

# The Effect of Online Service Quality to Customer Satisfaction

(A Case Study in Bhinneka.com Indonesia)

*Indrawati*

Faculty of Economics and Business, Telkom University  
Bandung, Indonesia  
[indrawati@telkomuniversity.ac.id](mailto:indrawati@telkomuniversity.ac.id)

*Kenang Kania Natasha*

Faculty of Economics and Business, Telkom University  
Bandung, Indonesia  
[kania245@yahoo.com](mailto:kania245@yahoo.com)

## Abstract

Indonesia is one of the potential target market for e-commerce, as the result the competition in this sector in Indonesia become very tough. To win this competition the e-commerce company, such as Bhinneka.com should satisfy its customers. This study test the influence of Online Service Quality-- efficiency, reliability, responsiveness, fulfillment, and privacy to the customer satisfaction in e-commerce (e-retailer). This study involved 100 respondents which were selected by using purposive sampling. Multiple regression analysis was used to analyze the relationship. This study revealed that efficiency, reliability, responsiveness, fulfillment and privacy jointly and separately have a positive and significant influence on customer satisfaction.

**Keywords:** *Service quality, Customer Satisfaction, Indonesian the effect*

## I. INTRODUCTION

Indonesia Internet users increase rapidly from 25 million in 2008 to 63 in 2012 [1]. The rapid growth of internet users in Indonesia creates new potential market for companies to take advantage for enhancing their business through electronic commerce (e-commerce), the buying and selling of goods or services on the Internet, especially in the World Wide Web [2]. The development of internet is directly proportional to the growth of e-commerce [3], since Internet changes the buying behaviour of Indonesian who spent 30 hours online per week [4]. Indonesia digital buyer penetration is increasing more than 1% every year and in the next years, Indonesia digital buyer are expected to be increased [3] along with the development of Internet provider in Indonesia and government program to create internet-literate society. Indonesia becomes one of the potential target market for e-commerce, as the result many e-commerce companies are interested to involve in this sectors, especially in e-retailing (Internet based retailing). Internet based retailing are believed to be superior to those that delivered through conventional channels due to their convenience, interactivity, and relatively low cost among other advantages.

The seventh top e-retailer and classified sites in Indonesia are Kaskus.co.id, Tokobagus.com, Berniaga.com, Lazada.co.id, Bhinneka.com, Zalora.co.id, and Bibli.com. Kaskus.co.id was ranked at the 7<sup>th</sup> in Indonesia and the 255<sup>th</sup> worldwide. Kaskus.co.id is well known for their forums and market place where the member can sell products in their sites. Tokobagus.com

(or now known olx.co.id) was 12<sup>th</sup> in Indonesia and the 526<sup>th</sup> worldwide, while its competitor berniaga.com was the 23<sup>rd</sup> in Indonesia and the 1470<sup>th</sup> worldwide. This two e-commerce sites well known for the place for classifieds. These sites provide places for advertisements. They provide sites to allow their member to sell or list their products in the sites free of charge. The last 4<sup>th</sup> e-commerce sites known as e-retailer type, is Lazada which was ranked the 33<sup>rd</sup> in Indonesia and the 2,158<sup>th</sup> worldwide. Lazada.co.id sells fashion items, gadget, and many other things. Bhinneka.com was rank the 54<sup>th</sup> in Indonesia and 3,819<sup>th</sup> worldwide. Zalora.co.id was ranked the 136<sup>th</sup> in Indonesia and the 9,835<sup>th</sup> world wide, it is well known as fashions e-retailer in Indonesia and world wide, and last is Bibli.com which was rank the 163<sup>rd</sup> in Indonesia and the 11,752<sup>nd</sup> worldwide [5].

