

WebQual Method for Analyzing the Service Quality of the Hospital Complaint Website on User Satisfaction

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ABSTRACT

The Hospital Complaints Website acts as a forum for the public to convey complaints, aspirations, and complaints regarding hospital performance, so the importance of the quality of service on this website cannot be ignored. Researchers are interested in conducting a more comprehensive study regarding the quality of hospital complaint websites. The research aims to measure the quality of service on the hospital complaints website by paying attention to several aspects of the user and looking for obstacles found on the Hospital Complaints website. The data collection method involves the acquisition of primary research data using the WebQual method as the main conceptual framework for analyzing the quality of services contained in the Hospital Complaints website which emphasizes assessing the quality of satisfaction with using the website which consists of four variables: usability quality, information quality, service interaction quality, and user satisfaction, while secondary data research carried out questionnaires and interviews with staff, patients and hospital leaders as many as 41 respondents to obtain quantitative data. To obtain quantitative data, the researcher compiled a series of valid research instruments that describe the relationship between several research dimensions in the WebQual method, including 4 variables and 26 questions. The data collected will be the basis for solving the problem that is the focus of the research and testing the hypothesis that has been formulated. Previously. Based on the results of validation testing, the r counting variable consists of Quality of Use = 0.936, Quality of Information = 0.859, Quality of Service Interaction = 0.874 against the r table of satisfaction with use 0.260, where ($r_{count} > r_{table}$) is declared valid, analysis of reliability test data value Information Value Criteria Cronbach's Alpha, Usability Quality 0.909 > 0.60, Information Quality 0.919 > 0.60, Service Interaction Quality 0.854 > 0.60, User Satisfaction 0.868 > 0.60. This means that each of these variables influences user satisfaction.

Key words: Service Quality, Hospital Complaint Website, User Satisfaction, WebQual 4.0

INTRODUCTION

In the current digital era, websites continue to play an important role as a significant communication tool between the government and the public, as can be seen on the Hospital Complaint Website. The quality of service on this site is very important because it can increase public participation in monitoring and empowering legislative institutions. Although there have not been many in-depth studies regarding the evaluation of the quality services of the Hospital Complaint Website, this research aims to complete this summary, until now there have not been many studies that have discussed in depth the evaluation of quality services from the Hospital Complaint Website. From this, researchers are interested in conducting a more comprehensive study of the quality of the hospital complaint website.

Some of the problems that researchers found were that there was no analysis of the quality of service on the Hospital Complaints Website, so a method was needed to see the picture of user satisfaction, measure the actual quality of service on the Hospital Complaints Website by paying attention to several aspects of the user. Look for problems found on the Complaints website.

According to (Adiar, Irwanda, Nur Alima, Majesty Ayu, & Fahreza, 2022) Quality Measurement Of The Surabaya E-Health Website In the Webqual 4.0 method, there are several sample tests, starting from validity test, reliability test, multiple linear regression test to F test. Respondents who have filled in a questionnaire totaling 51 people. From the results of the analysis carried out, the conclusion was obtained, namely the Registration website Online E-health Surabaya patients are quite good in terms of user satisfaction. The overall quality of the E-Health Surabaya website can be seen in the results of the satisfaction research users towards e-health websites are positive if the three aspects, namely usability, information, and interaction occur simultaneously.

This research will focus on using the WebQual 4.0 method as the main conceptual framework for analyzing service quality with four key variables, namely usability quality, information quality, service interaction quality and user satisfaction. Respondents who can be research subjects include the main respondents are users. active on the complaint website and these stakeholders may include members of the HOSPITAL, parties involved in organizing complaints, or the website managers themselves, around 70 respondents. Data analysis methods that will be used in this research Validity test, Reliability test, F and T tests Based on the results of data analysis, the reliability value of the Cronbach alpha test for items number 1 to 25 is greater than this value. The criteria are a T test result of 0.60 (partial) between the independent variable and the dependent variable, each showing a significance value of 10% or $0.1 < 0.1$ and a calculated t value $> t$ table value of 1.678. This means that each of these variables has an influence on user satisfaction.

