The Role of Webqual 4.0: Shopee User Satisfaction in Munjungan District

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Research aim: *Aims to analyze Shopee web user satisfaction based on WebQual 4.0 in Munjungan District, Trenggalek Regency, East Java.*

Design/Method/Approach: *This research is causal quantitative research. The population of this study were Shopee application users in Munjungan District, Trenggalek Regency who had made purchase transactions. The sampling technique used simple random sampling, the number of respondents was 160 people, determined based on the theory of Hair et al. Data was collected by utilizing a questionnaire as an instrument. The data analysis technique enables multiple linear regression which is processed with the help of the SPSS application.*

Research Finding: *This research proves that WebQual 4.0 has a positive and significant influence on Shopee web user satisfaction in Munjungan District, Trenggalek Regency, East Java.*

Theoretical contribution/Originality: *This research contributes to the understanding and provides insight into usability, service interaction, information quality, and customer satisfaction in shopping.*

Practitionel/Policy implication: *For companies, it can improve user experience, increase customer retention, and strengthen brand image. As for consumers, the benefits include easier navigation, a responsive interface, better product selection, and an overall more satisfying online shopping experience.*

Research limitation: *The study was limited by the lack of respondents, reaching only 102 out of a target of 160. This was due to the unwillingness of some respondents to complete the online form and time constraints.*

Keywords: *Usability, Information Quality, Service Interaction, User Satisfaction.*

1. Introduction

The rapid development in information technology has brought a number of significant changes in various aspects of life, one of the technological advances that has a major impact on society is the internet. the use of the internet has an impact on the growth of e-commerce. The development of e-commerce is driven by advances in the internet and mobile applications, allowing businesses to create effective systems to reach consumers widely and efficiently at a more affordable cost than conventional businesses [1]. Shopee is an app-based e-commerce, which is on the rise in Indonesia [2]. As the largest mobile platform application in Indonesia, it is very important for the Shopee company to improve the quality of its application so that users will feel satisfied in shopping.

User satisfaction is a feeling of disappointment or pleasure after comparing the performance or product results that are thought of against the expected performance [3]. User

satisfaction can also be interpreted as an attitude that is decided based on the experience gained or it can also be called an assessment of the characteristics or features of the product or service produced [4]. In measuring the quality of the application must use webqual 4.0 which consists of three variables, namely, Usability is a connection between humans and computers and their usefulness related to the website, including the ease of navigation felt by users, the level of suitability of the design and images presented to users [5]. Usability refers to the extent to which a product or system can be used easily and efficiently by users. Information Quality is the quality of information perceived by users, which is measured by four research indicators, namely information accuracy, timeliness, completeness of information and presentation of information [6]. Success in providing quality information can increase user trust, guide purchasing decisions, and overall increase the level of user satisfaction with a product or platform. Service Interaction is the ability to provide a sense of security during transactions, a good website reputation, ease of communication, generate trust in providing personal information, and assure users that promises will be kept [7]. service interaction contributes to a positive user experience through prompt response, effective support, good availability, service personalization, and overall positive interaction.

The author chose Munjungan Subdistrict as the object of research because Munjungan Subdistrict is a remote area and far from the City / Regency, Users in Munjungan have obstacles in using Shopee due to the lack of adequate training or guidance to use this platform. The quality of information about products is less than optimal, causing uncertainty for Munjungan users and hampering purchasing decisions. The limited choice of payment methods in Munjungan is an obstacle to efficient and convenient interaction between Munjungan users and the Shopee application. Unfamiliarity with the security of online transactions is a concern among the people of Munjungan. Some people feel uncomfortable or unsure about the security aspects when shopping online.

A number of studies have been conducted related to Usability, Information Quality, and Interaction Quality on User Satisfaction. The researchers prove that the three Webqual 4.0 variables have a positive effect, both partially and simultaneously on customer satisfaction [8–10]. This study aims to analyze the quality of the Shopee application using the WebQual 4.0 method based on the impressions of Shopee users in Munjungan District. In addition, this study also aims to assess how the influence of WebQual 4.0 dimension variables, such as usability, information quality, and service interaction, on user satisfaction.

1.1. Statement of Problem

Based on the background in the previous description, it can be seen that users in Munjungan have obstacles in using Shopee due to the lack of adequate training or guidance to use this platform. The quality of information about products is less than optimal, causing uncertainty for Munjungan users and hampering purchasing decisions. The limited choice of payment methods in Munjungan is an obstacle to efficient and comfortable interaction between Munjungan users and the Shopee application. Unfamiliarity with the security of online transactions is a concern among the people of Munjungan. Some people feel uncomfortable or unsure about the security aspects when shopping online.

