KnE Social Sciences
ICASI
International Conference on Advance & Scientific Innovation
Volume 2023

Research Article

Customer Satisfaction In An Online Marketplace: A Case Study of ITL Trisakti Students

Marthaleina Ruminda Sitorus, Aisyah Rahmawati, Putri Ayu Lestari, Salsabila Fitri Alfaris, Novi Indah Susanthi, Lira Agusinta

Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia

ORCID
Marthaleina Ruminda: https://orcid.org/0000-0003-2096-5347

Abstract.
This study aimed to discover the effect of web quality dimensions, i.e. usability, information quality, and interaction service, on customer satisfaction in a marketplace used by Institut Transportasi dan Logistik (ITL) Trisakti students. The quantitative study has 362 participants who were selected using a regression method. The results of the study revealed that the impact of usability, information quality, and interaction service affected online customer satisfaction. The multiple linear regression equation indicated that an increase in usability, quality of information, and interaction service would increase customer satisfaction in the marketplace. Based on the results of the F-test, it can be concluded that usability, information quality, and interaction service variables simultaneously influenced customer satisfaction in the marketplace.

Keywords: customer satisfaction, information quality, interaction service, usability

Corresponding Author:
Marthaleina Ruminda Sitorus;
email: marthaleina.rs@gmail.com

Published 26 May 2023

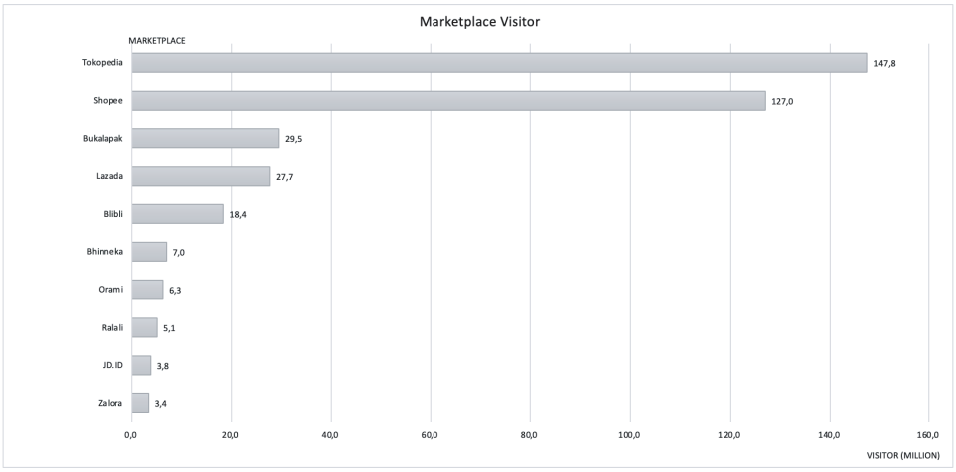
Publishing services provided by Knowledge E

Selection and Peer-review under the responsibility of the ICASI Conference Committee.

1. Introduction

Despite the outbreak of the Covid-19 pandemic, the Ministry of Co-operatives and SME is optimistic about the increase in MSME's export contribution to 15.12% in 2021. The Indonesian Ecommerce Association (idEA) states that, until March 2020, the number of MSMEs joining in the markets reached 4.8 million. The Managing Director of idEA, Bima Laga, says that idEA targets 2 million MSMEs to join online markets until the end of 2020. However, the data shows that 3.8 MSME made it to online markets in late 2020. The National Online Shopping Day (Harbolnas) program launched by idEA from 2018 to 2020 saw a surge in online transactions. Nielsen data shows that online transactions at Harbolnas grew from IDR 6.1 trillion in 2018 to IDR 9.1 trillion in 2019, and continued to IDR 11.6 trillion in 2020.

The marketplace rank in Indonesia in the first quarter (Q1) (March) of 2021 is presented in Figure 1.



