

Quality Analysis of the South Sorong Regency Dukcapil Website Using WebQual 4.0 and Importance Performance Analysis

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ABSTRACT

This study analyzes the quality of the Dukcapil (Department of Population and Civil Registration) website in South Sorong Regency, West Papua Province, using the Web Qual 4.0 method. The novelty of this study lies in its geographic focus on an underdeveloped eastern Indonesian region characterized by limited digital infrastructure and low digital literacy a context largely absent from existing e-government quality literature. A quantitative survey was conducted with 100 respondents selected through purposive sampling. The instrument demonstrated high reliability (Cronbach's Alpha = 0.942 for performance; 0.928 for importance). Data were analyzed using descriptive statistics and Importance-Performance Analysis (IPA). Results indicate that all three Web Qual 4.0 dimensions scored below user expectations: usability (performance = 3.42; importance = 4.05), information quality (3.38; 4.24), and service interaction (3.35; 4.14), yielding an overall mean gap of -0.77. The below-average scores notably lower than comparable studies in urban areas such as Bandung (3.65) and Tangerang (3.58) reflect structural constraints including limited IT human resources, constrained budgets, and uneven internet infrastructure that are characteristic of eastern Indonesian regions rather than mere service quality deficiencies. IPA identified 9 priority attributes requiring immediate improvement, predominantly in information quality (e.g., information currency, gap = -1.30) and service interaction (e.g., data security, gap = -1.06; communication ease, gap = -1.00). This study recommends targeted improvements in content management, security systems, and interactive communication features, and calls for mixed-methods and comparative studies across eastern Indonesian regions to strengthen policy generalizability.

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1. INTRODUCTION

Digital transformation in the government sector has become an urgent necessity in the modern era, particularly in improving the quality of public services delivered to the community. The Indonesian government, through various policies, has promoted the implementation of e-government to achieve more effective, efficient, and transparent governance. The Department of Population and Civil Registration (Dinas Kependudukan dan Pencatatan Sipil / Dukcapil), as one of the government agencies that provides direct services to the community, plays a strategic role in population administration, encompassing the issuance of identity cards, birth certificates, death certificates, and other population documents.

The Dukcapil website serves as a digital platform connecting the government with the community in accessing population administration information and services. In South Sorong Regency, the Dukcapil website was developed as part of public service digitalization efforts aimed at facilitating public access to service requirements, procedures, and online services without requiring in-person visits to the office. However, the mere existence of a website is insufficient without considering the quality aspects that may influence user satisfaction and its overall effectiveness.

Several prior studies have demonstrated the importance of evaluating government website quality in improving public services. Digital transformation at the Dispendukcapil faces challenges related to digital infrastructure and technological literacy that must be addressed in order to optimize service delivery.[1] Innovations in civil registration services have shown that the use of information technology can enhance the accessibility of services to the community.[2] Nevertheless, continuous evaluation of government website quality is necessary to ensure that digital services meet user expectations and needs.[3]

Although several studies have been conducted to analyze the quality of government agency websites using various methods, no specific research has yet examined the quality of the Dukcapil website in South Sorong Regency. The research gap addressed in this study lies in a comprehensive evaluation of user perceptions regarding the quality of the Dukcapil website in a region with unique geographical and demographic characteristics in Southwest Papua. This research is particularly important given that accessibility to digital information and services is critical for communities in archipelagic areas that often face difficulties in directly accessing government offices.

The urgency of this research is driven by the need to identify the strengths and weaknesses of the South Sorong Regency Dukcapil website from a user perspective, thereby enabling the formulation of targeted improvement recommendations. The WebQual 4.0 method was selected for the evaluation because it has been proven valid and reliable in measuring website quality based on end-user perceptions through three main dimensions: usability, information quality, and service interaction quality.

The novelty of this study can be examined from three aspects that distinguish it from previous research. First, this study focuses on Eastern Indonesia specifically South Sorong Regency in Southwest Papua Province which has not been previously studied in the Dukcapil website quality evaluation literature. Unlike the research of Hidayat et al. (2021) in Bandung and Rahmawati & Andry (2022) in Tangerang, which are located in urban growth centers, this study explicitly targets a region characterized by internet connectivity challenges, limited technological infrastructure, and digital literacy levels typical of developing areas in eastern Indonesia. Second, this study simultaneously combines descriptive analysis with gap analysis (importance-performance difference) for each attribute, providing a more operational improvement priority map compared to studies that rely solely on performance averages. Third, the archipelagic context and limited physical access to government offices lend a far greater urgency to digital service quality in this region compared to urban areas, making the findings of this study uniquely relevant to policy and not directly generalizable from research conducted elsewhere. The results are expected to provide practical contributions to the South Sorong Regency Dukcapil Office while enriching the e-government evaluation literature in eastern Indonesia, which remains very limited.