1.2. Research Objectives

Referring to the problems that have been raised previously, this research aims to study webqual or website quality 4.0 which consists of (Usability, Information Quality, and Service Interaction) for Shopee users in Munjungan District, Trenggalek Regency.

2. Method

This study uses a causal quantitative approach, the research data is primary data obtained from Shopee users in Munjungan District who have made purchases more than twice, in the form of a questionnaire distributed by researchers via google form. The total number of respondents in this study was 160 people, according to Hair et al with the calculation of 16 indicators in the variable and then times 10. The variables used involve Usability (X_1), Information Quality (X_2), Service Interaction (X_3) and User Satisfaction (Y). The analysis technique uses validity test, reliability test, classical assumption test, multiple linear regression test, hypothesis testing, t test, F test. which is processed with the help of the SPSS application.

3. Results and Discussion

The results of data collection from 102 respondents out of a total of 160 samples show that the data collection method used in this study involves the use of primary data and secondary data. The data collection tools used are questionnaires, observations, and document studies. Data analysis was carried out through validity test, reliability test, classical assumption test, multiple linear regression test, hypothesis testing, t test, and F test.

Data Quality Test

Table 1.Validity Test Results

Usabillty Validity Test Results (X_1)

Item No.	R. Count	R. Table 5% (100)	Significance	Criteria
1	0,498	0.195	0,000	Valid
2	0,589	0.195	0,000	Valid
3	0,662	0.195	0,000	Valid
4	0,555	0.195	0,000	Valid
5	0,664	0.195	0,000	Valid
6	0,673	0.195	0,000	Valid
7	0,690	0.195	0,000	Valid
8	0,698	0.195	0,000	Valid

Information Quality Variable Validity Test Results (X_2)

Item No.	R. Count	R. Table 5% (100)	Significance	Criteria
9	0,672	0.195	0,000	Valid
10	0,786	0.195	0,000	Valid
11	0,820	0.195	0,000	Valid
12	0,674	0.195	0,000	Valid
13	0,656	0.195	0,000	Valid
14	0,652	0.195	0,000	Valid
15	0,646	0.195	0,000	Valid

Service Interaction Variable Validity Test Results (X_3)

Item No.	R. Count	R. Table 5% (100)	Significance	Criteria
16	0,656	0.195	0,000	Valid
17	0,662	0.195	0,000	Valid
18	0,786	0.195	0,000	Valid
19	0,821	0.195	0,000	Valid
20	0,652	0.195	0,000	Valid
21	0,786	0.195	0,000	Valid
22	0,717	0.195	0,000	Valid

Customer Satisfaction Variable Validity Test Results (Y)

Item No.	R. Count	R. Table 5% (100)	Significance	Criteria
23	0,616	0.195	0,000	Valid
24	0,732	0.195	0,000	Valid
25	0,651	0.195	0,000	Valid

Based on Table 1 above, it shows that there are three independent variables (X) and 1 dependent variable (Y) which are the research materials, of the three X variables studied, there are 8, 7 and 7 statement items respectively. While the Y variable has 3 statement items. From each statement item on each variable, both independent and dependent, it turns out that the value of r count is greater than r table, it can be concluded that the data obtained in the field is declared valid.

Table 2. Reliability Test Results

Variables	Guttman Correlation Split Half Coefficient	Guttman Split Half correlation standard	Description
Usabillity	0,925	0,80	Reliabel
Information Quality	0,925	0,80	Reliabel
Service Interaction	0,925	0,80	Reliabel
Customer Satisfaction	0,925	0,80	Reliabel

Source: Processed SPSS 2023

Based on the table above, it shows that all variables have a correlation value of Guttman Split Half Coefficient> 0.80, which means that there are 3 variables said to be reliable.

Classical Assumption Test
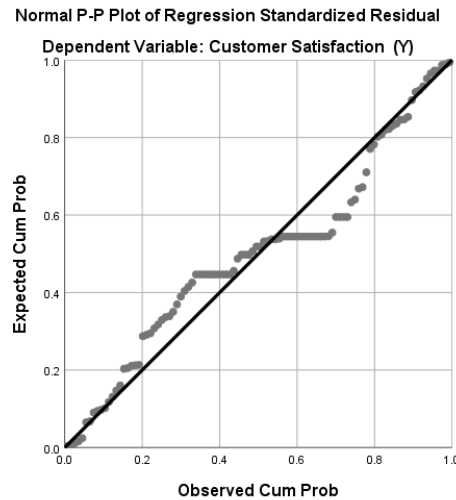
Figure 1. Normality Probability Plots
Source: Processed SPSS 2023

In the picture above, it can be seen that the plot (dots) follows the diagonal line so that the basis for decision making quoted from Imam Ghozali's book (2011), it can be concluded that the normality test of this research regression model is normally distributed.

