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An Analysis of User Satisfaction on the Official Website of Politeknik Aceh Selatan Using the EUCS Method

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ABSTRACT

This study aims to assess user satisfaction with the evaluated information system by employing a quantitative research approach, specifically through the use of a five-point Likert scale questionnaire. Respondents were asked to rate their level of agreement with 16 structured statements designed to reflect five key dimensions of user satisfaction: content, accuracy, format, ease of use, and timeliness. The Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree), allowing for the collection of measurable and standardized responses. The collected data were analyzed by calculating the Actual Satisfaction Score (SKN), which represents the total cumulative score based on all respondents' answers. This score was then compared to the Ideal Satisfaction Score (SKI), which was determined by multiplying the total number of respondents by the total number of questions and the highest possible Likert score. In this case, with 112 valid respondents, the SKN was calculated at 7,841, while the SKI reached 8,960, resulting in a Satisfaction Percentage (PK) of 87.52%. This high level of satisfaction suggests that the system effectively meets user expectations, particularly in delivering high-quality information, ensuring timely services, and providing a user-friendly interface. These findings highlight the system's strong performance in key usability areas and underscore its potential for further development. Furthermore, the results serve as an evidence-based foundation for future enhancements, especially in fostering user-centered, accessible, and sustainable digital services.

INTRODUCTION

Information Technology (IT) is a field of study and practice that focuses on the use of computer systems, software, networks, and digital infrastructure to manage and disseminate information. In modern life, IT plays a vital role, particularly in enhancing efficiency in communication, data storage, and information processing across various sectors, including business, education, government, and public services. One key implementation of IT is the website, which serves as a medium for delivering information, facilitating interaction, promoting services, and conducting transactions online. Therefore, it is essential to measure how effectively information systems are implemented and utilized [1].

Politeknik Aceh Selatan (Poltas), as a modern vocational higher education institution, heavily relies on its official website as the primary platform to disseminate information quickly, broadly, and efficiently to a wide range of stakeholders, including prospective students, current students, lecturers, and academic staff. Beyond being a communication tool, Poltas has also adopted a web-based digital system called e-Campus, which functions as an integrated academic service platform. Through this system, users can access services such as course registration (KRS), academic transcripts (KHS), class schedules, and final project registration—anytime and from anywhere. This positions the website not only as an information source but also as the central hub for academic activities and communication within the institution.

In this fast-moving digital era, the presence and activity level of Politeknik Aceh Selatan's official website have become crucial to the institution's visibility, operational efficiency, and overall development. The website now serves as the digital face of the campus, reflecting its identity, quality, and professionalism as a vocational higher education institution. It effectively communicates the institution's vision, mission, and competitive strengths to the public, including prospective students, parents, industry partners, and the broader community.

Furthermore, the website plays a significant role in building digital branding, expanding promotional reach, and projecting a modern and technology-responsive institutional image [2,3]. It provides real-time access to information related to student achievements, international collaborations, tri dharma (three pillars of higher education) activities, scholarships, and career opportunities. This makes the website a strategic, efficient, and transparent two-way communication platform.

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Therefore, the website has become an integral component of the operational and development strategy of a modern vocational institution like Poltas. It also serves as a foundational element in the institution's ongoing efforts toward digital transformation and enhancing regional and national competitiveness.

This study aims to evaluate user satisfaction with the official website of Politeknik Aceh Selatan using the End User Computing Satisfaction (EUCS) method. The assessment is based on five key dimensions: content, accuracy, format, ease of use, and timeliness. The findings of this research are expected to serve as valuable input for the strategic development and continuous improvement of the website's quality in the future.

LITERATURE REVIEW

User Satisfaction Analysis

In [4], user satisfaction analysis is defined as the process of evaluating the extent to which consumers' perceived performance of a product or service meets or exceeds their expectations. It is stated that user satisfaction analysis involves measuring the gap between initial expectations and actual experience.

According to [5], user satisfaction analysis is a crucial part of understanding the continuance of information system usage by users, which is influenced by the level of expectation confirmation and satisfaction after initial use. It is explained that the higher the confirmation between expectations and actual performance, the greater the user satisfaction, which in turn affects the intention to continue using the system.

In addition, [6] states that user satisfaction analysis is an evaluation of users' perceptions of the usefulness and ease of use of an information system, which ultimately influences their attitudes and acceptance of the technology.

