

# THE INFLUENCE OF PERCEIVED QUALITY, PERCEIVED VALUE, AND CUSTOMER EXPECTATION ON CUSTOMER SATISFACTION: AN EMPIRICAL STUDY ON INDEPENDENT SURVEYOR INDUSTRY IN INDONESIA

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**Abstract:** *The challenge for independent surveyor services industry in Indonesia in the future is a very high. This service protected by the government through Negative List Investment and will be opened for foreign investment soon. Developing of customer satisfaction will ensure a long-term competitive advantage. This study aimed to develop a model of customer satisfaction in the professional services of coal independent surveyors in Indonesia using Relationship Marketing perspective. Testing the hypothesis made on the relationship between 7 variables to customer satisfaction. Data compiled from 200 questionnaires completed by corporate decision-makers from 51 exporters and coal trading company in Indonesia and analyzed using the Structural Equation Model (SEM). The results of the study show that the customer satisfaction of coal independent surveyor influenced by perceived quality, perceived value and customer expectation. Research on the perceived quality suggests that perceived quality influenced by reliability, assurance, responsiveness and empathy.*

**Key Words:** *customer satisfaction, perceived quality, perceived value, customer expectation and relationship marketing.*

## INTRODUCTION

The independent surveyor industry is included in the government protection scope by implementing the limitation for foreign investments in Indonesia. Therefore, the government still has not given permission for the foreign independent surveyor industry as stated in *Negative List Investment*. However, it has been considered by the authority to open the market for the foreign surveyor companies as a response to the emergence of globalization which seems to have led to a stronger competition in the independent surveyor markets, including those which deal with coal mining.

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The export value of mining product in Indonesia is the highest as recorded in 2011 for US\$ 34.7 billions, with US\$ 27.77 billions is contributed from coal export (Performance Report of Minister of Trade, Republic of Indonesia, 2011). It is predicted that the production of Indonesia's coal in the future will increase as the coal consumption is expected to increase to 33% in 2025 out of the total consumption of energy sources. This eventually leads to the increase in the demand for independent surveyors for coal export. In the relation to the issue, it is important that there is a point of view of customers in selecting the companies providing such service. Kilpady (2005) states that adopting relationship marketing strategy (RM) can play a role in the success of the business in the future.

This research focuses on the test of factors influencing customer satisfaction to the independent surveyor industry in order to build a long-term relationship. It aims to identify and verify the role of reliability, assurance, responsiveness, empathy, perceived quality, perceived value, and customer expectation on customer satisfaction, as well as to build or develop a model of customer satisfaction based on the relationship marketing perspective which describes the relation between those variables and customer satisfaction.

## LITERATURE REVIEW

Zeithaml *et al.* (2009) in their book, *Service Marketing: Integrating Customer Focus Across the Firm*, state that the concept of relationship marketing basically represents a marketing paradigm shift from focusing on the acquisition/transaction to focusing on retention/relation. The philosophy of relationship marketing is conducting business and strategic orientation by focusing on managing and improving relationship with the existing customers instead of only acquiring new ones. Based on the concept, it is less costly to maintain the old customers than prospecting new ones, and it is believed that a successful marketer is the one who works with an effective strategy to maintain customers. Maxim (2009) in his research on the position of RM confirms that relationship marketing is a new paradigm on the concept of marketing thinking where it represents a new dimension as an addition to the previous marketing paradigms which are only based on transaction activities.

Gounaris (2005) states that there have been very little empirical documentations of Relationship Marketing on professional service, particularly for business-to-business (B2B) marketing. The market in professional service is dominated by the amount of knowledge representation and the rapid increase on economic sectors. Professional service focuses on resources in specific areas of expertise and gain experiences by dealing with the various ranges of clients and being innovative in the engagement process. Knowledge based relationship can be strengthened through

mutual trust (Bagdoniene and Jakstaite, 2009). Professional service as an intensive with knowledge business (Doloreux and Muller, 2007) is designed for institutional clients, mostly business but not restricted for non-profit organizations. Jaakkola and Halinen (2006) underline that the characteristics of professional service include having expertise or specialist, having autonomy in making decision, altruism, self management, client participation, and customization in high level.