Table 3. Linearity Test

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	-1.408	.952	
	Usability	.073	.039	.156
	Information Quality	.188	.041	.402
	Service Interaction	.199	.044	.380

Source: Processed SPSS 2023

Table 4. Multicollinearity Test Results

Variables	Tolerance	VIF	Description
Usabillty (X1)	0,392	2,548	No Multicollinearity
Information Quality (X2)	0,343	2,919	No Multicollinearity
Service Interaction (X3)	0,379	2,635	No Multicollinearity

Source: Processed SPSS 2023

So, based on the decision-making variables this research does not occur symptoms of multicollinearity.
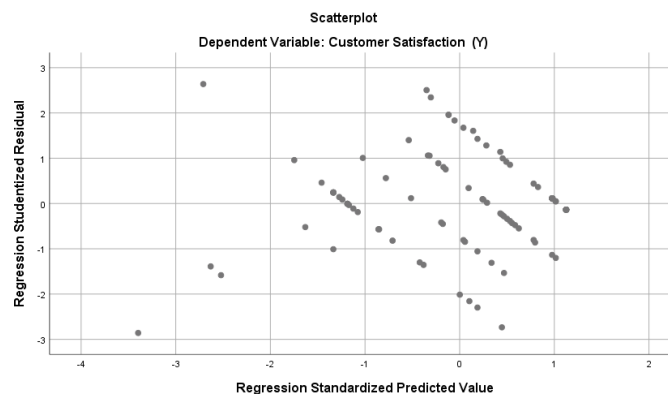
Figure 2. Scatterplots
Source: Processed SPSS 2023

Based on the picture above, the dots do not form a clear pattern (wavy, spread then narrowed) and the dots spread above and below the number 0 on the Y axis, meaning that the data or research does not occur heteroscedacity.

Multiple Linear Regression Test

Table 5. Multiple Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients
		B	**Std. Error**	**Beta**
1	(Constant)	-1.443	.947	
	Usability	.076	.040	.160
	Information Quality	.196	.042	.415
	Service Interaction	.190	.044	.362

Source: Processed SPSS 2023

$Y = a + b1x1 + b2x2 + b3x3 \neq e$
$Y = -1,443 + 0,076x1 + 0,196x2 + 0,190x3 \neq e$

1. a = -1.443 indicates that the variables usabillty, information quality, and service interaction have negative values.
2. b1 = 0.076 shows that the usability variable has a positive effect, meaning that if usability increases by units, satisfaction will increase by 0.076 with the assumption that other variables are considered constant.
3. b2 = 0.196 shows that the information quality variable has a positive effect, meaning that if usability increases by units, satisfaction will increase by 0.196 with the assumption that other variables are considered constant.
4. b3 = 0.190 shows that the service interaction variable has a positive effect, meaning that if usability increases by units, satisfaction will increase by 0.190 with the assumption that other variables are considered contant.

Coefficient of Determination

Table 6. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.860[a]	.739	.731	.811	1.723

Source: Processed SPSS 2023

1. Based on this table, it can be concluded that the coefficient of determination (R^2) between the Usabillity Variable (X_1), Information Quality (X_2), and Service Interaction (X_3) on Customer Satisfaction (Y) in Shopee Users is 0.739 or 73.9%. the coefficient of determination of this study is categorized as Very Strong.

2. The average customer satisfaction of shopee application users in munjungan sub-district is 73.9% determined by Usabillity Variables (X_1), Information Quality (X_2), and Service Interaction (X_3) and 26.1% determined by other factors that have not been studied.

Hypothesis Test

Table 7. T Test (Sig Value)

Coefficients[a]

Model	t	Sig.
Constant	-1.479	.142
Usability (X1)	1.891	.062
Information Quality (X2)	4.557	.000
Service Interaction (X3)	4.534	.000

Source: Processed SPSS 2023

Based on the table above, it can be concluded that Usabillity (X_1) has no effect on Customer Satisfaction, namely with a significance of 0.062. Information Quality (X_2) Affects Customer Satisfaction, namely with a significance of 0.000. Service Interaction (X_3) Affects Customer Satisfaction, namely with a significance of 0.000.

Table 8. F Test (Sig Value)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	182.115	3	60.705	92.371	.000[b]
	Residual	64.405	98	.657		
	Total	246.520	101			

a. Dependent Variable: Customer Satisfaction (Y)
b. Predictors: (Constant), Service Interaction (X3), Usabillty (X1), Information Quality (X2)
Source: Processed SPSS 2023

Based on the table above, it can be seen that the significance of this study is 0.000, so the Usabillity Variable (X_1), Information Quality (X_2), and Service Interaction (X_3) simultaneously or together have an effect on shopee user Customer Satisfaction. with the results that have been described, H_1 usability is mutual and significant to user satisfaction, this is in line with previous research [11], then H_2 information quality is mutual and significant to user satisfaction, this is in line with previous research [12], and finally H_3 service interaction mutually and significantly on user satisfaction, this is in line with previous research [13].

