Evaluating the Usability of a University Website Using the System Usability Scale (SUS)

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Abstract *- This study aims to evaluate the usability level of a university website using the System Usability Scale (SUS) method, with a case study conducted on the website of Universitas Narotama, which can be accessed at https://narotama.ac.id. Data were collected through a questionnaire distributed to 50 respondents who had prior experience using the website. The SUS instrument consists of 10 statements measured using a five-point Likert scale. The collected data were analyzed by calculating the SUS score based on standard procedures.*
The results indicate that the website achieved a SUS score of 72.75, which falls into the "Good" category and suggests that the system is acceptable to users. Further analysis reveals that users generally perceive the website as easy to use and learn; however, several aspects such as navigation structure, interface consistency, and information clarity still require improvement.
These findings suggest that although the website has met basic usability standards, further optimization is necessary to enhance the overall user experience. This study provides practical recommendations for improving the quality and development of more user-friendly websites.

Keywords: *System Usability Scale (SUS), Website Evaluation, User Experience (UX), Information System*

INTRODUCTION

The rapid advancement of information technology in recent years has driven digital transformation in the higher education sector. Universities are required to provide information services that are fast, accurate, and easily accessible to users through digital media such as websites. University websites play a crucial role as a medium for delivering academic information, promoting institutional profiles, and facilitating communication between the institution, students, and the wider community (Setiawan et al., 2018).

Website quality is a critical factor in determining the effectiveness of information delivery. One of the key aspects that must be considered is usability. Usability refers to the extent to which a system can be used by users to achieve specific goals effectively, efficiently, and with satisfaction (Kesuma, 2021). A website with a high level of usability enhances user experience, whereas poor usability may lead to difficulties in navigation and information retrieval (Bintang et al., 2025).

As a higher education institution, Universitas Narotama has utilized its website as a primary medium for disseminating information. The website provides various services, including academic information, campus news, and other digital services. However, in its implementation, there is still the possibility of usability issues experienced by users, such as a less intuitive interface, unclear navigation structure, and difficulties in locating the required information.

(Sembodo et al., 2021) To determine the usability level of a website, an appropriate and easily applicable evaluation method is required. One of the most widely used methods in recent studies is the System Usability Scale (SUS). This method is considered effective due to its simplicity, efficiency, and ability to produce reliable results based on user perceptions. The SUS consists of ten statements measured using a Likert scale, which generate a usability score that can be interpreted into specific categories..

Several studies conducted over the past five years indicate that the System Usability Scale (SUS) method has been widely applied in the evaluation of educational websites. The findings demonstrate that this method is capable of providing a clear representation of system usability levels and effectively supports the formulation of improvement recommendations (Kusumadya et al., 2022).
Based on the background, this study aims to analyze the usability level of the Universitas Narotama website using the System Usability Scale (SUS) method. The results of this study are expected to provide an overview of the website's usability quality and serve as a basis for formulating improvement recommendations to enhance the overall user experience.

RESEARCH METHOD

This study adopts a quantitative approach with a descriptive method. The quantitative approach is utilized to assess the website's usability level based on numerical data derived from respondents' questionnaire responses. The descriptive method is intended to systematically describe the usability condition of the system from the users' perspectives. (Sugiyono, 2020).

The object of this study is the university website of

Universitas Narotama, which is utilized as a medium for delivering academic information and digital services to users. The website provides various features, including academic information, campus news, and other online services that are accessible to lecturers, administrative staff, alumni, students, and the general public.

Figure 1. Research Framework Using System Usability Scale (SUS)

2.1 Data Source

This study utilizes both primary and secondary data sources. Primary data were obtained directly from respondents through the administration of a System Usability Scale (SUS) questionnaire. The respondents in this study were users who had prior experience accessing the official website of Universitas Narotama. The data collection was conducted online using a questionnaire distributed via Google Forms. A total of 50 respondents participated in this study. The questionnaire was used to assess the level of usability based on users' experiences (Desmulyani & Agustini, 2024).

Figure 2. Universitas Narotama Website (Source: https://narotama.ac.id)

Secondary data were collected from scientific literature, including relevant prior studies, academic books, and official documentation of the Universitas Narotama website, accessible at narotama.ac.id. These data served as supporting evidence in the analysis and discussion (Herdipriansyah et al., 2025).

2.2 Data Collection Techniques

The data collection techniques employed in this study include observation and questionnaire methods. Observation was conducted by directly examining the website's interface and features to gain an understanding of the system's structure and functionality. Meanwhile, the questionnaire served as the primary instrument in this research. The questionnaire was developed based on the System Usability Scale (SUS) method, which consists of 10 statements measured using a Likert scale (Bangor et al., 2009).