In service marketing, satisfaction may be defined as a condition when the customer perceive the results from the evaluation of the whole aspects of building a relationship (Savert, 2002 in Casalo *et al.* 2011) and it has been considered as the key antecedent of trust (Bauer *et al.* 2002). Several authors conclude that satisfaction is determined by customer value as the comparison between the perceived attributes and the exchanging processes in marketing or the comparison between the perceived benefits and the spent cost. Customer satisfaction is as well influenced by service quality and expectation, which is a comprehensive subjective evaluation on the service based on the company's level of perception on the service provided which can fulfill the requirement of desires and goals from the customers (Farn and Huang, 2008). Conceptually, the service quality is defined as the difference between customer satisfaction on the service and perceived service (Gronroos, 2000; Parasuraman, Zeithaml and Berry, 1988). Garvin (1998) says that the perceived quality is an image and reputation represented by a product which comes along with the company's responsibility, as well as one of the service quality dimensions used as an outline of planning and strategic analysis.

### **Conceptual Framework**

Parasuraman, Zeithaml and Berry (1988), in their researches on various kinds of service industries, identify five major dimensions of service quality which include reliability, responsiveness, assurance, empathy, and tangibles. In professional service industry, tangibles is the least discussed that it is not included in this research. Therefore, the hypotheses are in the following:

H1: Reliability has positive impact on Perceived Service Quality

H2: Responsiveness has positive impact on Perceived Service Quality

H3: Assurance has positive impact on Perceived Service Quality

H4: Empathy has positive impact on Perceived Service Quality

The retention strategy will not achieve a long-term success if the company lacks of a strong basis on service quality as it is the key element of customer satisfaction. All the strategy is built upon the assumption of the competition quality and provided value. Therefore, it is clear that company is expected to initiate the process of relationship development by providing a good major service presentation, or at

least fulfilling customer expectation (Zeithaml *et al.*, 2009). Zeithaml *et al.* (2009) continue by saying that satisfaction is the key factors in building a strong customer relationship or customer loyalty. Therefore, the hypotheses are in the following:

H5: Perceived Service Quality has positive impact on Customer Satisfaction.

H6: Perceived Service Quality has positive impact on Perceived Value.

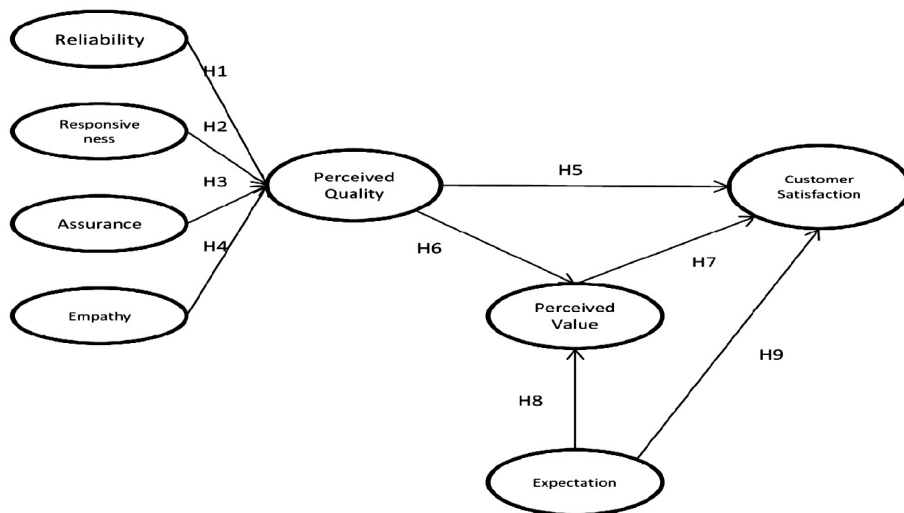
H7: Perceived Value has positive impact on Customer Satisfaction.

