS).

FINDINGS AND DISCUSSION

Frequency Distribution Analysis

Frequency analysis is used to analyze the overall information of the respondent based on the profile information.

Table 1: Frequency table for the respondent's profile

Type of Products Supplied				
	Frequency	Percent	Valid Percent	Cumulative Percent
Raw materials	53	26.5	26.5	26.5
Spare parts	99	49.5	49.5	76.0
Machinery	48	24.0	24.0	100.0
Total	200	100.0	100.0	
Business Location				
Within Pahang	92	46.0	46.0	46.0
Outside Pahang	108	54.0	54.0	100.0
Total	200	100.0	100.0	
Duration of Business Relationship with FPI Bukit Mendi				
Less than 1 year	27	13.5	13.5	13.5
1 year-5 years	29	14.5	14.5	28.0
5 years-10 years	67	33.5	33.5	61.5
More than 10 years	77	38.5	38.5	100.0
Total	200	100.0	100.0	
Number of Employees in Your Organization				
Less than 15 employees	45	22.5	22.5	22.5
16-25 employees	23	11.5	11.5	34.0
26-35 employees	62	31.0	31.0	65.0
36-45 employees	32	16.0	16.0	81.0
More than 45 employees	38	19.0	19.0	100.0
Total	200	100.0	100.0	
Type of Company				
Sdn Bhd	58	29.0	29.0	29.0
Berhad	33	16.5	16.5	45.5
Enterprise	32	16.0	16.0	61.5
Partnership	31	15.5	15.5	77.0
Sole proprietor	46	23.0	23.0	100.0
Total	200	100.0	100.0	

Table 1 illustrates the frequency of the type of product supplied to the FPI Bukit Mendi. It shows that the highest number of product being supplied to the factory is spare parts which are 49.5% from the total that indicates 99 from 200 respondents. While the least number of products supplied is machinery which the percentage is only 24%.

From the frequency table, about 108 of the respondents are from outside Pahang and the remaining 92 are from Pahang which the percentage is 54% and 46% respectively. It can be concluded that there are more suppliers come from outside Pahang rather than within Pahang.

In terms of years of business relationship, there are 77 suppliers that have more than 10 years business relationship with the factory, where 67 suppliers are between 5-10 years. There are 29 suppliers who have business relationship between 1-5 years and the remaining is less than 1 year. The highest percentage is the suppliers with the duration of more than 10 years (38.5%) and the least is 13.5% which the duration is less than one year. In conclusion, most of the suppliers at FPI Bukit Mendi are loyal to the factory with the relationship that is more than 10 years. It is also found that suppliers with around 26-35 employees in their organizations are higher (62%) than the suppliers with 16-35 workers (31%). The suppliers at FPI Bukit Mendi are mostly from Sdn Bhd Company because the highest frequency of the type of supplier's company is Sdn Bhd which is 29% that the frequency is 58 companies. The second highest is sole-proprietor company that is 23% and the frequency is 46 companies. The least number of frequencies is 31 companies with the percentage of 15.5% that is Partnership Company.

Inferential Analysis

Inferential analysis was used in this study to help in making decision about how the data collected relate to original hypotheses and how it might be inferred to a large number of subjects than those who were tested.

Table 2: Coefficient of Pearson Correlations

	Competitive of Suppliers	Relationship-Based Information	Inter Organisational Trust
Relationship-based Information	0.767**		
Inter organizational Trust	0.472**	0.294**	
Relationship flexibility	0.504**	0.445**	0.444**

Table 2 shows the coefficient of Pearson correlation. It is found that the significance value of mean of the relationship-based information is 0.00. Hence, the null hypothesis can be rejected. Since $r = 0.767$, a positive

and strong association is expected. On the other hand, the mean of interorganizational trust is significant at 0.00 value and the Pearson correlation shows the value of $r = 0.472$. There is a positive relationship with moderate strength as the significant value is more than 0.4. Therefore, the null hypothesis can be rejected which conclude there is a significant relationship between the interorganizational trust with the competitiveness of the suppliers at FPI Bukit Mendi.

The last variable which is the mean of the relationship flexibility also significant with the significant value is 0.00. It illustrates that there is an association between the relationship flexibility with the competitiveness of the suppliers at FPI Bukit Mendi. Nonetheless, the association is moderate as Pearson correlation shows the value of $r = 0.504$ (less than 0.6). The null hypothesis can be rejected with a conclusion that there is a significant association between the relationship flexibility with the competitiveness of suppliers at FPI Bukit Mendi.

Multiple Linear Regressions

Regression analysis is adopted to test the influence of three variables namely relationship-based information, inter organizational trust and relationship flexibility.

Table 3: Model summary of Multiple Linear Regressions

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	0.814 ^a	0.663	0.658	0.49332

a. Predictors: (Constant), mean of relationship flexibility, mean of inter organisational trust, mean of relationship-based information

b. Dependent variable: Mean of competitive of suppliers

The results of multiple linear regressions are summarized in Table 3. R is the multiple correlation coefficients between all of the predictor variables and the dependent variable. In this model, the value is 0.814 which indicates that there is a great deal of variance shared by the independent variables and the dependent variable.