The population in this study consists of all users of the university website, including lecturers, administrative staff, alumni, students, and the general public who have accessed the website. The sampling technique employed is purposive sampling, in which respondents are selected based on specific criteria, namely individuals who have prior experience using the Universitas Narotama website (Sugiyono, 2020). The sample size employed in this study ranges from 30 to 100 respondents, following established guidelines in usability research (Jakob Nielsen, 1993).

2.3 Research Instrument

The instrument used in this study was the System Usability Scale (SUS) questionnaire. SUS is a simple and effective method for measuring usability by utilizing 10 statements to assess users' perceptions of a system (Bangor et al., 2009). Each statement is measured using a five-point Likert scale, defined as follows:

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

2.4 Data Analysis Methods

Data analysis was conducted using the System Usability Scale (SUS) method. SUS is employed to measure the usability level of a system based on users' perceptions. The analysis procedure using SUS is carried out through the following steps:

1. For odd-numbered items (1, 3, 5, 7, and 9): The score is calculated by subtracting 1 from the user's response.
2. For even-numbered items (2, 4, 6, 8, and 10): The score is calculated by subtracting the user's response from 5.
3. The adjusted scores for all items are then summed to obtain the total score.
4. The total score is multiplied by 2.5 to produce the final SUS score.

$$SUS = \left(\sum_{i=1}^{10} score\ i \right) x\ 2{,}5$$

The System Usability Scale (SUS) method was selected due to its proven reliability and its extensive application in usability evaluations across a wide range of information systems (Shiffa Intania Putri, 2024). The calculated SUS scores are interpreted based on the following table, which serves as a reference for determining the usability feasibility level of the system.

Table 1. SUS Score Interpretation

SUS Score	Category
> 80	Excellent
68 – 80	Good
51 – 67	Enough (OK)
< 51	Poor

RESULTS AND DISCUSSION

This section presents the results and discussion derived from the usability analysis of a university website using the System Usability Scale (SUS) method. The data collected through questionnaires were processed and analyzed to obtain usability scores. These results were subsequently interpreted based on SUS standards to determine the overall quality level of the system and to provide a basis for recommending improvements.

This study involved 50 respondents who were users of the Universitas Narotama website. The respondents consisted of active students, alumni, lecturers, administrative staff, and members of the general public who had previously accessed the website. In terms of gender distribution, 28 respondents were male and 22 were female.

3.1 System Usability Scale (SUS) Questionnaire Results

Based on the results of the questionnaire, the mean scores of respondents' responses for each System Usability Scale (SUS) item are presented as follows.

Table 2. SUS Questionnaire Results

No.	Statements	Mean Scores
1.	The system is easy to use	4.2
2.	The system is unnecessarily complex	2.1
3.	The system is easy to learn	4.1
4.	I need assistance to use the system	2.3
5.	The system's features function properly	4
6.	The system is inconsistent	2.2
7.	Other users would find the system easy to use	4.1
8.	The system is confusing	2.4
9.	I feel confident using the system	4
10.	I need to learn a lot before I can use the system	2.3

The response patterns demonstrate consistency between positive and negative items, indicating that the collected data possess a good level of validity. Based on these results, it can be observed that the positive statements (items 1, 3, 5, 7, and 9) have average scores above 4, suggesting that respondents generally agree that the website is easy to use, easy to learn, and provides well-functioning features..

Conversely, the negative statement items (items 2, 4, 6, 8, and 10) obtained average scores below 3, indicating that most respondents disagreed that the website is complex, confusing, or inconsistent. This suggests that, in general, users do not experience significant difficulties when using the website.

However, several items, particularly items 4 and 8, show average scores close to 2.5, indicating that a portion of users still require assistance or experience confusion when interacting with the system. Furthermore, the graphical visualization of the data reinforces the descriptive analysis results and facilitates a clearer understanding of the response patterns provided by the respondents.

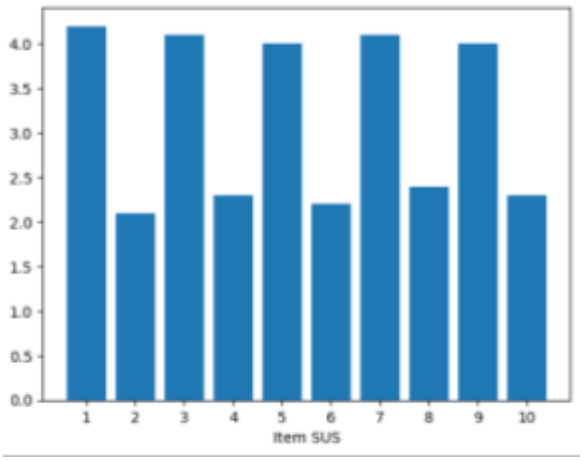

Figure 3. SUS Results Graph

3.2 SUS Score Calculation

The SUS score was calculated by converting the score of each individual item, resulting in a total score of 29.1.