H8: Expectation has positive impact on Perceived Value

H9: Expectation has positive impact on Customer Satisfaction

Based on the elaboration, the conceptual framework is depicted in Figure 1:

**Figure 1: Conceptual Model of Company-Customer Relationship**

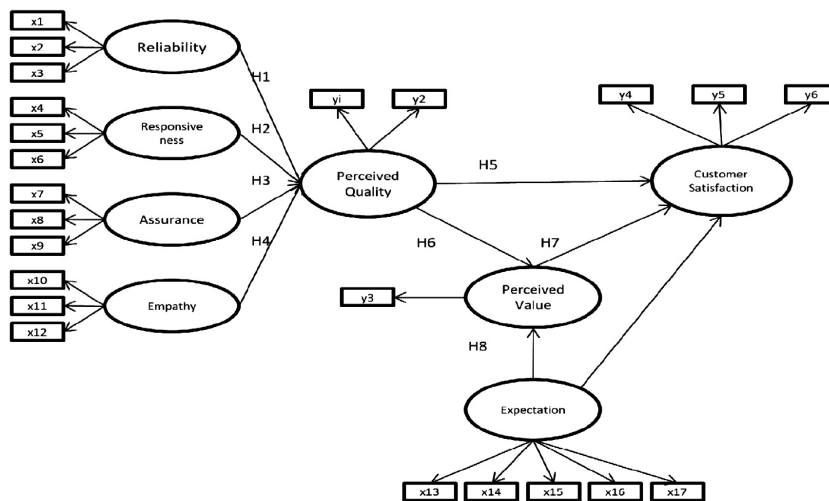


## RESEARCH METHOD

This research is conducted on coal mining exporting companies and coal trading companies as the customers for independent surveyor providers in Indonesia. Data from the respondents were collected in April to August 2013. The population for the purpose of this research consists of coal mining companies operating as exporter and producers, both being a member of Indonesia's Coal Mining Association (ICMA) and nonmembers, as well as national and international trader. The analysis unit is that every company is selected and in the analysis they are represented by the decision maker for employing surveyor service in the company. The interview process is conducted for respondents in 51 companies.

The purposive sampling method is used for the research. Data are collected by filling the questionnaires for targeted respondents, and then analyzed with descriptive statistic method in structural equation model (SEM) to confirm the structured model. All data are processed with computer software LISREL 8.5.1. The variables for the research consists of independent and dependent variables. Those variables, both exogenous (x1-x17) and endogenous latent variables (y1-y6), are measured with a series of questions where every one of them is composed in accordance with responded indicators using the Likert scale between 1 to 5, in which 1 = strongly disagree and 5 = strongly agree. The cross diagram and tested hypotheses show the relationship among the variables as depicted in Figure 2.

Figure 2: Cross Diagram



## RESULTS AND ANALYSIS

### Respondents Profile and Market Structure

This research includes 93 respondents representing 51 companies as the users for independent surveyor service where each one of them fill 1 to 3 questionnaires. In total, the number of filled questionnaires reaches 200 questionnaires. Those companies appoint the independent surveyor service for the purpose of coal exporting activities, and they include 43 companies (88.2% of total population) as both exporter and producers (operating coal mining activities) and 8 companies (11.8%) doing their business as trader (buying and exporting) for coal industry.

The characteristic of independent surveyor service market for coal industry in Indonesia influences by the competition character and company's selection for independent surveyor. The selection of users is based on the performance shown by the surveyors consisting of various factors. For the purpose of this research, 4 independent surveyor service companies are appointed by the coal companies, there are: Sucofindo (46%), Geoservices (30.50%), IOL Indonesia (12.50%) and Carsurin (8.50%), and by percentage of the companies employment is 97.5%.

### Data Analysis

The initial phase for this research starts with an analysis on each sub-model of Relationship Marketing to test the reliability of the measurement model in order to identify the ability of every indicator in explaining the latent variables. The reliability and validity of the measurement construct is chosen to ensure whether a group of indicators is able to explain the latent variables. Hair *et al.* (2006) state that a construct is considered reliable when the value of its construct reliability (CR) is not less than 0.7 or the value of the construct validity (CV) is not less than 0.5. On the other hand, Joreskog and Sorborn (1996) in a more simpler way require the standardized value of indicator variable coefisien (lambda) is at least 0.5. The Lisrel software is capable of explaining the results of test on construct reliability and construct validity for each relationship marketing sub-model in this research as shown in Table 1.