Bhinneka.com is one of the oldest e-commerce site in Indonesia. The business starts in 1993 and reaching e-commerce business in 1999. Bhinneka focusing on gadget as their main products, and recently they includes another category such as music instrument, baby toys and hobbies as their products. Their vision is to become world class company with the passion of information technology usage and become the pride of nation. The mission of Bhinneka.com is to become number one web store in Indonesia that provide completeness and convenience to shop, and also to acknowledge and provide pleasant shopping experiments to their customers. With capital budget around US \$ 8,500, Hendrik Tio started the business. Today Bhinneka.com has growing and becoming one of top e-commerce sites in Indonesia with turn over more than US\$ 500 million [6]. Although, the turnover is increasing but, the transaction in online is decreasing. In 2012 Bhinneka could manage to got in average 800 online transactions in a month and 2% of customer who visited the web and did transactions but in 2013 the transaction rate was less than 1% with the average transaction was 400 [7]. And in early 2014 the Alexa rank for Bhinneka.com was decreasing constantly. The rank of Alexa is based on the web the number of web's visitors, if the rank is decreasing means the visitors of the web is also decreasing. The Bhinneka.com daily page views had also decreasing during June-November 2014 periods [8]. The daily page views decreased along with the decreased in Alexa rank. This was dangerous for its business, since the decreasing number of visitors and the daily page views are indications that the Bhineka.com customers are decreasing. The decreasing trend of

websites daily visitors and page views are two indicators that there is a decreasing trend in Bhinneka.com customer satisfaction. If this trend is continuously decreasing, the probability of Bhinneka.com wins the competition in its own home country (Indonesia) will be impossible and Indonesian market will be dominated by foreign companies.

## II. PROBLEM STATEMENT, RESEARCH QUESTION AND OBJECTIVES

The problem statements of this study are 1) there are symptoms of decreasing trend in customer satisfaction of Bhinneka.com. The customer satisfaction is an important issue for any business system, both traditional and online. Customer satisfaction is critical element to establishing long term relationship [9]. Then, understanding factors that impact web customer satisfaction is great importance for e-commerce. According to Zeithaml et.al [10] online service quality is one of the key to drive customer satisfaction in e-commerce. 2) There are limited published studies that have been conducted in testing the effect of online service quality to the customer satisfaction of e-commerce. The research that studying the decreasing of customer satisfaction in relation with service quality has not been addressed yet, thus whether or not the online service quality dimensions that the company offers are giving positive influence to customer satisfaction has not been well explored yet, especially in Indonesia.

Given the problem statements above, the present study seeks to answer a research question:“

Does e-Service Quality or Online Service Quality--efficiency, reliability, responsiveness, fulfillment, and privacy influence positively the customer satisfaction in e-commerce (e-retailer)??”

In line with the research question, the objective of the study is to test if e-Service Quality or Online Service Quality -- efficiency, reliability, responsiveness, fulfillment, and privacy have a positive influence on the customer satisfaction in e-commerce (e-retailer).

## III. SIGNIFICANT OF STUDY

The results of this research are hopefully can give useful knowledge in the field of e-commerce business and academic that related to the effect of online service quality to customer satisfaction. This study is the way to investigate the relation between Zeithamal models which is in traditional market with the e-commerce business especially in customer satisfactions. The results are also significant to be used by e-retail business especially in Indonesia to increase their customer satisfaction which is very important for their current and future businesses.

## IV. LITERATURE REVIEW AND CONCEPTUAL MODEL

E-commerce is developed from traditional commerce, the common business that does not need internet or other electronic way to do transactions or activities, while e-commerce is based on internet and other electronic ways. There are 13 factors that differs e-commerce and traditional commerce, namely in term of

implementation dynamics, business case, financial transaction, effect of business process, frequency of transaction, product choice, trust level, relationship duration, cost, reliability, flexibility, and effect on distribution channel [11]. Those factors create e-commerce and traditional commerce has their own strengths and weakness in each factor, and creates choices for the industry players.

Due to the difference between traditional commerce and e-commerce, the service quality for each customer should be different. In traditional commerce, Parasuraman, Zeithaml and Berry [12,13] stated that the service quality dimensions consists of reliability, assurances, tangibles, empathy, and responsiveness. Furthermore, Parasuraman et al.[13] explained that Reliability refers to the ability of company to perform the promised service dependably. Assurance refers to the knowledge and courtesy of company's employees and their ability to build trust. Tangibles refer to the physical facilities, equipment, and employees' appearances. Empathy refers to the ability of company to care and give individualized attention to customers. Responsiveness refers to willingness of company to help customers and provide prompt service.

