



© Copyright Kemala Publisher
All rights reserved

Science, Engineering and Social Science Series
ISSN/e-ISSN: 2541 – 0369/2613 – 988X
Vol. 4, No.3, 2020, Printed in the Indonesia

Relationship Between E-Commerce Website and Product Quality Over Customer Satisfaction

Kiki, Tantri Yanuar Rahmat Syah^{1,*}, Rina Anindita¹
¹Faculty of Economic and Business, Esa Unggul University

This study aimed to analyse the effect of E-commerce website and product quality to customer satisfaction. In this study, the analysis was done partially to see the effect of E-commerce website to customer satisfaction also product quality over customer satisfaction and simultaneously analyse e-commerce website with product quality to customer satisfaction. This study we use analysis Structural Equation Modelling (SEM) methods to analyse customer satisfaction. Here, the data observation was collected by questionnaire with 124 respondents in e-commerce website. The sampling technique was used based on willingness to be correspondent. From the analysis results, we obtain a significant influence between the variables simultaneously website between E-commerce and product quality to customer satisfaction. Partially have a positive and significant influence between the variables of E-commerce website to customer satisfaction. The variable quality of the product is partially positive and significant impact on customer satisfaction. Increased E-commerce website services and product quality must be continued and intensified by the provider to give satisfaction to the consumer.

Keywords: Product Quality, Customer Satisfaction, E-Commerce Website.

1. INTRODUCTION

Development of the Internet led to the formation of a new world, commonly called cyberspace. In this virtual world every individual has the right and ability to interact with other people without any restrictions can prevent. E-commerce is a kind of business mechanisms electronically focusing on transaction-based business individuals using the Internet (technology-based digital network) as a medium of exchange of goods or services between two institutions (business to business) and direct consumers (business to consumer), past the constraints of space and time which is at the things that dominant. Thus, e-commerce application, should the relationship between companies with other external entities (suppliers, distributors, partners, consumers) can be done more quickly, more intensively, and cheaper than the conventional application of management principles (door to door, one-to-one relationship). Then e-commerce is not just a mechanism for selling goods or services through the medium of the Internet, but also to the occurrence of a business transformation that is changing the way

companies in conducting business activities. Develop and implement a system. E-commerce is not an instant process, but a transformation strategy and business systems continue to grow in line with its development and technology. Thus, to the occurrence of a business transformation that is changing the way companies in conducting business activities. Develop and implement a system. E-commerce is not an instant process, but a transformation strategy and business systems continue to grow in line with its development and technology. Thus, to the occurrence of a business transformation that is changing the way companies in conducting business activities. Develop and implement a system. E-commerce is not an instant process, but a transformation strategy and business systems continue to grow in line with its development and technology. Indonesia is the country with the highest growth of e-Commerce in the world. In recent years, more and more businesses, both large enterprises as well as retail, switch or expand business in the direction digital. The e-Commerce continues to grow, this is reinforced by a number of survey information and communications technology research institutes at home

*Email Address: tantri.yanuar@esaunggul.ac.id

and abroad. "2016 Economic Census data from the Central Statistics Agency (BPS) obtain the e-Commerce industry in the last ten years Indonesia grew by about seventeen percent of the total number of e-Commerce businesses reached 26.2 million units. Based on the above researchers interested in taking title "Effect Relations E-Commerce Website with Quality Products to Customer Satisfaction". E-Commerce use electronic technology to make sales, advertising by using the internet based on the context of the B2B (Business to Business) and B2C (Business to Customer) as well as to improve the internal functions (such as processing / determination order), and to facilitate communication with supply chain partners [1]. E-commerce will change all marketing activities and also while cutting operational costs for trading (trade). it is in the E-commerce is as follows: (a) Presentation electronics (Making the Web site) for products and services, (b) ordering directly and the availability of the bill, (c) Customer accounts securely Automation (either the account number or credit card number), (d) Payments made direct (online) and transaction handling. advertising by using the internet based on the context of the B2B (Business to Business) and B2C (Business to Customer) as well as to improve the internal functions (such as processing / determination order), and to facilitate communication with supply chain partners. E-commerce will change all marketing activities and also while cutting operational costs for trading (trade). it is in the E-commerce is as follows: (a) Presentation electronics (Making the Web site) for products and services, (b) ordering directly and the availability of the bill, (c) Customer accounts securely Automation (either the account number or credit card number), (d) Payments made direct (online) and transaction handling. advertising by using the internet based on the context of the B2B (Business to Business) and B2C (Business to Customer) as well as to improve the internal functions (such as processing / determination order), and to facilitate communication with supply chain partners. E-commerce will change all marketing activities and also while cutting operational costs for trading (trade) .it is in the E-commerce is as follows: (a) Presentation electronics (Making the Web site) for products and services, (b) ordering directly and the availability of the bill, (c) Customer accounts securely Automation (either the account number or credit card number), (d) Payments made direct (online) and transaction handling.

