

Evaluation of the Influence of Pandu Online Website Quality on User Satisfaction in Garut Regency: A Webqual 4.0 Approach in the E-Government Context

Hanna Yulia¹, Dini Turipanam Alamanda², Abdullah Ramdhani³, Vieny Marita Amalia⁴, Dinar Mariam⁵

^{1, 3, 4} State Administration Study Program, Faculty of Social and Political Sciences, Garut University, Indonesia

² Digital Business Study Program, Faculty of Economics, Garut University, Indonesia

⁵ Mark Oliphant College, Adelaide, Australia

(Corresponding author: yuliahanna11@gmail.com)

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Abstrak

Website Pandu Online memberikan keuntungan bagi pemerintah dalam menyediakan layanan publik yang efektif dan efisien bagi masyarakat. Penelitian ini bertujuan untuk menganalisis pengaruh kualitas website Pandu Online terhadap kepuasan pengguna di Kabupaten Garut dengan menggunakan metode Webqual 4.0, yang merupakan sebuah pendekatan yang mengintegrasikan teknologi canggih seperti kecerdasan buatan, analisis big data, Internet of Things (IoT), dan lainnya, untuk meningkatkan kualitas dan pengalaman pengguna dalam mengakses website. Penelitian ini menggunakan pendekatan kuantitatif dengan melakukan survei terhadap 100 masyarakat Garut yang merupakan pengguna website Pandu Online. Data yang terkumpul dianalisis menggunakan metode analisis Structural Equation Modelling - Partial Least Square (SEM PLS) dengan bantuan software WarpPLS 7.0. Hasil penelitian menunjukkan bahwa terdapat pengaruh kegunaan, kualitas informasi, kualitas layanan interaksi yang merupakan dimensi-dimensi kualitas website terhadap kepuasan pengguna. Selain itu, penelitian ini juga mendukung teori e-government yang menekankan pentingnya pemanfaatan teknologi informasi dalam penyelenggaraan layanan publik.

Kata kunci: Kualitas Website; Kepuasan Pengguna; Kualitas Layanan Interaksi; E-Government.

Abstract

The Pandu Online website provides advantages for the government in providing effective and efficient public services for the community. This study aims to analyze the influence of the quality of the Pandu Online website on user satisfaction in Garut Regency by using the Webqual 4.0 method, which is an approach that integrates advanced technology such as artificial intelligence, big data analysis, Internet of Things (IoT), and others, to improve the quality and user experience in accessing the website. This study uses a quantitative approach by conducting a survey of 100 Garut people who are users of the Pandu Online website. The collected data was analyzed using the Structural Equation Modelling - Partial Least Square (SEM PLS) analysis method with the help of WarpPLS 7.0 software. The results of the study show that there is an influence on usability, information quality, and interaction service quality which are the dimensions of website quality on user satisfaction. In addition, this research also supports the theory of e-government which emphasizes the importance of using information technology in the implementation of public services.

Keywords: Website Quality; User Satisfaction; Interaction Service Quality; E-Government.

INTRODUCTION

The increasing use of information technology and the internet has brought significant changes in various aspects of life in society. One aspect that is affected is public services, where government institutions such as the Garut Regency Population and Civil Registration Service (Disdukcapil) are trying to improve the efficiency and quality of their public services by utilizing technology (Salamah et al., 2020). Technology services cannot be separated from user satisfaction because, according to Rasool & Warraich (2018) and Yas et al. (2020), the satisfaction of users of this technology is the key to success in an information system.

The community's dissatisfaction with services at the Garut Disdukcapil has become a problem that the Garut Disdukcapil must address. Many people in the Garut Regency feel dissatisfied with the Garut Disdukcapil service because they must queue first to take and get a queue number. After the queue card is obtained, they must queue again to be called according to the queue type. Then, the information provided directly is not clear, and even with this problem, it will add to the problem because it will become an opening for Corruption, Collusion and Nepotism (KKN) elements. Because of those problems, Disdukcapil creates a solution to overcome the problem of dissatisfaction with the people of Garut.