Source: databoks.katadata.co.id

Figure 1: Marketplace Rank in Indonesia in 2021.

According to Figure 1 regarding the market level in Indonesia in the first quarter of 2021, Tokopedia ranked first in Indonesia with a total of 135.1 million visitors. Online marketplace with usability, good information quality and a good interaction service will have an impact on the satisfaction of marketplace customers. The webqual 4.0 dimensions were used to assess customer satisfaction using on-line marketplace without space and time limits, which is challenging to apply in traditional stores during the COVID-19 pandemic. It is tempting to examine the impact of usability, quality of information and interaction service variables on the satisfaction of online market customers in a case study of ITL Trisakti students.

2. Literature

2.1. Web Quality

Webqual was popular with the Service Quality (ServQual) term, commonly used by researchers or consultants to measure or analyze the quality or service provided by a company to customers [1], [2]. Web quality is an improvement of ServQual, defined as a method in measuring the website service quality based on customer responses. Web quality has three indicators: usability, information quality, and service interaction quality [3], [4].

2.2. Usability

Easiness is defined as the extent of one's belief that technology utilization is free from efforts. Satisfaction of site users is discovered in usability [5]. Customers expect usability in the visited website application, resulting in satisfaction.

2.3. Information Quality

Information quality has a pivotal role in creating customers in a marketplace. Several marketplace will strive to put clear, safe, and trusted information to attract customers in using such marketplace [6]. Information quality should deliver satisfaction to customers. The higher the satisfaction level perceived by customers, the better the information quality of a website.

2.4. Interaction Service

Service interaction quality is the quality of service interaction experienced by users when one deeply scrutinizes a website, actualized in trust and empathy. Humans cannot live without other individuals; thus, interaction will always present in their lives [7].

2.5. Customer Satisfaction

Customers rank warranty contract as the highest among the dimensions of aftersales service, followed respectively by delivery and installation in the next positions and determine customer satisfaction [4], [8]. Optimal customer satisfaction level will encourage customer loyalty. Satisfaction is measured from how much customer satisfaction is fulfilled.

3. Method

This study employed a quantitative method with a descriptive approach. Data collection was performed using a questionnaire with a Likert scale with a score interval of 1 (bad) to 5 (excellent). Data were collected via a survey distributed to respondents, ITL Trisakti students who used and transacted in several selected marketplace. Samples were collected using the simple random sampling method, obtaining 362 respondents. The

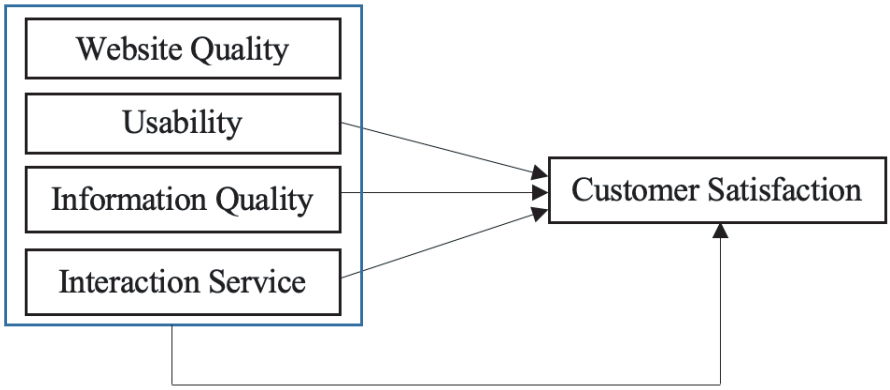


Figure 2: Research Framework.

validity test is considered valid (significant) if the standard value is 0.3 from the validity or the correlation score is higher than the standard value [9]. The questionnaire is declared reliable if the Cronbach's alpha value is >0.6. In the multiple linear regression test, if Sig value is <0.05, the independent variable (X) partially affects the dependent variable (Y).[10]. The normality test in the current study was using P-Plot. The regression model is declared distributing normally if plotting data (points) illustrate the actual data follow the diagonal line. [11].