Based on the foregoing background, this study aims to: first, measure the quality level of the South Sorong Regency Dukcapil website based on the dimensions of usability, information quality, and service interaction quality; and second, formulate priority improvement recommendations to enhance the quality of the South Sorong Regency Dukcapil website.

2. RESEARCH METHOD

This study employed a quantitative approach with a survey method to analyze the quality of the South Sorong Regency Dukcapil website. The research design was descriptive-evaluative, aimed at describing the condition of website quality based on user perceptions and identifying areas requiring priority improvements. The research was conducted between September and November 2024 in South Sorong Regency, Southwest Papua Province.

The population of this study consisted of all residents of South Sorong Regency who had accessed the Dukcapil website within the past six months. Given that the total population could not be precisely identified and exhibited heterogeneous characteristics,

Sampling was conducted using purposive sampling with the following criteria: respondents aged at least 17 years, having accessed the South Sorong Regency Dukcapil website at least twice within the past six months, and possessing a basic understanding of internet use. The determination of sample size was based on the recommendation of Hair et al., which states that for studies employing multivariate analysis, the minimum sample size is five times the number of indicators used. With 20 items in the WebQual 4.0 instrument, the minimum required sample was 100 respondents, and this study used exactly 100 respondents as its research sample.

The data collection instrument was a structured questionnaire adapted from the WebQual 4.0 instrument developed by Barnes and Vidgen. The questionnaire consisted of three main sections: the first containing respondent demographic information including age, gender, education, and website access frequency; the second containing 20 statements to measure the performance level of the three WebQual 4.0 dimensions; and the third containing 20 statements to measure the importance level of each website quality attribute. Measurement used a five-point Likert scale, with scores ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to use, the research instrument underwent validity testing using the Pearson Product Moment technique and reliability testing using Cronbach's Alpha. The validity test results showed that all items had correlation values above 0.3, indicating validity. The reliability test yielded a Cronbach's Alpha value of 0.942 for the performance variable and 0.928 for the importance variable, indicating very high instrument reliability.

Data were collected through the distribution of online questionnaires via Google Forms and offline printed questionnaires to reach respondents with limited internet access. Online questionnaires were distributed through South Sorong Regency community WhatsApp groups and social media with accessible links during the data collection period. Offline questionnaires were distributed at the South Sorong Regency Dukcapil office and several public locations with the assistance of trained enumerators. Each respondent received an explanation of the research objectives and was asked for participation consent prior to completing the questionnaire. The collected data were then checked for completeness and tabulated in preparation for analysis.

Data analysis in this study used two main techniques: descriptive analysis and Importance Performance Analysis (IPA). Descriptive analysis was used to describe the characteristics of respondents and calculate the mean score for each dimension and website quality indicator. Mean calculations used the arithmetic mean formula with score interpretation based on class intervals: scores of 1.00–1.80 were categorized as very low, 1.81–2.60 as low, 2.61–3.40 as moderate, 3.41–4.20 as high, and 4.21–5.00 as very high. IPA was used to identify improvement priorities by comparing the importance and performance levels of each attribute. The IPA calculation used a Cartesian diagram with the X-axis representing the mean performance and the Y-axis representing the mean importance. Quadrant dividing lines were determined based on the overall mean values of importance

and performance. Attributes were then mapped into four quadrants to determine action priorities. Data analysis was carried out using Microsoft Excel and SPSS version 26.

The research model used in this study can be described as a conceptual framework in which the independent variable is website quality measured through the three dimensions of WebQual 4.0 usability, information quality, and service interaction while the research output consists of identifying the website quality level and improvement priorities based on IPA. Each dimension was measured through specific indicators: usability through six indicators, information quality through seven indicators, and service interaction through seven indicators. Together, these indicators form a comprehensive construct of website quality from the user perspective.



Figure 1. Research Flowchart

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Respondent Characteristics

This study involved 100 respondents who were users of the South Sorong Regency Dukcapil website. Based on the data collection results, the characteristics of the respondents are described as follows.