The solution made by Disdukcapil is Presidential Instruction No. 3 of 2003 concerning National Policy and Strategy for e-government Development (Nugroho et al., 2022; Rahman & Purwanto, 2022). This solution is essential because it is an e-government initiative which aims to increase the efficiency of providing government services by utilizing the latest advances in information technology to innovate and improve interactions with the public (Al-Zahrani, 2020; Khan et al., 2020; Park & Samijadi, 2021; Sinaga & Seprina, 2022).

Garut Regency responded to the problems at Disdukcapil by presenting the Pandu Online website. This website is essential because it is the primary source of information on a service (Gupta & Singh, 2022). Rahman & Purwanto (2022) state that websites are electronic resources used not only to share information but also in business to provide online services to service users. Pandu Online services can be accessed via the website <https://pandu-online.garutkab.go.id>. With this online service innovation, people can submit requests for population data administration (Adminduk) easily without coming to

the Garut Disdukcapil office. With new services, it is hoped that it can increase public satisfaction with local government services (Vicente et al., 2022).

Another benefit of this online guide website service is that irresponsible parties will not exploit the personal data contained in the database and population documents because the registration documents will be received directly by applicants via personal email without any third party as an intermediary, which aligns with the principles of e-government that involve using information and communication technologies (ICTs) to enhance public sector activities, aiming to improve the access and delivery of government services for citizens, businesses, and employees.

E-government involves using information and communication technologies (ICTs) to enhance public sector activities, aiming to improve the access and delivery of government services for citizens, businesses, and employees. Driven by the need for efficiency, transparency, and public participation, e-government modernizes public administration, making services more accessible and user-friendly (Latupeirissa et al., 2024). Public service theory focuses on delivering effective and equitable public services, emphasizing public value, citizen engagement, and ethical administration. Public value is created when services meet citizens' needs, increasing satisfaction and trust in government (Abdulkareem & Mohd Ramli, 2022). Integrating ICTs in public service theory enhances service delivery, administrative efficiency, transparency, and accountability (Sofyani et al., 2020).

In e-government, public service theory highlights the importance of technology in streamlining processes and improving government-citizen interactions. Online services should be accessible, user-friendly, and meet diverse population needs. E-government can reduce corruption, increase transparency, and encourage public participation in decision-making (Abdulkareem et al., 2022). Combining e-government and public service theory reveals the transformative potential of digital technologies in public service delivery. A citizen-centric approach is advocated, focusing on creating value and improving citizens' experiences with government services (Pertiwi, 2022). Initiatives like the Pandu Online website exemplify this by using advanced technologies to enhance service quality and accessibility, aligning with public service theory's goals.

Many researchers discuss user satisfaction (Utami et al., 2021; Rahman & Purwanto, 2022; Vicente et al., 2022), but this research is more relevant with Budi (2022).

However, the success of the Pandu Online website in providing satisfaction to users still needs to be analyzed systematically. One method that can be used to carry out this analysis is the Webqual 4.0 method. This method has been proven effective in analyzing website quality and understanding user perceptions of the website usage experience (Salamah et al., 2020; Utami et al., 2021 Sinaga & Seprina, 2022; Taurintyanna & Karyati, 2022; Rahman & Purwanto, 2022).

By using the Webqual 4.0 method (Barnes & Vidgen, 2002), users can provide an assessment of three dimensions of website quality, namely quality of use, quality of information, and quality of interaction services. Quality of use includes an attractive appearance, clear instructions, ease of use and easy access for users (Taurintyanna & Karyati, 2022), moreover, it is easy to trace (Noor, 2022). Information quality includes completeness of information, relevance, information that is easy to understand and accuracy of the information presented (Zharfaningrum et al., 2020).

