

## The Influence of the Dimension of Trust on Customer Satisfaction E-Commerce (Study Case on E-Commerce Customers in Indonesia)

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**ABSTRACT:** This paper aims to analyze the influence of ability, benevolence, and integrity on customer satisfaction in E-commerce in Indonesia. The data from this study obtained 200 questionnaires distributed to e-commerce users. Statistical analysis used is Structural Equation Model (SEM). Ability variable is not significant to e-commerce customer satisfaction. Meanwhile, benevolence and integrity variables significantly influence e-commerce customer satisfaction. This research discusses in the field of Information Systems Management and Consumer Behavior, especially e-commerce applications. The scope of the study under study is the dimension of consumer confidence and its effect on satisfaction in transactions through e-commerce.

**KEYWORDS:** Customer Satisfaction, Customer Trust, E-commerce, Information System Management, SEM

### I. INTRODUCTION

The Internet is an electronic means that can be used for various activities such as communication, research, business transactions and others. Internet use for business transaction activity is known as Electronic Commerce (e-commerce) [1]. According to Indrajit [2], the characteristics of e-commerce consists of transactions between two parties; the exchange of goods, services or information; and the internet as the main medium in the transaction process. In practice, e-commerce transactions can occur between business organizations with fellow business organizations (B2B) and between business organizations with consumers (B2C) [1]-[4]. Internet users in Indonesia are officially registered subscription in 2003 as many as 739,571, which is divided into personal categories or individuals as much as 591,045 and corporations as much as 148,526 [5]. These conditions can be used as a trigger to grow e-commerce in Indonesia. With the increasing number of internet users, is expected to influence the behavior of people in purchasing goods or services, ie from conventional purchases to e-commerce. As the results of Liao and Cheung [6] study that internet users in Singapore, more and more use the internet then he is more happy to make purchases through eshop.

At this time the number of e-shop in Indonesia has reached more than twenty pieces. Products sold are various, such as books, computers, mobile phones, handicrafts, and t-shirts. In 2000 recorded the value of e-commerce transactions in Indonesia reached US \$ 100 million. If it refers to the results of research conducted by Liao and Cheung [6] in Singapore, at least with the growing number of internet users in Indonesia, it is predicted to continue to increase the volume and value of e-commerce transactions. Therefore, the security of e-commerce infrastructure becomes an important and serious study for computer and informatics experts [1], [7]-[9]. According to research results in 2001 conducted by ClearCommerce.com based in Texas, Indonesia is declared in the order of the two countries of origin cyberfraud perpetrators after Ukraine. The results show that about 20% of total credit card transactions from Indonesia on the Internet are fraud. The research surveyed 1,137 online stores, 6 million transactions, and 40 thousand subscribers [10].

The data above shows that transactions through e-commerce have a high potential risk. Corbit et al. [4] has conducted research and the result is that the increasing consumer participation in e-commerce is directly related to web experience, market orientation and trust. Other researchers, Mukherjee and Nath [11], found that consumer commitment in using e-commerce is directly related to shared values (ethics, security, and privacy) and trust. Through good communication, consumers feel guaranteed security in the transaction so that customer satisfaction in using e-commerce to increase. Building any kind of e-commerce system must still contain potential risks. As Pavlou and Gefen [12] have conducted, Corbit et al. [4], Kim and Tadisina [13], Mukherjee and Nath [11], and other researchers of the many factors that can affect the occurrence of transactions through e-commerce, trust factor becomes a key factor. Only customers who have the confidence that will dare to make transactions through the internet media. Without any trust from customers, it is impossible for an e-commerce transaction to occur.

Consumer satisfaction in conducting online shopping transactions in indications affects consumer confidence that will ultimately affect consumer attitudes in making repurchase (Elvandari, 2011). Consumer satisfaction on E-commerce is the most important factor for the survival of the online store, if someone who shopping on online sites feel satisfied then it can be said online store is successful and can obtain customers who are loyal to the online site. Loyalty as a deeply held commitment to buy or support a preferred product or service in the future despite the influence of marketing situations and businesses has the potential to drive customers [14]. Mayer et al. [15] after a comprehensive review of literature and the development of theory finds a formula that trust is built on three dimensions, namely ability, benevolence, and integrity. These three dimensions form an important basis for building a person's trust in order to trust a particular medium, transaction, or commitment. Indonesia as a developing country, and only about the last five years adopted e-commerce, of course, has some differences with developed countries that have long practiced e-commerce. These differences are at least related to regulatory issues, legal tools, and consumer behavior. In relation to the relatively new e-commerce practice in Indonesia, the interesting phenomenon to be studied is the extent to which e-commerce customers trust in conducting online transactions and how they relate to the level of e-commerce customer satisfaction. Therefore, the title of this research is "The Influence of the Dimension of Trust on Customer Satisfaction E-Commerce". The problems that can be formulated in this research are: (1) How influence ability to ecommerce customer satisfaction in Indonesia?, (2) How is the influence of benevolence toward ecommerce customer satisfaction in Indonesia?, (3) How is the influence of integrity to e-commerce customer satisfaction in Indonesia?.