Table 1. Respondent Characteristics by Gender

Gender	Frequency	Percentage (%)
Male	58	58.0
Female	42	42.0
Total	100	100.0

Based on Table 1, the majority of respondents were male, comprising 58 individuals (58.0%), while female respondents numbered 42 (42.0%). This distribution indicates that males more frequently access the South Sorong Regency Dukcapil website.

Table 2. Respondent Characteristics by Age

Age Group	Frequency	Percentage (%)
17–25 years	32	32.0
26–35 years	41	41.0
36–45 years	19	19.0
> 45 years	8	8.0
Total	100	100.0

Table 2 shows that the majority of respondents were in the 26–35 age group, comprising 41 individuals (41.0%), followed by the 17–25 age group with 32 individuals (32.0%), the 36–45 age group with 19 individuals (19.0%), and those over 45 years with 8 individuals (8.0%). This distribution indicates that website users are predominantly from the productive age group.

Table 3. Respondent Characteristics by Education Level

Education Level	Frequency	Percentage (%)
Senior High School / Equivalent	28	28.0
Diploma	15	15.0
Bachelor's Degree (S1)	47	47.0
Postgraduate (S2/S3)	10	10.0
Total	100	100.0

Based on Table 3, the majority of respondents held a bachelor's degree (S1), comprising 47 individuals (47.0%), followed by senior high school / equivalent with 28 individuals (28.0%), diploma with 15 individuals (15.0%), and postgraduate with 10

individuals (10.0%). This indicates that the majority of website users have a higher education background.

Table 4. Respondent Characteristics by Access Frequency

Access Frequency	Frequency	Percentage (%)
2–3 times	45	45.0
4–5 times	33	33.0
> 5 times	22	22.0
Total	100	100.0

Table 4 shows that the majority of respondents accessed the Dukcapil website 2–3 times in the past six months, comprising 45 individuals (45.0%), followed by those who accessed it 4–5 times with 33 individuals (33.0%), and more than 5 times with 22 individuals (22.0%). These data indicate that users are fairly active in accessing the website for various population administration purposes.

3.1.2. Descriptive Analysis of Website Quality

Descriptive analysis was conducted to determine the performance level of each dimension and indicator of the South Sorong Regency Dukcapil website quality based on respondents' perceptions.

Table 5. Descriptive Analysis Results Usability Dimension

No.	Indicator	Mean	Category
1	The website is easy to learn how to use	3.54	High
2	The website is easy to navigate	3.48	High
3	The website has an attractive appearance	3.36	Moderate
4	The website design is appropriate for the type of service	3.42	High
5	The website demonstrates organizational competence	3.38	Moderate
6	The website creates a positive user experience	3.34	Moderate
Overall Mean – Usability Dimension		3.42	High

Based on Table 5, the usability dimension had an overall mean of 3.42, categorized as high. The indicator with the highest score was ease of learning how to use the website (3.54), while the indicator with the lowest score was creating a positive experience (3.34). This indicates that the website is generally easy to use, but still requires improvement in creating a more positive and engaging user experience.

Table 6. Descriptive Analysis Results Information Quality Dimension

No.	Indicator	Mean	Category
7	Information presented is accurate	3.46	High
8	Information is trustworthy	3.52	High
9	Information is always up to date	3.22	Moderate
10	Information is relevant to user needs	3.44	High
11	Information is easy to understand	3.40	Moderate
12	Information is presented with sufficient detail	3.28	Moderate
13	Information is presented in the appropriate format	3.32	Moderate
Overall Mean – Information Quality Dimension		3.38	Moderate

Table 6 shows that the information quality dimension had an overall mean of 3.38, categorized as moderate. The indicator with the highest score was trustworthiness of information (3.52), while the indicator with the lowest score was information being always up to date (3.22). These results indicate that although the information presented is reasonably accurate and trustworthy, there are still issues with regular information updates and the completeness of information details.