Interaction quality is related to ease of use, speed of response, and the website's ability to meet user needs and security (Chen et al., 2021; Noor, 2022). By analysing the quality of the Pandu Online website using the Webqual 4.0 method, valuable insights can be found regarding the strengths and weaknesses of the website. The results of this analysis will provide a basis for developing and improving the website to increase user satisfaction and the effectiveness of the services provided by the Garut Regency Disdukcapil Office.

This research will also involve the participation of Pandu Online website users. Data collection was carried out through questionnaires distributed to a sample of users. The data collected will be analyzed using relevant statistical methods to gain a deeper understanding of user perceptions of the quality of the Pandu Online website and their level of satisfaction. Based on this background, this research aims to analyze website quality and user satisfaction using the WebQual 4.0 method so that it can provide important information that can be trusted and can be used to improve user experience, efficiency and effectiveness of population administration services (Alzahrani et al., 2017; Park & Samijadi, 2021; Noor, 2022; Subekti & Pribadi, 2022).

METHODS

This research used a quantitative approach, the aim of which is to obtain a factual about user satisfaction and website quality at the Garut Regency Disdukcapil. In this research, a questionnaire was used as a tool to collect data, which was distributed to 100 respondents in the Garut community and selected as a sample consisting of 58 men and 42 women aged < 20 years with a percentage of 20% as many as 20 people, aged 20-31 years with a percentage of 65% as many as 65 people, aged 31-40 years with a percentage of 15 % as many as 15 people and aged > 40 years with a percentage of 6% as many as six people. From these data, the productive age of 20-31 years influences this research.

The technique used in this research is webqual. Webqual is a method for assessing the quality of a website based on end-user perceptions. The instruments used in Webqual 4.0 result from developments from previous versions, namely Webqual 1.0, Webqual 2.0, and Webqual 3.0, and are a combination and adjustment of Servqual. Three main variables form the basis of research in Webqual 4.0, namely: 1. User Quality, Information Quality, and Service Interaction Quality (Muhsin & Zuliestiana, 2017; Nugroho et al., 2022; Salamah et al., 2020). The research framework and hypotheses are presented in Figure 1.

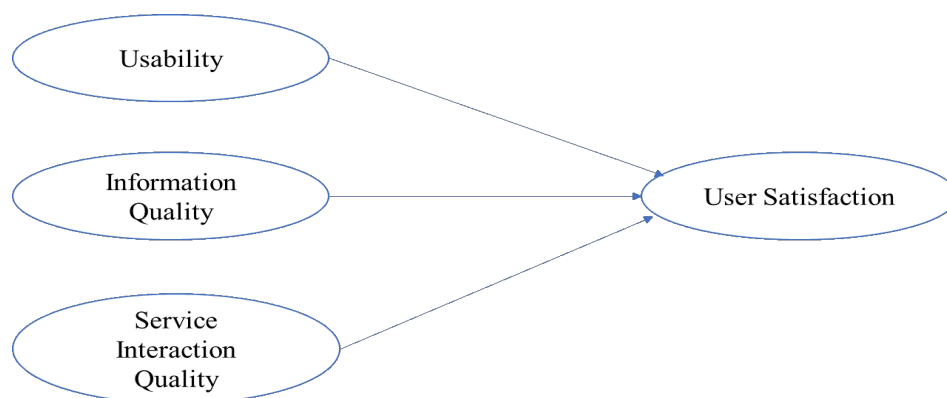


Figure 1. Research Framework

H₁: The quality of use influences user satisfaction

H₂: Information quality influences user satisfaction

H₃: The quality of interaction services influences user satisfaction

This technique is used to measure user satisfaction with the website that is being used. According to other researchers, this method was chosen because it was considered the most suitable and able to explain the quality measures of a website, which consist of usability (Taurintyanna & Karyati, 2022), quality of information, and quality of service interactions as measured by end user perceptions so that it will have an impact on the level of user satisfaction. website (Rahman & Purwanto, 2022). The variables in this research consist of exogenous and endogenous variables. The exogenous variables in this research are quality of use, quality of information, and quality of interaction services, while the endogenous variable is user satisfaction with the Pandu Online website.

