The Role of E-Satisfaction in Mediating the Effect of E-Service Quality and E-WOM on E-loyalty on Online Marketplace Customers in Denpasar, Bali, Indonesia

Santika et al.
The Role of E-Satisfaction in Mediating the Effect of E-Service Quality and E-WOM on E-loyalty on Online Marketplace Customers in Denpasar, Bali, Indonesia

I Wayan Santika1*, Komang AS Pramudana1, Ni LPS Astitiani2
1Management Department, Faculty of Economics and Business, Udayana University, Bali, Indonesia.
2Digital Business Department, Bali International University, Bali, Indonesia.

*Correspondence: iwsantika@gmail.com

Received: Dec 06, 2019; Accepted: Jan 05, 2020

Abstract
This research is motivated by the convenience for consumers to move from an online site to another online site when shopping online. This makes consumers vulnerable to switching to other online shopping sites. This study aims to determine the role of e-satisfaction in mediating the effect of e-service quality and e-WOM on e-loyalty in online marketplace customers in the city of Denpasar. The sampling method in this study is nonprobability sampling with a purposive sampling technique. Data were collected from 120 respondents who met the criteria of having made an online shopping transaction at least three times on an online marketplace site and is domiciled in Denpasar City. The analytical method used is path analysis estimated using statistical software. The results showed that e-service quality had a positive and significant effect on e-satisfaction; e-WOM has a positive and significant effect on e-satisfaction; e-service quality has a positive and significant effect on e-loyalty; e-WOM has a positive and significant effect on e-loyalty; e-satisfaction has a positive and significant effect on e-loyalty; e-satisfaction is significantly able to mediate the effect of e-service quality on e-loyalty; and e-satisfaction is significantly able to mediate the effect of e-WOM on e-loyalty. The contribution that can be given by the author is to enrich and complete the study of online marketing especially in developing countries and especially Bali; increasing online sales is important to be studied more.

Keywords: E-service quality; E-wom; E-satisfaction; E-loyalty.

1. INTRODUCTION

The development of increasingly sophisticated internet technology has benefited many parties, including business people in Indonesia. Online business is growing rapidly in Indonesia, which is marked by the increasing number of businesses that use the internet as a marketing medium, such as to promote, interact, and connect with customers. Through the internet, companies can present product information, prices, personality purchases, orders, payment systems, and delivery of goods to customers.

The development of business lines is indicated by an increase in the number of online stores and the number of consumers who shop online in Indonesia. This development is due to the program supporting online shopping applications that provide proper convenience (ease of use) and efficacy (usability) for users to create online stores and sell them online. Another advantage of online shopping is the flexibility of space and time so that consumers can shop anytime and anywhere. Online trading via the internet is known as e-commerce. E-commerce is the activity of conducting online business transactions
via the internet and devices that are integrated with the internet (Laudon and Traver, 2012). E-commerce is the result of developments in society as an effort to meet human needs in more effective and efficient ways. E-commerce that is growing rapidly as a medium of buying and selling is the online market. The online market is an online market consisting of online stores for selling and conducting transactions online.

The development of the online market has caused online shops to compete for the market. Repeat purchases at online shopping is an important problem caused by the convenience of consumers to switch from online stores to more online stores and make it easier for consumers to compare purchases of the same product at different online stores (Lu et al., 2013). In other words, online consumers can freely choose an online site and make a purchase without having to be attached to the online site. The result is that low consumer loyalty is often found in online shopping, which makes it difficult for online companies to realize long-term and sustainable profits (Yen, 2010).

Changing consumers from one product to another shows low consumer loyalty to the product, wherein the online context, loyalty is called e-loyalty. E-loyalty on online purchases is the attitude of consumers who are aware of always using certain online services and recommend them to other potential users to participate in using this online service (Hur et al., 2011). The higher the level of e-loyalty, the higher the awareness of consumers to continue to use and recommend this online service.

