

Analysis of website service quality for the online licensing information system at dpmpstp palembang using the webqual 4.0 method

Imam Nadhiral Mizan¹ Andri² Edi supratman³ Kiky Rizky Nova Wardani⁴

Department of Information Systems, Faculty of Computer Science

Bina Darma University

Palembang, Indonesia

Imamnadhiral@gmail.com¹ andri@binadarma.ac.id² edi_supratman@binadarma.ac.id³

kikyrizkynovawardani@binadarma.ac.id⁴

Submitted: April 22, 2025; Revised: June 10, 2025 ; accepted: October 30, 2025

Abstract

The rapid development of information technology, particularly the internet, has driven governments to adopt e-government to enhance information access, improve service efficiency, and promote administrative transparency. One of its implementations is a public service website that enables citizens to access digital services and information. The success of this system highly depends on the quality of the website in terms of usability, information completeness, and service interaction. This study employs the Webqual method, which consists of Usability Quality, Information Quality, and Interaction Quality, using a quantitative approach to evaluate the website's service quality. The results indicate that the Online Licensing Service Information System website of DPMPTSP Palembang City has improved service efficiency by accelerating the licensing process in accordance with SOP's, allowing applicants to obtain their licensing certificates within a maximum of three days. The system implementation has successfully reduced reliance on slower manual processes. However, several accessibility issues were identified, such as occasional slow page load times during peak hours and the absence of features that support users with disabilities, such as screen readers or keyboard navigation. In addition, technical terms like "SIPPERI" are explained but not comprehensively, which can confuse less experienced users. While user guides are available, the information provided is not detailed enough to cover the entire process. These findings were based on questionnaire responses and user observations. Further analysis reveals that Usability Quality, Information Quality, and Interaction Quality simultaneously have a significant impact on user satisfaction. However, when examined separately, only Information Quality and Interaction Quality show a significant positive impact, while Usability Quality does not strongly influence user satisfaction. The development of public service information systems should focus on improving accessibility, creating a more intuitive interface, and ensuring regular updates of information. With these optimizations, the system can be more effective in meeting user needs and enhancing their experience in accessing government digital services.

Keywords: E-Government, Webqual, Usability Quality, Information Quality, Interaction Quality, Online Licensing Services

1. Introduction

The Online Licensing Service Information System (SIPPERI) of DPMPTSP Palembang City aims to improve service quality for the citizens of Palembang by implementing the Online Single Submission (OSS) system. DPMPTSP Palembang has integrated services with OSS, including licensing services through SIPPERI. The OSS mechanism currently applied serves as the initial licensing medium or the primary requirement for obtaining other permits, fulfilling business commitments, and verifying the compliance of licensing commitments.

With this website, information regarding licensing can be easily accessed by the public, including license application services. However, until now, no measurement has been conducted to assess the service quality of the DPMPTSP Palembang website in terms of the effectiveness of digital information delivery. Additionally, to achieve good governance in information technology management, continuous evaluation is necessary. Therefore, DPMPTSP Palembang should analyze the service quality of its website by considering user perceptions to ensure user satisfaction with the website's services.

Currently, the DPMPTSP Palembang website faces several challenges that affect its effectiveness. For instance, during peak usage hours, the website sometimes experiences slow page loading times, which can delay the licensing process as users cannot submit or upload necessary documents promptly. Furthermore, the website lacks sufficient accessibility features for users with disabilities, such as screen readers or keyboard navigation, limiting inclusive access. While some technical terms like “SIPPERI” are explained on the website, explanations are incomplete, causing confusion among first-time or less-experienced users. Although user guides exist, they do not cover all aspects of the licensing process in sufficient detail. Additionally, the Public Information Disclosure (PPID) page is not regularly updated, resulting in users lacking clear and timely information about changes in policies or licensing requirements. These factors may decrease public trust in the digital licensing service and lead users to revert to manual processes at the physical office.

To objectively evaluate the quality of the website service from the users’ perspective, this study employs the Webqual 4.0 method. This method is selected because it is specifically designed to measure website quality across three main dimensions: Usability Quality, Information Quality, and Service Interaction Quality. Compared to other methods such as SERVQUAL, which primarily focuses on traditional service quality, Webqual is more appropriate for evaluating digital platforms and the online interactions users have with the system.

