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

Muhammad Riyan Prasetyo[1*], Basthoumi Muslih[2]

University of Nusantara PGRI Kediri, Jl. KH. Ahmad Dahlan No.76, Mojoroto, Kediri City, East Java, 64112, Indonesia

Rprasetyo037@gmail.com[1*], basthoumi@unpkediri.ac.id[2]

*corresponding author

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Abstract

Research aim: *The purpose of this study is t evaluate Shopee web users satisfaction in Munjungan District, Trenggalek Regency, East Java, using WebQual 4.0.*

Design/Method/Approach: *The approach in this study uses a causal quantitative approach with the population, namely Shopee application users in Munjungan District who have made purchases. This study, which uses simple random sampling as a sampling technique, has 160 respondents based on the theory of Hair et al. Data collection used in the form of instruments through distributing questionnaires. In this research data analysis using instrument test technique, classical assumption tests, and multiple linear regression tests through the SPSS application.*

Research Finding: *The findings in the study indicate that WebQual 4.0 has a significant influence on Shopee web user satisfaction in Munjungan District, Trenggalek Regency, East Java.*

Theoritical contribution/Originality: *This research has contributed to the understanding and insight into usability, information quality, service interaction, and user satisfaction during purchases.*

Practical/Policy Implication: *The implications obtained from this research are for companies to gain an improved user experience, increase customer retention, and strengthen brand image. Meanwhile,consumers get benefits such a easier navigation, a more responsive interface, better product filtering, and a pleasant experience during online shopping.*

Research limitation: *This study has limitations such as the insufficient of respondents, which targets 160 respondents but gets 102 people. This happened because some respondent were reluctant to complete the online form and there was a limit for filling it out.*

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

1. Introduction

One of the most important developments brought about by the iformation technology industry's explosive growth has been the internet, which has drastically changed many facets of life. One important impact of the internet is the development of e-commerce. With the development and widespread use of internet technology and mobile applications has fuelled e-commerce by allowing businesses to create efficient systems that can reach a wide audience at a lower cost than traditional businesses [1]. Indonesia, in particular, is experiencing a significant rise in app-based e-commerce platforms, with Shopee, one of the leading mobile platforms

[2]. Shopee, being the biggest mobile e-commerce platform in Indonesia, needs to keep improving the quality of its application in order to satisfy users and keep ts competitive advantage. Improving application quality involves various aspects, such as user interface design, functionality, security, and customer support. By focusing on these areas, Shopee can ensure a seamless and enjoyable shopping experience for its users, thereby fostering customer loyalty and sustaining its growth in the competitive e-commerce landscape.

User satisfaction is the emotion that results from comparing actual performace with expected performance, either with disappointment or with joy [3]. It may alternatively be understood as a mindset developed via experiences, or as an assessment of a product's quality features of the service [4]. To measure application quality, the WebQual 4.0 framework is used, consisting of three variables: usability, information quality, and service interaction. Usability involves the ease and efficiency with which users can navigate and interact with the website, encompassing the design's suitability and navigation ease. Information quality is assessed by indicators such as accuracy, timeliness, completeness, and presentation of information, which enhance user trust and satisfaction [5]. Service interaction focuses on providing transaction security, preserving a positve online image, making sure that communication is simple, developing trust, and keeping yoyr word to users, enhancing customer experience by providing timely answers, efficient assistence, accessibility and idividualized care [6]. These factors collectively ensure a positive user experience and high user satisfaction.

Munjungan Subdistrict was selected by the author as the research subject due to its rural location, distant from both the city and the regency. Munjungan users encounter difficultiesd with Shopee as a result of inadequate platform training or assistance. The caliber of the product data is inadequate, creating ambiguity and complicating the process of making purchase. Furthermore, Munjungan's restricted payment options make it diffiicult to connest conveniently and effiiciently with the Shopee app. Some Munjungan residents are also uneasy or hesitant to shop online due to worries about the security of online transactions.