4. Discussion and Result

5. Respondent characteristics in this study were categorized into gender, major, entry year, selected marketplace, and time of marketplace use. The respondent profiles are presented in table 3, table 4, table 5.

TABLE 1: Gender.

Gender	Frequency	Percent	Valid Percent	Cummulative Percent
Male	167	46.1	46.1	46.1
Female	195	53.9	53.9	100.0
Total	362	100.0	100.0	

5.1. Validity and Reliability Tests

The validity test was applied to usability, information quality, interaction service, and customer satisfaction variables.

Table 2: Year Of Students Entry.

Year	Frequency	Percent	Valid Percent	Cumulative Percent
2017	10	2.8	2.8	2.8
2018	252	69.6	69.6	72.4
2019	44	12.2	12.2	84.5
2020	56	15.5	15.5	100.0
Total	362	100.0	100.0	

Table 3: How Often Respondents Visit the Marketplace.

Numbers of Visit	Frequency	Percent	Valid Percent	Cumulative Percent
Very Often (More than 7 times a month)	113	31.2	31.2	31.2
Quite Often (4-6 times a month)	167	46.1	46.1	77.3
Rarely (1-3 times a month)	82	22.7	22.7	100.0
Total	362	100.0	100.0	

Based on the validity test results in table 6, data obtained for each study's item were valid. For the variables measured using 19 questions, the Corrected-Total Correlation from 362 respondents with a 5% significance value was > 0,103. Based on the reliability test results in table 7, data obtained for each study's item were reliable with a Cronbach's alpha value of > 0,60.

5.2. Classic Assumption Test

Based on Figure 3, the classic assumption test results were presented in a histogram against the usability, information quality, interaction service, and customer satisfaction variables, which all are the webqual 4.0 dimensions.

Based on the classic assumption test results in Figure 3, all data in each variable were normally distributed.

5.3. Multiple Linear Regression Test

Table 8 presents the T-test results in a multiple linear regression against the usability, information quality, interaction service, and customer satisfaction variables.

a. Dependent Variable: Customer Satisfaction

Table 4: Validity Test Results.

Variable	Items	Corrected Items-Total Correlation	Description
Usability (X_1)	X_1. 1	0.613	Valid
	X_1. 2	0.742	Valid
	X_1. 3	0.697	Valid
	X_1. 4	0.729	Valid
	X_1. 5	0.623	Valid
	X_1.6	0.652	Valid
	X_1.7	0.655	Valid
Information Quality	X_2. 1	0.771	Valid
(X_2)	X_2. 2	0.756	Valid
	X_2. 3	0.809	Valid
	X_2. 4	0.803	Valid
	X_2. 5	0.761	Valid
Interaction Service	X_3. 1	0.641	Valid
(X_3)	X_3. 2	0.556	Valid
	X_3. 3	0.747	Valid
	X_3. 4	0.813	Valid
	X_3. 5	0.723	Valid
	X_3.6	0.745	Valid
	X_3.7	0.648	Valid
Customer Satisfaction	Y_1	0.729	Valid
(Y)	Y_2	0.823	Valid
	Y_3	0.800	Valid

Table 5: Reliability Test Result.

Variable	Cronbach Alpha	Cronbach Alpha Standard	Description
Usability (X_1)	0.800	0.60	Reliable
Information Quality (X_2)	0.837	0.60	Reliable
Interaction Service (X_3)	0.823	0.60	Reliable
Customer Satisfaction (Y)	0.689	0.60	Reliable

Based on the multiple linear regression T-test in table 8, the following is partial explanation of independent variable effects on dependent variable:

H1: The effect of usability on marketplace customer satisfaction in ITL Trisakti students.