Website

According to [7], a website is a collection of interrelated web pages that reside on a single server and are maintained by an entity such as an individual, a company, or an organization. In the context of information systems, a website functions as the primary digital interface for interaction, information delivery, and internet-based services.

Similarly, [8] states that a website is a set of content interconnected through hyperlinks and available on the internet, which is perceived by users as a unified whole. The emphasis is not only on the technical aspects of individual web pages but also on how users experience and navigate information in an integrated manner.

End User Computing Satisfaction (EUCS)

According to [9], End User Computing Satisfaction (EUCS) is a method for measuring the level of satisfaction experienced by end users toward an application-based information system. This evaluation compares user expectations with the actual experience of using the information system.

EUCS assesses user satisfaction based on five key dimensions:

1. Content – the quality and relevance of the system's informational content.
2. Accuracy – the precision and reliability of the information presented.
3. Format – the layout and structure of the data presentation.
4. Ease of Use – the degree to which the system is easy to operate.
5. Timeliness – the speed at which information is updated or delivered

METHOD

The research method was carried out following the diagram below:

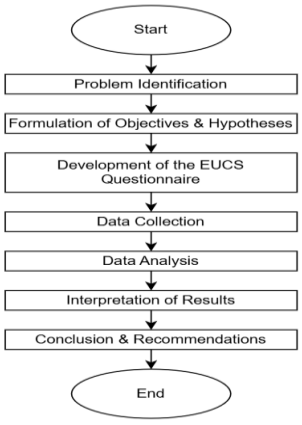

Figure 1. Research Process Diagram

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Questionnaire Design

The Process of Designing Questionnaire Items Regarding User Satisfaction with the Official Website of Politeknik Aceh Selatan Using the EUCS Method :

1. Defining the Measurement Objectives Based on EUCS
   The objective is to measure user satisfaction with the application based on five main categories: content, accuracy, format, ease of use, and timeliness.
2. Defining the Categories According to the EUCS Method

Table 1. EUCS Categories

No	Category	Description
1.	Content (C1–C3)	The quality of information provided by the application
2.	Accuracy (A1–A3)	The precision and correctness of data or information within the application
3.	Format (F1–F3)	The interface layout and structure of information presentation
4.	Ease of Use (E1–E4)	The ease with which users operate or navigate the application
5.	Timeliness (T1–T3)	The speed and punctuality of the system in delivering information or services

3. Developing Questions for Each Category
   a. Content (3 questions)
   - The information displayed in the application is easy to understand.
   - The available information meets my needs.
   - The application provides complete information.

   b. Accuracy (3 questions)
   - The data presented by the application is accurate and reliable.
   - I rarely encounter data errors in the application.
   - The results from the application reflect the actual conditions.

   c. Format (3 questions)
   - The layout and design of the application make it easy for me to read the information.
   - The information is presented consistently and neatly.
   - Navigation within the application is easy to understand and use.

   d. Ease of Use (4 questions)
   - This application is easy to use, even for new users.
   - I do not need much assistance to use this application.
   - The features in the application are easily accessible.
   - The application interface is responsive and intuitive.

   e. Timeliness (3 questions)
   - The application delivers information quickly and on time.
   - I can access the application anytime when needed.
   - The application's response time in delivering results is sufficient.
4. Determining the Assessment Method and Rating Scale
   A five-point Likert scale is used to facilitate the quantification of data:

Table 2. Likert Scale Table

Scale	Description
1	Strongly Disagree / Very Dissatisfied
2	Disagree / Dissatisfied
3	Neutral
4	Agree / Satisfied
5	Strongly Agree / Very Satisfied

5. Validity and Reliability Testing
   A pre-test of the questionnaire was conducted with a number of respondents to ensure its validity (i.e., whether the questions measure what they are intended to measure) and reliability (i.e., whether the results are consistent across similar conditions).
6. Questionnaire Structure Development
   The questionnaire was designed with a clear and measurable structure, consisting of: Title, Purpose of the Questionnaire, Instructions for Completion, Questions with a Likert scale column, and Respondent Identification.

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7. Questionnaire Distribution
   The distribution of the questionnaire was carried out using Google Forms to facilitate accessibility and data collection.

Data Collection

The data collection process was carried out through the following steps:

1. Determining the objective of data collection.
2. Identifying the population and selecting the sample.
3. Designing and distributing the questionnaire (conducted online).
4. Conducting validity and reliability testing.
5. Executing the data collection process.
6. Managing the collected data.
7. Preparing for data analysis.