The effets of service interaction, infromation wuality, and usability on user satisfaction have all been studied in detail. These three WebQual 4.0 characteristics, Numerous studies have examined the effects of service interactions, information quality, and usability on user satisfaction. Researchers have shown that these three WebQual 4.0 qualities, when taken individually and in combination, have a considerable impact on user happiness, both partially and concurrently [6–8]. The purpose of this study is to assess the Shopee application quality among Munjungan district users by employing the WebQual 4.0 methodology. Additionally, the study attempts to evaluate the relationship between user satisfaction and the three WebQuel 4.0 dimension variables: usability, information quality, and service interaction.

1.1. Statement of Problem

It seems from the previous explanation that Munjungan user users of the Shopee platform encounter a number of difficulties. Among these difficulties is their inability to use the platform successfully due to a lack of proper training or direction. Furthermore, making decisions about purchases is hampered by the absence f reliable product information. Munjungan's restricted selection of payment options makes it more difficult to use the Shopee app conveniently and efficiently. In addition, a lack of knowledge regarding the security of online transactions causes anxiety among Munjungan residents, causing them to feel about the security of online buying.

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 (X1), Information Quality (X2), Service Interaction (X3) 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 from a total of 160 samples show that the data collection methods used in this study use 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, coefficient of determination, t test, and F test using IBM SPSS version 23 software.

3.1. Validity Test

The validity test aims to determine whether a questionnaire is valid. One method for assessing the validity of a questionnaire is to use the corrected item total correlation. This method involves comparing the calculated r value with r table at 5% significance level with degrees of freedom (N-2). In this context, N is 102, so the degree of freedom is 100 (102-2). Therefore, the r product moment value used as the limit is 0.195.

The results of validity testing with SPSS show that all eight statement items on the Usability variable (X1) have a R Count value ranging from 0,655 to 0,778, which is greater than the R Tabel 0f 0,195 at a significance level of 5%. More precisely, each of the firs, second, and third statement items has a R Count value of 0,684, 0,778, and 0,723, with a significance level of 0,000. Nothing further is displayed. Additionally, the R Count values for the fourth, fifth, and sixth items are 0,665, 0,716, and 0,678 respectively with a significance of 0,000 for the fourth, fifth, and sixth respectively. R Count values for the seventh and eighth items, respectively, are 0,734 and 0,669 respectively with a significance level of 0,000. Consequently, every statement on the Usability variable (X1) is deemed valid, indicating that every statement in the questionnaire accurately assesses the Usability component and can be utilized for additional examination in this research.

The In Information Quality (X2) variable's R Table of 0,195 at the 5% significant level is less than the R Count values of 0,592 to 00,795 for each of the seven statement items. Specifically, the first item has a significance level of 0,000 and a R Count value of 0,677. A R Count value of 00,729 at a significance level of 0,000 is displayed for the third item. In addition, the fourth item has a significance level of 0,000 and a R Count value of 0,795. With a significance level of 0,000, the fifth item displays a R Count value of 0,738. A significance of

0,000 is associated with the R Count value of 0,592 for the sixth item and a significance of 0,731 for the seventh item. As a result, every statement in the questionnaire accurately measures the Information Quality component and can be utilized for additional research in this study. All statement items on Information Quality (X2) variable have been deemed valid.

For each of the seven statement items in the Service Interaction (X3) variable, the R Count values range from 0,625 to 0,771, and the R Table of 0,195 at the 5% significance level is less than this. Specifically, the significance level of the first item is 0,000 and its R Count value is 0,647. The significance of the second item is 0,000, and its R Count value is 0,754, a R Count value of 0,653 with a significance level of 0,000 is displayed for the third item. In addition, the fourth item has a significance level of 0,000 and a R Count value of 0,771. With a significance level 0f 0,000, the fifth item displays a R Count value of 0,707. The R Count values for the sixth and seventh items, respectively are 0,625 and 0,653, with a significance level of 0,000 for each. As a result, every statement in the questionnaire accurately measures the Service Interaction component and can be utilized for additional research in this study. All statement items on the Service Interaction (X3) variable have been deemed valid.