It is hoped that the results of this research can serve as a guide for hospitals in formulating policies and actions to improve the quality of complaint services, as well as providing real benefits for users of the website. Apart from that, this research can also serve as a guide for other researchers interested in analyzing the service quality of similar website sites in different fields.

LITERATURE REVIEW

Previous Related Study

According to (Adiar, Irwanda, Nur Alima, Majesty Ayu, & Fahreza, 2022), SIMPEBAJA Website Quality Analysis from Factors User Satisfaction Using the Webqual Method. **Same Variable** X: Website quality Y: User Satisfaction **Different Variables** : X: Service Quality **Research result** After analyzing both partially and simultaneously, the quality dimensions of the SIMPEBAJA website are based on Webqual 4.0 variables which include (X1) Usability, Information (X2), and Service Interaction (X3) either individually or together has a significant effect on user satisfaction (Y) SIMPEBAJA website.

According to (Utomo & Tambotoh, 2023), Analysis of User Satisfaction on the Taman Climbing Registration Website Mount Merbabu National with Webqual 4.0 Method **Same Variable** X: WebQual 4.0 Y: User Satisfaction **Research result** The results of measurements using a Likert scale show that the quality of usability, quality of information, quality of service interactions, and user satisfaction get "Strongly Agree" results, indicating that the website measurements are adequate and very good. Moreover, the advantage of this research lies in the ability of the Webqual 4.0 method to identify and analyze service problems that are felt by users, providing input for the management of Mount Merbabu National Park in improving and overcoming deficiencies in the website system.

Understanding Website

(Chusnah & Wahyuningtyas, 2021) Defines that, a website is a collection of pages on a domain on the internet that are used for a specific purpose and can be interconnected and widely accessed via a browser using a URL.

User Satisfaction

According to (Zikri & Harahap, 2022), That satisfaction can be explained as the person's level of feeling after comparing the results or performance they experienced with the hopes they had. In other words, the level of satisfaction is the result of the difference between perceived performance and existing expectations. When performance does not meet expectations, users will feel disappointed. On the other hand, if the performance meets expectations, users will feel very satisfied. However, if the performance exceeds expectations, users will feel very satisfied.

WebQual

According to (Wijaya & Handayani, 2023) "WebQual 4.0 is a tool used to evaluate usability, information quality, service interaction quality and overall impact of a Web site.". According to (Hendrawan, G.A.Wibawa, & Cokorda, 2023) Webqual is structured based on a focus on three main areas, namely: *Usability, Information Quality, Service Interaction Quality*

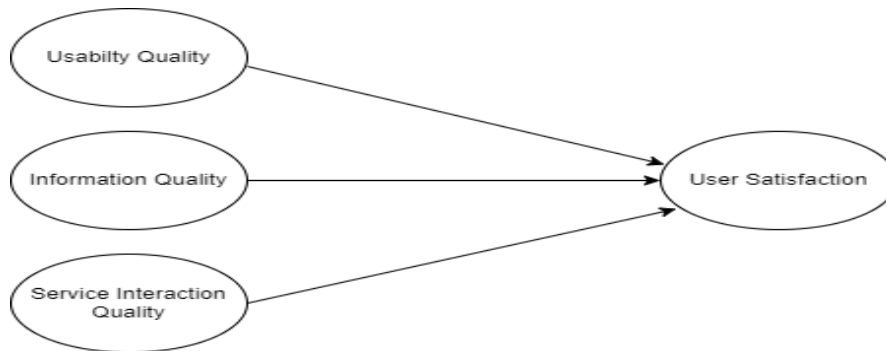


Figure 1 Basic Concept of WebQual

Factors that Influence Service Quality

- Design and Interface.
- Speed and Performance
- Reliability
- Relevant and Quality Content
- Customer Interaction and Support
- Security and Privacy
- Integration with other platforms