2. Method

2.1. Data Collection Location

This research was conducted at the Investment and One-Stop Integrated Services Office (DPMPTSP) of Palembang City, located at Jl. Gub H Bastari, 15 Ulu, Jakabaring, Palembang City, South Sumatra 30267.

2.2. Data Sources and Data Collection Techniques

2.2.1 Data Sources

Data sources are events or information that have occurred and can serve as facts or evidence to support the discussion. This study utilizes two types of data sources, as follows:

1. Primary Data

Primary data refers to the main data used in this research. It was obtained directly from 97 respondents, who provided insights into the influence of Usability Quality, Information Quality, and Service Interaction Quality on the website services of the Online Licensing Service Information System (SIPPERI) at DPMPTSP Palembang City. The data was collected through interviews and questionnaires administered to users of the service.

2. Data Sekunder

According to Sugiyono (2019), secondary data consists of primary data that has been processed and presented in an organized manner by the primary data collectors or other parties, such as in tables or diagrams. [1]

2.2.2 Data Collection Techniques

According to Sugiyono (2019), data collection techniques can be conducted using interviews, questionnaires (surveys), observations, or a combination of these methods.. [1]

1. Interviews

The interview technique is a quantitative data collection method using an interview guide as an instrument. In this study, interviews were conducted directly with DPMPTSP Palembang City staff and users of the SIPPERI online licensing service website.

2. Observations

Observation involves systematically observing and recording visible elements of a phenomenon related to the research object.

3. Kuesioner

A questionnaire is a data collection technique in which a set of written questions or statements is given to respondents for them to answer. In this study, the questionnaire aims to determine whether the respondents' answers align with the actual learning process. The questionnaire was distributed directly to users of the One-Stop Integrated Service (DPMPTSP) of Palembang City.

4. Document Study

The documentation study is a data collection technique that involves examining documents to obtain data or information relevant to the research problem. In this study, the documentation study serves as a method that is not directly aimed at users of the SIPPERI online licensing service website at DPMPTSP Palembang City.

2.3 Population, Sample, and Sampling

2.3.1 Population

According to Sugiyono (2019), a population is a generalization area consisting of objects or subjects that have specific qualities and characteristics determined by the researcher to be studied and from which conclusions are drawn. [1] In this study, the population consists of users of the SIPPERI Online Licensing Service website at DPMPTSP Palembang City, totaling 2,902 registered applicants.

2.3.2 Sample

A sample is a subset of the population that represents the characteristics of the entire group (Sugiyono, 2019). [1] In this study, the researcher narrowed down the population of 2,902 registered applicants to 97 respondents using the Slovin formula.

The Slovin formula is used in research to determine a sample size that accurately represents the overall population. The formula is as follows:

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

Keterangan:

n : Jumlah sampel
N : Jumlah populasi
e² : Persisi (10%)

Given that the population in this study consists of 2,902 registered applicants, a margin of error of 10% was applied. The calculation is as follows:

$$n = \frac{2902}{1+2902(0.10)^2}$$

(1)

$$n = \frac{2902}{1+2902(0.01)}$$

(2)

$$n = \frac{2902}{1+29.02}$$

(3)

$$n = \frac{2902}{30.02}$$

(4)

$$n = 96.66$$

(5)

The result is rounded up to 97 respondents, who serve as the sample for this study.

2.3.3 Sampling Technique

Sampling techniques are generally divided into two categories: Probability Sampling and Non-Probability Sampling. According to Sugiyono (2019), Non-Probability Sampling is a sampling technique that does not consider multiple variables when selecting the sample. [1] This means that not all members of the population have an equal chance of being selected as respondents. In this study, the sample was selected based on the willingness of individuals to fill out the questionnaire and their relevance to the research objectives. From the 97 selected respondents, all were users of the SIPPERI Online Licensing Service website at DPMPTSP Palembang City.

2.4 Variables and Operational Variables

2.4.1 Variables

According to Sugiyono (2019), a variable is anything that takes on different values and is defined by the researcher for study to obtain information and draw conclusions. [1] This study involves two types of variables: independent variables and dependent variables.

2.4.1.1 Independent Variables

Independent variables are variables that influence or cause changes in the dependent variable. In quantitative research, these variables explain the occurrence of the research focus or topic.

