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# Usability Analysis of the UNISSA Website Using the SUS Method: Towards an International Islamic Digital Campus

Darus Winanten Piandani[1]*, Danu Pratomo[2], Syafril Hidayat[3], Anggunan Tunggal[4], Asmar Baco[5], Widyatmike Gede Mulawarman[6], Adam Jait[7]
Master of Educational Management Department, Mulawarman University
**Corresponding Author:** Darus Winanten Piandan dwpiandani@gmail.com

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A B S T R A C T

Digital transformation in higher education demands that institutional websites function optimally as information centers, service media, and representations of institutional identity. Sultan Sharif Ali Islamic University (UNISSA), as an international Islamic university, requires a website that is easy to use, informative, and meets global user experience standards. This study aims to evaluate the usability level of the UNISSA website using the System Usability Scale (SUS) method. The research approach employs a descriptive quantitative method using the SUS instrument, administered through a questionnaire given to 20 respondents, comprising students and lecturers. The results show an average usability score of 52,125, which falls into the category C or "OK/Fair" and is below the minimum standard threshold of 68 according to the SUS guidelines. These findings indicate that the website is usable, but does not provide an optimal user experience. The variation in scores (30–72.5) indicates differences in perception and user experience, especially regarding navigation, menu structure, accessibility, and feature consistency. Based on these results, improvements are recommended in aspects of appearance, information structure, device responsiveness, and the implementation of User-Centered Design principles and WCAG 2.1 standards. This research contributes to the development of higher education website quality, particularly to support UNISSA towards the concept of International Islamic Digital Campus.

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## INTRODUCTION

In the increasingly advanced digital era, higher education institutions are required to develop a professional and functional online presence to support their vision as a global campus. For an international university like Universiti Islam Sultan Sharif Ali (UNISSA), a website serves as the primary gateway connecting students, faculty, international partners, alumni, and the general public. The website serves not only as an information hub but also as a representation of the institution's academic Islamic identity and excellence. Therefore, website quality is a strategic aspect to ensure the university can emerge as an "International Islamic Digital Campus."

One popular tool used to measure user perceptions of system usability is the System Usability Scale (SUS). The SUS was developed by John Brooke as a quick and dirty measurement instrument capable of providing a global picture of the usability of a system, including websites (Brooke, 1996). In the context of university website evaluation, the use of the SUS allows for relatively simple yet meaningful measurements for interface design and user experience decisions. The use of the SUS in university website research allows for consistent comparisons between studies and facilitates evidence-based design decision-making (Brooke, 1996).

The interpretation of SUS scores has also been strengthened by subsequent studies (e.g., Bangor, Kortum & Miller) that added adjectival scales and benchmarks so researchers could categorize usability levels (e.g., “Poor,” “OK,” “Good,” “Excellent”) and give practical meaning to the numbers. This approach helps universities understand whether a given score aligns with the service practices expected by users, including students, faculty, and potential international partners, and determines priority thresholds for improvement. Therefore, in addition to calculating the total SUS score, a thorough analysis of its items and benchmark categories can provide measurable recommendations for improvement. (Bangor, 2009)

A university website has a multifaceted responsibility: providing information for prospective students and stakeholders, supporting academic and administrative activities, and projecting a professional and modern image of the institution. Research shows that website quality (including usability, information quality, and interaction service quality) is significantly related to user satisfaction (Dian Ulhaq Qurrata A'yun, 2023). Therefore, when a university website fails to meet usability and information quality standards, the potential for a suboptimal user experience increases, ultimately impacting the institution's reputation.

Especially for Islamic universities targeting international audiences, additional challenges arise in terms of accessibility, multilingual navigation, the delivery of globally relevant and spiritual content, and the integration of Islamic values into digital design. A website is not merely a technical medium but also a communicative medium that articulates the Islamic character and international prominence of the institution. Therefore, efforts to evaluate the UNISSA website must consider both technical aspects and inherent Islamic values and culture.