**Table 1**  
**Latent Variables, Indicator Variables and Result of Reliability and Validity Test**

<i>NNo.</i>	<i>Latent Variables</i>	<i>Indicator Variables</i>	<i>CCode</i>	<i>Lambda</i>	<i>EError</i>	<i>T t-Value</i>	<i>CCR</i>	<i>VCV</i>	<i>Reference</i>
11.	Reliability	Accuracy	xx1	0.80	0.35	14.58	00.74	00.49	Zeithaml, Berry and Parasuraman (1988)
		Expertise	xx2	0.67	00.55	119.90			
		Delivery	xx3	0.61	0.63	114.08			
22.	Responsiveness	Informativeness	xx4	0.71	00.50	115.87	00.77	00.52	
		Speed	xx5	0.69	00.53	116.66			
		Supportive	xx6	0.77	00.40	117.07			
33.	Assurance	Reputation	xx7	0.72	00.48	115.90	00.70	00.43	
		Security	xx8	0.61	00.63	117.78			
		Competency	xx9	0.64	00.59	115.43			
44.	Empathy	Individual Attention	xx10	0.70	00.51	112.01	00.66	00.39	
		Understanding	xx11	0.63	00.60	112.33			
		Flexibility	xx12	0.54	00.71	112.20			

55.	Perceived Quality	Customer's Feeling	yy1	0.79	00.37	00.73	00.65	00.48	Parasuraman, Zeithaml & Berry (1988)
		Actual Experience	yy2	0.58	00.66	00.59			
66.	Perceived Value	Price-Quality Ratio (Value for money)	yy3	2.94	55.15	00	00.63	00.63	Fornel <i>et al.</i> (1996), Wang (2009), Zeithaml <i>et al.</i> (2009)
77.	Customer Expectation	Customer Philosophies	xx13	0.62	0.64	116.03	00.86	00.55	Zeithaml <i>et al.</i> (2009)
		Customer Needs	xx14	0.82	00.33	115.54			
		Perceived Service Alternatives	xx15	0.89	00.20	115.29			
		Service Promises	xx16	0.69	00.52	113.69			
		Past Experience	xx17	0.64	00.58	112.00			
88.	Customer Satisfaction	Service Features	yy4	0.78	00.39	00	00.77	00.52	Zeithaml <i>et al.</i> (2009)
		Customer Emotion	yy5	0.68	00.54	00			
		Perception of Equity	yy6	0.71	00.50	00			

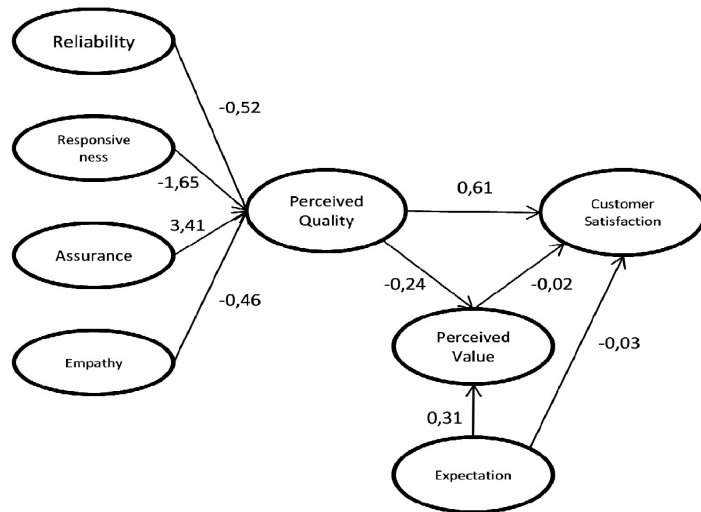
The results from the analysis on the eight latent variable constructs show that the affirmations explaining the indicators are able to explain the latent variables. They prove that all variables are crucial as the basis to get description on the latent variables in different coefficient units.

### Structural Model of Relationship Marketing

The structural model explained in the framework section indicates that to identify the coefficient value of the model or the contribution of each exogenous latent variables to the endogenous latent ones, it is important to make a coefficient assumption by applying the concept of un-weighted least square (ULS). The results from the assumption along with the coefficient test are explained in the Figure 3. The hypotheses are tested by using two statistic tests (Joreskog, 1998), statistic Khi-kwadrat ( $\chi^2$ ) and RMSEA. Ho is acceptable if the P-Value ( $\chi^2$  test) is more than 0.05 or the RMSEA value is less than 0.08. The results show that the P-Value = 0.53909 and RMSEA=0.000, which mean that in general, the empirical model is acceptable in accordance with the required criteria by Joreskog *et al.* (1996). Meanwhile, the t-value shows the significance of relationship between latent variables as shown in Figure 4.