1. Usability Quality (X_1)

Usability quality measures the design and functionality of a website, including its layout, ease of use, navigation, and clarity for users. The five indicators for this variable are:

- a) Easy to learn and operate the website
- b) Clear and easy-to-understand website interaction
- c) Easy to learn and operate
- d) Easy to use
- e) Visually appealing design

2. Information Quality (X_2)

Information quality assesses the accuracy and relevance of content on a website, ensuring it meets users' needs. The six indicators for this variable are:

- a) Provides accurate information
- b) Provides trustworthy information
- c) Provides up-to-date/timely information
- d) Provides relevant information
- e) Provides easily understandable information
- f) Provides detailed and appropriate information

3. Service Interaction Quality (X_3)

Service interaction quality evaluates the user's experience and interaction with the website's services. The six indicators for this variable are:

- a) Ensures a safe user experience
- b) Has a good reputation
- c) Protects users' personal information
- d) Allows for user personalization
- e) Provides services as described
- f) Facilitates communication with service providers

2.4.1.2 Dependent Variable

The dependent variable is influenced by the independent variables (Ulum R.A, 2018). In this study, the dependent variable is User Satisfaction (Y). The four indicators for this variable are:

- a) Ease of interaction with the website
- b) Minimal waiting time when accessing the website
- c) Beneficial information provided to users
- d) Website accessibility on various devices (smartphones, tablets, etc.)

2.4.2 Operational Variables

Operational variables define the attributes, properties, or values of an object or activity that vary and are determined by the researcher for study and conclusion drawing (Sugiyono, 2019).

Table 1. Operational Variables

Variable		Indicator	Question Item
Usability (X_1)	Quality	Easy to learn and operate the website	X_{1-1}
		Clear and easy-to-understand website interaction	X_{1-2}
		Easy to learn and operate	X_{1-3}
		Easy to use	X_{1-4}
		Visually appealing design	X_{1-5}
Information (X_2)	Quality	Provides accurate information	X_{2-1}
		Provides trustworthy information	X_{2-2}
		Provides up-to-date/timely information	X_{2-3}
		Provides relevant information	X_{2-4}
		Provides easily understandable information	X_{2-5}
		Provides detailed and appropriate information	X_{2-6}

Service Interaction Quality (X_3)	Ensures a safe user experience	X_{3-1}
	Has a good reputation	X_{3-2}
	Protects user's personal information	X_{3-3}
	Allows for user personalization	X_{3-4}
	Provides services as described	X_{3-5}
	Facilitates communication with service providers	X_{3-6}
User Satisfaction (Y)	Ease of interaction with the website	Y_1
	Minimal waiting time when accessing the website	Y_2
	Beneficial information provided to users	Y_3
	Website accessibility on various devices	Y_4

2.5 Research Instrument

A research instrument is a tool used by researchers to measure natural or social phenomena under investigation. In this study, the research instrument is a questionnaire (structured list of questions).

This research instrument is designed to measure the influence of usability quality, information quality, and service interaction quality on user satisfaction regarding the online licensing service website at DPMPTSP Palembang City.

The indicators for each variable are structured into a checklist or multiple-choice format based on the dimensions and indicators of the studied variables. The questionnaire serves as the primary research instrument to collect data from respondents.

3. Result and Discussion

3.1 Online Licensing Service Information System (SIPPERI)

The establishment of SIPPERI (Online Licensing Service Information System) is an innovation by DPMPTSP Palembang City aimed at facilitating public access to licensing and non-licensing services without requiring applicants to visit the office in person. This system allows services to be accessed from anywhere, making the licensing process more efficient.

In addition to providing licensing services, SIPPERI also features a complaint submission system, allowing the public to provide feedback to improve public service quality continuously. Furthermore, the system includes a tutorial section to guide users through the application process, ensuring they can navigate the system effectively. The homepage of SIPPERI is illustrated in Figure 1 below.