2. METHODOLOGY

E-Commerce can be divided into several types which have different characteristics such as:

A. Business to Business (B2B)

Business to Business e-commerce has characteristics; (A) Trading partners known and generally have a relationship (relationship) long. (B) The information is only exchanged with the partner. Because it is already familiar with the

communication opponent, the type of information transmitted can be prepared in accordance with the needs and the confidence (trust), (c) data exchange (data exchange) took place repeatedly and at regular intervals.

B. Business to Consumer (B2C)

Business to Consumer Commerce has the following characteristics: (a) Open to the public, where information is distributed over public, (b) Services provided is common (generic) and the mechanism that can be used by the general public. For example, because the Web system in general use, the service is given by using a Web basis, (c) The service is provided upon request (ondemand). Consumer initiatives and producer must be prepared to respond in accordance with the request, (d) approach to client / servers are often used where taken Assuming the client (consumer) uses minimal system (Web-based) and processing (business procedure) laid the server side.

C. Collaborative commerce

In e-commerce, business partners collaborate (instead of buying or selling) electronically. Such collaboration often occurs between and among business partners along the supply chain.

D. Customer onsumen to consumen customer (C2C)

In C2C someone selling products or services to others. It can also be referred to as a customer to palanggan that is, those who sell products and services to each other.

E. Customer to Business (C2B)

In the consumer C2B give the need for a particular product or service, and suppliers compete to provide products or services to consumers. For example, at priceline.com, where customers mention the product and the desired price, and price line try to find the suppliers that meet those needs.

F. Intra-organizational trade

In this situation the company uses internally to improve e-commerce operations. Special conditions in this case referred to as e-commerce B₂E (business to its employees) which is described in the case study is open.

G. Civic government (Government to Citizen-G2C)

In this situation the company uses internally to improve e-commerce operations. Special conditions in this case referred to as e-commerce B₂E (business to its employees) which is described in the case study is open.

H. Civic government (Government to Citizen-G2C)

In these circumstances an entity (unit) governments provide services to citizens through e-commerce technology. Government units to do business with a variety of other government units as well as with various companies (G₂B). Egovernment namely the use of Internet technology in general and e-commerce specifically to

transmit information and public services to citizens, business partners, suppliers and government entities, as well as those working in the public sector.

I. Trade Mobile (mobile commerce m-commerce)

When e-commerce is conducted in a wireless environment, such as by using cellular phone to access the internet and shopping, then this is called m-commerce. The quality of products according to Vincent Gaspersz (2005 in Alma, 2011) dimensions of quality of products consists of: (a) Performance (performance), the principal operating characteristics of core products, (b) characteristics or additional privileges (features), the secondary characteristics or complement, (c) Reliability (reliability), which is less likely to be damaged or fail to wear, (d) Compliance with specifications (conformance to specification), namely the extent to which the characteristics of the design and operation to meet the standards that have been set before, (e) durability (durability), which relates to how long the product can continue to be used, (f) Serviceability, including speed, competence, convenience, easy to repair, complaint handling satisfactorily, (g) Aesthetics, the product appeal to the senses sense [2].