## II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1. E-Commerce

E-commerce is the activity of selling and purchasing goods or services through internet facilities [7]. According to Sutabri (2012) E-commerce is the dissemination, purchase, sale, marketing of goods and services through electronic systems such as internet or television, www (world wide web), or other computer networks. E-commerce can be done by anyone with business partners, without being limited space and time. According to Karmawan [16], there are several types of E-commerce such as: (1) Business to Business (B2B), most E-commerce applied today is a type of B2B. This type of e-commerce includes inter-organizational transactions conducted in the electronic market; (2) Business to- Consumer (B2C), this is a retail transaction with individual buyers; (3) Consumer to-Consumer (C2C), in this category, a component sells directly to other consumers; (4) Consumer to-Business (C2B), belonging to this category is an individual who sells the organization's products or services, and an individual agrees to a transaction. In ecommerce activities it actually means the relationship between sellers and buyers, transactions between business actors, and internal processes that support transactions with companies [17].

### 2.2. Definition of Trust

A business transaction between two or more parties will occur if each trusts each other. This trust can not simply be acknowledged by other parties or business partners, but must be built from the beginning and can be proven. Trust has been considered as a catalyst in various transactions between sellers and buyers in order that customer satisfaction can materialize as expected [18]. Some literature has defined trusts with various approaches [11]. In the beginning, trusts are widely studied from the discipline of psychology, because this is related to one's attitude. In its development, trust became the study of various disciplines [13], [19]-[20], including being a study in ecommerce. Rotter (1967) defines trust is the belief that one's word or promise is trustworthy and one will fulfill its obligations in an exchange relationship. According to Morgan and Hunt (1994) defines that trust will occur when a person has confidence in an exchange with a partner who has integrity and can be trusted.

According to Mayer et al. [15] factors that make up one's belief in others there are three that is ability, benevolence, and integrity. Ability is the ability to refer to the competence and characteristics of the seller / organization in influencing and authorizing specific areas. In this case, how the seller is able to provide, serve, until securing the transaction from the interference of the other party. This means that consumers get satisfaction and security guarantees from sellers in making transactions. Kim et al. [21] states that abilities include competence, experience, institutional validation, and kemampuan in science. Furthermore, Benevolence is the willingness of the seller in providing mutual satisfaction between himself and the consumer. Profit obtained by the seller can be maximized, but customer satisfaction is also high. Sellers are not merely pursuing the maximum profit alone, but also have a great attention in realizing customer satisfaction. According to Kim et al. [21], benevolence includes attention, empathy, confidence, and acceptance. Then, Integrity relates to how the behavior or habits of the seller in running his business. The information given to the consumer is true to the facts or not. The quality of the product sold is reliable or not. Kim et al. [21] argued that integrity can be seen from the point of fairness, fulfillment, loyalty, honesty, dependability, and reliability.

