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PERANALYSIS OF ACADEMIC WEBSITE USING WEBQUAL 4.0 METHOD AND IMPORTANCE-PERFORMANCE ANALYSIS (IPA)

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Abstract

The Academic Website plays a crucial role as the primary channel for delivering academic information to the entire academic community. Its main functions include providing vital information such as Graduation Schedules, Academic Year Calendars, and Scholarship Announcements, making it an indispensable source of information for students. The quality of services on this website is a crucial aspect in meeting the information needs of students. This research aims to evaluate and enhance the quality of the website, with a primary focus on improving services for students and achieving a higher ranking in Webometrics State Islamic Religious Higher Education Institution (PTKIN), currently positioned at 18th. The research methodology utilizes WebQual 4.0 to assess the website's quality, focusing on usability, information quality, and service interaction quality. The Importance-Performance Analysis (IPA) approach is employed to guide the website's development based on the importance and actual performance of each quality attribute. The Webqual Index analysis results indicate that the website achieves a score of 0.85 or 85%, highlighting good service quality but also indicating the need for improvement in information and service interaction quality. This study produces a comprehensive guide for the necessary changes and developments in the Academic Website. The guide ensures that the website aligns with the dynamic needs of the university community, creating a virtual environment that supports and facilitates access to information for students. These improvements are expected not only to enhance the Webometrics PTKIN ranking but also to increase student satisfaction and engagement in the academic process

Keywords: *Website Quality, Academic Website, Webqual 4.0, IPA, Webometrics*

ANALISA WEBSITE AKADEMIK MENGGUNAKAN METODE WEBQUAL 4.0 DAN *IMPORTANCEN PERFORMANCE ANALYSIS* (IPA)

Abstrak

Website Akademik memiliki peran yang sangat penting sebagai saluran utama untuk menyampaikan informasi akademik kepada seluruh civitas akademika. Fungsi utamanya meliputi penyediaan informasi vital seperti Jadwal Wisuda, Kalender Tahun Ajar, dan Pengumuman Beasiswa, menjadikannya sebagai sumber informasi yang sangat diperlukan oleh mahasiswa. Kualitas layanan dari website ini menjadi aspek krusial dalam memenuhi kebutuhan informasi mahasiswa. Penelitian ini memiliki tujuan untuk mengevaluasi dan meningkatkan kualitas website tersebut, dengan fokus utama pada peningkatan layanan bagi mahasiswa dan mencapai peringkat yang lebih tinggi dalam Webometrics Perguruan Tinggi Keagamaan Islam Negeri (PTKIN), yang saat ini berada di peringkat ke-18. Metodologi penelitian menggunakan WebQual 4.0 untuk menilai kualitas website, dengan memfokuskan pada usability, kualitas informasi, dan kualitas interaksi layanan. Pendekatan Analisis Importance-Performance (IPA) digunakan untuk membimbing pengembangan website berdasarkan tingkat kepentingan dan kinerja aktual dari setiap atribut kualitas. Hasil analisis Webqual Index menunjukkan bahwa website mencapai nilai sebesar 0,85 atau 85%, menyoroti kualitas layanan yang baik namun juga menunjukkan perlunya peningkatan kualitas informasi dan interaksi layanan. Studi ini menghasilkan panduan komprehensif untuk perubahan dan pengembangan yang diperlukan dalam Website Akademik. Panduan ini memastikan bahwa website sesuai dengan kebutuhan dinamis komunitas perguruan tinggi, menciptakan lingkungan virtual yang mendukung dan memudahkan akses informasi bagi mahasiswa. Perbaikan ini diharapkan tidak hanya meningkatkan peringkat Webometrics PTKIN, tetapi juga meningkatkan kepuasan dan keterlibatan mahasiswa dalam proses akademik.

Kata kunci: *Kualitas Website, Website Akademik, Webqual 4.0, IPA, Webometric.*

1. INTRODUCTION

In the current digital era, information technology has become an integral part of human life. The role of information technology is increasingly crucial, especially in the context of higher education in developing countries such as Indonesia [1]. University websites serve not only as information platforms but also as tools that facilitate the activities of the academic community. One opportunity to enhance the quality of education is the provision of online learning, especially for researchers. Academic websites represent a specific type of university website, providing information services focused on the needs of researchers and members of the academic community[2], [3].