Several studies have shown that e-loyalty is influenced by consumer ratings of the quality of electronic services, as in the study of Chen et al. (2013). In online shopping, consumers cannot conduct an assessment of the physical elements of the company caused by the absence of direct interaction (face to face) between consumers and companies so that consumers can only assess the quality of services provided by online companies, called the quality of electronic services. The quality of electronic services shows how electronic commerce sites serve and facilitate online shopping, ordering, and shipping of products or services effectively and efficiently (Zeithaml et al., 2000).

One research paper shows that the quality of electronic services has a positive and significant influence on online customer loyalty. Other results are that the quality of electronic services has a positive and significant effect on customer satisfaction, and the quality of electronic services also has a significant effect on customer loyalty through customer satisfaction. Although the research of Abdullah et al. (2015) states that the electronic service quality hypothesis has a positive and significant effect on customer loyalty not accepted (rejected), the quality of electronic services is not a predictor of customer loyalty in online banking business application users. Chen et al. (2013) confirm that e-service quality has a positive and significant effect on the perception of customer satisfaction and customer loyalty for businesses to business e-commerce users. According to Li et al. (2009), the dimension of e-service quality is seen from two perspectives, namely the company perspective and the customer perspective. When viewed from a company perspective, the dimensions of e-service quality that must be considered are ease of use (ease for customers to use a website), website design (website must be well designed and visually appealing), reliability (consistency of performance and web reliability), system availability (correct technical functions of the website), privacy (security and protection of customer information), responsiveness (effective problem handling and returns via the internet), and empathy (individual care and attention given to customers via electronic channels). Meanwhile, if viewed from the customer's perspective, the dimensions of e-service quality that must be considered are experience (the impression of the company through previous customers) and trust (customer trust by providing fast and information-rich services).

Research Ario and Djatmiko (2016) shows that increasing e-service quality will increase customer satisfaction and increase e-loyalty. Customer satisfaction is a measure between customer expectations and company products or services as long as customers use the company's products or services (Yong et al. in Andreas 2012). Research by Ristina and Rusfian (2013) shows that e-service quality has a positive and significant effect on customer satisfaction, but e-service quality does not directly influence repurchase. In contrast, another research paper shows that e-service quality has a positive and significant effect on customer satisfaction and e-service quality directly affects e-loyalty.

Based on the background of the problem and the results of previous studies, a study was conducted to analyze the effect of e-service quality and e-wom on e-loyalty with e-satisfaction as a mediating variable on online marketplace customers in Denpasar City.
2. CONCEPTUAL FRAMEWORK AND HYPOTHESIS

This study analyzes the effect of e-service quality and e-wom on e-loyalty with e-satisfaction as a mediating variable. Figure 1 shows the conceptual framework of the study that explains the relationship of each variable in this study.

![Figure 1. Research Conceptual Framework.](image)

Some literature shows that e-service quality has a positive and significant effect on e-satisfaction and e-loyalty. Likewise, the results of the study of Chen et al. (2013) show that e-service quality has a positive and significant effect on customer satisfaction and e-loyalty for e-commerce users. The research of Ario and Djatmiko (2016) shows that increasing e-service quality will increase customer satisfaction and increase e-loyalty. Although the research of Abdullah et al. (2015) states that the e-service quality hypothesis has a positive and significant effect on e-loyalty not accepted (rejected), the e-service quality is not a predictor of e-loyalty in online banking business application users. Similarly, the research by Ristina and Rusfian (2013) shows that e-service quality has a positive and significant effect on customer satisfaction, but e-service quality does not directly influence repurchases on online shopping. The results of a research paper again reinforces that e-service quality has a positive and significant effect on customer loyalty (e-loyalty) for Go-Jek customers. Other results are that e-service quality has a positive and significant effect on customer satisfaction, and e-service quality has a significant effect on e-loyalty through customer satisfaction.

Based on previous empirical studies, the following hypothesis can be arranged: H1: e-service quality has a positive and significant effect on e-satisfaction. H2: e-wom has a positive and significant effect on e-satisfaction. H3: e-service quality has a positive and significant effect on e-loyalty. H4: e-wom has a positive and significant effect on e-loyalty. H5: e-satisfaction has a positive and significant effect on e-loyalty. H6: e-satisfaction significantly mediates the effect of e-service quality on e-loyalty. H7: e-satisfaction significantly mediates the effect of e-wom on e-loyalty.