Research on the usability of university websites reveals several common issues: inconsistent information structure, confusing navigation, lack of accessibility for diverse users, and sometimes outdated content. All of these factors can undermine user trust and the effectiveness of institutional communication. Systematic studies and empirical cases on university websites emphasize the importance of regular evaluation and a combination of methods (questionnaires, task testing, heuristic analysis) to obtain a comprehensive picture of the user experience. Implementing user-centered improvements has been shown to increase the effectiveness of university online services (Assist. Prof. Dr. S. Ahmet Mentes, 2012).

Against this backdrop, this article aims to analyze the quality of the UNISSA website using the SUS method. This analysis will determine how well the UNISSA website is perceived by users in terms of usability and whether it meets the expectations of campus digital services towards international standards. The evaluation results are expected to identify areas for improvement and provide evidence-based recommendations for enhancing the website's quality as part of the transformation towards an international Islamic digital campus. The method used combines quantitative (SUS) and qualitative analysis of the findings to ensure that recommendations are concrete and implementable (Brooke, 1996).

## LITERATURE REVIEW

1. Usability Theory (System Usability)

Usability is the extent to which a system can be used by users effectively, efficiently, and satisfactorily to achieve specific goals. According to ISO 9241-11, usability consists of three main dimensions: effectiveness, efficiency, and user satisfaction. In the context of university websites, usability relates to the ease with which students, lecturers, and prospective students can find information, understand navigation, and use academic service features practically. Several local studies confirm that factors such as menu structure, text readability, access speed, and icon consistency significantly influence the perception of usability of university websites (Pratama & Yuliana, 2021; Arifin, 2023). A website with good usability not only increases user experience but also strengthens the institution's professional image.

2. Teori System Usability Scale (SUS)

The System Usability Scale (SUS) is a usability evaluation instrument developed by Brooke (1996) and is still relevant today. The SUS uses 10 statements(positive and negative) on a Likert scale of 1–5 to produce a score between 0–100. Research from 2020–2025 shows that SUS remains a favorite evaluation tool because of its high reliability, simple method, as well as ability to provide usability benchmarks(Hyzy et al., 2022; Arifin, 2023). SUS scores can also be categorized into classes A (Excellent) to F (Poor), making it easier for researchers to interpret the results. According to Bangor et al. (2009), a SUS score above 68 is considered the minimum standard for a usable system.

3. Teori Website Quality

Website quality refers to the extent to which the site can provide accurate information, an easy-to-use interface, and a good interaction experience. According to DeLone & McLean (updated model), website quality consists of three main dimensions:

1. Information Quality, including accuracy, relevance, completeness, and currency of content.
2. System Quality can be in the form of access speed, navigation, design layout, menu structure, and security.
3. Interaction Service Quality, for example, user assistance, responsiveness, and virtual support.

Indonesian research, such as that by Rahmawati & Supriyono (2022) and Hidayat (2021), shows that the quality of information and the visual appearance of a website significantly influence the level of trust in an institution. In the context of international Islamic campuses, website quality is also linked to consistency of values, professionalism, and readiness to address a global audience.

4. Research Related to Educational Website Evaluation

Draft Digital Campus refers to a comprehensive digital transformation in academic services, administration, and academic community interactions. A digital campus encompasses not only the website but also integration with other systems such as LMS, online registration, e-learning, e-office, and academic databases. According to Nugroho (2024), there are three main pillars of Digital Campus:

1) Information System Integration
2) Optimal digital service interface and access
3) Digital culture and human resource readiness

The website becomes the main gateway to the entire campus digital ecosystem. Therefore, the quality of UNISSA's website must reflect the institution's readiness to become an internationally recognized Islamic campus, in terms of technical, content, and aesthetic aspects.