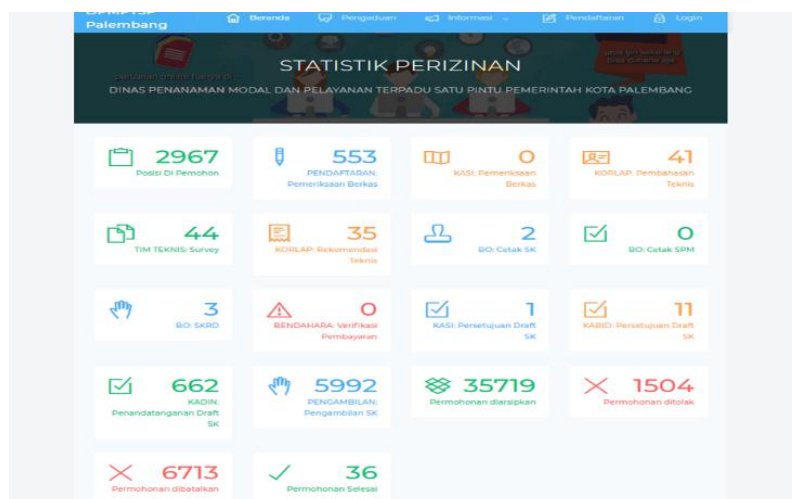


Fig 1. SIPPERI Homepage

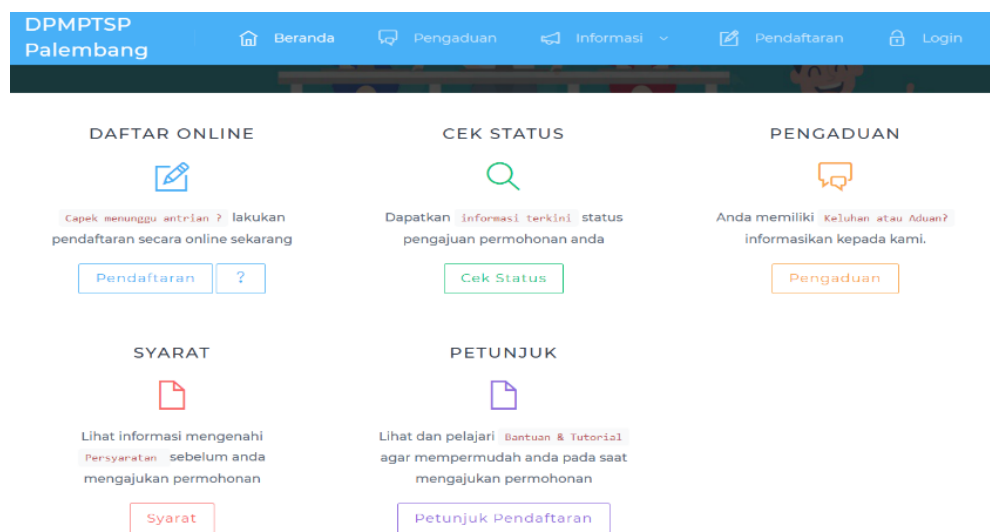


Fig 2. SIPPERI Licensing Statistics

As shown in Figure 2, as of February 3, 2025, a total of 553 applicants have registered through SIPPERI, with:

1. 1,504 applications rejected,
2. 6,713 applications canceled, and
3. 36 applications successfully processed and completed.

Several applications were rejected due to various issues, including incomplete documents or insufficient data, preventing further processing.

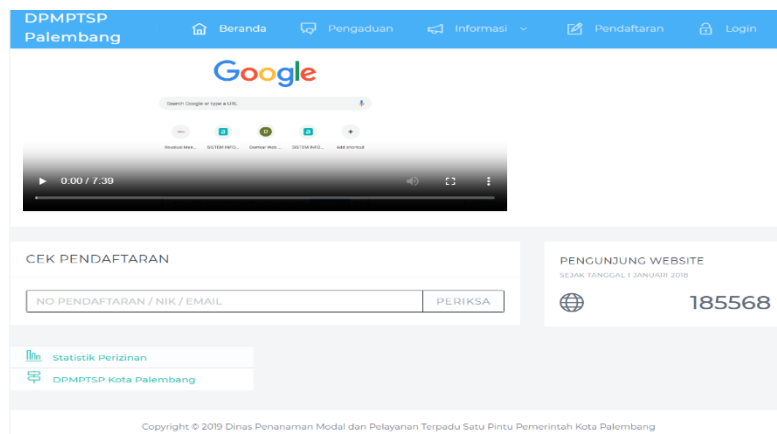


Fig 3. SIPPERI Visitors

In Figure 3, a tutorial video is provided to help users understand how to use SIPPERI, covering steps such as account creation, registration, license application submission, and tracking the progress of their applications as handled by administrators or system officers.