The management of academic websites does not always run smoothly. The main issue, as revealed in an interview with Hadi Saputra, the manager of the academic website at the State Islamic University Sultan Syarif Kasim Riau (UIN SUSKA Riau) Pekanbaru, is server disruptions. Steps for recovery using backup data have been taken to address this issue. According to the Webometrics Ranking of World Universities edition July 2023.02, UIN SUSKA Riau ranks eighteenth in the category of State Islamic Religious Universities, indicating that the quality of its website does not meet user expectations, particularly in terms of unattractive design, delayed information delivery, and communication difficulties with the university [4].

A preliminary study conducted by researchers identified additional issues with the use of UIN SUSKA Riau's academic website. Students complained about unattractive design, delayed information, irrelevant information delivery, and difficulty communicating with academic authorities. These problems have led to dissatisfaction with the provided services [5], [6]. To delve deeper into identifying user problems and expectations, researchers conducted interviews with five randomly selected students. The results indicated that the main issue is the lack of academic information provided by the website, especially regarding scholarship opportunities and other academic information. This information should be easily accessible through the academic website, but students have to manually search for it through search engines[7].

The quality of a website can be measured through three main components: usability, information quality, and service interaction quality. These components are integral to the WebQual method, which originates from the Quality Function Deployment (QFD) concept focused on the "voice of the customer". The WebQual method has evolved to version 4.0 and is often used by researchers to evaluate the quality of a website's services [7], [8], [9]. The success of WebQual is also attributed to its emphasis on website quality aspects. With a focus on usability , information quality, and service interaction quality, WebQual 4.0 becomes an effective method for assessing and improving the quality of a website [10], [11]. Additionally, Importance-Performance Analysis (IPA) will be applied to identify improvement priorities based on the importance and actual performance of each quality attribute. This approach provides a holistic overview for the development and enhancement of a better website [12], [13]. This research is expected to offer a comprehensive understanding of the quality of academic websites in higher education. Concrete improvement recommendations are anticipated to increase user satisfaction, address identified issues, and contribute positively to the effectiveness of services in the university environment[14], [15], [16].

Furthermore, this research is expected to provide a guide for other universities to enhance the quality of their academic websites and contribute to the development of theory and practice in academic website management.

2. RESEARCH METHODS

The research methodology is a series of steps that will be undertaken during the research process. The research flow can be seen in the following figure, Figure 1.

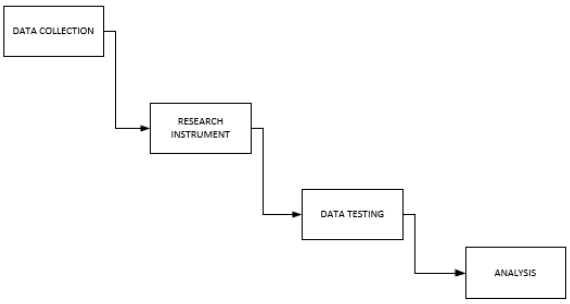

Figure 1. Methodology Research

This research employs a questionnaire containing questions about website quality analysis based on the WebQual 4.0 method, structured into 3 variables divided into 22 indicators using a Likert scale. As a research instrument, a three-part questionnaire is utilized. The initial section of the questionnaire comprises four questions related to user profiles, followed by two questions regarding users' perceptions of the current website quality and the alignment level between these perceptions and their aspirations. The subsequent section of the questionnaire contains 22 detailed questions related to the research.

WebQual 4.0 refers to an approach that places users as the primary focus. This relates to how WebQual 4.0 evaluates web quality based on users' perceptions of various aspects, namely usability, information quality, and service interaction [17]. This comparison refers to other methods that typically focus solely on measuring satisfaction, unlike WebQual, which has formed a clear framework structure. Based on this, WebQual was

chosen for its alignment with the context and objectives of the research, as well as its ease of implementation and interpretation. Therefore, the WebQual 4.0 method is considered a suitable choice for gaining a deep understanding of the quality of the academic website at UIN Suska Riau and providing recommendations for improvements that meet user needs.