Researchers made direct observations of the Pandu Online website and the use of the Garut Regency Disdukcapil service website to make it easier to find problems on the website. This research instrument included a questionnaire to assess user perceptions to find out the extent of the effects felt when using the online guide website. Distribution was carried out with the help feature of the Google form, which is distributed to people who have used the Pandu Online website. To obtain data correctly, the questionnaire used a Likert scale of 1 to 5.

The measuring scale used in this research is a modified scale with multiple choice form, where each statement is given a score range between 1 to 5. Each is SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA= Strongly Agree. Based on the answers according to the Likert scale, criteria are prepared for assessing each question item based on the presentation. The steps to determine the score value are the known sample size $N = 100$ respondents multiplied by the minimum weight (score = 1) and the maximum weight (score = 5) to determine the minimum and maximum values. The minimum score is 100 with its maximum score 500. Based on the value range formula, the criteria for assessing respondents' perceptions are presented in Table 1. And the variable operationalization is presented in Table 2.

Tabel 1. Guidelines for Assessment of Research Indicators

No	Score	Criteria
1	100-179	Very bad
2	180-259	Bad
3	260-339	Quite good
4	340-419	Good

Tabel 2. Variable Operationalization and Descriptive Results

No	Variable	Indicator	Score (Criteria)	Description
1	Usability Quality (U)	Attractive appearance (Taurintyanna & Karyati, 2022)	361 (Good)	The Pandu Online website has an attractive, professional appearance and is easy to use, creating a positive user experience.
		Clear instructions (Taurintyanna & Karyati, 2022)	375 (Good)	It is said that the website is easy to use because users can see clear instructions for finding the information they are looking for and interact with various features without difficulty.
		Easy to use (Taurintyanna & Karyati, 2022)	380 (Good)	The Pandu Online website is well-designed and user-friendly, allowing users to access and utilize the services quickly without any obstacles.
		Accessibility (Zharfaningrum et al., 2020)	387 (Good)	The Pandu Online website is well designed, allowing users to navigate and search for the information they need quickly.
2	Information Quality (IQ)	Relevance (Zharfaningrum et al., 2020)	367 (Good)	The Pandu Online website provides relevant information content that suits users' needs or interests, adding value and significant benefits.
		Ease of understanding (Zharfaningrum et al., 2020)	402 (Very Good)	The Pandu Online website presents the material as user-friendly, allowing individuals of all levels of understanding to access and understand the information well.
		Completeness (Zharfaningrum et al., 2020)	360 (Good)	The Pandu Online website provides complete information. It indicates that the site provides all necessary or relevant information regarding the topic discussed, meeting user expectations for completeness of content.
		Accuracy (Zharfaningrum et al., 2020)	361 (Good)	The Pandu Online website provides accurate information where the information source

3	Service Interaction Quality (SIQ)	User Friendly (Chen et al., 2021)	291 (Quite Good)	is reliable and can be trusted by users.
		Useful (Noor, 2022)	326 (Quite Good)	Interaksi antara pengguna dan admin di website Pandu Online sudah cukup baik. Ini menunjukkan bahwa komunikasi dan respons dari admin dianggap memadai dan memenuhi harapan pengguna.
		Security (Noor, 2022)	346 (Good)	The Pandu Online website has adequate file upload quality, which indicates that the process of uploading files on the site is considered good and meets user standards.
4	User Satisfaction (US)	User need (Beatrix, 2022; Budi, 2022; Noor, 2022)	342 (Good)	The Pandu Online website has a good level of security, so the site is considered adequate and trustworthy by users.
		Service (Budi, 2022)	328 (Quite Good)	Users feel satisfied because the Pandu Online website has met their needs well. The experience of using the site is very satisfying and effective in providing the desired information or solution.
		Share (Budi, 2022)	365 (Good)	Users are satisfied with the quality of service provided by the Pandu Online website, which shows that the experience of using the site was positive and satisfying.
		Number Of Scores		

After the hypothesis is determined, the testing standards using the WarpPLS 7.0 software tool must be by the provisions of the measurement model analysis (outer model) and structural model analysis (inner model). The following is a table to find out the outer model and inner model standards according to the provisions.