3.2 Research Findings

3.2.1 User Assessment of the Website

Based on interviews with users of the Online Licensing Service Information System website of DPMPTSP Palembang City, several key points were identified by the researchers:

1. The online licensing service at DPMPTSP Palembang City has successfully accelerated the process that was previously conducted conventionally. With the online system, applications are processed within a maximum of three days, and the licensing certificates (SKs) can be issued on time according

to the SOP. Although DPMPTSP Palembang City does not have a specific target for the number of services provided, the percentage of licenses issued according to service standards reached an average of 98.1% in 2023–2024, exceeding the set target. This indicates that the service objectives have been met within the specified timeframe.

2. DPMPTSP Palembang City has provided procedures and information to facilitate public access to online licensing services through the SI IMUT system, including standard operating procedures, account registration guidelines, and the licensing process flow. However, some service standards are still difficult to access, and the documents in the PPID are not fully updated, resulting in less-than-optimal access to the latest information for the public.

3.2.2 Research Instrument Testing

3.2.2.1 Validity Test

The validity test is conducted to determine the extent to which a measuring instrument can accurately measure what it is intended to measure. The validity test was performed using a Correlation Matrix by comparing the calculated *r*-value (rhitung) from the Correlated Item-Total Correlation with the critical *r*-table value (Pearson Product Moment). In this study, the sample size (*n*) is 97, and the degrees of freedom (*df*) can be calculated as $(n - 2) = 97 - 2 = 95$, with an alpha level of 0.05, resulting in an *r*-table value of 0.199. If the calculated *r*-value is greater than the *r*-table value and positive, then the item or indicator is considered valid (Sugiyono, 2019).

Table 2. Validity Test Results for Usability Quality (X_1)

Variable	R Value	R table	Remarks
Item 1	0,785	0.199	Valid
Item 2	0,711	0.199	Valid
Item 3	0,710	0.199	Valid
Item 4	0,776	0.199	Valid
Item 5	0,479	0.199	Valid

Based on Table 2, the validity test results for Usability Quality (X_1) show that the lowest *r*value is 0.479 and the highest is 0.785. This indicates that all item statements in the Usability Quality variable (X_1) are valid and meet the criteria to be used as measurement instruments.

Table 3. Validity Test Results for Information Quality (X_2)

Variable	R Value	R table	Remarks
Item 1	0,697	0.199	Valid
Item 2	0,600	0.199	Valid
Item 3	0,707	0.199	Valid
Item 4	0,745	0.199	Valid
Item 5	0,710	0.199	Valid
Item 6	0,831	0.199	Valid

As shown in Table 3, the validity test results for Information Quality (X_2) reveal that the lowest *r*value is 0.600 and the highest is 0.831. This means that all item statements in the Information Quality variable (X_2) are valid and acceptable for use as measurement instruments.

Table 4. Validity Test Results for Service Interaction Quality (X_3)

Variable	R Value	R table	Remarks
Item 1	0,552	0.199	Valid
Item 2	0,546	0.199	Valid
Item 3	0,760	0.199	Valid
Item 4	0,768	0.199	Valid
Item 5	0,789	0.199	Valid
Item 6	0,878	0.199	Valid

According to Table 4, the validity test results for Service Interaction Quality (X_3) show that the lowest *r*value is 0.546 and the highest is 0.878. This implies that all item statements in the Service Interaction Quality variable (X_3) are valid and meet the necessary criteria for use as measurement instruments.

Table 5. Validity Test Results for User Satisfaction (Y)

Variable	R Value	R table	Remarks
Item 1	0,715	0.199	Valid
Item 2	0,879	0.199	Valid
Item 3	0,527	0.199	Valid
Item 4	0,876	0.199	Valid

Based on Table 5, the validity test results for User Satisfaction (Y) indicate that the lowest rvalue is 0.527 and the highest is 0.879. These results confirm that all item statements in the User Satisfaction variable (Y) are valid and suitable to be used as measurement instruments.

3.2.2.2 Reliability Test

Reliability refers to a value that indicates the consistency of an instrument in measuring the same phenomenon. An instrument is considered reliable if the Cronbach's Alpha value is greater than 0.6 (Sugiyono, 2019). The smaller the measurement error, the more reliable the measuring instrument, and vice versa.

Table 6. Reliability Test Results

Variabel	Cronbach's Alpha	N of Items	Remarks
Usability Quality (X_1)	0,874	5	Reliabel
Information Quality (X_2)	0,741	6	Reliabel
Service Interaction Quality (X_3)	0,826	6	Reliabel
User Satisfaction (Y)	0,817	4	Reliabel

Based on Table 6, all variables in the reliability test have Cronbach's Alpha values greater than 0.60, which indicates that the questionnaire items for the variables Usability Quality, Information Quality, Service Interaction Quality, and User Satisfaction are reliable. Therefore, the variables used in this study are suitable for further analysis.