Respondent Identification

The respondents in this study consisted of various stakeholders and members of the academic community at Politeknik Aceh Selatan (Poltas). Each respondent received a link to a Google Form containing 16 questions, which could be answered based on their individual assessments. The total number of respondents was 112.

Score Calculation Using the Likert Scale

1. Formula for Actual Satisfaction Score (SKN)

$$SKN = \sum_{i=1}^{n} Xi$$

noted:

Xi = Score of each questionnaire item

n = Total number of statements in the questionnaire

2. Interpretation Range

$$Interval = \frac{Skor\ Max - Skor\ Min}{Jumlah\ Kategori} = \frac{5-1}{5} = 0{,}8$$

Therefore, the interpretation of the average score can be referred to in Table 3.

Table 3. Interpretation Range

Average Score	Interpretation Category	Interpretation (%)
1.00 – 1.80	Very Dissatisfied	0 – 20%
1.81 – 2.60	Dissatisfied	21 – 40%
2.61 – 3.40	Neutral	41 – 60%
3.41 – 4.20	Satisfied	61 – 80%
4.21 – 5.00	Very Satisfied	81 – 100%

3. Formula for Ideal Satisfaction Score (SKI)

$$SKI = \sum (\text{Total Responden x Total Statement x Skor Tertinggi Likert})$$

4. Formula for Satisfaction Percentage (PK)

$$PK\ (\%) = \frac{SKN}{SKI}\ x\ 100\%$$

RESULT

To measure user satisfaction with the system under study, a quantitative approach was employed using a five-point Likert scale questionnaire instrument. Each respondent was asked to provide ratings for 16 statements representing five main indicators: content (information quality), accuracy, format (interface layout), ease of use, and timeliness. The Likert scale scores ranged from 1 (strongly disagree) to 5 (strongly agree), where higher scores indicate higher levels of user satisfaction.

In processing the data, the total actual score obtained from all respondents—referred to as the Actual Satisfaction Score (SKN)—was first calculated. The SKN was computed based on the frequency of responses at each score level, as follows:

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$$SKN = (726 \times 5) + (1014 \times 4) + (51 \times 3) + (1 \times 2) + (0 \times 1) = 3630 + 4056 + 153 + 2 + 0 = 7841$$

Next, to determine the proportional level of satisfaction relative to the maximum possible score, the Ideal Satisfaction Score (SKI) formula was used. The SKI was derived from the product of the number of respondents, the number of questions, and the maximum Likert scale score (i.e., 5). With 112 respondents answering 16 questions each, the SKI was calculated as follows:

$$SKI = 112 \times 16 \times 5 = 8960$$

After obtaining both SKN and SKI values, the Satisfaction Percentage (PK) was then computed using the following formula:

$$PK = \left(\frac{SKN}{SKI}\right) \times 100\% = \left(\frac{7841}{8960}\right) \times 100\% = 87,52\%$$

Based on the above calculation, the level of user satisfaction with the system tested reached 87.52%, which is considered very high. This indicates that the system has delivered a positive user experience and met the expectations of the majority of users. The high satisfaction rate also suggests that the system meets key criteria in terms of the quality of the information provided, timeliness of service, ease of navigation and use, as well as the aesthetics and readability of the interface design.

Furthermore, the satisfaction percentage of 87.52% falls under the "very satisfied" category according to Likert scale interpretation guidelines. Generally, a range of 81% to 100% reflects a very high level of user satisfaction with a service or system. In the context of this study, it demonstrates that most respondents felt the system effectively supported them in completing their tasks or obtaining the information they needed efficiently and effectively.

CONCLUSION

The results of this study indicate that the quality and performance of the system have reached a satisfactory level based on the perceptions of the majority of users. The achieved satisfaction level of 87.52% reflects the system's success in meeting users' informational needs, ease of use, and timeliness of service delivery. However, although this result is considered very good, system administrators must continue to conduct regular evaluations to ensure the system remains relevant and effective in addressing users' evolving needs in the digital era. A detailed analysis of each questionnaire item is also essential to identify areas that require further improvement. Indicators with relatively lower average scores should be prioritized in the subsequent system development process. Therefore, the results of this measurement not only reflect the current success of the system but also serve as a critical foundation for formulating strategies for system development that are more adaptive, sustainable, and user-centered.

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