Table 3. Outer and Inner Model Standards

	Type of Test	Value requirements comply with WarpPLS 7.0
Outer Model		- Average path coefficient (APC), Average R-squared (ARS) and Average adjusted R-squared (AARS) = P-Value score <0.05 or lower than 5% - Average block VIF (AVIF) dan Average full collinearity VIF (AFVIF) = acceptable if ≤ 5, ideally ≤ 3.3
	1. Model fit and quality indices	- Good of Fitness (GoF) ≥ 0.1 (small), ≥ 0.25 (medium) dan ≥ 0.36 (large). - Sympson's paradox ratio (SPR) = acceptable if ≥ 0.7 - R-squared contribution ratio (RSCR) = acceptable if ≥ 0.9 - Statistical suppression ratio (SSR) = acceptable if ≥ 0.7 - Nonlinear bivariate causality direction ratio (NLBCDR) = acceptable if ≥ 0.7
	2. Full collinearity VIFs	Collinearity score <10
	3. Tests of normality	If "Yes" = the variables are normal, if "No" = the variables are not normal A value is considered ideal if the loading factor exceeds 0.7, indicating that the indicator is valid as an indicator that measures the construct. However, a standardized loading factor value above 0.5 is acceptable, but if it is less than 0.5, it will be excluded from the model.
Inner Model	1. Convergent Validity	The cross-loading value of the indicator with the construct must be higher than the correlation with other construction blocks; this indicates that the contract predicts the block size correctly. The AVE value or root of AVE must be greater than the square of the correlation between constructs or between the contract and other contracts to be considered valid.
	2. Discriminant Validity	
	3. Composite Reliability.	The reliability value and Cronbach's alpha value will be met if the standard value is at least 0.7 or >0.7

RESULTS AND DISCUSSION

Results of Outer Model

In testing the fit quality indices model, the results were Average path coefficient (APC) = 0.311, Average R-squared (ARS) = 0.677, and Average adjusted R-squared (AARS) = 0.667; of these three results, the results were safe because the P-value was <0.05 . Meanwhile, the results of Average block VIF (AVIF)=2.215 and Average full collinearity VIF (AFVIF)=2.594 are safe and acceptable because ≤ 5 . The Goodness-of-Fit (GoF) is 0.710, which is significant because the consequence is ≥ 0.36 . The value of the R-squared contribution ratio (SPR), namely 1.000, means that it is ideal, the statistical suppression ratio (SSR), namely 1.000, is accepted because it is ≥ 0.7 , and finally, the value of the nonlinear bivariate causality direction ratio (NLBCDR), namely 1000, is acceptable because it is ≥ 0.7 . Then, the results of the Full collinearity VIFs test is critical because the collinearity results must be met whether the data is normal or abnormal. The results of the collinearity test in this study were fulfilled because the score was less than ten, and the resulting values consisted of $U = 2.297$, $IQ = 2.567$, $SIQ = 2.664$, and $US = 2.849$. In testing the tests of normality, the results of all the variables are expected.

Results of Inner Model

In Convergent Validity testing, the aim is to measure the correlation of variable indicators with the number of variable indicators. A variable is said to have a high value if the Average Variance Extracted (AVE) is 0.5 or higher (Mutmainnah et al., 2018). Table 4 shows the Convergent Validity values for all variables that meet the validity criteria because they have a value of more than 0.5. Therefore, all variables are valid and can be used for further testing.