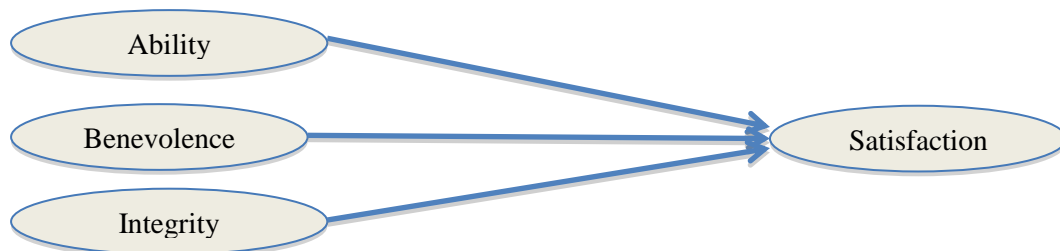
### 2.3. Customer Satisfaction

According to Kotler [14], consumer satisfaction is the level of one's feelings after comparing (performance or outcome) perceived compared to expectations. Consumers can experience one of the three general levels of satisfaction that is performance below expectations, the consumer will feel disappointed, but if the performance in accordance with expectations, customers will feel satisfied and if the performance can exceed expectations then customers will feel very happy and happy. According to Kotler's (1996) theory, consumer satisfaction variables can be measured by using 3 indicator items as follows: re-purchase, word-of-mouth, and create purchase decision on the same E-commerce company. According to Kotler (1996) there are several methods that can be used in measuring customer satisfaction, including: (1) complaints and suggestions system, any customer service oriented organization must provide the widest opportunity for its customers to submit suggestions, criticisms, opinions and complaints; (2) ghost shopping, one way to get a picture of customer satisfaction is to employ several people to act or behave as potential buyers, then report their findings on the strengths and weaknesses of the company's products and competitors based on their experience in purchasing those products ; (3) lost customer analysis, the company should contact customers who have stopped buying or have moved the supplier in order to understand why it happened; (4) customer satisfaction survey, generally research on customer satisfaction is done by survey research either by post, telephone, or direct interview. The company will get a response and also give a positive sign that the company is paying attention to its customers.

According to Hasan [22] the benefits of customer satisfaction include: (1) revenues: the effect of customer satisfaction on long-term revenue performance or profit is shaped by more competitive strategic dimensions through brand loyalty, product quality, brand or company association, and managers; (2) reaction to low-cost producers: price cuts are considered by many firms to be a powerful weapon to gain share. Many customers are willing to pay higher prices for better service and product quality; (3) economic benefits: by maintaining and satisfying customers today is much easier than constantly trying to attract; (4) price sensitivity reduction: a satisfied customer of a company tends to bargain bargain for each individual purchase; (5) key to future business success; (6) word of mouth relationship: a satisfied customer can make the relationship between the company and the customer harmonious, provide a good foundation for repeat buyers and the creation of customer loyalty, be an advocate for the company or product harassed others, and form a positive recommendation from mouth to mouth which is very profitable for the company.

### 2.4. Model Development And Hypothesis

Based on the problem formulation, literature review and research concept framework that has been proposed, the conceptual model of this research are:



**Figure 1 Conceptual Research Framework**

From the conceptual model, the research hypothesis developed as follows:

H<sub>1</sub>: Ability has a direct significant influence on e-commerce customer satisfaction.

H<sub>2</sub>: Benevolence has a direct, significant influence on e-commerce customer satisfaction.

H<sub>3</sub>: Integrity has a direct significant influence on e-commerce customer satisfaction.

## III. RESEARCH METHODOLOGY: DATA AND MEASUREMENT

This research is a survey research, that is research which take sample directly from population. Data from this study were obtained from questionnaires distributed to e-commerce users from various regions. The population in this study is all internet users in Indonesia who have done e-commerce transactions through internet media. This study focuses on how customer satisfaction when using e-commerce systems. The sampling technique in this research is the non-probability chosen is judgemental technique (purposeful). This technique is chosen to ensure that only the sample has a specific element that has been determined by the researcher to be

taken as a sample. In this study, the size of the sample is adjusted to the analytical model used is Structural Equation Model (SEM). In this regard, the sample size for SEM using the estimated maximum likelihood estimation (MLE) model is 100-200 samples [23]-[24]. In this study the number of respondents as much as 200 respondents.

**Independent Variables.** Ability is defined as the customer's perception of the ability of the seller through e-commerce media in providing goods, providing a sense of security and comfortable in the transaction, Benevolence is defined as the customer's perception of the seller's good desire through the e-commerce media in providing transaction satisfaction. Integrity is defined as the customer's perception of the seller's commitment through e-commerce media in maintaining the values to provide the best service to the customer.

**Dependent Variables.** Consumer satisfaction is the level where consumers feel what they want and need the consumer in accordance with what is expected.

#### IV. RESEARCH RESULTS AND DISCUSSION

In the table below, it shows that all proxies have outer loading factor values greater than 0.7. It can be concluded that, all indicators are eligible to be an indicator that can reflect each of the corresponding variables.

Outer Loadings

	X1_	X2_	X3_	Y1
X1.4	1,000			
X2.1		0,907		
X2.2		0,903		
X2.3		0,897		
X3.2			0,798	
X3.3			0,823	
Y1.1				0,745
Y1.2				0,847
Y1.3				0,863

Table 1 Results of Processed Data, Outer Loadings

In the next table see the Average Variance Extracted (AVE) measurement. Recommended AVE value must be greater than 0.5. In Table 2 shows the AVE value of each variable greater than 0.5, so it can be concluded that the variables used are valid and reliable.

Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X1_	1,000	1,000	1,000	1,000
X2_	0,886	0,897	0,929	0,814
X3_	0,478	0,479	0,793	0,657
Y1	0,763	0,802	0,860	0,673

Table 2 Results of Data Processed, Construct Reliability and Validity

The proposed hypothesis will be tested using the Structural Equation Model (SEM) model. SEM analysis was tested using SmartPLS for Macbook software to examine the effect of trust dimension on E-Commerce customer satisfaction.