Table 7. Descriptive Analysis Results Service Interaction Dimension

No.	Indicator	Mean	Category
14	The website has a good reputation	3.44	High
15	The website is safe for transactions	3.38	Moderate
16	Personal information is kept secure	3.42	High
17	The website provides a personalization space	3.18	Moderate
18	The website creates a sense of community	3.14	Moderate
19	Easy to communicate with the organization	3.26	Moderate
20	Feel confident in the services provided	3.62	High
Overall Mean – Service Interaction Dimension		3.35	Moderate

Based on Table 7, the service interaction dimension had an overall mean of 3.35, categorized as moderate. The indicator with the highest score was confidence in the services provided (3.62), while the indicator with the lowest score was creating a sense of community (3.14). These results indicate that although users have confidence in the services, aspects of social interaction and ease of communication still require improvement.

Table 8. Summary of Overall WebQual 4.0 Dimension Means

Dimension	Mean	Category
Usability	3.42	High
Information Quality	3.38	Moderate
Service Interaction	3.35	Moderate
Overall Mean	3.38	Moderate

Table 8 presents a summary of the mean scores across the three WebQual 4.0 dimensions. The usability dimension scored highest with a mean of 3.42, followed by information quality at 3.38, and service interaction at 3.35. The overall mean website quality score was 3.38, categorized as moderate. This indicates that the South Sorong Regency Dukcapil website quality is generally adequate but still requires various improvements to enhance user satisfaction.

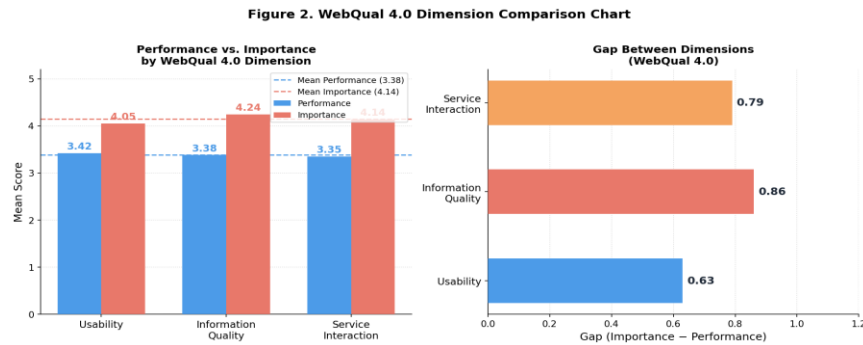


Figure 2. Dimension Comparison and Gap Chart WebQual 4.0

3.1.3. Importance Performance Analysis (IPA)

IPA was conducted by comparing the importance and performance levels for each website quality attribute. The overall mean importance and performance scores for all attributes were used as the cutoff points for quadrant division in the Cartesian diagram.

Table 9. Importance and Performance Calculation Results

No.	Indicator	Importance	Performance	Gap
1	Website easy to learn	4.12	3.54	-0.58
2	Website easy to navigate	4.18	3.48	-0.70
3	Attractive appearance	3.86	3.36	-0.50
4	Design appropriate for service type	4.02	3.42	-0.60
5	Demonstrates organizational competence	3.94	3.38	-0.56
6	Creates positive experience	4.08	3.34	-0.74
7	Accurate information	4.42	3.46	-0.96
8	Trustworthy information	4.38	3.52	-0.86
9	Up-to-date information	4.52	3.22	-1.30
10	Relevant information	4.28	3.44	-0.84
11	Easy-to-understand information	4.24	3.40	-0.84
12	Detailed information	4.16	3.28	-0.88
13	Appropriate information format	4.06	3.32	-0.74
14	Good reputation	4.10	3.44	-0.66
15	Safe for transactions	4.34	3.38	-0.96
16	Personal data security	4.48	3.42	-1.06
17	Personalization space	3.72	3.18	-0.54
18	Sense of community	3.68	3.14	-0.54
19	Easy communication	4.26	3.26	-1.00
20	Trust in services provided	4.20	3.62	-0.58
Overall Mean		4.15	3.38	-0.77

Based on Table 9, negative gaps were found across all attributes, indicating that website performance remains below the importance levels expected by users. The largest gap was found in the attribute related to information being always up to date (-1.30), followed by personal data security (-1.06), and ease of communication with the organization (-1.00).