4. Conclusion

Based on the results of the research that has been carried out, it can be concluded that the Usabillity, Information Quality, and Service Interaction variables partially and simultaneously have a significant effect on customer satisfaction for Shopee application users in Munjungan District.

This research faces several limitations, including the results of data collection which should involve 160 respondents, but only managed to collect data from 102 respondents. This limitation is related to several factors, including the disagreement of some respondents to fill out the online form that has been provided. In addition, time constraints and the number of participants willing to fill out the questionnaire only reached 102 respondents.

The results of this study can serve as a foundation for future research, especially in similar areas of study, such as usability, information quality, and service interaction. It is expected that future researchers can identify new problems and expand the number of respondents to increase the statistical validity and generalizability of the research results.

References

[1]   Isma A. E-Commerce dan Internet Of Things (IOT). 2023.

[2]   Yudha P. Pengaruh Experiential Marketing Fitur Dan Trust Terhadap Kepuasan Pengguna Aplikasi Shopee. J Ekon Dan Bisnis GROWTH 2020;18:129–46.

[3]   Sri A. Pengaruh Layanan Website Tokopedia Terhadap Kepuasan Konsumen Menggunakan Metode Webqual 4.0. JuSiTik J Sist Dan Teknol Inf Komun 2022;2:32–8. https://doi.org/10.32524/jusitik.v2i1.433.

[4]   Purnomo H, Sardanto R, Muslih B. Signifikansi Prediktor Kepuasan Konsumen Jasa Hotel. Nganjuk: Adjie Media Nusantara; 2020.

[5]   Ardi AN Al. Pengaruh Kualitas Website Lazada Terhadap Kepuasan Dan Loyalitas Konsumen Di Indonesia. Universitas Jember, 2019.

[6]   Abu N. Peran System Quality Dan Information Quality Dalam Mendukung Keberhasilan Implementasi Simda Desa (Studi Kasus Pada Desa-Desa Di Kabupaten Bangka). J Ris Terap Akunt 2018;2:1–6.

[7]   Bintari WP, Udayana I, Maharani BD. Pengaruh Usability, Information Quality, dan Service Interaction Terhadap Loyalitas Konsumen Dengan Kepuasan Sebagai Variabel Intervening (Studi Pada Konsumen Tokopedia di Kabupaten Kediri). J Perspekt

2022;20:68–75. https://doi.org/10.31294/jp.v20i1.12286.

[8]   Dalilah I, Kusyanti A, Herlambang AD. Evaluasi Kualitas Layanan Website PT . Kereta Api Indonesia (Persero) terhadap Kepuasan Pengguna Menggunakan Webqual 4 . 0 dan Importance- Performance Analysis (IPA). J Pengemb Teknol Inf Dan Ilmu Komput 2018;2:288–95.

[9]   Meidianto DS, Jumhur HM. Pengukuran Kualitas Website Melalui Metode Webqual 4.0 Dan Kepuasan Pelanggan Pada Blibli.Com Measurement of Website Quality Through Webqual 4.0 Method and Customer Satisfaction on Blibli.Com. E-Proceeding Manag 2019;6:2084–90.

[10]   Farlevi FI. Pengukuran Kualitas Layanan Bukalapak.Com Terhadap Kepuasan Konsumen Dengan Metode Webqual 4.0. JEBIMAN J Ekon Bisnis, Manaj Dan Akunt 2023;1:243–53.

[11]   Padmowati R de LE, Buditama AT. Seminar Nasional Teknologi Komputer & Sains (SAINTEKS) Aplikasi Perangkat WebQual 4.0 Untuk Pengukuran Kualitas Sistem Informasi Student Portal Unpar. Semin Nas Teknol Komput Sains 2019:715–9.

[12]   Kosaman RW, Sumitro IH, Sulistyowati R. Penggunaan Metode Webqual 4.0 Untuk Penilaian Kualitas Situs Webeli.Com Dalam Upaya Pengembangan Situs. Sigma-Mu 2018;10:1–16. https://doi.org/10.35313/sigmamu.v10i2.1225.

[13]   Purwandani I, Syamsiah NO. Analisis Kualitas Website Menggunakan Metode Webqual 4.0 Studi Kasus: MyBest E-learning System UBSI. J Sist Dan Teknol Inf 2021;9:300. https://doi.org/10.26418/justin.v9i3.47129.