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
X1_ -> Y1	0,028	0,024	0,079	0,356	0,722
X2_ -> Y1	0,198	0,208	0,068	2,899	0,004
X3_ -> Y1	0,340	0,349	0,070	4,870	0,000

Table 3 Results of Data Processed

Based on the results in Table 3, it shows that Ability is not significant to e-commerce customer satisfaction. It is shown from  $p\text{-value} > 0,05$ . P-Values ability shows the value of 0.722. This indicates  $H_1$  is rejected. Based on the findings of this research means that the variable ability is not an important variable considered in increasing e-commerce customer satisfaction in Indonesia. Based on the results in Table 3, it shows that Benevolence significantly affects e-commerce customer satisfaction. It is shown from  $p\text{-value} < 0,05$ . P-Values benevolence shows a value of 0.004. This indicates that  $H_2$  is accepted. In this research, benevolence variable apparently has a significant influence on e-commerce customer satisfaction in Indonesia. This means, the higher the vendor's benevolence, the higher the level of e-commerce customer satisfaction in Indonesia. Therefore, the benevolence variable is an important variable and considered by the respondents of e-commerce customers in Indonesia in multiplying customers. Based on the results in table 3, shows that Integrity has significant effect on e-commerce customer satisfaction. It is shown from  $p\text{-value} < 0,05$ . P-Values integrity

shows a value of 0.000. This indicates that  $H_3$  is accepted. From the results of this study, supporting research Gefen and Straub (2004) in which integrity has a positive and significant influence on the sustainability of purchases (purchase intentions). Variable integrity turns out to have a significant influence on e-commerce customer satisfaction in Indonesia. This means, the higher the integrity of the vendor, the higher the level of customer satisfaction e-commerce in Indonesia. Therefore, the integrity variable is an important variable and considered by the respondents of e-commerce customers in Indonesia in multiplying customers.

## V. CONCLUSION AND SUGGESTION

### 5.1 Conclusion

Based on the findings of this study, the variable ability is not an important variable considered in increasing e-commerce customer satisfaction in Indonesia. Because the variable ability has no significant effect on e-commerce customer satisfaction. Benevolence variables apparently have a significant influence on e-commerce customer satisfaction in Indonesia. This means, the higher the vendor's benevolence, the higher the level of e-commerce customer satisfaction in Indonesia. Therefore, the benevolence variable is an important variable and considered by the respondents of e-commerce customers in Indonesia in multiplying customers. Then, the integrity variable turns out to have a significant influence on e-commerce customer satisfaction in Indonesia. This means, the higher the integrity of the vendor, the higher the level of customer satisfaction e-commerce in Indonesia. Therefore, the integrity variable is an important variable and considered by the respondents of e-commerce customers in Indonesia in multiplying customers.

From the results of this study shows the higher level of confidence in E-commerce will increase consumer satisfaction, and that consumers will feel satisfied if the perpetrators of E-commerce is able to maintain the level of consumer confidence to always meet every promise, and when making transactions trustworthy so that consumers are not afraid of losing money, as well as information offered on E-commerce honestly. So that will form a consumer satisfaction that will consumers will buy back to E-commerce. The rise and fall of a level of customer satisfaction when buying a product or service on E-commerce is determined by how high the level of consumer confidence of the E-commerce. So the success of E-commerce is to always maintain the level of security, preferences that bergama, as well as good shopping experience gained on E-commerce company when conducting online shopping transactions, and can maintain the level of consumer confidence with both to meet every promise- promises promised by the perpetrators of E-commerce, and when consumers make transactions trustworthy, and the information offered is honest. So that will form a consumer satisfaction that will consumers will buy back to E-commerce.

### 5.2 Suggestion

In this study, there are also limitations of research. In the next study can be added new variables and / or indicators to enrich the model used in this study. Thus, the results of further research can be more perfect and the conclusions obtained can be different or remain the same with the results of this study. If it proves the same result, it means that the model used in this research has a high consistency to be applied in Indonesia. Then, it is expected to extend the observation time and provide more questionnaire questions to know the consistency of the influence of these independent variables on consumer satisfaction on E-commerce, and increase the number of samples so as to get better results. For the perpetrators of E-commerce, should further enhance an online shopping transactions, safely and conveniently so that consumers feel safe when doing transactions. And the perpetrators of E-commerce should still maintain the level of confidence in each consumer, because by maintaining consumer confidence is a success for the perpetrators of E-commerce so that maintaining trust in each consumer will form a satisfaction for consumers.

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