The R Count values for each of the three statement items in the User Satisfaction (Y) variable range from 0,748 to 0,855, exceeding the R Table value of 0,195 at the 5% significant level. In particular, the firs item has a R Count value of 0,748 and a significance level of 0,000. At a significance level of 0,000 the R count values for the second and third items are, respectively 0,855 and 0,789. Since each statement in the questionnaire effectively reflects a different component of User Satisfaction, it van be used for further analysis in this study. As a result, all statement items on the User satisfaction (Y) variable are certified valid.

3.2. Reliability Test

Reliability test is used to evaluate the reliability of a questionnaire that reflects certain variables or constructs. The reliability of a questionnaire can be stated when individual answers to statements in the questionnaire are consistent or stable over time. according to Sujarweni [9], a variable is considered reliable if the resulting score has a value greater than 0.70.

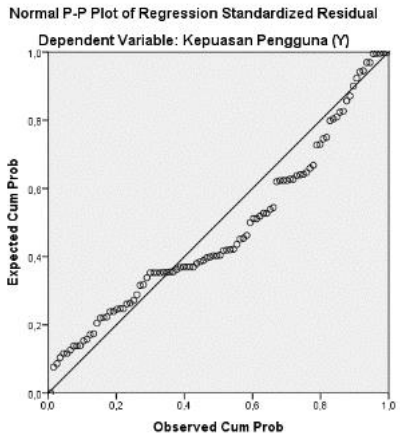
The results of reliability testing using SPSS show that every variable in this study has a high degree of reliability, exceeding the alpha requirement set at 0,70. The extraordinary reliability of the Usablity test instrument is demonstrated by the Usability variabel (X1);s Cronbach Alpha score of 0,856, which is far heigher than the average alpha value. The instrument used to measure Information Quality is also extremely reliable, as indicated by the Cronbach Alpha value of 0,834 for the Information Quality (X2) variable. The Cronbach Alpha value of 0,813 for the Service Interaction (X3) indicates that the instrument used to measure Service Interaction has good reliability. As demonstrated by the User Satisfaction (Y) variable’s higher that normal Cronbach Alpha 0,715, the method used to measure service egagement is quite reliable. Consequently, all the variables in this research can be considered reliable and deserving of further exploration.

3.3. Classical Assumption Test

This test is carried out to see whether the data used has classical assumption deviations or not. Three tests the heteroscedastisity, multicollinearity, and normality tests are employed in the assumption test that is conducted. The three tests respective outcomes are:

Normality Test

The normality test is used to evaluate whether in the regression model, confounding or residual variables have a distribution that follows a normal pattern. When the data spreads symmetrically around the diagonal line, this indicates that the residuals are normally distributed which is one of the fundamental assumptions in linear regression analysis [10].



Source: Processed SPSS, 2024

Figure 1. Normality Probability Plots

As seen in the figure above, the dot plot follows the diagonal line pattern, this indicates that the normality test of this research regression model is normally distributed so that it fulfils the basic assumptions of linear regression.

Multicollinearity

This test aims to ascertain whether the independent variables (X) in a regression model are correlated or not. To determine the presence or absence of multicollinearity in a regression model, you can see two main indicators, namely Tolerance and Variance Inflation Factor (VIF).

Table 1. Multicollinearity Test Table

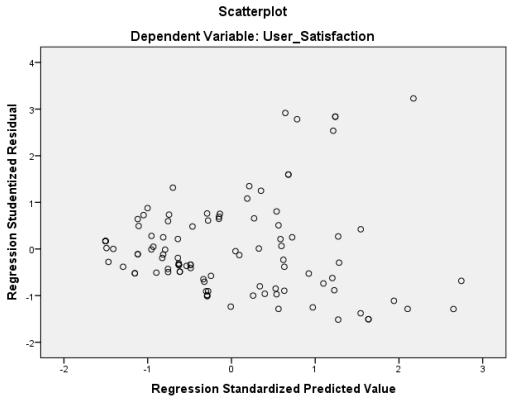
Variables	Tolerance	VIF
Usability (X1)	0,951	1,051
Information Quality (X2)	0,384	2,605
Service Interaction (X3)	0,391	2,557

Source: Processed SPSS, 2024

The table above shows that each independent variable has a VIF value far below 10.00 and a tolerance value greater than 0.10. Thus, it can be said that there is no multicollinearity problem in the variables of this study.