The quality of service which includes five dimensions namely: (1) Tangibles (direct evidence), the ability of a company to indicate its existence to external parties. Appearance and capabilities of the company's physical infrastructure and the state of the surrounding environment is tangible evidence of the services provided by the company, (2) Reliability (reliability), the ability to provide the promised service with immediate, accurate and satisfactory. Performance should be in accordance with customer expectations mean timeliness, the same service to all customers without error, sympathetic attitude and high accuracy, (3) Responsiveness (comprehension), the ability to help and gives fast service (responsiveness) and right to customers with clear information delivery. provide good credibility for the company in the future, (c) Security (security), the existence of a trust from customers for services received. Of course, the performance provides a guarantee maximal trust. (D) Competence (competence) is owned and skills needed in order to provide service to customers can be implemented optimally. (E) Courtesy (politeness), in the service of the existence of a moral value held by the company in providing services to customers. Kesopan guarantee of compensation offered to customers in accordance with the conditions and circumstances. (F) Empathy (empathy), which provide a genuine concern and is a private individual or given to customers by striving to understand the desires of consumers [3, 4]. Customer satisfaction levels can be determined based on a five (5) main factors that must be considered by a company namely: (1) Quality of products, consumers will be satisfied if the evaluation results indicate that the product purchased was of excellent quality. (2) The quality of service, better quality of service that enables companies to improve customer satisfaction

and reduce customer dissatisfaction. The better the quality of service will reduce rework and ultimately figure customer dissatisfaction can be reduced, (3) Emotional, consumers would feel proud and gain the confidence of others will be amazed about what was used, (4) Prices, products that have the same quality but set relatively cheap price would give a higher value to consumers, (5) Costs [5, 6].

J. E-commerce Website

Website Electronic Commerce (E-commerce) is a new concept that is commonly described as the process of buying and selling goods or services on the World Wide Web of the Internet or the process of buying and selling or exchanging products, services and information through information networks including the internet [7, 8, 9]. A various perfecting role in E-commerce include communication perspective, business process perspective, a service perspective, the perspective online. E-commerce website will also have the types of properties that Business-to-business transactions (B2B), Business to Consumer (B2C) [10]. Consumer to Consumer (C2C), Consumer to Business (C2B), Non-Business E-commerce, and Intra-business (Organizational) E-commerce. E-commerce websites are very have many of them for the benefit of the organization, as the basic information consumers, and society. The respondents agreed to purchase online with E-commerce website results are positive and significant impact on customer satisfaction [11]. Consumers like or agree via online shopping, because shopping online through easier, no need to sacrifice more and reduce the cost of the search or searching cost. E-commerce website is effective in giving effect to customer satisfaction in because of the sale and purchase of information services and is not limited to the distance and time [12, 13].

K. Product quality

The quality of products is the overall features and characteristics of the product or service that relies on the ability to satisfy stated or implied needs [14]. Consumers will be satisfied if the assessment showed that the quality products they use [15]. The purpose of the quality of the product is as follows:

- a) Ensuring that manufactured goods can reach the standards that have been set.
- b) Ensuring that inspection cost can be as small as possible.
- c) Ensuring that the design of specific production costs as small as possible.

Ten determinants of satisfaction (ten domains of satisfaction) that influence the behavior of consumer satisfaction, one of which is the quality of the product [16]. Consumers who are satisfied will be happy to convey the positive news about the company without being asked, but consumers were disappointed would be a carrier of negative news. Product quality declare the results showed

a significant positive impact on consumer satisfaction he stated that when consumers satisfied to loyal consumers to the product [17]. The quality of the products also have a significant positive effect on customer satisfaction [18]. Product quality significant positive effect on customer satisfaction. The reinforcement is also supported by the indicators used include product performance, product reliability, product features, durability, ability to be repaired, beauty [19].

L. Consumer satisfaction

Consumer satisfaction is feeling happy or disappointed someone arising from comparing the perceived performance of the product or the results of their expectations. Consumer satisfaction is an emotional response to the evaluation of the experience of consumption of a product or service [20]. Type of customer satisfaction is divided into two, namely:

- Functional satisfaction, the satisfaction derived from the function or use of a product.
- Psychological satisfaction, the satisfaction derived from the attributes that are intangible.

There are four methods of measurement of customer satisfaction conducted by the company to determine the level of customer satisfaction that is the system of complaints and suggestions, customer satisfaction surveys, ghost shopping, customer loss analysis. (There is an indicator in assessing whether consumers are satisfied or not include product quality, price, service quality, and ease emotional factors [21]. E-commerce website plus about research quality of the product is necessity of E-commerce website and product quality in giving effect to consumer satisfaction [21, 22, 23].