3. METHOD(S)

This study uses a quantitative approach to the type of associative research. Associative research is able to explain the relationship between one variable with another variable. The indicators forming the variables refer to several sources that have been modified to suit the subject of this study. This research was conducted to explain the effect of e-service quality and e-wom on e-loyalty through e-satisfaction. This research was conducted on online marketplace customers in Denpasar City by collecting data through questionnaires.

The study population was all online marketplace customers in the city of Denpasar. The sample size plays an important role in estimating and interpreting results. This study uses 23 indicators so that a sample size of 115-230 respondents was obtained by using estimates based on the number of parameters. The number of samples used in this study was 120 respondents.
The sampling technique used in this study is nonprobability sampling, which is a sampling technique that does not provide equal opportunities or opportunities for each element or member of the population to be selected as a sample (Sugiyono, 2014). The sampling technique used is using purposive sampling and incidental sampling techniques. Purposive sampling is a sampling technique with certain considerations in which the researcher must really know and assume that the respondent chosen can provide information in accordance with the problem under study. Incidental sampling is a sampling technique based on coincidence, that is, anyone who meets coincidentally with a researcher will be sampled, if it is considered that the person is suitable as a data source. The criteria for purposive sampling in this study were respondents who were online marketplace customers who had shopped online at least three times, had a minimum of high school education or equivalent, and were domiciled in Denpasar.

The data analysis technique used is path analysis or called a path analysis. Path analysis is an extension of regression analysis linear multiple useful to assess causal relationships between variables (Preacher and Hayes, 2004). Path analysis techniques will be used in testing the amount of contribution expressed by the path coefficient in each path diagram of the causal relationship or cause and effect created by the free variable to the dependent variable. While testing the mediation hypothesis is done by a procedure developed by Sobel (Suyana, 2016). This Sobel test is done by testing the strength of the indirect effect of the independent variable (X) on the dependent variable (Y) through mediating/intervening variables (M).

### 4. RESULTS AND DISCUSSION

Respondent characteristics in this study were seen from gender, age, education, online marketplace sites used, and tools used to access online marketplace sites. As shown in Table 1, the largest percentage of respondents were women (62%), aged between 26 and 35 years (44%), and undergraduate education (57%). The most widely used online marketplace site is Tokopedia (53%), while the tools used to access online marketplace sites are dominated by smartphones (91%).

In this research, the analysis technique used is the path analysis technique. Path analysis is used to determine the pattern of relationships between three or more research variables. The results of the path analysis for regression equation 1 and regression equation 2 are presented in Table 2.

From the results of data processing presented in Table 2, the following hypotheses can be discussed: (i) Hypothesis 1 testing obtained the significance level of two-sided test $t$ for the e-service quality variable of 0.00 smaller than 0.05 with a positive regression coefficient of 0.582. This shows that H1 is accepted, which means that e-service quality has a positive and significant effect on e-satisfaction. This means that the more the quality of online services increases, the more the satisfaction of online marketplace customers in the city of Denpasar. (ii) Hypothesis 2 testing obtained the significance level of $t$ two-tailed test for the e-wom variable of 0.00 smaller than 0.05 with a positive regression coefficient of 0.298. This shows that H1 is accepted, which means that e-wom has a positive and significant effect on e-satisfaction. This means that the increasing online word-of-mouth efforts will also increase the satisfaction of online marketplace customers in the city of Denpasar. (iii) Hypothesis 3 testing obtained the significance level of $t$ two-tailed test for the e-service quality variable of 0.00 smaller than 0.05 with a positive regression coefficient of 0.298. This shows that H1 is accepted, which means that e-service quality has a positive and significant effect on e-loyalty. This means that the more the quality of online services increases, the loyalty of online marketplace customers in Denpasar City increases. (iv) Hypothesis 4 testing obtained the significance level of $t$ two-tailed test for the e-wom variable of 0.00 smaller than 0.05 with a positive regression coefficient of 0.170. This shows that H1 is accepted, which means that e-wom has a positive and significant effect on e-loyalty. This means that increasing word-of-mouth efforts online will increase customer loyalty in the online marketplace in the city of Denpasar. (v) Hypothesis 5 testing obtained the significance level of $t$ two-tailed test for an e-satisfaction variable of 0.00 smaller than 0.05 with a positive regression coefficient of 0.684. This shows that H1 is accepted, which means that e-satisfaction has a positive and significant effect on e-loyalty. This means that increasing customer satisfaction increases customer loyalty in the online marketplace in Denpasar. (vi) Hypothesis 6 testing uses the Sobel test by calculating the value of $Z$ count as follows: $Z = \frac{ab}{\sqrt{b^2s_c^2 + a^2s_b^2}} = 7.138$. Because
Table 1. Characteristics of Respondents.