The questionnaire distribution was carried out after the formulation of the questionnaire based on pre-determined attributes. The researchers distributed the questionnaire using Google Forms to active students at UIN SUSKA RIAU. The population in this study consists of active students from the 2023 cohort, while the sample includes randomly selected active students from the 2023 cohort, totaling 4703 active students. The use of Simple Random Sampling as part of Probability Sampling was employed for sample selection. The results of the Slovin calculation indicate a value of 97.4, rounded up to 100 active students from the 2023 intake at UIN SUSKA Riau.

In this stage, the researcher undertakes the creation of a questionnaire based on previous studies. The questionnaire comprises questions related to the analysis of website quality using the WebQual 4.0 method, organized into 3 variables with 22 indicators, utilizing a Likert scale. As a research instrument, a three-part questionnaire is employed [14], [18]. The initial part of the questionnaire contains four questions regarding user profiles, followed by two questions concerning users' perceptions of the current website quality and the alignment level between these perceptions and their aspirations. The subsequent section of the questionnaire consists of 22 detailed questions related to the research.

In this study, the researcher utilizes a five-point Likert scale where users can choose from five alternative answers, ranging from "strongly disagree" (1) to "strongly agree" (5), to assess their perceptions of website quality and the relevance of the measured indicators. Additionally, this five-point scale is also employed to evaluate the importance level of each indicator, where users can choose from "not important at all" (1) to "very important" (5).

Table 1. Questionaire Items

Variabel	Questionaire Items	Code
Usability	The ease of learning and operating the website significantly influences users' perceptions of website quality.	U1
	Interactions with the website are easy to understand and perform, aided by clear instructions to facilitate users	U2
	The website is user-friendly with intuitive navigation, and its visually appealing design sparks user interest	U3
	The design is tailored to the type of site, specifically an Academic Web.	U4
	The use of the website enhances users' competencies and competitiveness	U5
	Quality information on the website is crucial for users to access and utilize the provided information	U6
	Information presented on the website must be timely and up-to-date to meet user needs	U7
	The relevance of information presented on the website is a key factor in maintaining user interest	U8
Information	The use of the website enhances users' competencies and competitiveness	I1
quality	Quality information on the website is crucial for users to access and utilize the provided information	I2
	Information presented on the website must be timely and up-to-date to meet user needs	I3
	The relevance of information presented on the website is a key factor in maintaining user interest.	I4
	Ease of understanding information on the website is a critical aspect for user comfort	I5
	The availability of detailed information on the website can influence users' perceptions of the quality of the presented information	I6
	The format of information presentation on the website should be adapted to users' needs to provide a better experience.	I7
Service	Users' perceptions of the website's reputation are positive and reliable.	S1
interaction	Users feel secure when conducting transactions on the website	S2
quality	The website is considered capable of maintaining the confidentiality of users' personal information effectively	S3
	Interactions with the website leave a positive personal impression on users.	S4
	Users feel they have a good relationship with the organization through the website	S5
	The website facilitates communication between users and the organization.	S6
	Users trust that the goods or services provided by the organization will align with what is promised.	S7

Method validity refers to the extent to which the instrument or tool used can measure what it is supposed to measure. In the context of WebQual 4.0, construct validity has been examined through a careful questionnaire development process. The questions in the questionnaire are designed to cover relevant aspects of website quality, such as usability, information quality, and service interaction, in line

with the theoretical framework of WebQual. Additionally, previous research using this method has also provided evidence regarding its validity in evaluating website quality[1], [17], [19].

Method reliability refers to how consistent the measuring tool is in producing the same data when used repeatedly. In this study, the reliability of the WebQual 4.0 questionnaire was tested using appropriate statistical methods, such as internal consistency analysis (Cronbach's alpha). This was done to ensure that the questions in the questionnaire consistently measure the same concept of website quality. If the Cronbach's alpha value reaches an acceptable level (usually above 0.7), then the questionnaire is considered to have adequate reliability[1], [20].

