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Journal of Information Systems and Informatics

Vol. 6, No. 4, December 2024 e-ISSN: 2656-4882 p-ISSN: 2656-5935

DOI: 10.51519/journalisi.v6i4.910

Published By DRPM-UBD

Evaluating User Experience and Usability of the USEPT Website Using User Experience Questionnaire and System Usability Scale Method

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Abstract

In recent years, assessing the quality of the Sriwijaya University English Proficiency Test (USEPT) website and its user experience has become increasingly important due to the globalization of higher education and the need for students to develop international communication skills. This study aims to evaluate the UX and usability of the USEPT website by using the User Experience Questionnaire (UEQ) and System Usability Scale (SUS) to provide a comprehensive analysis. The results showed that all aspects of the UEQ scored with an average value ranging from -0.88 to 0.48 making it in the "bad" category especially on attractiveness, stimulation and novelty. While the average SUS score is 50 which categorizes usability at the "Not Acceptable" level, with a grade of "F" and adjective rating at the "poor" level. These findings illustrate the poor functionality of the website due to unsatisfactory user experience, thus requiring holistic improvements across all dimensions of UEQ. Recommendations for improvement include optimizing website navigation, increasing visual appeal by creating an attractive design, integrating interactive features to increase user engagement and satisfaction. This research makes a positive contribution to the development of the USEPT website in user satisfaction and can be a reference for website evaluation.

Keywords: Evaluation, UX, UEQ, SUS, USEPT

1. INTRODUCTION

In the era of rapid advances in information and communication technology (ICT), various aspects of life now depend on digital innovations that increase efficiency and ease of access to information, including in the education sector. According to research by Saepudin et al. [1], ICT development in Indonesia has covered various sectors, and data from the Indonesian Internet Service Providers Association (APJII) shows that education is one of the most accessed services, with a percentage of 11.7% [2]. Universities in Indonesia, such as Sriwijaya University



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(UNSRI), have developed various websites to support academic activities, including the USEPT (Universitas Sriwijaya English Proficiency Test) website, which is a platform for English proficiency assessment tests as a requirement for student graduation [3].

In recent years, measuring the quality of the USEPT website and its usability experience has become increasingly important, given the globalization of higher education where English is the lingua franca and the need to prepare students with international communication skills [4]. Two important aspects of website quality are the user experience (UX) and the usability level of the website, which refers to how easily users can interact and use the website effectively so that it will increase user satisfaction [5]. Therefore, if a website has a good view of these two aspects, it can be ensured that the user experience of using the website has a high level of satisfaction and improves the alignment of the website with user expectations.

However, evaluation of the USEPT website is still very limited, until now there are no research journals that highlight the UX and usability aspects of this website so it is not known whether the USEPT website is running according to its functionality. Therefore, to find out the weaknesses and challenges of this website, it is very important to conduct research on user experience in using the website and to identify whether there are problems that users feel when using the USEPT website. This opens up opportunities for the author to conduct research to analyze these problems.

There are various methods to measure UX and usability, such as User Experience Questionnaire (UEQ), System Usability Scale (SUS), and Net Promoter Score (NPS), each of which has advantages and limitations. Research [6] shows that UEQ provides a comprehensive measurement of a wide range of aspects of user experience. On the other hand, SUS provides usability scores that can be easily compared, and provides accurate, valid, reliable and dependable scores in terms of testing usability [7].

Therefore, this study chose to use UEQ and SUS together in analyzing UX and usability on the USEPT website, because the combination of these two methods can provide more in-depth and balanced insights in assessing user experience and usability levels [8], as well as enabling a clear comparison between different aspects of user experience and usability levels, thus providing a solid foundation for appropriate improvement recommendations. This research aims to answer several important questions, including how to evaluate UX and measure usability on the USEPT website, and formulate recommendations for improvement. With the new approach of combining UEQ and SUS, this research is unique in providing a more complete picture of the quality of the USEPT website than previous studies, and

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this combination also has the potential to provide more specific and in-depth improvement recommendations.

2. METHODS

Research using UEQ and SUS methods for user experience and usability evaluation is carried out through several stages, including literature review, sampling techniques, data collection, data processing, and data analysis, as shown in Figure 1.

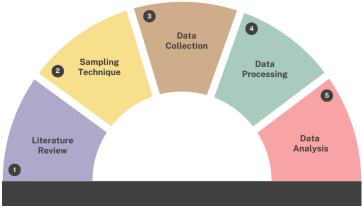


Figure 1. Research Stages

2.1. Literature Review

A literature review is a written summary that includes articles from journals, books, and other documents that establish theories and provide information from both the past and present, organized by topic and relevant documents [9]. At this stage, the author conducts a study through observation and analysis of similar scientific articles, books, and previous research to be used as references to improve understanding and support this research report. In this study, the authors obtained data by searching and analyzing articles that examined the evaluation of user satisfaction with information systems and the services they provide.