H₁: E-Commerce Website which would increase consumer satisfaction.

H₂: Good product quality will increase customer satisfaction.

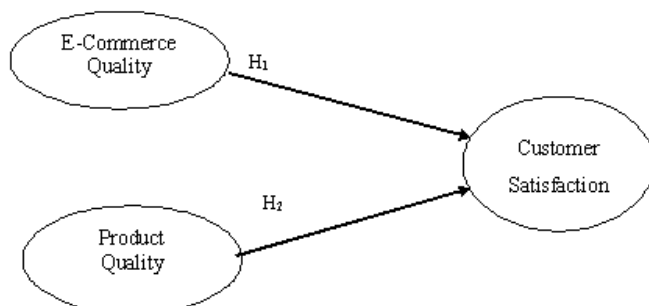


Figure 1. Research framework

3. RESULT AND DISCUSSION

Respondents in this study is the user's e-commerce which is known by researchers. This study uses quantitative data and primary data types. Sampling was done by nonprobability sampling method i.e. by convenience sampling approach. The method based on (convenience sampling) conducted by researchers arbitrarily choose free samples or a sample taken by a factor of spontaneity, which means that anyone who accidentally meet with investigators and according to its characteristics, then that person can be sampled. The number of respondents in the take is as much as 124 respondents due to the number of population is too large and is not identified then the determination sample around 100 data [24].

In this study, respondents were asked to provide answers to how far respondents agree or disagree to the questions in the questionnaire. Scale with five levels of preference answers with the following options: to variable E-commerce websites, product quality, and satisfaction customer. The answer is Strongly Disagree got a score of 1, Answer Disagree got a score of 2, Answer Less Agree or Neutral got a score of 3, Answer Agree with scores of 4 and answers Strongly Agree scored 5. E-commerce Website measured using an instrument which consists of 29 items and are all valid. Use your product quality is measured by the instrument of which consists of 15 items and are all valid. Customer satisfaction is measured using an instrument which is consists of three items and all valid. Test the validity of Confirmatory Factor Analysis done by looking at the value of Kaiser-Meyer-Olkin Measure of Sampling (KMO) and Measures of Sampling Adequacy (MSA). In this test the value obtained must be greater than 0.5, which means that the factor analysis appropriate or suitable for use, and can be further processed. Reliability test using Cronbach alpha values greater than > 0.6, which means reliable. The next phase, our data if using SEM analysis. SEM is able to explain the relevance of variables in a complex as well as direct and indirect effects of one or more variable to another variable. Test the validity of Confirmatory Factor Analysis done by looking at the value of Kaiser-Meyer-Olkin Measure of Sampling (KMO) and Measures of Sampling Adequacy (MSA). In this test the value obtained must be greater than 0.5, which means that the factor analysis appropriate or suitable for use, and can be further processed. Reliability is test Cronbach alpha values greater than > 0.6, which means reliable. The next phase, our data if using SEM analysis. SEM is able to explain the relevance of variables in a complex as well as direct and indirect effects of one or more variable to another variable. Test the validity of Confirmatory Factor Analysis done by looking at the value of Kaiser-Meyer-Olkin Measure of Sampling (KMO) and Measures of Sampling Adequacy (MSA). In this test the value obtained must be greater than 0.5, which means that the factor

analysis appropriate or suitable for use, and can be further processed. The reliability Cronbach alpha test values greater than > 0.6, which means reliable. Furthermore, SEM is able to explain the relevance of variables in a complex as well as direct and indirect effects of one or more variable to another variable [25, 26]. In this test the value obtained must be greater than 0.5, which means that the factor analysis appropriate or suitable for use, and can be further processed. Reliability Cronbach alpha test values greater than > 0.6, which means reliable. The next phase, our data if using SEM analysis. SEM is able to explain the relevance of variables in a complex as well as direct and indirect effects of one or more variable to another variable. In this test the value obtained must be greater than 0.5, which means that the factor analysis appropriate or suitable for use, and can be further processed. Reliability test Cronbach alpha values greater than > 0.6, which means reliable. The next phase, our data if using SEM analysis. SEM is able to explain the relevance of variables in a complex as well as direct and indirect effects of one or more variable to another variable. The next phase, our data if using SEM analysis. SEM is able to explain the relevance of variables in a complex as well as direct and indirect effects of one or more variable to another variable. Based on the magnitude of sample taken in this study is 124 people respondents. All questionnaires in the scatterplot and in return were 124 questionnaires. SEM examination, as we have done, can be seen in Figure 2.