Reliability testing is a statistical examination employed to assess the reliability or consistency level of a measurement instrument. In the research context, this measurement instrument can be a questionnaire or a test utilized to gather data from respondents. Reliability testing is conducted to ensure that the measurement instrument can be trusted to generate consistent and replicable data at different times. Based on previous research related to the analysis of website quality, the WebQual method is recommended as a method for analyzing website quality. WebQual was initially developed by Stuart J. Barnes and Richard T. Vidgen [21], [22]. This method is an evolution of SERVQUAL, which was previously widely used to measure service quality. The WebQual search engine is built on the concept of Quality Function Deployment (QFD), a process based on the "voice of the customer" during development and implementation. In other words, WebQual evaluates websites based on user perceptions [23], [24].

Furthermore, in establishing hypotheses between user expectations and website performance, the use of Importance-Performance Analysis (IPA) is recommended as an analysis based on the gap values obtained in the previous WebQual analysis [25], [26], [27]. Therefore, the IPA method becomes an additional method in making the best decisions to determine which attributes should be maintained and which ones should be further improved to achieve user satisfaction with the website[28].

In this stage, the acquired data will be processed, and prior to that, the data will be analyzed based on its demographic aspects. In the demographic analysis phase, respondent data is collected and categorized based on various variables such as gender, university of origin, study program, semester level, website usage intensity, perceptions of the existing website quality, and the alignment of website quality with respondents' expectations. Microsoft Excel 2010 software is utilized for processing and analyzing this demographic data.

After conducting demographic analysis, the researcher proceeds to perform inferential statistical analysis to test the reliability, validity, and gaps between the results obtained from the questionnaire distribution. These three tests are conducted using IBM SPSS 24 software. Further analysis is carried out on the data obtained from the assessment of perceptions and expectations/level of importance regarding the quality of the UIN Suska Riau academic website using the Webqual Index (WQI), gap analysis, and Importance-Performance Analysis (IPA).

Subsequently, the results of the analysis of the Webqual Index (WQI), gap analysis, and Importance-Performance Analysis (IPA) are translated into statistical-quantitative terms. In this context, the researcher employs Gap Analysis to measure the extent of the gap between respondents' expectations and perceptions of the existing website quality[29], [30]. Gap Analysis is conducted by calculating the difference between the average scores of expectations and the average scores of respondents' perceptions on each measured dimension of website quality. Furthermore, this difference is assigned a positive or negative sign to indicate whether respondents' perceptions are higher or lower than their expectations for each dimension of website quality [31], [32], [33].

In this case, the researcher not only considers the results of the analysis but also refers to relevant literature. Therefore, it can be concluded that this research has applied various data analysis techniques to obtain a holistic understanding of respondents' perceptions and expectations regarding website quality.

3. RESULT AND CONCLUSSION

In this stage, the processing of data answered by respondents related to respondent characteristics to the respondents' answers regarding the quality of the academic website at UIN Suska Riau is conducted. The respondent data obtained consists of 100 individuals, described based on gender and the respondent's cohort. Based on the faculties, as seen in Figure 4.4, the majority of respondents come from the Faculty of Science and Technology, constituting 22% with a total of 22 respondents, followed by the Faculty of Education and Teacher Training with 18%, totaling 18 respondents. Subsequently, from the Faculty of Sharia and Law, there are 15% or 15 respondents, and the Faculties of Agriculture and Animal Husbandry, Islamic Thought and Economics, and Social Sciences each contribute 10%, with 10 respondents each. The Faculty of Da'wah and Communication Sciences has 8%, accounting for 8 respondents, and finally, the Faculty of Psychology also has 8%, totaling 8 respondents.