| No. | Characteristics                  | Information (%) |
|-----|----------------------------------|-----------------|
| 1   | Age of respondent                |                 |
|     | 17-25 years old                  | 18              |
|     | 26-35 years old                  | 44              |
|     | 36-45 years old                  | 34              |
|     | 46-55 years old                  | 3               |
|     | 56 years and over                | 1               |
| 2   | Gender                           |                 |
|     | Men                              | 38              |
|     | Woman                            | 62              |
| 3   | Education                        |                 |
|     | SMA/SMK                          | 39              |
|     | Bachelor                         | 57              |
|     | Others                           | 4               |
| 4   | Largest online marketplace used  |                 |
|     | Tokopedia                        | 53              |
|     | Bukalapak                        | 30              |
|     | Lazada                           | 14              |
|     | Blibli.com                       | 1               |
|     | OLX                              | 1               |
|     | Others                           | 1               |
| 5   | Tool for accessing online        |                 |
|     | marketplace sites                |                 |
|     | Smartphone                       | 91              |
|     | The laptop                       | 6               |
|     | Tablet                           | 2               |
|     | PC                               | 1               |

Source: Data processed, 2019.

Table 2. Range of Coefficients of Regression Equation 1 and Regression Equation 2.

| Model | Unstandardized Coefficients | Standardized Coefficients | T | Sig. |
|-------|-----------------------------|---------------------------|---|------|
|       | B | Std. Error | Beta |    |     |
| 1     |   |           |      |    |     |
|       | (Constant) |  |  |  |  |  |
|       | E-service quality (X1) | 0.726 | 0.094 | 0.582 | 7.100 | 0.000 |
|       | E-wom (X2) | 0.359 | 0.091 | 0.298 | 3.956 | 0.000 |
|       | E-satisfaction (M) |  |  |  |  |     |
|       | (Constant) |  |  |  |  |  |
|       | E-service quality (X1) | 0.278 | 0.033 | 0.298 | 8.354 | 0.000 |
|       | E-wom (X2) | 0.159 | 0.031 | 0.170 | 5.065 | 0.000 |
|       | E-satisfaction (M) | 0.614 | 0.033 | 0.684 | 18.879 | 0.000 |

Dependent variable: e-satisfaction (M)

| Model | Unstandardized Coefficients | Standardized Coefficients | T | Sig. |
|-------|-----------------------------|---------------------------|---|------|
|       | B | Std. Error | Beta |    |     |
| 2     |   |           |      |    |     |
|       | (Constant) |  |  |  |  |  |
|       | E-service quality (X1) | 0.230 | 0.122 | 0.298 | 8.354 | 0.000 |
|       | E-wom (X2) | 0.159 | 0.031 | 0.170 | 5.065 | 0.000 |
|       | E-satisfaction (M) | 0.614 | 0.033 | 0.684 | 18.879 | 0.000 |

Dependent variable: e-loyalty (Y)
the $Z$ count of 7.138 is greater than 1.96, H1 is accepted, which means e-satisfaction is a variable that mediates the effect of e-service quality on e-loyalty. These results indicate that it is important to pay attention to customer satisfaction to create customer loyalty through quality online services to online marketplace customers in Denpasar. (vii) Hypothesis 7 testing uses the Sobel test by calculating the value of $Z$ count as follows: $Z = \frac{ab}{\sqrt{b^2s_b^2 + a^2s_a^2}} = 2.174$. Because the $Z$ count of 2.174 is greater than 1.96, H1 is accepted, which means e-satisfaction is a variable that mediates the effect of e-wom on e-loyalty. These results indicate that it is important to pay attention to customer satisfaction to create customer loyalty with online word-of-mouth efforts on online marketplace customers in Denpasar City.