Table 10. Attribute Distribution by IPA Quadrant

Quadrant	Attributes	Description
I (Main Priority)	7, 8, 9, 10, 11, 12, 15, 16, 19	Accurate information, trustworthy information, up-to-date information, relevant information, easy-to-understand information, detailed information, safe for transactions, personal data security, easy communication
II (Keep Up the Good Work)	1, 2, 4, 6, 14, 20	Website easy to learn, easy to navigate, design appropriate, positive experience, good reputation, trust in services
III (Low Priority)	3, 5, 17, 18	Attractive appearance, demonstrates competence, personalization space, sense of community
IV (Possible Overkill)	13	Appropriate information format

Table 10 presents the distribution of attributes across the four IPA quadrants. Quadrant I, representing the main improvement priorities, contains 9 attributes, the majority of which belong to the information quality and service interaction dimensions. Quadrant II contains 6 attributes with already good performance that should be maintained. Quadrant III contains 4 attributes with low priority. Quadrant IV contains 1 attribute considered overkill, as it has high performance but low user importance.

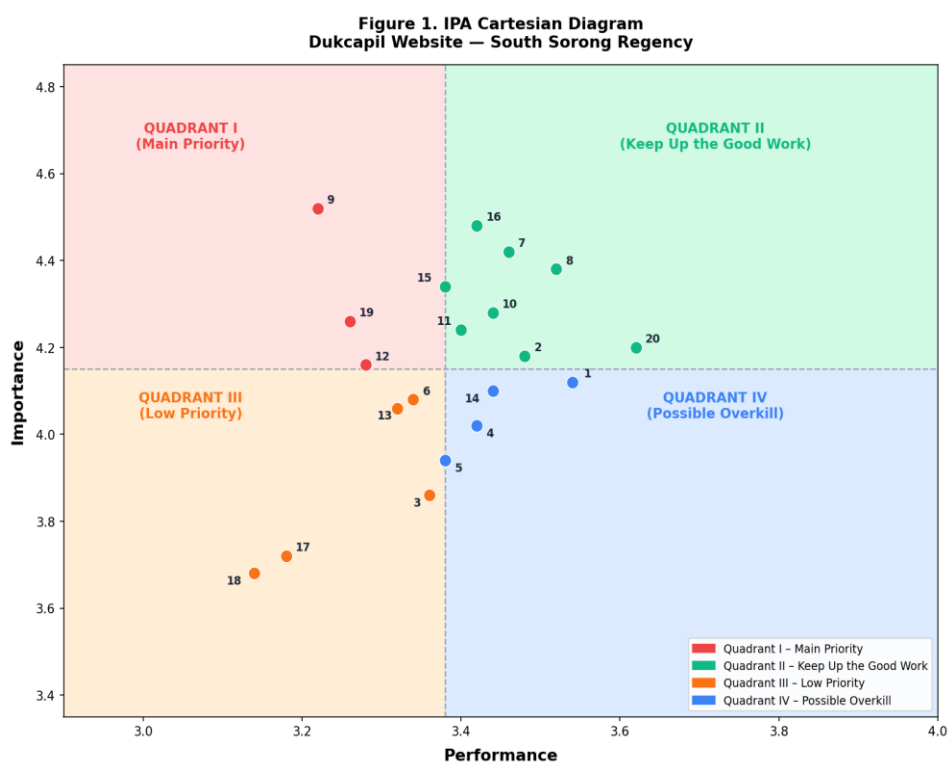


Figure 3. IPA Cartesian Diagram Dukcapil Website, South Sorong Regency

3.2. Discussion

3.2.1. Quality of the South Sorong Regency Dukcapil Website

The research results indicate that the overall quality of the South Sorong Regency Dukcapil website falls in the moderate category, with a mean score of 3.38. This finding suggests that the website meets basic quality standards but still requires various improvements to reach an optimal level. Explicit comparisons with previous research reveal significant differences: Hidayat et al. (2021) found an average quality score of 3.65 for the Bandung City Dukcapil website, Rahmawati & Andry (2022) recorded a score of 3.58 in Tangerang City, while Firmansyah & Supangkat (2022) reported an average of 3.71 for local governments in Java. Compared to these three studies, the South Sorong Regency Dukcapil score of 3.38 falls 0.20 to 0.33 points lower. This difference can be contextually understood as a reflection of the digital divide between western and eastern Indonesia. Limited human resources in the field of information technology, constrained operational budgets, and uneven internet infrastructure in South Sorong Regency are structural factors that directly affect the capacity for website development and maintenance. This finding reinforces the argument of Wijaya & Kurniawan (2023) that eastern Indonesia faces accessibility and digital literacy challenges that are systemically distinct from those in major cities on Java.[4]