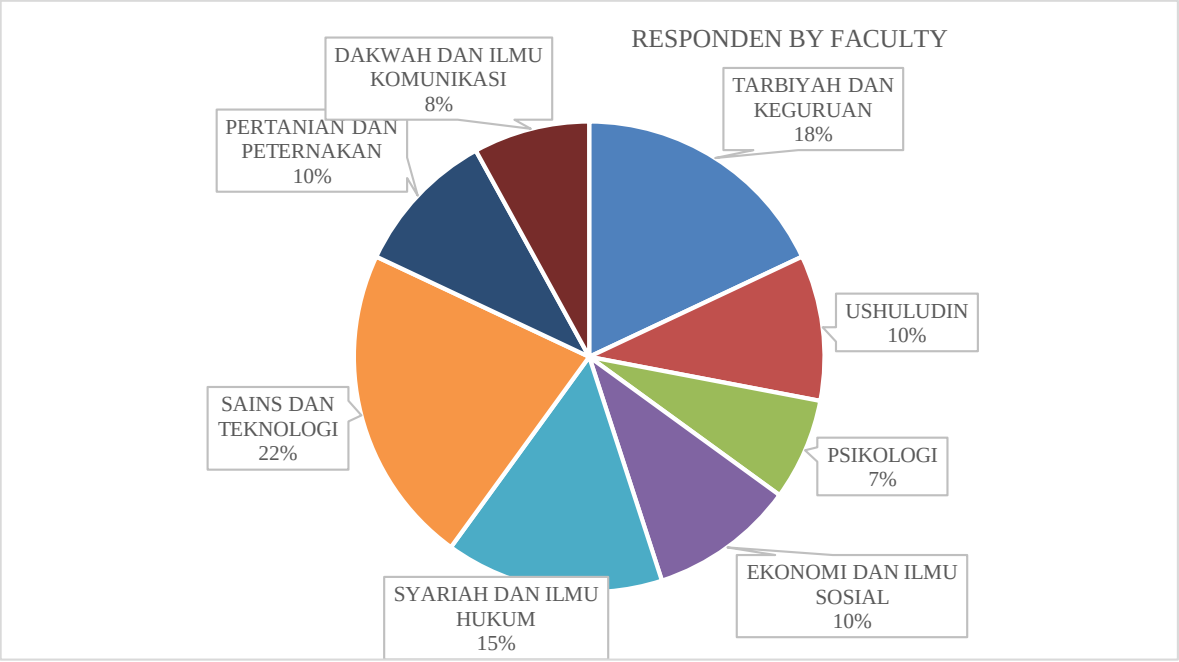

Figure 2. Responden By Faculty

Reliability testing is conducted to assess the reliability of the indicators used in the research questionnaire.

Table 2. Importance Reliability Testing

Importance Reliability Statistics

Cronbach's Alpha	N of Items
0.797	22

The test results indicate a Cronbach's Alpha value of 0.797 for the previously created questionnaire. The reliability of an instrument is considered reliable if its Cronbach's Alpha value is greater than 0.6. In this study, the research instrument has a value of 0.797, which is greater than 0.6, confirming the reliability of the instrument.

The validity testing is conducted to determine whether the instrument used can measure what is intended. This testing involves examining the corrected item-total correlation values using the Pearson Product-Moment Correlation technique, which compares the item scores with the total item scores (calculated as the Pearson correlation coefficient) against the critical value. The critical value for a sample size of 100 is 0.2301

Table 3. Validity Test

No	Items	rcalculate	rtabel	status
1.	U1	0.801	0.2301	Valid
2.	U2	0.786	0.2301	Valid
3	U3	0.784	0.2301	Valid
4.	U4	0.792	0.2301	Valid
5.	U5	0.792	0.2301	Valid
6.	U6	0.784	0.2301	Valid
7.	U7	0.787	0.2301	Valid
8.	U8	0.784	0.2301	Valid
9.	I1	0.793	0.2301	Valid
10.	I2	0.768	0.2301	Valid
11.	I3	0.794	0.2301	Valid
12.	I	0.775	0.2301	Valid
13.	I5	0.775	0.2301	Valid
14.	I6	0.809	0.2301	Valid
15.	I7	0.786	0.2301	Valid
16.	S1	0.780	0.2301	Valid
17.	S2	0.787	0.2301	Valid
18.	S3	0.802	0.2301	Valid
19.	S4	0.795	0.2301	Valid
20.	S5	0.787	0.2301	Valid
21.	S6	0.793	0.2301	Valid
22.	S7	0.800	0.2301	Valid

Based on the above table (Table 3), the values in the Corrected Item-Total Correlation column are > 0.2301, indicating that the instrument used can be considered valid.