2.2. Sampling Technique

Sampling is done in such a way that it reflects the actual population conditions [10]. To determine the number of samples used in this study, researchers used the Slovin formula with the required sample size of 100 respondents. researcher collected respondents by distributing questionnaires through social media such as WhatsApp and Instagram to obtain the data needed for measuring user satisfaction. The data collection technique used is non-probability sampling, namely purposive sampling. This technique is a technique for determining samples

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based on certain criteria set by the researcher. Some of the criteria set by researchers are:

- Is an active student of Sriwijaya University.
 To ensure users have sufficient experience in accessing and using the features.
 So that the data obtained is valid and can be trusted.
- 2) Have used the Sriwijaya University English Proficiency Test (USEPT) website.

2.3. Data Collection

Data collection is done by distributing questionnaires to get the data needed for measuring user satisfaction. The authors distribute the UEQ and SUS questionnaire forms to the predetermined sample. The author distributes questionnaire online via Google Form.

2.4. Data Processing

Data processing is a systematic procedure that converts raw data into valuable and usable information [11]. The results of data processing are usually presented in the form of tables, graphs, or reports to facilitate interpretation and communication of findings to stakeholders.

1) UEQ Data Processing

In the UEQ method, data is analyzed and processed with the help of the UEQ Data Analysis Tool which can be downloaded from the official website https://www.ueq-online.org. After downloading this tool, the first step is to open the UEQ_Data_Analysis_Tool_Version_12 file using using Microsoft Excel application, which displays the "Read_First" sheet as the initial display. In this sheet, the researcher can select the language by clicking the "Choose your language" button. Next, data from the respondent's questionnaire is entered into the "Data" sheet according to the conditions-free of special characters and a maximum of 1000 respondent data as shown in Figure 2. The more data entered, the better the analysis results.



Figure 2. UEQ Data Analysis Tool "Data" Sheet View

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Before viewing the final results, we can open the "Inconsistencies" sheet, which can be seen in Figure 3, to detect inconsistent and suspicious data and remove them to make the analysis results more valid.

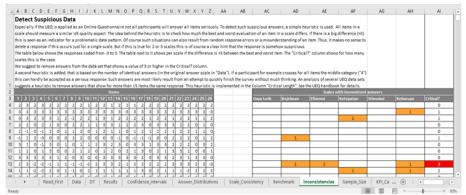


Figure 3. UEQ Data Analysis Tool "Inconsistencies" Sheet View

Inconsistent data is marked with a critical value > 2 and a critical length value > 15. This type of data is also marked with a red table in the critical and critical length columns. All data used for analysis must go through a cleaning process by removing inconsistent data. After the data has been removed, the results of the data transformation can be seen in the "DT" sheet as shown in Figure 4.

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Figure 4. UEQ Data Analysis Tool "DT" Sheet View

UEQ Data Analysis Tool automatically processes and interprets the data that has been inputted, helping to provide the authors the results in graphical form, which can be found in the "Result" sheet. This sheet displays graphs of mean per scale, mean per item, and mean of pragmatic and hedonic quality aspects, which makes it easy to visualize the research findings. In the "Result" sheet, we can see the results of the analysis in the form of mean, variance, and standard deviation values for each UEQ scale item. If required, the correlation between items and the

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reliability coefficient (Cronbach's Alpha) can be accessed in the "Scale_Consistency" sheet. The last step is to open the "Benchmark" sheet that shows the benchmark values for each UEQ scale, which gives an overview of the evaluated product quality that can be seen in Figure 5.

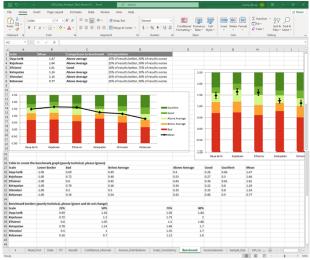


Figure 5. UEQ Data Analysis Tool "Benchmark"

The final result of data processing will show the evaluation of users about the system. The assessment of the 26 research instruments can be categorized into three categories as shown in Table 1.

Table 1. Average rating scale of questionnaire results

Average Range	Description
> 0.8	Positive Value
-0.8 - 0.8	Neutral Value
< -0.8	Negative Value

In additional to the results of each question, there are also results from 6 scales which are the average of the questions included in the scale category. The measurement results of these 6 scales will be used to create benchmarks with the conditions as shown in Table 2 below:

Table 2. Benchmark assessment terms

Scale	Bad	Below Average	Above Average	Good	Excellent
Attractiveness	< 0.7	0.7 - 1.18	1.19 – 1.58	1.59 – 1.84	> 1.84
Perspicuity	< 0.73	0.73 - 1.2	1.21 - 1.73	1.74 - 2	> 2

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Scale	Bad	Below Average	Above Average	Good	Excellent
Efficiency	< 0.61	0.61 - 1.05	1.06 – 1.5	1.51 – 1.88	>1.88
Dependability	< 0.79	0.79 - 1.14	1.15 – 1.148	1.49 – 1.7	> 1.7
Stimulation	< 0.51	0.51 - 1	1.01 – 1.35	1.36 – 1.7	> 1.7
Novelty	< 0.17	0.17 - 0.7	0.71 – 1.12	1.13 – 1.6	> 1.6