5. Teori User Experience (UX)

User Experience (UX) encompasses the overall perception, emotions, and responses of users when interacting with a system. UX is not just about visual appearance, but also encompasses cognitive, emotional, functional, Anduse value. Modern UX models emphasize 4 main elements:

a. Usable (easy to use)
b. Useful (beneficial)
c. Desirable (look attractive and give a good impression)
d. Findable (information easy to find)

UX studies on higher education websites show that intuitive navigation, color consistency, clear information structure, and screen responsiveness are key factors influencing user satisfaction (Maskur, 2024; Sumarto, 2023). In the context of UNISSA, good UX is crucial for building the image of a modern Islamic campus ready to compete globally

## METHODOLOGY

The approach used in this study is descriptive quantitative with the aim of evaluating the level of usability of the UNISSA website based on user perceptions (Creswell, 2014). The instrument used was a System Usability Scale (SUS) questionnaire in the form of a Google Form consisting of 10 statements with a five-point Likert scale, ranging from "strongly disagree" to "strongly agree" (Brooke, 1996). This method was chosen because of its simplicity and reliability in measuring the perception of usability of various types of systems or applications (Lewis, 2018). The initial display and login of the UNISSA website are shown in the following image.

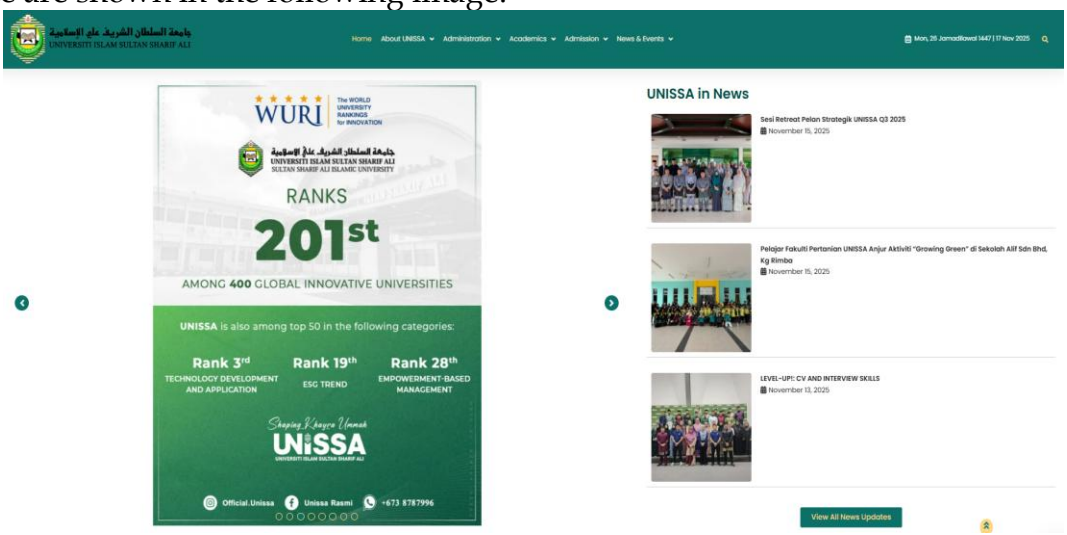


Figure 1. Initial View of the UNISSA Website

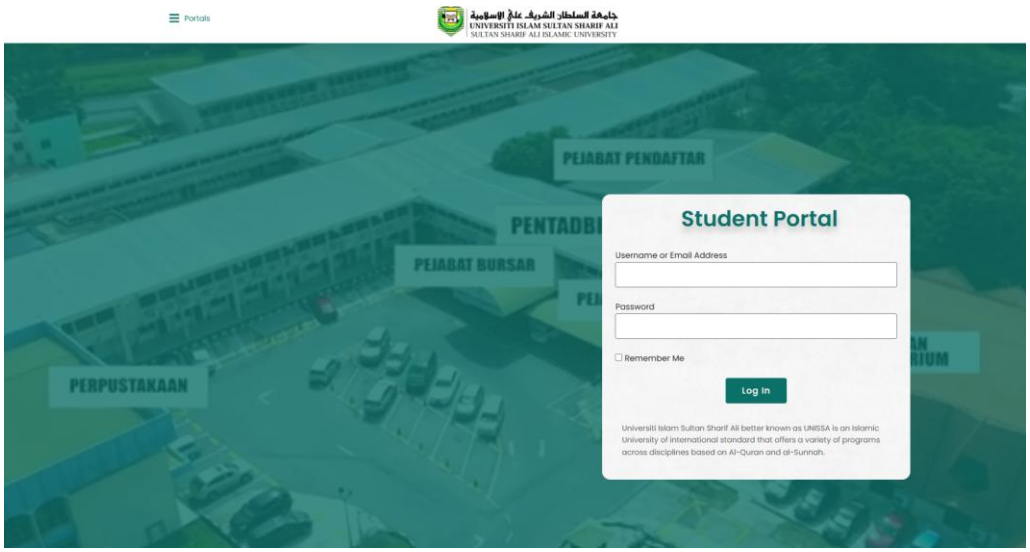


Figure 2. Login Display for Students

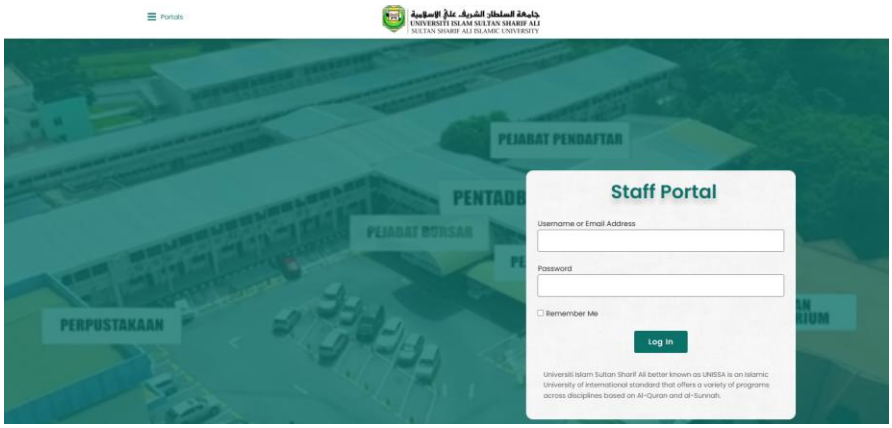


Figure 3. Login Display for Staff

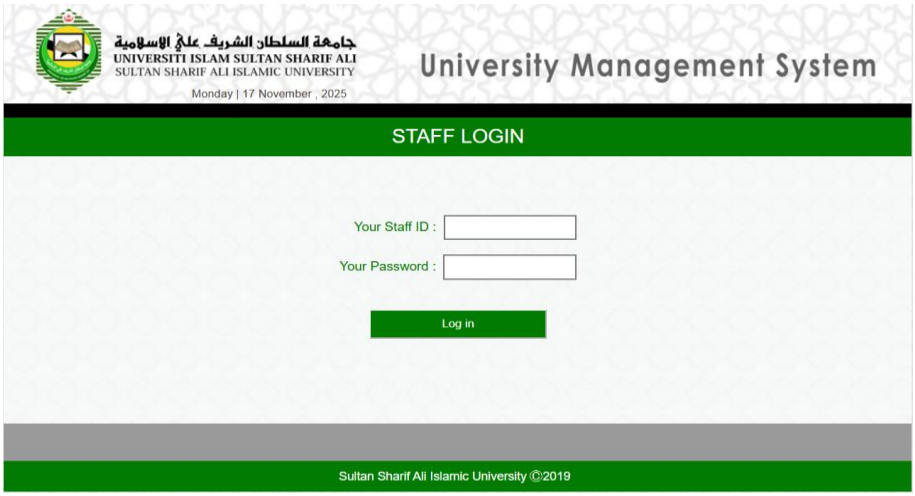


Figure 4. Login Display for UMS

The population in this study was all UNISSA website users, including students, lecturers, and partners. The sample was selected purposively, considering users' active involvement in accessing the site (Etikan, Musa, & Alkassim, 2016). A total of 20 respondents were selected to complete the questionnaire to obtain sufficient data for quantitative analysis.

The collected data were analyzed using the standard calculation formula in SUS, where the scores from each respondent were summed and converted into a scale value of 0–100 (Bangor, Kortum, & Miller, 2009). The average SUS score from all respondents was then used as the main indicator in assessing the usability of the UNISSA website. Interpretation of the results refers to the usability level categories commonly used in usability research, such as a score above 68 is considered an indicator of good usability (Brooke, 1996).

The questionnaire used in the System Usability Scale consists of 10 questions on a scale of 1 to 5.