5. CONCLUSIONS

The conclusion of this study is based on the results of data analysis, and the discussion that has been carried out can be stated as follows: (i) E-service quality has a positive and significant effect on e-satisfaction, thus the more the quality of online services increases, the more online customer satisfaction increases. (ii) E-wom has a positive and significant effect on e-satisfaction, so the more word-of-mouth online increases, the more online consumer satisfaction increases. (iii) E-service quality has a positive and significant effect on e-loyalty, so the more the quality of online services increases the more online consumer loyalty increases. (iv) E-wom has a positive and significant effect on e-loyalty, so the more word-of-mouth online increases, the more online consumer loyalty increases. (v) E-satisfaction has a positive and significant effect on e-loyalty. This shows the importance of the role of customer satisfaction on service quality will have an impact on the loyalty of online marketplace customers in the city of Denpasar. (vii) Finally, this study concludes that E-satisfaction significantly mediates the effect of e-wom on e-loyalty. These results indicate that the important role of customer satisfaction in word of mouth will affect the loyalty of online marketplace customers in the city of Denpasar.

Acknowledgment
No financial or material support.

Author Contributions
All authors contributed equally to this study.

Conflict of Interest
None.

References
Abdullah SO, Chowdhury IA, Omar AR, Osman LH (2015). Key drivers of customer loyalty in online banking. Annals of Management Science 4 (1): 89-110.
Andreas J (2012). The effect of brand credibility on word of mouth through customer satisfaction & customer loyalty. Journal of Widya Mandala Catholic University in Surabaya 11 (4): 1-8.
Ario AA, Djatmiko T (2016). Effect of E-service Quality on E-customer Satisfaction and E-customer Loyalty on Lazada. co.id. Telecommunications and Informatics Business Management Study Program, Faculty of Economics and Business, Telkom University: Bandung, West Java, Indonesia.
Chen JV, Chen Y, Capistrano EPS (2013). Process quality and collaboration quality on B2B e-commerce. Industrial Management & Data Systems 113 (6): 908-926.
Hur Y, Ko Yong Jae, Valacich J (2011). A structural model of the relationships between sport website quality, e-satisfaction, and e-loyalty. Journal of Sport Management 25: 458-473.
Laudon KC, Traver CG (2012). E-Commerce, Business Technology Society. Addison Wesley: Boston, MA.
Li H, Liu Y, Suomi R (2009). Measurement of e-service quality: an empirical study on online travel services. 17th European Conference on Information System Journal. https://pdfs.semanticscholar.org/1a33/23a0867a65fa5ff23c380be82f9eb087df83.pdf [20th January 2020].

Lu LC, Chang HH, Yu ST (2013). Online shoppers' perceptions of e-retailers' ethics, cultural orientation, and loyalty: an exploratory study in Taiwan. Internet Research 23 (1): 47-68.

Preacher KJ, Hayes AF (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior Research Methods, Instruments & Computer 36 (4): 717-731.

Ristina DA, Rusfian E (2013). The effect of e-service quality on repurchase intention through customer satisfaction. http://lib.ui.ac.id/naskahringkas/2015-09/S-Ristina%20Dian%20Astuti. Accessed 21 January 2017 at 23.44 Wita.

Sugiyono (2014). Understanding Business Research (Quantitative, Qualitative and R&D Approaches). Alfabeta: Bandung.

Suyana U (2016). Textbook, Quantitative Analysis Application. Main Literature: Denpasar.

Yen YS (2010). Can perceived risks affect the relationship of switching costs and customer loyalty in e-commerce? Internet Research 20 (2): 210-224.

Zeithaml VA (2000). Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. Journal of the Academy of Marketing Science 18 (6): 67-85.