Based on Figure 2 Path Diagram T-Value above which is a hypothesis in this study, presented in the following structural equation (see Table I).

Table I. Hypothesis Testing Research Model

Hypothesis	Statement Hypothesis	T-Value	Information
H ₁	E-Commerce Website which would increase consumer satisfaction	-1.57	The data do not support the hypothesis
H ₂	Good product quality will increase customer satisfaction	8.97	The data support the hypothesis

4. CONCLUSION

In the first hypothesis testing results (H₁), it was found that the analysis results support the hypothesis that H1 E-Commerce Website which would increase consumer satisfaction by -1.57, This shows that with E-Commerce Website who either do not affect customer satisfaction cannot support the hypothesis. From these results it is advisable to replace the variables used by the Quality of Service in accordance with the results that have been done, Results of testing the second hypothesis (H₂), it was found that the analysis results support the hypothesis H2 is Good product quality will increase customer satisfaction 8.97. This shows that the higher the quality of the products it will be increasingly satisfied customers in consuming goods or services that have been purchased. These results reinforce previous research that has been done by Ahmed (2011) in which the findings of this study indicate that employees are more motivated found satisfied with the work. Here, this result also obtain a job satisfaction has a positive result significantly influenced by the motivation of employees. So, with a good motivation within the organization, employee satisfaction will also increase.

This research was conducted in order to determine the effect of variable E-commerce website, the product quality to customer satisfaction. The results showed two hypotheses are accepted and proven that: the first e-commerce website does not have a positive and significant impact on customer satisfaction. What this means is, the better the level of management and maximization of E-commerce websites are not related to the higher value customer satisfaction. Both the quality of the product has a positive and significant impact on customer satisfaction. Both of the positive result means that the higher proficiency level Indonesian standard quality products or better products in terms of quality, the higher the value of customer satisfaction. The effects of E-commerce website and product quality to customer satisfaction, without considering any other factors that may be used as additional variables reinforce the value of satisfaction to

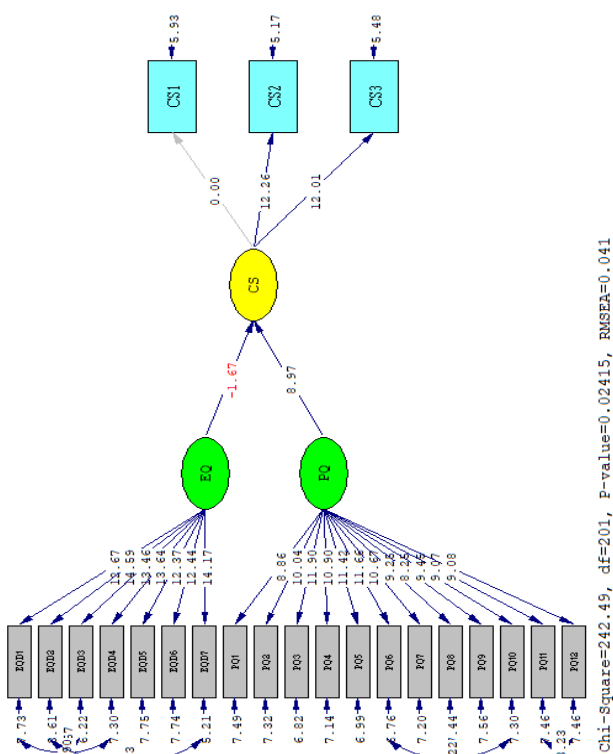


Figure 2. Path Diagram T-Value

the customer, such as brand, price and so on. This study only applies through a questionnaire survey method, so that the conclusions are based only on data collected through the use of instruments in writing.