Table 1. System Usability Scale Questions

| No | Question | Scale |
|---|---|---|
| 1 | I think I will be using the UNISSA website frequently. | 1 – 5 |
| 2 | I find the UNISSA website too complicated to use. | 1 – 5 |
| 3 | I find the UNISSA website easy to use. | 1 – 5 |

| | | |
|---|---|---|
| 4 | I feel like I need someone else's help to be able to use the UNISSA website. | 1 – 5 |
| 5 | The features on the UNISSA website are well integrated. | 1 – 5 |
| 6 | I feel that various functions on the UNISSA website are inconsistent. | 1 – 5 |
| 7 | I feel confident when using the UNISSA website. | 1 – 5 |
| 8 | I found the UNISSA website difficult to learn at first. | 1 – 5 |
| 9 | I can quickly understand how to use the UNISSA website. | 1 – 5 |
| 10 | I feel that many things need to be improved to make the UNISSA website easy to use. | 1 – 5 |

Of the 10 questions, the answer levels have a score of 5 (Strongly Agree), 4 (Agree), 3 (Undecided), 2 (Disagree), and 1 (Strongly Disagree).

Table 2. Skor System Usability Scale

| No | Answer | Score |
|---|---|---|
| 1 | Strongly agree | 5 |
| 2 | Agree | 4 |
| 3 | Doubtful | 3 |
| 4 | Don't agree | 2 |
| 5 | Strongly Disagree | 1 |

Of the 10 questions, divided into 2 categories, namely questions with positive sentences with question numbers 1, 3, 5, 7, and 9, while questions with negative sentences are at numbers 2, 4, 6, 8, and 10. The way to calculate the total SUS score of respondents is to add up the scale of each item minus 1 for odd questions, and 5 minus the scale position of each even question item. Then multiply by 2.5.

Respondent score = ((P1 – 1) + (5 – P2) + (P3 – 1) + (5 – P4) + (P5 – 1) + (5 – P6) + (P7 – 1) + (5 – P8) + (P9 – 1) + (5 – P10))*2.5

Next, calculate the SUS score by finding the average for each respondent.

$$\bar{x} = \frac{\sum x}{n}$$

$\bar{x}$ = Average Score

$\sum x$ = Sum Score

n = number of respondents

The next step is to categorize the scores in the range of 0-100 using the following table guide.

Table 3. Score Category

| Score Range | Interpretation | Letter Category |
|---|---|---|
| 80 - 100 | A/ Excellent | Very good |
| 68 - 79 | B/ Good | Suitable for use |
| 51 - 67 | C/ Ok/Fair | Needs improvement |
| < 50 | D – F /Poor | Not feasible |

The table shows that the higher the SUS score, the better the usability quality of the UNISSA website.

## RESULTS AND DISCUSSION

The usability evaluation of the UNISSA website using the SUS (Usability Scale System) method was carried out on 20 User respondents were targeted at students and lecturers at UNISSA Brunei Darussalam, using a Google Form questionnaire. The results were then processed and produced an output summarizing the level of user evaluation of the UNISSA website system.

a. Respondent Description

This study involved 20 respondents, consisting of students and lecturers who actively use the UNISSA website. Respondents were selected purposively to ensure they had direct experience using the system.

b. SUS Questionnaire Calculation Results

In the usability analysis of the data obtained using the questionnaire, the UNISSA website usability score was then calculated, with each statement having its own contribution between 0 and 4. Each respondent provided an assessment of 10 statement items on a Likert scale of 1–5. The scores were then processed using the standard SUS calculation (Brooke, 1996), namely:

1) For odd-numbered items: (Score – 1)
2) For even numbered items: (5 – Score)
3) The results of all items are added up and multiplied by 2.5 to obtain each respondent's final score in the range 0–100.

The following are the results of the questionnaire for 20 respondents at UNISSA Brunei Darussalam after calculations were carried out.