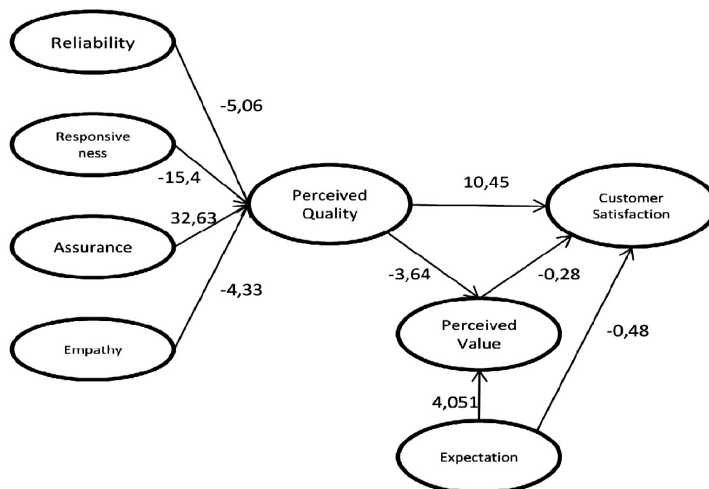


**Figure 3: Coefficient of Customer Satisfaction Model**



Chi-Square=153.34, df=165, P-value=0.73258, RMSEA=0.000

**Figure 4: t-value of Customer Satisfaction Model**



Chi-Square=153.34, df=165, P-value=0.73258, RMSEA=0.000

Table 2 shows the relationship pattern among latent variables.



**Table 2**  
**Relationship Among Variables**

<i>Endogen Variables</i>	<i>Exogen Variables</i>	<i>Coefficient Model</i>	<i>t-value</i>	<i>Explanation</i>
CUSTOMER SATISFACTION	Perceived Quality	0.61	10.45	Customer Satisfaction is influenced respectively based on the greatest contribution by Perceived Quality, Customer Expectation and Perceived Value. Perceived Quality significantly influences customer satisfaction with t value = 10.45
	Expectation	-0.03	-0.48	
	Customer Expectation	-0.02	-0.28	
PERCEIVED VALUE	Customer Expectation	0.31	4.05	Perceived Value is influenced respectively based on the greatest contribution by Customer Expectation and Perceived Quality. Both significantly influence customer satisfaction with t value = 4.05 for Customer Expectation and -3.64 for perceived quality.
	Perceived Quality	0.24	-3.64	
PERCEIVED QUALITY	Assurance	3.41	32.63	Perceived Quality is influenced respectively based on the greatest contribution by Assurance, Responsiveness, Reliability and Empathy. The four variables significantly influence customer satisfaction with t value for Assurance, t = 32.63, responsiveness, t= -15.40, reliability, t=-5.06 and empathy t=-4.33. The four variables positively influence Perceived Quality.
	Responsiveness	-1.65	-15.40	
	Reliability	-0.52	-5.06	
	Empathy	-0.46	-4.33	

## CONCLUSION AND SUGGESTION

### Conclusion

Customer satisfaction is influenced by perceived quality, perceived value and customer expectation. The perceived quality and customer expectation variables also influence customer satisfaction through perceived value. Perceived quality is significantly influenced by reliability, responsiveness, assurance and empathy.

### Suggestion

It is important to study the perceived value aspect more comprehensively considering that it is the determinant for the construction of customer satisfaction.

### Managerial Implication

To ensure customer satisfaction, it is worth noted for the managers of independent surveyor companies in coal industry to improve:

1. Perceived quality through the improvement of customer's feeling/memory. The customers for the service are known to demand for high quality service performance considering that their expectation is equally high.
2. Accuracy, because company's capability in providing service, which includes accurate survey results, is the sole foundation of the independent surveyor company to achieve reliability from the customers.
3. Assurance, which is the ability of the staff members to build the company's reputation before the customers and to guarantee security for them.
4. Supportive attitude from the staff members by responding customer expectation

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