3.2.2.3 Results of Classical Assumption Test

Before conducting multiple linear regression analysis, it is necessary to perform classical assumption testing to ensure the best results. The purpose of fulfilling these assumptions is to ensure that the independent variables, as estimators of the dependent variable, are unbiased. One of the classical assumption tests carried out in this study is the normality test.

Table 7. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
	Unstandardized Residual	
N		97
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.09580706
Most Extreme Differences	Absolute	.078
	Positive	.061
	Negative	-.078
Test Statistic		.078
Asymp. Sig. (2-tailed)		.177 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Based on Table 7, the normality test using the Kolmogorov-Smirnov method shows a significance value of 0.117, which is greater than the significance level of 0.05. Therefore, it can be concluded that the residuals in this study are normally distributed. A normal distribution is indicated when the significance value is greater than 0.05.

3.2.2.4 Multiple Linear Regression Analysis

Based on the results of the classical assumption tests, there is no bias in the data to be processed. Therefore, multiple linear regression analysis is conducted. This analysis is used to determine the extent to which the independent variables—Usability Quality, Information Quality, and Service Interaction Quality—affect the dependent variable, which is User Satisfaction with the Online Licensing Service Information System website at DPMPSTSP Palembang City.

Table 8. Multiple Linear Regression Test Results

Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	.412	1.229	
	<i>Usability Quality</i>	-.051	.040	-.065
	<i>Information Quality</i>	1.278	.193	1.460
	<i>Service Interaction Quality</i>	-.639	.230	-.618

a. Dependent Variable: User Satisfaction

Based on Table 8, the regression coefficients obtained are as follows: Usability Quality (X1) = 0.412, Information Quality (X2) = -0.051, and Service Interaction Quality (X3) = 0.230, with a constant value of 5.031. Thus, the multiple linear regression equation is as follows :

$$Y = 0.412 - 0,051 X_1 + 1.278 X_2 - 0,693 X_3 + e \quad (1)$$

The regression analysis results show that the constant value of 0.412 represents the level of User Satisfaction (Y) when the variables Usability Quality (X1), Information Quality (X2), and Service Interaction Quality (X3) are assumed to be constant. The Usability Quality variable has a regression coefficient of -0.051, indicating that an increase in usability quality actually decreases user satisfaction. Conversely, the Information Quality variable has a coefficient of 1.278, suggesting that improvements in information quality positively affect user satisfaction by 0.700. Meanwhile, the Service Interaction Quality variable, with a coefficient of -0.693, shows that increased interaction quality may actually reduce user satisfaction. This indicates that information quality has a stronger positive influence on user satisfaction than usability and service interaction.

3.2.2.5 Coefficient of Determination

The purpose of the coefficient of determination is to measure how much of the variation in the dependent variable can be explained by the independent variables.

Table 9. Coefficient of Determination Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.876	.767	.759	1.113	1.602

a. Predictors: (Constant), *Service Interaction Quality*, *Information Quality*, *Usability Quality*
b. Dependent Variable: User Satisfaction

To determine the extent of the influence, we refer to the adjusted R Square value, which is 0.759 or 75.90%. This means that the variables Usability Quality (X1), Information Quality (X2), and Service Interaction Quality (X3) collectively explain 75.90% of the variation in the User Satisfaction variable (Y), while the remaining 14.10% is influenced by other factors not examined in this study.

3.2.2.6 Simultaneous Test (F-Test)

To determine whether Usability Quality (X1), Information Quality (X2), and Service Interaction Quality (X3) simultaneously influence the User Satisfaction variable (Y), the F-test results can be seen in the following table:

Table 10. F-Test Results

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	378.806	3	126.269	101.868	.000
	Residual	115.276	93	1.240		
	Total	494.082	96			

a. Dependent Variable: User Satisfaction

b. Predictors: (Constant), *Service Interaction Quality*, *Information Quality*, *Usability Quality*

Based on Table 10, the significance value of F is $0.000 < 0.05$, indicating that the variables Usability Quality (X1), Information Quality (X2), and Service Interaction Quality (X3) simultaneously have a significant influence on User Satisfaction (Y) with regard to the Online Licensing Service Information System website at DPMPTSP Palembang City.