In e-commerce, the service quality is online Service Quality (e-Servqual) was developed by Zeithaml, Parasuraman and Malhotra [14] through focus group interview. They had identified seven dimensions of online service quality, namely: efficiency, fulfillment, reliability, responsiveness, compensation, privacy and contact. In the next process, Zeithaml et al [15] identified four dimensions only of e-Servqual, namely: **reliability**, **fulfillment**, **privacy** and **efficiency**. Furthermore they explained that Reliability refers to the technical functioning of the site, particularly the extent to which it is available and functioning properly. Fulfillment is how the organization's promises and products are delivered on time. Privacy dimension includes assurances that the customers data are not shared and the credit card information is secured, and Efficiency means the ability of customers to get to the websites, looking their desires product and the information that they need with minimal effort [14].

Zeithaml et.al [15] also found another three dimensions that become make senses only when the online customers have questions or run into problems. The dimensions are: compensations, contact and responsiveness. Compensations involve the compensation to the customer such as cash back, free delivery and handling costs. Contact is the ability of the organization to be able to speak or communicate with the customers online or through phone. Responsiveness measure the ability of e-retailer to provide information to the customers while the problems occurs [15]. Griffith and Krampf that referred by Zeithaml et.al [15] found that **access and responsiveness** of the website are the key indicators of online service quality.

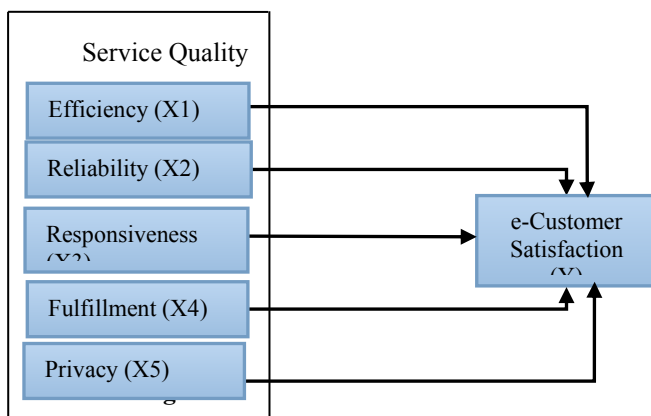
Based on Oliver's definition of satisfaction, Zeithaml and Bitner [15] defined satisfaction as the customer's evaluation of a product or service in terms of whether that product or service has met their needs and expectations. According to Kotler [16], satisfaction is person's feeling of pleasure or disappointment that

resulting from comparing the perceived performance to the expectations. Hunt [17] wrote that satisfaction is a function of consumer's belief that he or she was treated fairly. Gustafsson [18] said that customer satisfaction is defined as the overall evaluation of the performance of an offering date. This overall evaluation has a strong positive effect on customer loyalty intentions across of services and products category. Based on those theories, customer satisfaction is the feeling of customers about the products or services performance evaluated at the end of consuming the product. Measuring and understanding the customer satisfaction is important to make the customers become loyal-- they do repeat buying, refer the product to other people, and reject other companies' product.

Scholars had researched the effect of on line service quality or e-service quality to the customer satisfaction. Cronin and Taylor [19] hypothesized that satisfaction is an antecedent of service quality. Zeithaml et al. [15] stated that on line service quality as one of factors that drives customer satisfaction. Wolfinger and Gilly [20] found that online service quality has significant effects to the overall customer satisfaction.

Wolfinger and Willy [20] found that reliability and fulfillment are the strongest predictor of customer satisfaction. Liu and Arnett [21] identified that responsiveness and privacy are the critical dimensions for website success in the contact the customer satisfaction. Efficiency, Reliability, Fulfillment, Privacy, and Responsiveness have been proven by several authors in different studies, such as : Yang & Fang [22]; Yang & Jun [23]; and Saha & Zao [24] as the dimensions of E-Service Quality that have significant effect on the customer satisfaction.