Table 4 Results of SUS Method Calculation

| Respondents | Amount *2,5 | Respondents | Amount *2,5 |
|---|---|---|---|
| R1 | 67,5 | R11 | 45 |
| R2 | 55 | R12 | 62,5 |
| R3 | 30 | R13 | 60 |
| R4 | 37,5 | R14 | 55 |
| R5 | 52,5 | R15 | 42,5 |
| R6 | 42,5 | R16 | 62,5 |
| R7 | 65 | R17 | 45 |
| R8 | 60 | R18 | 72,5 |
| R9 | 37,5 | R19 | 47,5 |
| R10 | 52,5 | R20 | 50 |
| Average score | | | 52,125 |

c. SUS Average Score

With a score of 52.125, this value is below the threshold of 68, which, according to Brooke (1996) and Bangor et al. (2008), indicates a level of usability that still needs improvement. The UNISSA website is at the lower limit with the "OK but marginal" category, which indicates that the UNISSA website is usable, but does not provide an optimal user experience and still has obstacles in navigation, feature clarity, or content structure. Based on calculations from 20 respondents, the average SUS score was 52.125.

Table 5. Descriptive Statistics

| Descriptive Statistics | Mark |
|---|---|
| Number of Respondents | 20 |
| Highest SUS Score | 72,5 |
| Lowest SUS Score | 30 |
| Rate-rate UP | 52,125 |

d. Interpretation of Results

Based on the results of the UNISSA website usability evaluation through a questionnaire using Google Forms, using the SUS method on 20 respondents, several important points can be taken, namely:

1. The average SUS score obtained was 52.125
2. The highest score from respondents was 72.5, while the lowest score was 20.
3. Based on Table 3, the average score of 52.125 is in category C with OK criteria.
4. The UNISSA website is considered to have poor usability according to SUS standards, as evidenced by the low level of user satisfaction and low levels of usefulness and utility

The discussion section is where the author can interpret the results that have been obtained. Here, the author needs to compare the findings with existing literature, analyze whether the research results are by previously stated theories or hypotheses, and explore the implications of the findings. The author also needs to explain the limitations of this study and how these limitations may affect the results or generalization of the findings. In addition, the discussion should lead to a discussion of the relevance of the findings to theory or practical applications, as well as suggestions for further research. This section is an opportunity to dig deeper into the results' meaning and provide a broader view of the topic being studied.

## CONCLUSIONS AND RECOMMENDATIONS

**a. High Score Variation (30–72.5) Indicates Inconsistency in User Experience**

The significant difference in scores (42.5 points) indicates that some users found the website quite easy to use, while others experienced difficulties. This may be due to:

a) Inconsistent appearance and navigation.
b) Information is not easy to find/incomplete.

c) Not all menus are responsive to different devices.

**b. Possible Problems with Navigation and Menu Structure**

SUS typically excels at detecting user frustration related to navigation, so low scores likely stem from:

a) The menu is not intuitive.
b) Content is difficult to access without prior knowledge.
c) No search or breadcrumb feature.

**c. The Influence of Linguistic Factors**

Because UNISSA is an international Islamic campus, there may be differences in perception between local and non-local users regarding the use of language, terms, and page layout.

## FURTHER STUDY

This study has several limitations. First, the number of respondents used in the usability evaluation was only 20 people, although sufficient for initial analysis, it does not fully represent the entire population of UNISSA website users, especially when viewed from the diversity of backgrounds, ages, digital literacy levels, and frequency of site use. Second, the method used is limited to the System Usability Scale (SUS), which is quantitative and does not explore qualitative aspects in depth, such as subjective reasons behind user satisfaction or dissatisfaction.

Based on the scores obtained, the following lessons can be drawn:

1. The website has not fully met the expectations as an "International Islamic Digital Campus". The level of usability needs to be improved to be relevant to global users.
2. SUS successfully identified that user experiences were not uniform. The varying scores provided insight that the website was not inclusive of all user types.
3. Evaluation doesn't stop at the SUS, but serves as the foundation for design and UX revisions. The improvement process should be iterative and data-driven.
4. Website development must be user-oriented (User-Centered Design), not based on developer assumptions.

Therefore, further research is needed using mixed methods (quantitative and qualitative), a larger and more diverse number of respondents, and an in-depth analysis of the factors that influence usability perceptions so that the results obtained are more comprehensive and applicable.