In the subsequent stage, the evaluation of the Webqual Index is conducted based on the data obtained from respondents. The Webqual Index is utilized to establish the standards (benchmark) for the overall assessment of the academic website. To determine the WQI, several values need to be known, including the weight/importance value (Mean of Importance), Maximum Score (Max. Score), and weighted score (Wgt. Score), ultimately resulting in the WQI for the academic website of Sultan Syarif Kasim Riau State Islamic University..

Table 4. Webqual Index

No	Items	Mol	Max. Score	Wgt. Score	WQI
1.	U1	4.30	21.50	18,48	0,86
2.	U2	4,29	21,44	18,16	0,85
3.	U3	4,29	21,44	17,48	0,82
4.	U4	4,37	21,86	19,22	0,88
5.	U5	4,30	21,48	18,12	0,80
6.	U6	4,28	21,47	16,92	0,81
7.	U7	4,31	21,54	19,26	0,89
8.	U8	4,20	21,00	18,74	0,89
9.	I1	4,42	22,12	19,02	0,86
10.	I2	4,42	21,94	19,3	0,87
11.	I3	4,39	21,94	17,72	0,81
12.	I	4,33	21,64	18,32	0,85
13.	I5	4,36	21,82	19,36	0,89
14.	I6	4,36	21,80	18,22	0,84
15.	I7	4,29	21,46	15,96	0,78
16.	S1	4,31	21,54	17,62	0,82
17.	S2	4,43	22,16	19,94	0,90
18.	S3	4,42	22,08	19,84	0,90
19.	S4	4,24	21,22	18,52	0,87
20.	S5	4,22	21,12	18,32	0,87
21.	S6	4,33	21,64	18,74	0,87
22.	S7	4,36	21,80	18,6	0,85
Total		4,33	476,04	406,64	0,85

Based on Table 4. The Mean of Importance (Mol) is derived from the average values of perceptions and expectations provided by respondents for each indicator. From Table 5, it can be observed that, based on the Mol values for each indicator, there is a classification according to the upper quartile, which amounts to 4.37. Therefore, questions deemed to play a crucial role are ranked as number 17, 18, 9, 10, 11, and 4, related to trust and security issues, as well as accurate and reliable information. Meanwhile, questions considered less important fall into the lower quartile with numbers 8, 20, 19, and 6. The Maximum Score is obtained by multiplying the importance values given by respondents by 5 (the highest scale in the assessment). According to Table 5, the maximum achievable score is 476.04. This value is obtained through the multiplication of the Mean of Importance (MoI) with the average scores given by respondents for the perceived current quality of the website (perception scores). In this case, as seen in Table 5, the Weighted Score value is 406.64.

The WebQual Index (WQI) value is obtained by dividing the Weighted Score by the Maximum Score derived from each indicator. From Table 5, when viewed as a whole, the academic website of Sultan Syarif Kasim State Islamic University obtains a WebQual Index value of 0.85 or equivalent to 85%.

Overall, based on both the Weighted Score and WQI values, it can be concluded that the academic website of Sultan Syarif Kasim State Islamic University in Riau demonstrates superiority in information services compared to other indicators. Therefore, to maintain the quality level of the academic website, it is necessary to consistently uphold performance in providing quality information and enhancing the quality of interaction services to more effectively meet user needs.

Next, a GAP Analysis is conducted. The gap analysis calculates the average value of the evaluation of users' perceptions and expectations of the quality of the website. Table 6 shows the average values of the gap analysis on the academic website of UIN SUSKA Riau for each indicator in the three variables of WebQual 4.0. Overall, the quality of the academic website at Sultan Syarif Kasim State Islamic University in Riau has not met user expectations. Next, a GAP Analysis is conducted. The gap analysis calculates the average value of the evaluation of users' perceptions and expectations of the quality of the website. Table 6 shows the average values of the gap analysis on the academic website of UIN SUSKA Riau for each indicator in the three variables of WebQual 4.0. Overall, the quality of the academic website at Sultan Syarif Kasim State Islamic University in Riau has not met user expectations.