Considering the theories discussed above, the overall service quality dimensions used in this research are efficiency, fulfillment, reliability, privacy, and responsiveness as shown in figure 1.



**Conceptual Model for e-Customer Satisfaction**  
Source: Saha & Zhao [24]

## V. HYPOTHESES, MEASUREMENT AND DATA COLLECTION METHOD

In line with the schematic relationship among variables as shown in Figure 1, the hypotheses of this present study are as follows:

H.1. Over all Service Quality has a positive influence on e-Customer Satisfaction.

H.2. Efficiency has a positive influence on e-Customer Satisfaction.

H.3. Reliability has a positive influence on e-Customer Satisfaction.

H.4. Responsiveness has a positive influence on e-Customer Satisfaction.

H.5. Fulfillment has a positive influence on e-Customer Satisfaction.

H.6. Privacy has a positive influence on e-Customer Satisfaction.

To test the hypotheses, this study collected data by using questionnaire. The validity and reliability of the questionnaire were assessed to ensure that the questionnaire accurately measured the constructs [25,26]. The reliability test determines the consistency of a developed instrument in measuring its target construct, and can be conducted using an inter-item consistency reliability test [25]. Among the types of this test, the most popular for multipoint-scaled items is the Cronbach's Alpha ( $\alpha$ ) coefficient, the higher the coefficient, the better the measuring instrument.  $\alpha$  coefficients with values ranging from 0.60 to 0.70 are deemed as the lower limit of acceptability; thus, a minimum value of 0.7 is necessary to indicate reliability [26].

Validity is verified to determine the effectiveness of the developed instrument in measuring its target construct and whether the instrument measures the correct construct [25]. Validity can be divided into: (a) content or logical validity; (b) criterion-related validity, which is categorized into predictive and concurrent validity; and (c) construct validity, which can be measured by convergent and discriminate validity.

Content validity can be achieved through careful item selection, a studious review of previously tested measures, as well as through incorporation of suggestions from literature and information obtained from a pilot study of the instrument [26, 28, 29]. All of these suggested methods for achieving good content validity of a construct were used in preparing the operationalization for each construct in the present study. The questionnaire was also assessed by two education experts who are also as experts in the Indonesian language and one business practice in e-commerce. The aim of this process was to validate the content of the questionnaire in terms of relevance, representativeness, suitability, accuracy, and wording [29,30].

To test the construct validity and reliability of the questionnaire used, this study distributed the questionnaire to 30 respondents. The collected data were analyzed by using SPSS for Windows version 17.0 program. There are 24 items of 6 variables, and the result of SPSS shows that all the items were valid and reliable, thus all the items were hold retained in the questionnaire that were distributed to the respondents of main data collection.

A survey method using a questionnaire was conducted to collect the main data for testing the hypotheses. This study involved 100 respondents which are selected by using purposive sampling. The questionnaire in Google doc. format were distributed through social media and

online forums such as kaskus.co.id, chip.co.id, and female daily users that has experienced online shopping in Bhinneka.com sites. The e-mail address were required to prevent double answer, thus no data come from the same email address included in the data analyzing process. All the data collected from the web questionnaires were automatically recorded in spreadsheet format in author google account. Thank you mail were sent to the individuals who participate in the research, and free mobile balance were given to the respondent to increase the rate for participating the research.

## VI. DATA ANALYSIS METHODS AND RESULT

Multiple regression analysis was used to analyze the influence of **efficiency, fulfillment, reliability**, privacy, and responsiveness to customer satisfaction and [26]. The F test was used to determine the level of significant of the relationship between independent variables simultaneously on the dependent variable [25]. The result of statistics analysis shows that the calculated F value is 124.426 with a significance (P) value of 0.000 which is less than 0.05. Thus, this study concludes that variable efficiency, reliability, responsiveness, fulfillment and privacy jointly have a positive and significant influence on customer satisfaction.