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**REFERENCES**

Assist. Prof.Dr.S. Ahmet Mentes, A. p. (2012). Assessing The Usability Of University Websites: An Empirical Study On Namik Kemal University. (pp. 61-69. Vol 11 Issue 3). Turkey: TOJET: The Turkish Online Journal of Educational Technology.

A'yun, D. U. Q., Wicaksana, D. Y., Ulya, S., Aisyah, R. J. S. Z., & Fazlurrahman, H. (2023). Website quality and user satisfaction: A higher education website study. *March 11th Business Review*, 8 (2), 110-120. Journal UNS

Arifin, S. R. (2023). *Evaluation of the usability of academic information systems using the System Usability Scale (SUS).*Journal of Information Technology & Management, 9 (1), 45–53.

Bangor, A. (2009). Determining What Individual SUS Scores Mean: Adding an Adjective Rating Scale. (pp. 114-123, vol 4 issue 3). USA: Journal Of Usability Studies.

Brooke, J. (1996). SUS - A quick and dirty usability scale. *United Kingdom.*

Bujang Sabri, E. M. (2021). Implementation of the "Pair System" Strategy to Increase the Validity of Graduate Search. *Journal of Teachers' Scientific Works*, 27-34.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.

Dian Ulhaq Qurrata A'yun, D. Y. (2023). Website quality and user satisfaction: A higher education perspective. (pp. 109-117. Vol. 8. No. 2). Surakarta: Sebelas Maret Business Review.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5 (1), 1–4. https://doi.org/10.11648/j.ajtas.20160201.11

Hidayat, R. (2021). *The influence of the quality of university website information on student satisfaction.* Journal of Higher Education Studies, 6 (2), 88–99.

Hussain, W., et al. (2012). The importance of a higher education website and its usability. *International Journal of Basic & Applied Sciences*, 1 (2), 120-163.

Hyzy, M., et al. (2022). *SUS Benchmarking for Digital Systems.* JMIR.

Lewis, J. R. (2018). The System Usability Scale: Past, present, and future. *International Journal of Human–Computer Interaction*, 34 (7), 577–590. https://doi.org/10.1080/10447318.2018.

Maskur, A. (2024).*Usability and UX evaluation for higher education websites.* Journal of Business Information Systems, 15 (3), 321–329.

Maskur, A., & Syarief, A. (2025). Usability and user experience evaluation for website design of higher education institutions (2015-2024): Evolutionary trends and clusters of research. *Journal of Business Information Systems*, 15(3), 321-329. Undip E-Journal

Understanding the System Usability Scale (SUS). (2022, February 7). Binus SIS. https://sis.binus.ac.id/2022/02/07/mengenal-system-usability-scale/ School of Information Systems

Mentes, S. A. (2012).*Assessing the Usability of University Websites* (case study). *International Education Studies / ERIC*. ERIC

Nugroho, A. (2024). *Campus digital transformation strategy*. Indonesian Journal of Educational Administration, 12 (1), 1–12.

Rahmawati, F., & Supriyono, H. (2022). *The influence of web quality on user experience*. Journal of Information Systems & Computers, 5 (4), 211–220.

Saiful, M. S. (n.d.). Application of Tracer Study Information System to Determine the Level of Higher Education Contribution to Graduate Competence (Case Study of Faculty of Engineering, Hamzanwadi University). *Journal of Informatics and Technology*.

Safitri, A. (2024). Enhancing higher education website quality through a data-driven approach: Usability, information quality, and interaction quality. *JTOS*, [Vol/Issue TBD]. ejournal.uniks.ac.id

Sumarto, B. (2023).*Digital campus model for Indonesian universities.*Proceedings of the National Seminar on Educational Technology.

Thomas, B. A. Weerdmeester, & I. L. McClelland (Eds.), *Usability Evaluation in Industry* (pp. 189–194). Taylor & Francis.

UNISSA (Sultan Sharif Ali Islamic University). *About / Vision & Mission / Programmes* (UNISSA official page). Accessed from the official UNISSA website. Sultan Sharif Ali University+2 Sultan Sharif Ali University+2