Table 4. Convergent Validity Testing

	U	IQ	SIQ	US	P-value
U_1	0.764				<0.001
U_2	0.879				<0.001
U_3	0.913				<0.001
U_4	0.863				<0.001
IQ_1		0.822			<0.001
IQ_2		0.844			<0.001
IQ_3		0.879			<0.001
IQ_4		0.875			<0.001
SIQ_1			0.859		<0.001
SIQ_2			0.869		<0.001
SIQ_3			0.832		<0.001
US_1				0.906	<0.001

US_2	0.893	<0.001
US_3	0.855	<0.001

Source: WarPLS 7.0 data processing results

In the Discriminant Validity test, the results of this test are seen from the diagonal values, namely U=0.856, IQ=0.855, SIQ=0.853, and US=0.885, so this result has been fulfilled because the value of this diagonal is greater than the values on the left and right and above and below it. The final test is Composite Reliability. This test helps test the user's level of consistency in answering questions that the researcher has provided. The results of this test have been fulfilled because the composite reliability and Cronbach's alpha values for each variable have met the standard, namely a minimum of 0.7 or >0.7; this result can be seen in Table 5.

Tabel 5. Composite Reliability Testing

Variabel	Composite reliability coefficients	Cronbach's alpha coefficients
U	0.916	0.877
IQ	0.916	0.877
SIQ	0.889	0.813
US	0.915	0.861

Source: WarPLS 7.0 data processing results

Tabel 6. Score Criteria

No	Indicator	Mean	N	Score	Criteria
1	The display quality of the online guide website is good	3.610	100	361	Good
2	The quality of the online guide website makes it easy to learn	3.750	100	375	Good
3	The quality of the online guide website makes it easy to use it	3.800	100	380	Good
4	The quality of the online guide website makes it easy to browse it	3.870	100	387	Good
5	Online guide websites provide relevant information	3.670	100	367	Good
6	The online guide website provides information in a language that is easy to understand	4.020	100	402	Very Good
7	The online guide website provides complete information	3.600	100	360	Good
8	The online guide website provides accurate information	3.610	100	361	Good
9	The quality of user interaction with the website manager is good	2.910	100	291	Quite Good
10	The quality of uploading files on the online guide website is adequate	3.260	100	326	Quite Good

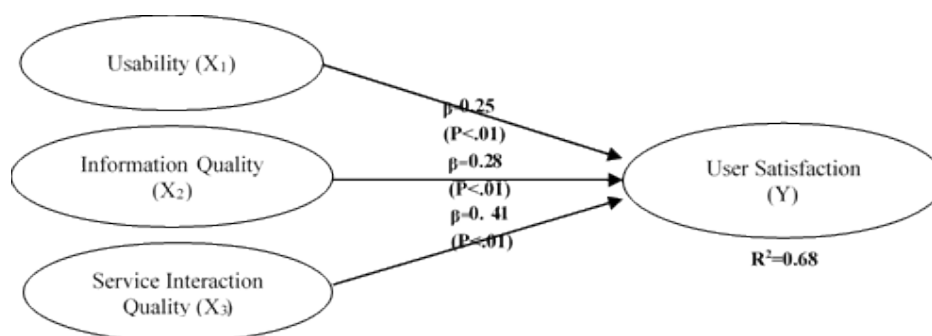
No	Indicator	Mean	N	Score	Criteria
11	The security quality of the online guide website is good	3.460	100	346	Good
12	I feel satisfied because the online guide website has answered the user's needs	3.420	100	342	Good
13	I am satisfied with the quality of service on the online guide website	3.280	100	328	Quite Good
14	I am willing to recommend the online guide website to others	3.650	100	365	Good
	Total Score	3.560	100	356	Good

Based on Table 6, the overall score of these variables is 356, meaning that the average of all variables on the Pandu Online website is suitable for use and is sufficient for users of the Pandu Online website service. However, some indicators still need improvement, such as user-friendly, useful, and service indicators. Not only that, there is also a very good indicator, namely the ease of understanding indicator.