Maximizing the E-commerce website functions as a site selling, information and services are always on the increase. Always updated information along with the increase in system E-commerce website that can attract a consumer. Creativity in the product and improving product quality website can continue to be improved. Moreover, the level of quality is one factor that is felt directly by consumers. Research on customer satisfaction further here may require the presence of additional variables that provide or look at the effect on consumer satisfaction as price, brand or the other

References

- [1]. Ali Khatibi. (2003), The effect of e-commerce on customer satisfaction in Malaysia, *J. Soc. Sci.*, 7 (3): 201-208.
- [2]. Djarwanto Pangestu. (2000), *Statistics Inductive fifth edition*, Yogyakarta: BPFE.
- [3]. Habibur Rahman and Han Lili. (2011), Customer satisfaction in E-Commerce A case study of China and Bangladesh. *ECTS*.
- [4]. Hubert Graja and Jennifer McManis. (2001), Quantifying customer satisfaction with e-commerce websites, In *Proceedings of the 17th IEE UK Teletraffic Symposium*. Dublin, Ireland, May 16-18.
- [5]. Handi Irawan. (2008), *Ten Principles of Customer Satisfaction*. Publisher Elex Media, Jakarta: Gramedia Group Komputindo.
- [6]. Jogiyanto HM (2004). *Business Research Methodology*, Yogyakarta: BPFE.
- [7]. Imam Ghozali. (2013), *Applications Multivariate Analysis with SPSS 19*, Semarang: BPUNDIP.
- [8]. Indrajit, RE (2001), *E-Commerce: Tips and Business Strategies in Cyberspace*. Jakarta: PT Elex Media Komputindo.
- [9]. Kotler, Philip and Keller, Kevin Lane. (2009), *Marketing management 13th edition*. Jakarta: Erland.
- [10]. Kuncoro, M. (2009), *Research Methods for Business and Economics Researching and Writing Thesis How? Issue 3*, Jakarta: Erland.
- [11]. Lupiyoadi, Creep and Hamdani A. (2006). *The second edition of Marketing Management Services*, Jakarta: Four Salemba.
- [12]. Ni Made Sprott Wedarini. (2012), Influence of product quality to customer satisfaction and loyalty. Faculty of Economics, University of Udayana.
- [13]. Parasuraman. (1985), A Concept Model of Service Quality and Its Implication for Future Research, *Journal of Marketing*. Vol. 49.
- [14]. Santoso Singgih. (2007), *Structural Equation Modeling with AMOS Concepts and Applications*, Jakarta: PT. Elex Media Komputindo.
- [15]. Sekaran Uma and Roger Bougie. (2011), *Research Methods For Business*. UK: John Wiley & Sons.
- [16]. Shahrudin Jakpar and Angelyn Gon Sze Na. (2012), Examining the quality attributes that most influence consumer satisfaction when the price was discounted: a case in Kuching, Sarawak. *International Journal of Business and Social Science*. Vol.3 No.23.
- [18]. Sri Wiludjeng SP. (2013), Effects of E-Commerce Customer Satisfaction and Trust In *Forum Jual Beli Kaskus In Bandung*, SEMANTIC 2013. ISBN: 979-26-0266-6.
- [19]. Sugiyono. (2008), *Business Research Methods*, Bandung: PT. Alfabeta.
- [20]. Susanto. (2013), *Research Methodology*, Yogyakarta: Vision Solutions Madani.
- [21]. Suyanto, M. (2003), *Strategy E-commerce Advertising company top world*. Yogyakarta: Andi.
- [22]. Swastha, Basu and Hani Handoko. (1997), *Marketing Management: Analysis of Behavior Consumer*. Yogyakarta: Liberty.
- [23]. Tjahjono, Heru K. (2009), *a business research method. 2.0-Cet.1*, Yogyakarta: Vision Solutions Madani.
- [24]. Tjiptono, Fandy, (2007), *Principles - Principles of Total Quality Service*, Yogyakarta: Andi Offset
- [25]. Hadyanto Mulyono. (2007), Analysis influence of product quality and service quality to satisfaction, *Journal of management and organizational studies undip*, Vol 4 No2.
- [26]. Sobihah, M. (2015). E-Commerce Service Quality on Customer Satisfaction, Belief and Loyalty: A Proposal, 6(2), 260–266. <https://doi.org/10.5901/mjss.2015.v6n2p260>.

Received: 15 April 2020, Accepted: 21 June 2020