The usability dimension achieved the highest score of 3.42, indicating that the website performs reasonably well in terms of ease of use. Users assessed the website as easy to learn and navigate, with a design appropriate for government services. This is consistent with Permana and Siswanto's research finding that usability is an important factor influencing user satisfaction with government websites.[5] A simple interface design and intuitive navigation enable community members at various digital literacy levels to access information and services. Nevertheless, the aspect of positive user experience still needs to be improved through the addition of interactive and responsive features that can enhance user engagement.[6]

The information quality dimension scored 3.38, categorized as moderate a result that warrants critical reflection rather than mere categorization. This score indicates that the website only meets the minimum threshold of user information needs, but has yet to fulfill the expectations reflected by the average importance score of 4.24 for this dimension a gap of -0.86, the largest among the three dimensions. Structurally, the low score on information currency (3.22, gap = -1.30) is not merely a technical issue, but a reflection of the absence of systematic content governance: there is no dedicated content management team, no standard operating procedures for regular updates, and no functioning content audit mechanism. This situation is compounded by limited IT operational budgets in local governments in Southwest Papua, which are structurally different from those of city

governments in Java. This finding is consistent with the research of Hidayat et al., which identified information quality as the primary weakness of the Dukcapil website.[7] Information that is not regularly updated risks providing communities with irrelevant data particularly concerning document requirements that frequently change in line with national policies.[8] Insufficient information detail also poses a practical challenge for users who need comprehensive guidance, especially since many users in this region cannot easily visit the office for direct clarification. This situation underscores the need for professional content management with clearly defined responsibilities and a structured update schedule.[9]

The service interaction dimension scored the lowest at 3.35, and this result warrants critical analysis within the context of the region's digital ecosystem limitations. The low score is not simply a matter of undeveloped features, but reflects the absence of a planned digital interaction strategy on the part of the service provider. The sense of community attribute, scoring 3.14 the lowest of all 20 indicators indicates that the website functions merely as a one-way information board rather than a genuine two-way service platform. This is fundamentally at odds with the ideal function of e-government, which should facilitate dialogue between government and citizens. The low score on ease of communication (3.26, gap = -1.00) also indicates that community members, particularly those in remote sub-districts of South Sorong Regency, lack effective alternative channels for obtaining responses to their questions other than visiting the office in person thereby negating the primary benefit of the website itself. These results are consistent with the findings of Rahmawati and Andry, who stated that service interaction is the most challenging aspect of government website implementation in Indonesia.[10] Features such as chatbots, interactive FAQs, or complaint ticketing systems could serve as pragmatic and relatively affordable solutions with significant impact on service quality perception.[12]

3.2.2. Improvement Priorities Based on IPA

The IPA identified 9 attributes falling within Quadrant I (Main Priority) that must be addressed immediately, as they have high importance levels but low performance. These attributes are: accurate information, trustworthy information, always up-to-date information, relevant information, easy-to-understand information, detailed information, transaction security, personal data security, and ease of communication with the organization. The dominance of information quality and service interaction attributes in this quadrant confirms that these two dimensions require special attention in any website quality improvement effort.

The highest priority should be given to the attribute of information currency, which has the largest gap of -1.30. Users strongly expect up-to-date information, yet website performance in this area remains very low. Research by Wijaya and Kurniawan emphasizes that the timeliness of information is a critical factor in government websites, as policies and procedures frequently change.[13] To address this issue, the South Sorong Regency

Dukcapil needs to establish a dedicated content management team responsible for updating information at least once a week, create an editorial calendar for scheduling content publication, and add timestamps to each piece of information so users know when it was last updated.

Security aspects also rank as important priorities, with personal data security having a gap of -1.06 and transaction security a gap of -0.96. Given that the Dukcapil website handles sensitive data such as National Identity Numbers (NIK), family registration documents (KK), and other personal documents, security assurances are crucial for building public trust. Research by Nugraha and Herdiyanti found that data security concerns are the primary barrier to public use of e-government services.[14] To enhance security, the website needs to implement HTTPS protocols, data encryption, two-factor authentication systems, and conduct regular security audits. Additionally, security certificates and clear privacy policies should be displayed to provide assurance to users.