3.2.2.7 Partial Test (t-Test)

Table 11. t-Test Results

Table Five Test Results						
Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.412	1.229		.335	.738
	<i>Usability Quality</i>	-.051	.040	-.065	-1.268	.208
	<i>Information Quality</i>	1.278	.193	1.460	6.613	.000
	<i>Service Interaction Quality</i>	-.639	.230	-.618	-2.785	.006

a. Dependent Variable: User Satisfaction

Based on the hypothesis testing using the t-Test in Table 11, it is found that the Usability Quality variable does not significantly affect User Satisfaction. This is evidenced by a significance value of $0.208 > 0.05$. Meanwhile, the Information Quality variable does significantly affect User Satisfaction, as indicated by a significance value of $0.000 < 0.05$. Similarly, the Service Interaction Quality variable also significantly affects User Satisfaction, supported by a significance value of $0.006 < 0.05$.

3.3 Discussion

3.3.1 User Assessment of the Website

The key points obtained by the researchers from users' assessments of the SIPPERI website are as follows:

1. The online licensing services at DPMPTSP Palembang City aim to accelerate and simplify the licensing process compared to conventional systems. With this system, license applications are processed within a maximum of three days in accordance with the SOP, after which applicants can print their licensing certificates. The implementation of this online service has met the required standards for speed and timeliness in license processing.
2. DPMPTSP Palembang City has provided procedures and information to facilitate public access to online licensing services. However, several service standards and documents in the PPID have not yet been updated, which results in suboptimal public access to the latest information.

3.3.2 The Influence of Usability Quality, Information Quality, and Service Interaction Quality on User Satisfaction of the Online Licensing Service Information System Website at DPMPTSP Palembang City

The F-test results in Table 10 show that the variables Usability Quality, Information Quality, and Service Interaction Quality simultaneously have a significant positive effect on user satisfaction ($F = 101.868 > F_{table} = 2.470$, $\text{sig} = 0.000 < 0.05$). This means that when these three aspects are perceived positively by users, the level of satisfaction with the website increases. These findings are consistent with the research by Novitasari & Sutabri (2023), who found that the combination of these three variables had a strong influence on user satisfaction in the context of public service websites using the Webqual

method. Similarly, Ihsan et al. (2022) emphasized that evaluating websites using the Webqual 4.0 method helps measure service effectiveness from the user's perspective.

3.3.3 Influence of Usability Quality on User Satisfaction of the Online Licensing Service Information System Website at DPMPTSP Palembang City

Based on Table 11, the T-test results show a significance value for the Usability Quality variable of 0.208, which is greater than $\alpha = 5\%$, and a t-value of $-1.268 < t\text{-table} = 1.991$. This indicates that there is no significant positive partial effect of the Usability Quality variable on User Satisfaction. This may be due to the fact that although the website provides basic functions, it still lacks in clarity and ease of interaction. Users may find the interface confusing or difficult to navigate. This aligns with the observations by Arthalia & Prasetyo (2021), who noted that even when a website is technically functional, users may still struggle if the interface is not user-friendly or lacks clear guidance. Consequently, users may not fully utilize the website's features, which can reduce its perceived usefulness.

3.3.4 Influence of Information Quality on User Satisfaction of the Online Licensing Service Information System Website at DPMPTSP Palembang City

Based on the T-test results in Table 11, the significance value for the Information Quality variable is 0.000, which is less than $\alpha = 0.05$, and the t-value is $6.613 > t\text{-table} = 1.991$. This indicates a significant positive partial effect of the Information Quality variable on User Satisfaction. This supports findings by Ihsan et al. (2022), who concluded that the accuracy, relevance, and timeliness of information presented on a website directly influences how satisfied users feel. In this study, users of the DPMPTSP Palembang website reported greater satisfaction when the information they accessed was clear, reliable, and up-to-date. However, the issue of outdated content in certain sections, such as the PPID, needs to be addressed to ensure consistent user trust and transparency.

3.3.5 The Influence of Service Interaction Quality on User Satisfaction of the Online Licensing Service Information System Website at DPMPTSP Palembang City.