Table 5. Gap Analysis

No.	Items	Importance	Performance	Gap
1	U1	4.26	4.30	-0,04
2	U2	4.22	4.30	-0,06
3	U3	4.06	4.29	-0,24
4	U4	4.26	4.37	-0,24
5	U5	3.58	4.30	-0,86
6	U6	4.00	4.28	-0,54
7	U7	4.22	4.31	-0,22
8	U8	4.20	4.20	-0,30
9	I1	4.20	4.42	-0,32
10	I2	4.24	4.42	-0,18
11	I3	4.20	4.39	-0,20
12	I	4.30	4.33	-0,20
13	I5	4.28	4.36	-0,12
14	I6	4.04	4.36	-0,26
15	I7	4.12	4.29	-0,31
16	S1	4.04	4.31	-0,28
17	S2	4.34	4.43	-0,24
18	S3	4.30	4.42	-0,30
19	S4	4.20	4.24	-0,18
20	S5	4.20	4.22	-0,14
21	S6	4.18	4.33	-0,28
22	S7	4.18	4.36	-0,26

With an average value of -0.86, based on the above (Tabel 5), this gap reflects that, in the dimensions of usability, information quality, and service interaction quality, users on average feel that

the perceived quality is slightly lower than their expectations. With a negative gap value, generally, it can be interpreted that users' expectations for website quality are higher than the quality they currently perceive. The variable with the largest gap value, information quality, indicates that there is potential for improvement and enhancement in presenting information to align with user expectations.

Following the completion of the GAP Analysis, the next step involves the Importance-Performance Analysis. Satisfaction can be achieved by improving the quality of the website as perceived by users. In the context of improvement, the Importance-Performance Analysis technique is employed to identify which attributes are top priorities based on user expectations. The results of this analysis can be illustrated in four quadrants.

Quadrant I reflects attributes that have already met user expectations and need to be maintained to keep their quality high. Quadrant II indicates attributes that should be the focus of improvement because user expectations are higher than the current quality provided. Quadrant III describes attributes that do not require deep attention as user expectations are already quite low. Quadrant IV reflects attributes that may be less important but already have excellent quality.

Based on the average values of perceptions and expectations for each indicator, both values are used to position each attribute on a Cartesian diagram. The boundary lines in this diagram are drawn from the mean value generated from all indicators.