R-square is simply the squared value of R. This is frequently used to describe the goodness-of-fit or the amount of variance explained by a given set of predictor variables. In this case, the value is 0.663 which indicates that 66.3% of the variance in the dependent variable is explained by the independent variables in the model. However, the remaining 33.7% is not affected by the independent variables which the variables are remained unknown and needs further investigation.

Table 4: Regression analysis (coefficients)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.285	0.314		0.908	0.365		
Relationship-based Information	0.541	0.039	0.648	13.90	0.000	0.790	1.265
Inter organizational trust	0.290	0.058	0.231	4.96	0.000	0.792	1.263
Relationship flexibility	0.114	0.050	0.113	2.26	0.025	0.695	1.439

Dependent variable: Mean of competitive of suppliers

The coefficients indicate the increase in the value of the dependent variable for each unit increase in the predictor variable. For example, the unstandardized coefficient for the relationship-based information is 0.541. It indicates that for each percentage rise in mean of the relationship-based information, a mean of competitiveness of the suppliers at FPI Bukit Mendi will increase by 54.1%.

Finding also shows all the three independent variables are highly significant with the significant value is 0.000 and 0.05. All the relationships between independent and dependent variable show positive relationships. The higher the number of Beta shows the stronger relationship between the independent and dependent variable. The highest Beta is 0.648 which is the relationship-based information. It indicates the relationship-based information have strong positive significant relationship with the competitiveness of suppliers at FPI Bukit Mendi.

Even though trust is difficult to build in the organizations but once it is developed, it will benefit both of the organizations [5]. When firms adopt new and better technology, it will allow them to build high trust with their partners and suppliers. This association is possible when better technology allows a higher consistency in product quality, design, feature and delivery as determined in the planning process [2].

In addition, we discovered that there is significant relationship between relationship flexibility and the competitiveness of suppliers at FPI Bukit Mendi. It may be concluded that the majority of suppliers believe that flexible relationship where they need to perform additional task, skills and training are related to their field of expertise [1].

CONCLUSION AND RECOMMENDATIONS

The purpose of the study is to determine the factors that influence the competitiveness of the suppliers at FPI Bukit Mendi. This study has developed a framework to be tested using the correlational research design and regression method. Overall, the finding reveals a positive and significant relationship between the relationship-based information with the competitiveness of the suppliers at FPI Bukit Mendi. Hence, the relationship-based information is important in helping the suppliers to develop their competitiveness. This is due to the information sharing from the manufacturer will help the suppliers to improve their performances. It will enhance the knowledge of manufacturer [19]. Subsequently, the competitiveness will be developed if the performance of the suppliers is good.

A positive significant relationship is also found between the interorganizational trust and the competitiveness of the suppliers at FPI Bukit Mendi. This indicates that the interorganizational trust is an important factor in the SRM to develop the competitiveness of the suppliers at FPI Bukit Mendi. In business relationship, trust is very important element to ensure long lasting relationship with the suppliers. Even though trust is difficult to build in the organizations but once it is developed, it will benefit both of the organizations.

The finding also shows there is a significant relationship between the relationship flexibility with the competitiveness of the suppliers at FPI Bukit Mendi. It may be concluded that the suppliers agree with the flexible relationship which they need to have more additional task, skills and training that related or not related to their field of business. The findings of this study have provided few recommendations for the future research purposes.

Employ Effective Communication System with Suppliers

The finding shows the shared information is a major influencer to develop the competitiveness. Thus, this study has supported that shared information is important to develop the competitiveness. It is recommended that an effective communication system with the supplier should be employed. Effective communications will avoid the miscommunication between suppliers and (factory) manufacturers. This will lead the business to run efficiently [11]. Example of the communication system is a data base system designed for use of the factory and all their suppliers. From the system, all relevant information can be shared to all suppliers.

Continuous Improvement and Learning

In order to obtain trust among the interorganizational, it is recommended suppliers and the factory to have a continuous improvement and learning. The continuous improvement and learning will help an organization to build their reliability and naturally the other suppliers also will have more trust to the factory. The improvement and learning can be in any terms such as the learning about the new technology.

Responsiveness

Responsiveness is an ability to complete assigned tasks within a given time. It is also an important key to improve the interorganizational trust. A competent factory must be able to react on any task assigned like the suppliers must always be responsiveness to deliver the supplies on time. If the supplier is able to commit, it shows the companies are very competent and reliable. The factory also must always be responsive to make payment on time.

Award Contracts to Competent Suppliers

Award contract to competent suppliers is one of the most effective ways in improving the relationship and to make sure that the company receives a good quality product with a negotiable cost. It is a win-win situation where the supplier will able to get the contract and the company must be able to receive product that meet their satisfactory. In order to get the contract, the supplier will compete among other suppliers to give a better service than the other. In addition, the finding on the relationship flexibility is insignificant relationship with the competitiveness of the supplier. Hence, it recommended award giving contract to competent suppliers. This will improve the relationship flexibility among the supplier to the factory. With award contracts, the suppliers will be willing to have a flexible task other than just supplying the items ordered by the factory. The suppliers will be competing among other suppliers to get the contract from the manufacturers. Without the award giving contract the relationship flexibility might be a burden to the suppliers.

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