SUS = 29.1 x 2.5

Thus, the final SUS score obtained is **72.75**. This score indicates that the university website falls within the Good category and is acceptable to users. Furthermore, the score exceeds the average usability threshold of 68, suggesting that the system has met the general standards of usability.

The use of graphical representations in the form of A–F classifications in System Usability Scale (SUS)

results plays a crucial role in facilitating a more intuitive and communicative interpretation of usability data. This approach allows stakeholders to better understand system quality not only through numerical scores but also through clearly defined categorical levels. This is further supported by recent research conducted by Ricardo Baeza-Yates (2020), which highlights that clearly categorized data visualizations can enhance users' comprehension of analytical outcomes and support more effective data-driven decision-making.

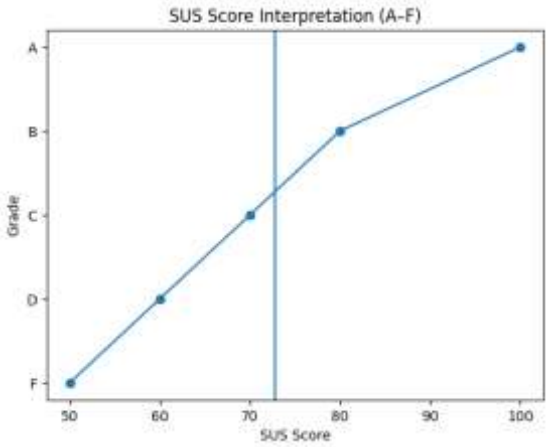

Figure 4. SUS Score Chart on A–F Grade Scale

The figure illustrates the interpretation of the System Usability Scale (SUS) score into A–F grading categories. Based on the graph, the SUS score of 72.75 falls within the range of 70–80, which corresponds to a grade of B (Good). This indicates that the system has a good level of usability and is acceptable to users, although it has not yet reached the "Excellent" category. This interpretation is supported by studies conducted by Bangor et al., (2009) and Tom Tullis, (2013) , which suggest that usability measurement results should be classified into specific categories to facilitate a clearer understanding of system quality.

3.3 Discussion

The findings indicate that the university website of Universitas Narotama exhibits a good level of usability based on the obtained SUS score. This result suggests that, overall, users can operate the system effectively with minimal difficulty.

Further analysis indicates that the high scores on positive statement items reflect that users perceive the system as easy to use (ease of use), easy to learn (learnability), and capable of enhancing user confidence during interaction. This finding is consistent with previous studies suggesting that systems with good usability can improve user experience as well as increase efficiency in system usage (Jeff Sauro, 2012).

On the other hand, although the SUS score falls within the "Good" category, several aspects still require attention. The scores on the negative items indicate that some users experience confusion when using the system and require additional time to adapt. This suggests the presence of weaknesses in the interface design and system navigation.

This interpretation is consistent with the findings of Lewis (2018), who emphasized that the results of usability measurement using the System Usability Scale (SUS) should be interpreted with caution, as scores within the "Good" category do not necessarily reflect an optimal overall user experience. Therefore, further evaluation is required to identify aspects that can still be improved.

In addition, based on the distribution pattern of respondents' answers, it can be concluded that the system has met the fundamental aspects of usability; however, it has not yet reached the "Excellent" level, indicating that there is still room for further development

CONCLUSION

4.1 Conclusion

Based on the results of this study on the usability analysis of a Universitas Narotama website using the System Usability Scale (SUS), a SUS score of 72.75 was obtained. This score falls within the "Good" category, indicating that the Universitas Narotama website generally has an acceptable level of usability and can be effectively used by users.

The analysis results show that users perceive the website as easy to use and easy to learn, and that the available features function properly. This indicates that the system has met the fundamental aspects of usability, particularly in terms of learnability and efficiency.

However, several aspects still require attention, such as navigation that is not fully intuitive, interface consistency, and the clarity of the system's usage flow. These findings suggest that although the website meets basic usability standards, there is still room for improvement to enhance the overall quality of the system and provide a more optimal user experience. Therefore, it can be concluded that the website of Narotama University is feasible for use, but further development is required to achieve a higher level of usability.

4.2 Recommendation

Based on the results of this study, several recommendations can be proposed as follows:

1. **Improvement of navigation structure**
   The website should be developed with a simpler and more intuitive navigation structure to enable users to easily locate the required information.
2. **Enhancement of interface design consistency**
   Standardization of the interface design across all web pages is necessary to improve user comfort

and ensure a consistent interaction experience.

3. **Optimization of information presentation**
   The presented information should be more concise, clear, and well-structured to enhance user understanding.
4. **Improvement of website performance**
   System response time and access speed should be optimized to provide a better user experience.
5. **Future research directions**

Future studies are recommended to incorporate additional evaluation methods, such as WebQual or the User Experience Questionnaire (UEQ), to obtain more comprehensive usability and user experience insights.

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