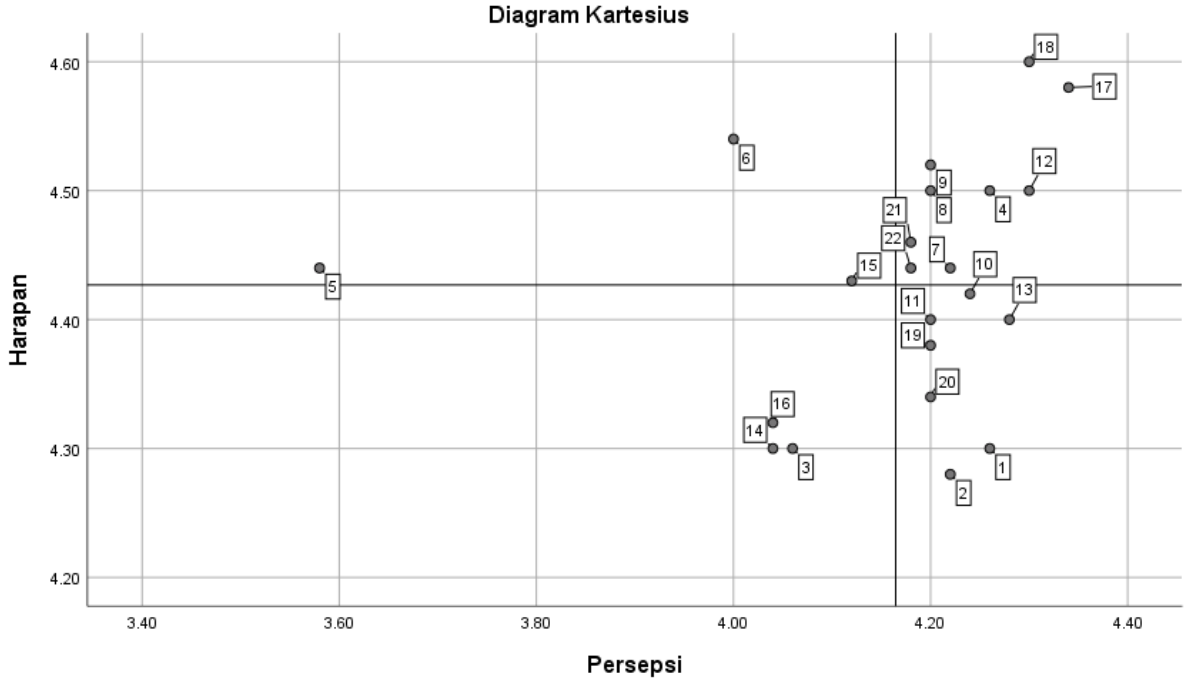

Figure 3. Cartesian diagram

Based on the above figure, the results of the Importance-Performance Analysis (IPA) indicate that four indicators fall into quadrant II. Quadrant II represents attributes with high expectations but low performance. Therefore, these four indicators, namely indicators 5, 6, and 15, related to the appearance, design, and suitable format in information delivery, are identified as top priorities for improvement. On the other hand, quadrant I shows nine attributes that already meet or even exceed customer expectations. Hence, it is necessary to maintain their quality to ensure customer satisfaction. These nine attributes are 4, 7, 8, 9, 12, 17, 18, 21, and 22.

Quadrant III includes seven attributes considered less important as customers have low expectations for these attributes. These attributes are 1, 2, 10, 11, 13, 19, and 20. While they may not be a top priority, it is important to note that consumer acceptance can vary, and attention is still needed to ensure overall customer satisfaction.

Finally, in Quadrant IV, there are three attributes considered not requiring additional attention because customer expectations are low, and their performance is already quite good. Therefore, improvement efforts can be redirected to other attributes that require more intense attention. These attributes are 16, 14, and 3. By analyzing these quadrants, the improvement or development team can plan more targeted and effective improvement strategies according to customer needs and expectations.

4. CONCLUSION

Based on the WebQual Index (WQI) results used as a standard or benchmark for the academic website, it indicates an overall score of 0.85 or 85%, signifying that the quality of information services on the UIN Suska Riau academic website is generally good. To maintain its quality, special attention needs to be focused on improving the quality of information and service interaction.

However, the Gap Analysis reveals that the quality of the UIN Suska Riau academic website does not entirely meet user expectations. This is evident from several indicators that show significant gaps and require further attention, such as attractive appearance and type-appropriate design.

Furthermore, the Importance-Performance Analysis (IPA) indicates that improvement priorities should be directed towards indicators related to attractive appearance, type-appropriate design, and appropriate information delivery formats. These conclusions provide insights into the strengths and areas that need improvement on the UIN Suska Riau academic website. Concrete improvement recommendations can be derived from the Gap Analysis and IPA results with the goal of enhancing satisfaction and service effectiveness in the university environment.

In improving user satisfaction and service effectiveness, emphasis should be placed on enhancing the appearance, design, and information presented in the future. Therefore, coordination among the administrators of the UIN Suska Riau academic website is essential to provide services to users by paying attention to the appearance, design, and information presented. This research can be considered when determining user perceptions in response to website quality.

Future research endeavors could explore longitudinal studies to track changes in user perceptions over time, conduct user engagement analyses to improve the website's usability, assess its mobile compatibility and accessibility, and conduct comparative studies with other academic websites to identify best practices for improvement. By pursuing these avenues, administrators can ensure the website remains responsive to user needs and delivers an exceptional user experience.

Moreover, further investigation into alternative evaluation methods or emerging technologies could provide valuable insights into enhancing the evaluation of academic website quality. Exploring methodologies such as user experience (UX) testing, usability studies, or incorporating artificial intelligence (AI) algorithms for website analysis could offer innovative approaches to better understand and improve website quality. These avenues of research would contribute to the ongoing enhancement of academic website quality evaluation practices and ultimately benefit users in the academic community.

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BILBOGRAPHY

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