Hypothesis Test Results

Hypothesis testing aims to check the truth or validity of the research hypothesis. The results of the relationship or correlation between constructs are tested by looking at the path coefficients and their level of significance, which will then be compared with the hypotheses from the research presented in the previous methodology. The significance level used in this research is 5% or <0.05 . The following are the results of the effect size from the research model (Figure 2), which have been obtained based on data processing results using WarpPLs 7.0.

Figure 2. Measurement Model



Source: WarPLS 7.0 data processing results

Table 7. Hypothesis Test Results

Variable Relationships	Path Coefficient	P-value	Note
Usability Quality on User Satisfaction	0.172	0.005	Significant
Information Quality on User Satisfaction	0.200	0.002	Significant
Quality of Service Interaction on User Satisfaction	0.305	<0.001	Significant

Based on Table 7, the relationship between the three Pandu Online website quality variables and user satisfaction is found. The probability value of the usability quality variable on user satisfaction is $0.005 < 0.05$, meaning the results are significant. then the probability value of information quality on user satisfaction is $0.002 < 0.5$ and the results are significant. And the probability value of the quality-of-service interaction on user satisfaction is $<0.001 < 0.5$, meaning the result of this last relationship is significant.

Usability Quality influences User Satisfaction

Usability quality includes indicators of an attractive appearance; it can be seen from the Pandu Online website itself that on the first page of entering the website, there is a welcome greeting and a nice photo of the Disdukcapil office, thus making users interested. Then, looking at the clear instructions, this website looks very clear. At the top of the display are several menus according to the document data required by the user. There is a navigation system according to the image and description of the number of document types. This website is straightforward to use according to the type of user request. Moreover, the accessibility of Pandu Online is that it is straightforward to access because when the user type in the name of the website in the search site, this website immediately appears, and the information on the website is easy to get.

All of these factors influence the level of user satisfaction. Good display quality creates visual appeal (Aripadono & Ardiansyah, 2023), while ease of learning, use, and searching for information or accessibility (Taurintyanna & Karyati, 2022), makes users feel comfortable and efficient when interacting with the Pandu Online website. All of these quality indicators significantly contribute to a high level of satisfaction, making users more likely to use this website again.

Information Quality influences User Satisfaction

The Pandu Online website already provides relevant information because this website provides good content, with the latest news and an appearance that suits users'

needs. Judging from the menu text and text in the website, it contains short text that users can understand; this indicates that this website is excellent because it is easy for users to understand. The completeness of the information is good because it is evident from the initial display or homepage display, starting from the number of residents then various types of documents and letters; everything is complete and, starting from profiles, vision, and mission, consultant performance assessments to complaints and users or the public can see employee data on the Pandu online website. Moreover, this website provides accurate and reliable information, seen from the display of the requested requirements according to the type of document needed by the user and the schedule automatically scheduled when the required document is created. Users can also trust the data and instructions provided by the Pandu Online website.

All of these factors contribute to user satisfaction. By providing information that is relevant, easy to understand, complete, and accurate (Zharfaningrum et al., 2020). The Pandu Online website ensures that users are satisfied with their experience. Users can rely on the Pandu Online website as a reliable and helpful source of information for the people of Garut. The availability of complete information, ranging from profiles, vision, and mission to employee data, shows the website's commitment to providing comprehensive information, supporting transparency and accessibility of information (Tavares & da Cruz, 2020). The use of short, easy-to-understand text on menus and site content indicates the application of the principles of clarity and efficiency in communication (Reyna et al., 2018). This aligns with the usability principle in web design, where ease of understanding and navigation are crucial to improving user experience and convenience ensures that all users, regardless of background or technological expertise, can easily access and utilize the information provided (Hartati, 2020).

Quality of Service Interaction influences User User Satisfaction

The interaction between users and administrators on the Pandu Online website could be enhanced to achieve more professionalism. Administrators respond at unpredictable times and often fail to provide practical solutions or assistance to the users. This results in a suboptimal user experience, leaving users feeling unsupported. Additionally, the file upload functionality on the Pandu Online website requires improvement. Users frequently need help uploading, hindering their ability to save and share necessary documents efficiently. On a positive note, the Pandu Online website

boasts a strong and dependable security system. User data is well-protected, and the website employs adequate security measures to thwart unauthorized access and other potential security threats.