METHOD

Design and Samples

In this research, there are several stages carried out to create a flow (process) from the beginning of the research to the conclusion, including:

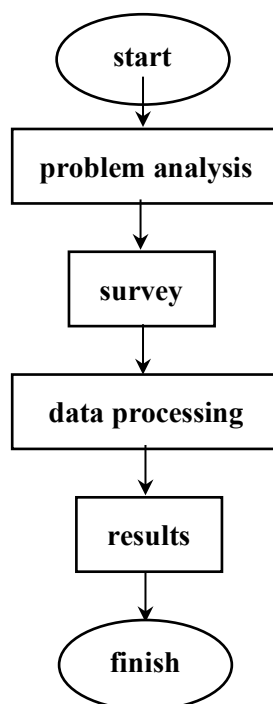


Figure 2 Research Stages

Instrument and Procedure

In order to obtain quantitative data, researchers need to compile a series of valid research instruments in the form of tables that describe the relationship between several research dimensions in the WebQual method.

Table 1 Research Variable Indicators

Nio.	Variable	Indicators	Variable code
1.	<i>Usability Quality</i>	<ul style="list-style-type: none"> ● Ease of operation. ● There is clear interaction on the website. ● Ease of navigation. ● Easy to see interface. ● Interface type according to website function. ● There is additional information on the website that is easy to understand. ● Information layout is neat and precise ● Easy to find the address of the destination website on the internet. 	UQ 001 UQ 002 UQ 003 UQ 004 UQ 005 UQ 006 UQ 007 UQ 008
2.	<i>Infornatiion Quality</i>	<ul style="list-style-type: none"> ● The information available is reliable. ● The information provided is up to date. 	IQ 001 IQ 002

		<ul style="list-style-type: none"> ● Information is easy to understand. ● There is detailed information. ● The information provided is relevant to the user ● Accurate information. ● The format of the information presented is appropriate. 	IQ 003 IQ 004 IQ 005 IQ 006 IQ 007
3.	<i>Service Interaction Quality</i>	<ul style="list-style-type: none"> ● Good website reputation. ● Security in completing files or documents is guaranteed. ● There is a guarantee of security in personal data ● Easy to interact with related parties. ● Can attract user interest and attention. ● Easy to convey problems or aspirations directly. ● Have a high level of trust regarding data security. 	SIQ 001 SIQ 002 SIQ 003 SIQ 004 SIQ 005 SIQ 006 SIQ 007
4.	<i>User Satisfaction</i>	<ul style="list-style-type: none"> ● The website has a good appearance. ● The website provides the required services. ● The website guarantees privacy and security for user data. 	US 001 US 002 US 003

Source: (Wijaya & Handayani, 2023)

Data Analysis

1) Validity Test

The purpose of the validity test is to ensure that the measuring tool has strong measuring power so that each question can be represented.

The basis used in making decisions in this validity test is that when the rCount value exceeds rTable, then the questionnaire is considered valid. Conversely, if the rCount value is lower than rTable, then the questionnaire is considered invalid.

2) Reliability Test

Reliability testing is to evaluate the stability and consistency of a measuring instrument or test in measuring the same construct or phenomenon repeatedly. Good reliability test results show that the measurement instrument has high consistency, so it can be relied on in measuring the intended variable or construction. The reliability test that is widely used in research is the Cronbach's Alpha method.

3) F and T test

The F test is a test where the independent variables, namely Usability, Information, and Interaction, can simultaneously influence the dependent variable, namely User Satisfaction. The F test was carried out with a significance level of 10% (0.1). Meanwhile, the T-test is a test to determine the level of significance of the influence of the independent variable (X) on the dependent variable (Y) partially. The independent variable can affect the dependent variable if the t count is > t table or the significance probability value is < 0.1.

RESULT AND DISCUSSION

1) Distribution of Questionnaires

Researchers distributed questionnaires to several users to measure the quality of service on the hospital complaints website using Google Forms. There were around 41 respondents consisting of Hospital IT staff and several other users in the same scope.