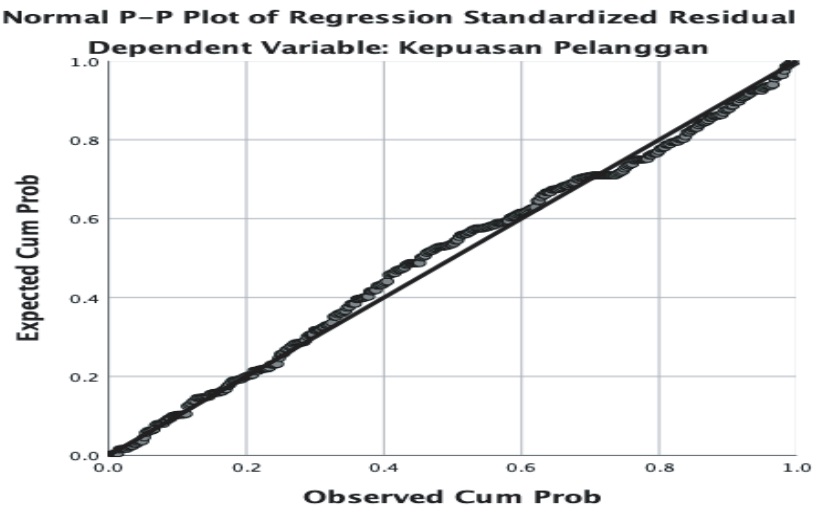


Figure 3: Classic Assumption Test Results.

TABLE 6: T-test Results on Multiple Linear Regression Coefficient.

Model Unstandardized		Coefficients Std. Error	Standadized Coefficients	t	Sig.
	B		Beta		
(Constant)	.741	.306		2.420	.016
Usability	.130	.013	.309	10.147	.000
Information Quality	.158	.016	.328	9.751	.000
Interaction Service	.155	.013	.401	12.268	.000

The calculation result demonstrated that the significance value (X_1) 0.000 < 0.05, and t_{table} = (x/2;n-k-1)= (0.05/2;362-3-1)= (0.025; 358)= 1.96661. It indicates that $t_{calculation} > t_{table}$; hence, usability ($X_1$) partially affected customer satisfaction (Y). Therefore, H_0 was rejected and H_1 was accepted. This study result follows a study by, stating the effect of easy navigation on usability on customer satisfaction.(Suci et al., 2019).

H2: The effect of information quality on marketplace customer satisfaction in ITL Trisakti students.

The calculation result demonstrated that the significance value (X_2) 0.000 < 0.05, and t_{table} = (x/2;n-k-1)= (0.05/2;362-3-1)= (0.025; 358)= 1.96661. It indicates that $t_{calculation} > t_{table}$; hence, information quality (X_2) partially affected customer satisfaction (Y). Therefore, H_0 was rejected and H_1 was accepted. This study result follows a study by, stating the effect of information quality on customer satisfaction (Y). Therefore, H_0 was rejected and H_1 was accepted. This study result follows a study by, stating the effect of information quality on customer satisfaction.[4], [12]

H3: The effect of interaction service on marketplace customer satisfaction in ITL Trisakti students.

The calculation result demonstrated that the significance value (X3) 0.000 < 0.05, and ttable = (x/2;n-k-1)= (0.05/2;362-3-1)= (0.025; 358)= 1.96661. It indicates that tcalculation>ttable; hence, interaction service (X3) partially affected customer satisfaction (Y). Therefore, H0 was rejected and H1 was accepted. This study result follows a study by, stating the effect of interaction service on customer satisfaction.[2], [8], [13]

Table 10 presents the F-test results of multiple linear regression on the usability, information quality, interaction service, and customer satisfaction variables.

TABLE 7: F test results on Multiple Linear Regression ANOVA.