The problem of unpredictable response and failure to provide practical solutions reflects deficiencies in the aspects of 'responsiveness' and 'assurance' in service quality theory by (Parasuraman et al., 2005; Li et al., 2023). Inconsistencies in providing practical support indicate a need for increased training and resources for admin teams to improve their ability to respond to user needs promptly and effectively (Eldridge et al., 2022). According to User Support Theory, effective and efficient support ensures user satisfaction and system acceptance. This lack of support can lead to a suboptimal user experience, leaving the impression that users need better support (Khajouei et al., 2011; Hsu et al., 2018).

The difficulties users often experience in uploading files indicate problems in 'perceived ease of use' in the Technology Adoption Model (TAM) (Stantchev et al., 2014; Alamanda et al., 2021). Ease of use is a critical factor influencing the acceptance and use of technology. This issue hinders users' ability to store and share documents efficiently, a critical component of website functionality. This suggests the need for audit and technical improvements to the file upload feature, perhaps through infrastructure improvements or a more intuitive interface (Davis et al., 2010).

On the other hand, the Pandu Online website has a robust and reliable security system aligned with data security principles (Workman et al., 2008). Effective user data protection is critical in maintaining user trust and confidence in online platforms, particularly in e-government services where sensitive information is frequently handled (Sapraz & Han, 2021). The Pandu Online website employs comprehensive security measures to prevent unauthorized access, data breaches, and other security threats, which are essential for safeguarding personal and governmental data.

One of the key elements of the Pandu Online website's security system is its adherence to the data security concept, which encompasses three primary pillars: integrity, confidentiality, and availability of information. Integrity ensures that the data is accurate and unaltered, protecting it from unauthorized modifications (Shukla et al., 2022). Confidentiality guarantees that sensitive information is only accessible to authorized users, preventing unauthorized disclosure (Wang et al., 2022). Availability

ensures that the data and services are accessible to authorized users when needed, ensuring uninterrupted access to essential services (Indumathi et al., 2020).

Implementing these security measures involves using advanced encryption techniques, secure login protocols, regular security audits, and real-time monitoring to detect and respond to potential security threats (Gunduz & Das, 2020). The website's security infrastructure is designed to comply with strict information security standards, such as the General Data Protection Regulation (GDPR) and other relevant legal frameworks (Georgiou & Lambrinoudakis, 2020). Moreover, the strong data security framework of the Pandu Online website significantly contributes to building user trust. When users are confident that their data is protected, they are more likely to engage with the platform and utilize its services. This trust is crucial for the successful implementation of e-government initiatives, as it encourages greater public participation and interaction with digital government services.

CONCLUSION

Based on research conducted on the Pandu Online website, the usability quality of the Pandu Online website, including an attractive appearance, clear instructions, and an efficient navigation system, has a positive impact on the level of user satisfaction. All these factors make users feel comfortable and efficient when interacting with the Pandu Online website. Therefore, users are more likely to use it again. The Pandu Online website provides relevant, easy-to-understand, complete, and accurate information, contributing to user satisfaction. Users can trust the data and instructions provided by the Pandu Online website and rely on it as a reliable and helpful source of information in population administration services in the Garut Regency.

Interaction between users and admins of the Pandu Online website needs to be improved. Uncertain responses and a lack of solutions or help make users feel less supported. The ability to upload files must be improved so that users can smoothly save and share required documents. Even though website security is excellent and reliable, users still need help with user interaction with the admin.

In addition, the findings from this research show that the Pandu Online website can improve user experience, efficiency, and effectiveness of population administration services. By improving service interactions and maintaining the quality of usability and

information, the Pandu Online website can better satisfy users and provide more significant benefits for the people of Garut.

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