The research uses the Sliovin Formula, which is a formula used for statistical research to determine the sample size needed to draw a survey from the existing population.

$$n = \frac{N}{1+N(e)^2}$$

Information :

n : Required sample size

N: Total number of pyopulations

e : Desired error rate (for this study an error rate of 10% or 0.1 is used).

So that :

$$n = \frac{70}{1+70(0,1)^2}$$

$$n = \frac{70}{1+0,7}$$

$$n = \frac{70}{1,7} = 41,7 \quad n \approx 41$$

So from the calculation above we get As many as 41 respondents.

2) Data processing

Validity Test

This variable inquiry consists of 8 questions. Interpretation of the validity results with the sample size is by paying attention to the calculated r value (r calculated > r table) so that it is declared valid. The significant value for the confidence level is <0.1 and the r table distribution value with a confidence level of 0.1 (df = N-2) is 0.260.

Table 4

Validity Test Corelations Ciorrelatiions

		US1	US2	US3	Tiotal_ US
US1	Pearson Correlation	1	.711**	.771*	.936**
	Sig. (2-tailed)		.000	.000	.000
	N	41	41	41	41
US2	Pearson Correlation	.711*	1	.582*	.859**
	Sig. (2-tailed)	.000		.000	.000
	N	41	41	41	41
US3	Pearson Correlation	.771*	.582**	1	.874**
	Sig. (2-tailed)	.000	.000		.000
	N	41	41	41	41
Tiotal_ US	Pearson Correlation	.936*	.859**	.874*	1
	Sig. (2-tailed)	.000	.000	.000	
	N	41	41	41	41

** . Correlation is significant at the 0.01 level (2-tailed).

Table 5

User Satisfaction Validity Test

No.	r Calculate	r Tablil	Decision
1	0,936	0,260	Valid
2	0,859	0,260	Valid
3	0,874	0,260	Valid

The results of the research instrument trial in Table show that rCount is greater than rTable, which means that all items in the questionnaire can be declared valid and can be used as a data collection tool.

Reliability Test

In this reliability test, the author will measure the dimensional instruments of the WebQual method, including usability quality, information quality, service interaction quality, and user satisfaction in measuring service quality. Hospital complaint website.

Table 6

Reliability Test Results for Overall Dimensions

Variabel	value Cronbach's Alpha	Criteria	Information
Usability Quality	0,909	0,60	Reiliabel
Information Quality	0,919	0,60	Reiliabel
Quality of Service Interaction	0,854	0,60	Reiliabel

User Satisfaction	0,868	0,60	Reiliabeil
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Cronbach's Alpha Criteria Information Value Variable Usability Quality 0.909 > 0.60, Reiliabeil Information Quality 0.919 > 0.60, Reiliabeil Quality of Service Interaction 0.854 > 0.60 Reiliabeil User Satisfaction 0.868 > 0.60 Reiliabeil

3) Hypothesis Testing

T test

In this test the author uses two basic decisions, the first way is by comparing the significance value with a probability value of 0.1. If the significance value is <0.1 then variable X influences variable Y, whereas if the significance value is >0.1 then variable X is not affected by variable Y.

$$t_{Tabel} = (a/2 ; n-k-1)$$

Features:

a = significance value

n = number of samples

k = number of variables

$$t_{Tabel} = t(a/2 ; n-k-1)$$

$$a = 10 \% = t(0,1/2 ; 41-3-1)$$

$$= 0,05 ; 37$$

$$= \mathbf{1,687}$$

From the calculation above, it can be seen in the T distribution table, that the significance row is 0.05, with the sample number row being 37, the result is **1.687**.