Heteroscedasticity

This test is used to determine whether in the regression equation there is an inequality of variance from residuals or other data. The presence or absence of heteroscedasticity in the regression equation can be determined by several methods, but in this study using the Scatterplots test.



Source: Processed SPSS, 2024

Figure 2. Scatterplots

Based on Figure 2 above, there is no clear pattern seen in the data points. The dots tend to spread above and below zero on the Y-axis. This indicates that there are no signs of heteroscedasticity in the data or this study.

3.4. Test Multiple Linear Regression Test

This multiple linear regression test aims to understand how the independent variables jointly affect the dependent variable, providing a more comprehensive insight into the relationship between them in the context of the research being conducted.

Table 2. Multiple Linear Regression Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	,483	1,278		,378	,706
	Usability (X1)	,079	,028	,190	2,811	,006
	Information Quality (X2)	,136	,046	,315	2,958	,004
	Service Interaction (X3)	,198	,049	,422	4,005	,000

a. Dependent Variable: User Satisfaction (Y)

Source: Processed SPSS, 2024

Based on the test results in table 2 above, the following equation is obtained:

Y= a + b1X1 + b2X2 + b3X3 + e

Y= 0,483 + 0,079X1 + 0,136X2 + 0,198X3 + e

1. a : The constant value is 0.483. This shows that Usability, Information Quality, and Service Interaction are constant, then the value of User Satisfaction is 0.483.
2. b1 : The Usability regression coefficient value is 0.079 and is positive. This shows that if Usability increases, User Satisfaction will increase.
3. b2 : The Information Quality regression coefficient value is 0.136 and is positive. This shows that if Information Quality increases, User Satisfaction will increase.

4. b3 : The Service Interaction (X3) regression coefficient value is 0.136 and has a positive value. This shows that if Service Interaction (X3) increases, User Satisfaction will increase.

3.5. Test Coefficient of Determination (R^2)

Table 3. Determination Coefficient Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,758[a]	,575	,562	,927	2,009

a. Predictors: (Constant), Service Interaction (X3), Usability (X1), Information Quality (X2)
b. Dependent Variable: User Satisfaction (Y)
Source: Processed SPSS, 2024

Based on the Adjusted R Square value in table 3 above, it can be seen that the Usability (X1), Information Quality (X2), Service Interaction (X3), and User Satisfaction (Y) variables are 0.562 or 56.2 while the remaining 43.8% is explained by other variables not examined in this study, which means that the effect of determining the independent variable (X) on the dependent variable (Y) is 43.8% explained by other variables not examined in this study.

3.6. Partial Test (t Test)

This test is conducted to ascertain whether each independent variable has a significant influence on the dependent variable separately.

Table 4. Partial Test Results (t Test)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	,483	1,278		,378	,706
	Usability (X1)	,079	,028	,190	2,811	,006
	Information Quality (X2)	,136	,046	,315	2,958	,004
	Service Interaction (X3)	,198	,049	,422	4,005	,000

a. Dependent Variable: User Satisfaction (Y)
Source: Processed SPSS 2024

Based on table 4 above, the Usability variable (X1) has a t count value greater than the t table (2,811 > 1,984) and a significance value smaller than 0.05 (0,006 < 0.05), so Ho is rejected and Ha is accepted. Thus, there is a significant influence between the Usability variable (X1) on Shopee User Satisfaction (Y) in the Munjungan section. This finding is supported by [7], who also found that the ease of use of e-commerce applications significantly enhances user satisfaction.

The Information Quality variable (X2) shows a t count value greater than the t table (2,958 > 1,984) and a significance value smaller than 0.05 (0,004 < 0.05), then Ho is rejected and Ha is accepted. It states that there is a significant influence between the Information Quality variable (X2) on Shopee User Satisfaction (Y) in Munjungan. This study is supported by [8], who state that accurate, relevant, and easily understood information can improve user satisfaction.