Based on the T-test results in Table 11, the significance value for the Service Interaction Quality variable is 0.006, which is less than $\alpha = 0.05$, and the t-value is $2.785 > t\text{-table} = 1.991$. This indicates a significant positive partial effect of the Service Interaction Quality variable on User Satisfaction. When users feel they are being supported through responsive communication, secure data handling, and personalized services, their satisfaction increases. This is in line with the research of Sholihah, Adnan, & Arifin (2022), which highlights that strong service interactions—especially in terms of user trust and the perception of empathy—are essential in digital public services. The DPMPTSP website's ability to offer secure and trustworthy transactions contributes significantly to the overall user experience.

4. Conclusion

Based on the results of the research and data analysis conducted, the following conclusions can be drawn:

1. The Online Licensing Service Information System website of DPMPTSP Palembang City is considered to have improved service efficiency by accelerating the licensing process in accordance with SOPs, namely a maximum of 3 days before the applicant can print the licensing certificate. The implementation of this online system demonstrates the utilization of information technology in the digitalization of public services, reducing reliance on slower manual processes. However, in terms of information quality, there are still obstacles related to accessibility and data updates on the PPID, which can hinder transparency and ease of access to the latest information for users. Therefore, system optimization, particularly in data management and integration, is necessary to ensure the website can provide more effective and informative services to the public.
2. Overall, Usability Quality, Information Quality, and Service Interaction Quality have a positive and significant effect on user satisfaction with the Online Licensing Service Information System website of DPMPTSP Palembang City. However, when analyzed partially, Usability Quality does not show a significant influence, while Information Quality and Service Interaction Quality are proven to have a positive and significant influence. This indicates that in the development of public service information systems, information quality and service interaction are the main factors in increasing user satisfaction, while the usability aspect needs to be further evaluated to ensure a more optimal user experience.

Based on the conclusions presented, the researcher would like to offer the following suggestions to further develop this study:

1. To improve user satisfaction, DPMPTSP Palembang City needs to maintain and enhance the quality of information among employees. With high-quality information, usability, and service interaction, users will be more satisfied, which in turn can boost creativity and work enthusiasm in line with individual capabilities.
2. For future research, it is recommended not to focus solely on the three variables used in this study, namely Usability Quality, Information Quality, and Service Interaction Quality. Since the results show that about 24.8% of the factors affecting user satisfaction remain unexplained, future researchers can consider adding other relevant variables. These may include system speed (response time), user trust in the system, level of digital literacy, or personal factors such as age, education, and frequency of system use. By including these additional variables, future studies are expected to provide a more complete picture of the factors that influence user satisfaction with online licensing services..
3. To improve the Usability Quality aspect and thus enhance user satisfaction with the Online Licensing Service Information System website, it is necessary to develop the user interface (UI) to be more interactive for mobile users such as smartphone and tablet users. Additionally, designing a simple and clean website layout will make it easier for users—especially those less familiar with technology—to understand and utilize the website according to its intended purpose by implementing a responsive, minimalist, and mobile-friendly website interface that accommodates a wide range of user technical abilities..

Reference

- [1] Sugiyono. (2019). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alfabeta, CV.
- [2] Ayu Novitasari, & Tata Sutabri. (2023). Analysis of Website Service Quality at BKPSDM Palembang City Using the Webqual Method. *Indonesian Journal of Multidisciplinary on Social and Technology*, 1(2), 88–94. P-ISSN: 2986-6790, e-ISSN: 2986-6782.
- [3] Arif Saputra, & Denny Kurniadi. (2019). Analysis of User Satisfaction with the E-Campus Information System at IAIN Bukittinggi Using the EUCS Method. *Jurnal Vokasional Teknik Elektronika dan Informatika*, 7(3). E-ISSN: 2302-3295.
- [4] Ika Arthalia, & Rendi Prasetyo. (2021). The Use of Websites as an Evaluation Tool for Academic Activities of Students at SMA Negeri 1 Punggur, Lampung. *ojs.ummetro.ac.id*.
- [5] Ihsan, Azzam Afdhalul, et al. (2022). Website Quality Evaluation Using the Webqual 4.0 Method and Importance Performance Analysis. *Keunis*, 10(2), 29–40.
- [6] Kotler, P., Keller, K. L., & Chernev, A. (2022). *Marketing Management* (16th ed.). United Kingdom: Pearson Education Limited.
- [7] Sholihah, A., Adnan, F., & Arifin, F. N. (2022). Evaluation of the Main Government Website Service Quality of Situbondo Regency Using the E-Govqual and Importance Performance Analysis (IPA) Methods. *JURNAL DEVICE*, 60–74.