Ease of communication with the organization, with a gap of -1.00, also requires immediate improvement. Currently, communication channels between users and Dukcapil are limited and their responsiveness is low. The addition of communication features such as live chat, a chatbot for common questions, a complaint ticketing system, and integration with official social media accounts can improve service accessibility. Research by Rahmawati and Andry showed that responsiveness in addressing user questions and complaints correlates positively with satisfaction and trust in e-government services.[15]

Quadrant II (Keep Up the Good Work) contains 6 attributes that already have good performance and high importance levels and therefore need to be maintained. These attributes include ease of learning the website, ease of navigation, appropriate design, positive experience, good reputation, and trust in services. The strong performance on these aspects indicates that the website development team has done commendable work in designing the user interface and user experience.[16] However, Dukcapil should not become complacent and must continue monitoring and pursuing continuous improvements to ensure quality is maintained and even enhanced in line with technological advances and evolving user expectations.

Quadrant III (Low Priority) contains 4 attributes with low importance and performance levels: attractive appearance, demonstration of organizational competence, personalization space, and sense of community. Although they are low-priority at present, these attributes still merit attention in the long term as they can add value to the website.[17] Developing a user community, for example, could be a long-term strategy to increase public participation and build loyalty toward government digital services.

Quadrant IV (Possible Overkill) contains only 1 attribute appropriate information format which has reasonably good performance but low user importance. This suggests that resources allocated to this aspect could be reduced and redirected to higher-priority areas, such as content updating and security

3.2.3. Research Limitations

This study has several limitations that should be acknowledged transparently in order to provide appropriate context for interpreting the findings. First, the use of purposive sampling potentially introduces a selection bias that cannot be dismissed. The respondent criteria requiring internet access and at least two website uses systematically exclude the most vulnerable groups facing barriers to digital services namely elderly citizens, low-education groups, and residents in remote rural areas who are most in need of attention in the context of digital inclusion. As a result, the study findings tend to reflect the perspective of relatively technology-literate users, meaning the quality scores obtained may be more optimistic than the reality of overall user experience. Second, the sample of 100 respondents, although meeting the minimum requirement for multivariate analysis according to Hair et al., is relatively small for representing the heterogeneous population of South Sorong Regency, which encompasses multiple sub-districts with varying geographical conditions and levels of accessibility. The respondent composition — dominated by males (58%) and bachelor's degree holders (47%) also suggests a distribution that may not be fully representative of the actual demographic profile of users. Third, the exclusively quantitative approach limits the study's capacity to explore the deeper motivations behind respondents' assessments. Why does the sense of community score stand at the lowest level (3.14)? Is it because the feature does not exist, because the community is unaware of it, or because of more fundamental trust barriers? These questions cannot be answered through questionnaire data alone and require a qualitative approach. Fourth, this study was conducted during the September–November 2024 period, meaning the findings represent a snapshot and do not capture the dynamics of changes in website quality over time. Fifth, WebQual 4.0 does not measure technical accessibility aspects such as loading speed on limited internet networks a factor that is practically highly relevant in areas with unstable connectivity such as South Sorong Regency. Acknowledging these limitations is important to ensure that the research findings are interpreted proportionately and to guide future research toward more comprehensive and inclusive designs.

4. CONCLUSION

Based on the research results, the quality of the South Sorong Regency Dukcapil website falls in the moderate category with a mean score of 3.38, where the service interaction dimension has the lowest score. This score falls below the average of similar studies in major Indonesian cities such as Bandung (3.65), Tangerang (3.58), and the average for cities in Java (3.71), underscoring the existence of a digital divide between eastern and western Indonesia that warrants more serious policy attention. Importance Performance Analysis (IPA) identified 9 priority attributes requiring immediate improvement, particularly in the areas of information currency (gap -1.30), data security (gap -1.06), and

ease of communication (gap -1.00), with an overall negative mean gap of -0.77 indicating that performance still falls below user expectations. It is therefore recommended that Dukcapil immediately focus improvements on these priority attributes by establishing a content management team, enhancing the security system, adding interactive communication features, and optimizing access for limited internet connections, while also securing sustained technical and budgetary support. For future research, the authors recommend three directions for development: (1) the use of mixed methods combining quantitative surveys with in-depth interviews to obtain a richer understanding of the motivations and barriers users face in accessing digital services in remote areas; (2) a significant increase in the number of respondents (at least 300–500) to improve sample representativeness and enable subgroup analyses based on more detailed demographic characteristics; and (3) comparative studies across regencies/cities in Southwest Papua or among districts in eastern Indonesia to produce stronger generalization of findings and provide relevant benchmarks for e-government development in the region.

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