Table 6
Usability Quality Variable T Test Results (X1) Against User Satisfaction (Y)
Coefficients^a

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
		B		Beta		
1	(Constant)	3.368	1.582		2.130	.040
	Ttotal_UQ	.263	.050	.643	5.243	.000

a. Dependent Variable: Ttotal_US

Results of the T-test (partial) between the independent variables, namely the quality of the results (X1), and the independent variables, namely the quality of the results (Y) with a significance value of 10% or 0.1, which is $0 < 0.1$ and the t value is **5.243** > t table value **1.687**. This means that the variation in the quality of a company has an impact on the quality of the market.

Table 7
T Test Results for Quality Information Variables (X2) on User Satisfaction (Y) Cioefficients^a

Miodel		Unstandardized Cioefficients		Standardized Cioefficients	t	Sig.
		B	Std. Error	Beta		
1	(Cionstant)	1.755	1.590		1.104	.276
	Tiotal IQ	.354	.057	.706	6.232	.000

a. Dependent Variable: Tiotal_US

Results of the T-test (partial) between the independent variable, namely the quality of information (X2), and the independent variable, namely the competitiveness (Y) with a significance value of 10% or 0.1, which is $0 < 0.1$ and the t value is **6.232** > t table value **1.687**. This means that information quality variables have an impact on customer satisfaction.

Table 8
T Test Results for Variable Service Interaction Quality (X2) on User Satisfaction (Y) Cioefficients^a

Miodel		Unstandardized Cioefficients		Standardized Cioefficients	t	Sig.
		B	Std. Error	Beta		
1	(Cionstant)	.221	1.549		.143	.887
	Tiotal_S IQ	.423	.057	.764	7.386	.000

a. Dependent Variable: Tiotal_US

Results of the T-test (partial) between the independent variable, namely the quality of information (X2), and the independent variable, namely the competitiveness (Y) with a significance value of 10% or 0.1, which is $0 < 0.1$ and the t value is **7.386** > t table value **1.687**. This means that information quality variables have an impact on customer satisfaction.

F test

In this research, the researcher wants to use a rudder to look for intuitive tables with a sample size of 41 results so that results can be obtained as follows:

$$\begin{aligned}
 f \text{ Tabeil} &= (k ; n-k) \\
 &= (3 ; 41-3) \\
 &= (df - 3 \text{ kei } 38) \\
 &= \mathbf{2,23}
 \end{aligned}$$

From the calculation above, it can be explained that f table with a sample size (n) of 41 results and the variable numbers used are X1, So it can be seen in the f distribution table for a significance value of 0.1 with the value (df -3) of row 38, the result is **2.23**.

Table 9

F Test Results for Variables X1, X2, and X3 Against Variable Y

ANiOVA^a

Model		Sum Squares	iof df	Mean Square	F	Sig. b
1	Regressiio n	122.267	3	40.756	18.406	.000
	Residual	81.928	37	2.214		
	Tiotal	204.195	40			

a. Dependent Variable: Tiotal_US

b. Predictors: (Cionstant), Tiotal_SIQ, Tiotal_UQ, Tiotal_IQ

From the results of the examination in the table above, the F test of variables X1, 23. So variables X1, X2, and X3 have a significant influence on variable Y.

CONCLUSION

Based on the discussion that the author discusses, conclusions can be drawn The results of calculating data for all variables showed that as many as 41 respondents were satisfied with the quality of service on the hospital complaint website. This proves that the service on the complaint website meets the four-dimensional elements of the WebQuial method. Apart from that, it can be decided that the research hypothesis (H1) states that there is a significant relationship (correlation) between the influence of service quality on the hospital complaint website and the level of user satisfaction, so the hypothesis (H0) is rejected.

Test results between the independent variable, namely the quality of use (X1), to the independent variable, namely the quality of service (Y), the independent variable, namely the quality of information (X1), to the dependent variable, namely user satisfaction (Y), and the independent variable, namely the quality of service interaction (X1), to the variable The dependency, namely user satisfaction (Y), each shows a significance value of 10% or 0.1, which is <0.1 and the t-count value $>$ t-table value 1.678. This means that each of these variables has an influence on user satisfaction

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