This study also use T test to determine the significance effect of efficiency, reliability, responsiveness, fulfillment and privacy to customer satisfaction separately or partially [25]. The result of statistics analysis shows that the calculated T value of Reliability, Fulfillment, Responsiveness, Privacy, and Efficiency are respectively 3.195; 2.490; 5.170; 3.436; and 2.341 with a significance value (P) less than 0.05. Thus, this study concludes that variable efficiency, reliability, responsiveness, fulfillment and privacy partially have positive and significant influenced on customer satisfaction.

The coefficient of determination ( $R^2$ ) was used to determine the level of accuracy in regression analysis, the coefficient of determination ( $R^2$ ) is between 0 and 1. If  $R^2$  is zero means that independent variable has absolutely no effect on the dependent variable. If the  $R^2$  more close to one, it can be said that the effect of independent variables on the dependent variable is good.  $R^2$  is also used to determine the percentage change in the dependent variable which are caused by the independent variable [25]. The statistics test result shows that the adjusted  $R^2$  in this research is 0.862. It means that 86.2% of customer satisfaction are determined by efficiency, reliability, responsiveness, fulfillment and privacy of online service quality. While the rest, which is 13.8% of customer satisfaction are effected by others variable which are not included in this research.

## VII. CONCLUSION AND DISCUSSION

The findings of the study show that all of the hypotheses in this study were supported by the data. This study also found that the Responsiveness dimension of Bhinneka.com had the lowest score. To improve the responsiveness dimensions, the company should handle products returns through creating better system to make the products return can be handled well. The company

also need to provide convenience options for returning items, since the convenience option as the second worst service quality.

The delivery aspect was the biggest issues in fulfillment dimension. The company should quickly deliver the products that consumer had ordered and if there was any problem with delivery, the company should give notices to the customers.

Some of the respondents felt that they did not get correct online services from Bhinneka.com sites. Hence the company should make sure that every service in the sites was delivered correctly and maintain their sites technical functions is working properly. They also mention that they could not able to complete their transactions quickly. The company could decrease the length of order form and allow direct online payment methods to enables the customers to finish their transactions quickly.

## REFERENCES

- [1] Asosiasi Penyelenggara Jasa Internet Indonesia. (2013). Retrieved February 23, 2014, from <http://www.apjii.or.id/v2/read/index-article/statistik.html>
- [2] Rouse, M. (2005). What is e-commerce (electronic commerce or EC)? - Definition from WhatIs.com. Retrieved February 24, 2014, from <http://searchcio.techtarget.com/definition/e-commerce>
- [3] eMarketer.(2013) B2C Ecommerce Climbs Worldwide, as Emerging Markets Drive SalesHigherRetrieved February 24, 2014, from <http://www.emarketer.com/Article/B2C-Ecommerce-Climbs-Worldwide-Emerging-Markets-Drive-Sales-Higher/1010004>
- [4] Karimmudin, Amir (2014, February 13). Ulang Tahun ke 21 Bhinneka segera perbarui platform e-commerce dan luncurkan marketplace terkurasi. Retrieved from <http://dailysocial.net/post/ulang-tahun-ke-21-bhinneka-segera-perbarui-platform-e-commerce-dan-luncurkan-marketplace-terkurasi>
- [5] Alexa Top 500 Global Sites. (2014). Retrieved February 24, 2014, from <http://www.alexa.com/topsites>
- [6] SWA.(2014) 2013 Bhinneka.Com Cetak Omset Lebih Dari Rp 600 Miliar | SWA.co.id. Retrieved April 4, 2014, from <http://www.swa.co.id/business-strategy/2013-bhinneka-com-cetak-omset-lebih-dari-600-miliar>
- [7] Mazidah, I. (2014, March 27). Lazada Incar Satu Juta Pengunjung - Kontan Online. Retrieved April 29, 2014, from <http://industri.kontan.co.id/news/lazada-incar-satu-juta-pengunjung>
- [8] Alexa Site Overview.(2014). Retrieved May 12, 2014, from <http://www.alexa.com/comparison/bhinneka.com>