Model	Sum of Squares	df	Mean Square	f	Sig.
Regression Residual Total	536.243	3	178.148	517.200	.000
	123.727	358	.346		
	659.970	361			

Based on the F-test multiple linear regression test results in Table 10, data showed that the simultaneous F-test had $f_{calculation} > f_{table}$, i.e., 517.200 > 3,02087. Therefore, it concluded that usability, information quality, and interaction service simultaneously affected customer satisfaction.[12], [14].

It is consistent with the contention that usability, quality of information and quality of service interactions have had a significant impact on customer satisfaction. It also follows a study claiming that user-friendliness, quality of information and quality of service interactions have had a positive impact on customer satisfaction, both simultaneously and partially.

6. Conclusion

Based on the results of the study, it can be concluded that the dimensions of website quality (WebQual) 4.0 such as the factors of usability, quality of information, and interaction services simultaneously affect marketplace customer satisfaction, a case study on ITL Trisakti students. Based on the results of partial regression on independent variables, namely ease of navigation, quality of information and interaction services,

each affects the dependent variable, namely customer satisfaction case studies in ITL Trisakti students.

Digital market managers should compete to improve digital services. Increasing ease of navigating on digital market applications will provide customer comfort and satisfaction. The best quality of information will provide an incentive for clients to transact. In the same way, quick and accurate interaction services ensure customer satisfaction in the digital market.

References

[1] Parasuraman A. Service productivity, quality and innovation: implications for service-design practice and research. Int J Qual Serv Sci. 2010;2(3):277–86.

[2] Suci A, Oktavia L, Ruminda M, Liauw JK. The Influence of Market Place Mobile Application Towards Purchase Intention By Webqual 4. 0 Method. 2019. pp. 695–703.

[3] Barnes S, Vidgen R. WebQual: An Exploration of Web-Site Quality. WebQual: An Exploration of Web-site Quality. 2000;(June):2014.

[4] Simarmata J, Ruminda M, Kosasih SC, Suvittawat A. Service Innovation for Business Growth: Case Study of Thai and Indonesian Logistic Entrepreneurs. 2018. pp. 1486–1495

[5] Król K, Zdonek D. Local government website usability on mobile devices: test results and recommendations. Digital Policy, Regulation and Governance. 2021;23(2):173–89.

[6] Kumar P, Polonsky M, Dwivedi YK, Kar A. Green information quality and green brand evaluation: the moderating effects of eco-label credibility and consumer knowledge. Eur J Mark. 2021;55(7):2037–71.

[7] Lee R, Neale L. Interactions and consequences of inertia and switching costs. J Serv Mark. 2012;26(5):365–74.

[8] Hidayati N, Hidayat M, Ruminda M, Agusinta L, Ricardianto P. Loyalitas Dan Kepuasan Penumpang pada Mass Rapid Transit [JMTRANSLOG]. Jurnal Manajemen Transportasi & Logistik. 2021 Nov;08(03):235–46.

[9] Prof. Dr. Sugiyono, Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Penerbit Alfabeta; 2016.

[10] Ghozali I. Aplikasi Analisis Multivariate dengan Program IBM SPSS 21 Update PLS Regresi. Semarang: Badan Penerbit Universitas Diponegoro; 2013.

[11] Ghozali I. Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25. 9th ed. Semarang: Badan Penerbit Universitas Diponegoro; 2018.

[12] Agrawal S, Singh V, Upadhyay Y. Structural model of information quality framework to e-agri supply chain. Journal of Advances in Management Research. 2021 Oct;18(4):609–34.

[13] Jannah M, Meliana V. Pengaruh Kualitas Produk dan Relationship Marketing Terhadap Kepuasan Konsumen Ngemil Banana Chips. STREAMING Jurnal Manajemen. 2022;1(1). [Online]. Available: http://ojs.kalbis.ac.id/index.php/kalbisiana/article/view/469

[14] D. Hamidin et al.Strategi Pemasaran di Era Digital, Cetakan I, Juni 2022. Sukabumi, Jawa Barat: Haura Utama, 2022.