The Service Interaction variable (X3) has a t count value greater than the t table (4,005 > 1,984) and a significance value smaller than 0.05 (0,000 < 0.05), then Ho is rejected and Ha is accepted. Thus, there is a significant influence between the Service Interactive variable(X3) on Shopee User Satisfaction (Y) in the Munjungan district. This finding is supported by [6], who found that quality service interaction greatly influences user satisfaction on e-commerce platforms.

3.7. Simultaneous Test (F Test)

The F test is used to test the significance of the effect of the independent variable (X) simultaneously on the dependent variable (Y).

Table 5. F Test Results

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113,828	3	37,943	44,130	,000[b]
	Residual	84,260	98	,860		
	Total	198,088	101			

a. Dependent Variable: User Satisfaction (Y)
b. Predictors: (Constant), Service Interaction (X3), Usability (X1), Information Quality (X2)
Source: Processed SPSS, 2024

From table 5 above, it can be seen that the calculated F value > table F value (44,130 > 2,69) and Sig value 0,000 < 0,05, which means Ho rejected Ha accepted. It shows the result that the variables Usability, Information Quality, and Service Interaction simultaneously affect Shopee User Satisfaction in Munjungan. This finding is supported by the study of [6], which found that the combination of these three factors collectively affects the level of user satisfaction in e-commerce applications.

4. Conclusion

This study reveals that the variables of usability (X1), information quality (X2), and service interaction (X3) significantly affect users of the Shopee application. The partial test results (t-test) show that the ease of use of the Shopee application has a significant impact on user satisfaction. In other words, the easier it is to use the Shopee app in Tangerang, the higher the user satisfaction. Information quality also significantly impacts user satisfaction. The better the quality of information provided by the Shopee app in Munjungan County, the higher the user satisfaction. Service interaction also proves to have a significant impact. The better the service interaction provided by the Shopee app in Bandung, the higher the user satisfaction. The F test results show that usability, information quality, and service interaction together have

a significant impact on user satisfaction. This means that improvements in ease of use, information quality, and service interaction will collectively enhance user satisfaction with the Shopee application.

This study suffered from a number of limitations, including the number of respondents collected being only 102 respondents, although the target was 160 respondents. Factors affecting this limitation include the unwillingness of some respondents to complete the online form provided, as well as time constraints and the number of participants willing to complete the questionnaire, which only reached 102 respondents.

This research provides empirical evidence that improvements in ease of use, information quality, and service interaction can significantly improve user satisfaction of the Shopee application. Therefore, Shopee is advised to continue to improve these aspects in order to improve user experience and satisfaction. In addition, the study also faces a limitation in the number of respondents collected, so it is suggested that further research should expand the number to improve the statistical validity and generalization of the results of the study. Future researchers are expected to be able to identify new problems and deepen the analysis of variables that affect user satisfaction in the context of other e-commerce applications.

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 2020:1–57.
[5] Ardi AN Al. Pengaruh Kualitas Website Lazada Terhadap Kepuasan Dan Loyalitas Konsumen Di Indonesia. Universitas Jember, 2019.
[6] 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.
[7] Yulianti E. Pengaruh Security, Trust, Usability, Dan Usefulness Terhadap Kepuasan Pengguna Pada Aplikasi Seabank Universitas Pembangunan Nasional " Veteran " Jawa Timur 2024;5:3167–82.
[8] Amarin S, Wijaksana TI, Bisnis A, Telkom U. Pengaruh Kualitas Sistem , Kualitas Informasi, Dan Kualitas Layanan Terhadap Kepuasan Konsumen (Studi Pada Pengguna Aplikasi Berrybenka Di Kota Bandung) 2021;4:37–52.
[9] Sujarweni VW. Metodologi Penelitian: Lengkap, Praktis, Dan Mudah Dipahami. Pustaka Baru Press. Yogyakarta; 2014.
[10] Ghozali I. Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23. Badan Penerbit Universitas Diponegoro. Semarang; 2016.