- [9] Peterson, R.A., Balasubramanian, S. & Bronnenberg, B.J (1997). Exploring the implications of the internet for consumer marketing, *Journal of the Academy of Marketing Science*, Vol. 25 No. 4, 320-46.
- [10] Zeithaml, V.A., Parasuraman, A. & Malhotra, A., (2002) Service quality delivery through web sites: a critical review of extent knowledge, *Journal of the academy of marketing science*, Vol 30 No.4.
- [11] Mougayon, W. (1997), *Opening Digital Markets*, CyberManagement, Toronto.
- [12] Parasuraman, A., Berry, L.L. & Zeithaml, V.A (1988). SERVQUAL: A Multiple-Items Scale for Measuring Consumer Perceptions of Service Quality, *Journal of retailing*, volume 64 No.1, Spring
- [13] Parasuraman, A., Berry, L.L. & Zeithaml, V.A (1985). A conceptual model of service quality and its implications for future research, *Journal of Marketing* Vol 49, Fall
- [14] Zeithaml, V.A., Parasuraman, A. & Malhotra, A., (2000) A Conceptual Framework for Understanding e-Service Quality: Implications for future Research and Managerial Practice: Working Paper, Cambridge MA, Marketing Science Institute, Report Number 00-115
- [15] Zeithaml, V. A. & Bitner, M. J. (2003) *Service Marketing: Integrating Customer Focus Across the Firm*, New York: McGraw-Hill Higher Education.
- [16] Kotler, P., & Keller, K. L. (2000). *Marketing management* (10th ed.). Upper Saddle River, NJ: Prentice Hall.
- [17] Hunt, Shelby D. (1991), *Modern Marketing Theory: Critical Issues in the Philosophy of Marketing Science*, Cincinnati: SouthWestern Publishing Co
- [18] Gustafsson, Anders., Johnson, Michael D., & Roos, Inger. (2005). "The effects of customer satisfaction, Relationship Commitment Dimensions and Triggers on Customer Retention". American Marketing Association.
- [19] Cronin, J.J & Taylor, S.A (1992). Measuring Service Quality: A Reexamination and Extension, *Journal of Marketing*, 56 July 55-68
- [20] Wolfenbarger, M. and M. Gilly, "E-TailQ: Dimensionalizing, Measuring and Predicting Retail Quality", *Journal of Retailing*, No. 27:183-198, 2003.
- [21] Liu, C. & Arnett, K.P (2000). Exploring the factors associated with web site success in the context of electronic commerce, *Information and Management*, Vol 38 No.1, pp 23-34
- [22] Yang, Z. & Fang, X. (2004). Online service quality dimensions and their relationship with satisfaction: A content analysis of customer reviews of securities brokerage services, *International Journal of Service Industry Management*, Vol 15 No. 3.
- [23] Yang, Z. and M. Jun (2002). Consumer perception of e-service quality: From Internet purchase and non-purchaser perspectives. *Journal of Business Strategies*, 19: 19-41.
- [24] Saha, P., & Zhao, Y. (2005), *Relationship Between Online Service Quality and Customer Satisfaction: A study in Internet Banking* (Dissertation). Lulea University of Technology
- [25] Sekaran, U. and Bougie, R. (2010) *Research Method for Business, A Skill Building Approach*. Fifth Edition. John Wiley & Sons Inc., Singapore
- [26] Hair, J. F. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Upper Saddle River, NJ: Pearson Education.
- [27] Churchill, G.A., and Iacobucci, D. (2005). *Marketing Research Methodological Foundations*. Ninth Edition. South-Western: Thomson Corporation.
- [28] K, W. Chew (2007) *Modified Technology Acceptance Models as a Predictor of Online Purchase Behavior : a Malaysian Perspective* (Doctoral Dissertation, Multimedia University)
- [29] Indrawati (2015) *Metode Penelitian Manajemen dan Bisnis Konvergensi Teknologi Komunikasi dan Informasi*. Bandung: Refika.
- [30] Indrawati (2012). *Behavioral Intention to Use 3G Mobile Multimedia Services in Indonesia*, Doctoral Dissertation, Multimedia University.