2) SUS Data Processing

The data processing process on the System Usability Scale (SUS) method uses Microsoft Excel software, there are rules for doing the calculations. The results of each question will be calculated based on the scores received from the data obtained from each of the questionnaires [12]:

- a) For each question with an odd number consisting of numbers 1, 3, 4, 7, and 9. The score for each question received will be reduced by 1.
- b) For each question with an even number consisting of numbers 2, 4, 6, and 8. The score for each question is calculated by subtracting the number 5 minus the score of the question obtained from the respondent.
- c) If all questions have been calculated, the next step is the calculation of odd weights and even weights are summed up and the score will then be multiplied by 2.5.
- d) Because the calculation of the formula above applies to only one respondent, the next step is the SUS score of each respondent will be calculated the average score. The way to get the average score is by adding up all the respondents' SUS scores and then dividing by the total number of respondents. The formula for finding the average value can be seen from Equation 1.

$$\bar{\chi} = \frac{\sum x}{n}$$
 1)

Description:

 \overline{x} = average SUS score

 $\sum x =$ number of SUS scores

n = number of respondents

Usability measurement in SUS consists of 3 aspects of determination, namely Acceptability, Grade Scale, and Adjective Rating. The measurement of the SUS assessment can be explained as follows [13]:

a) The Acceptability Range aspect assessment consists of three categories, namely Not Acceptable which has a value range of 0 - 50, Marginal Low

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which has a value range of 51 - 62, and High which has a value range of 63 - 70.

- b) Grade Scale aspect assessment which consists of five categories namely grade A with a score ≥ 80.3, Grade B with a score of 80.3 ≥ B ≥ 74.3, Grade C with a score of 74.3 ≥ C ≥ 68, Grade D with a score of 68 ≥ D ≥ 51, and Grade F with a score ≤ 51.
- c) Assessment of the Adjective Range aspect which consists of Worst Imaginable, Poor, Ok, Good, Exellent, and Best Imaginable. determination in this aspect will determine the assessment of adjectives which are the results of respondents' experience in using the website.

2.5. Data Analysis

Data analysis involves manipulating, converting, and modeling data to reveal valuable information, to assist in decision-making, and to derive reliable conclusions. The data analysis process conducted by the authors using the UEQ Data Analysis Tool Version 12 and Microsoft Excel. Then the authors using IBM SPSS Statistics 25 to analyze the correlation between the four aspects of the UEQ method and the SUS method.

3. RESULTS AND DISCUSSION

3.1. Data Collection

The data collection process was conducted from July 28, 2024 until September 29, 2024 and resulted in 331 data. Data collection was carried out through two methods, namely as follows.

- 1) User Experience Questionnaire (UEQ) Method In the User Experience Questionnaire (UEQ) method, respondents will fill in a total of 26 question instruments, each with 7 answer options from scale 1 to scale.
- 2) System Usability Scale (SUS) Method In the System Usability Scale (SUS) method, respondents will fill in 10 questions consisting of five answers that range from "Strongly Disagree" to "Strongly Agree".

3.2. Data Processing

Before the analysis begins, cleaning of the data filled in by 331 respondents is required to ensure that the data processed has a high level of accuracy. In the UEQ method, data obtained from respondents is input in the UEQ Data Analysis Tool Version 12. Respondent data is input in the "Data" sheet in this tool, which then, the data consistency checking process is carried out to detect suspicious data. This

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process uses the "Inconsistencies" sheet in the UEQ Data Analysis Tool, where inconsistent or invalid data is identified to be deleted for more accurate analysis results. Data with critical value > 2 and critical length > 15 were removed, so that out of 331 data collected, 308 valid data remained. Data used for analysis is data that is already valid

Meanwhile, for SUS analysis, the remaining respondent data was also input into a Microsoft Excel sheet that serves as a tool for calculating SUS scores. The initial process involved data transformation as per SUS guidelines, where the scores of certain questions were modified based on SUS rules-odd questions were subtracted by one point, while even questions were calculated by subtracting five points from the original score. The transformed data was then accumulated to get the average SUS score. Based on the accumulated results of the remaining 308 respondents, the average SUS score was recorded as 50, which was then interpreted according to the SUS assessment parameters to determine the usability level of the website.

3.3. Data Analysis

The results of the data analysis will be discussed using two evaluation methods, namely UEQ and SUS. Both aim to evaluate the user experience and usability of the tested website, with the results of each presented separately.

3.3.1. UEQ Data Analysis

The results of data analysis using the User Experience Questionnaire (UEQ) method involved calculating the mean value of each UEQ scale and item using cleaned data. The calculation results categorize the assessment as positive, neutral, or negative based on the mean value range. If the mean value of an item is more than 0.8, it is a positive evaluation (green area). Mean values between -0.8 to 0.8 indicate neutral evaluations (yellow area), while values below -0.8 indicate negative evaluations (red area). Figure 6 and Table 3 present the graphs and mean values for the six UEQ scales.

Table 3. Mean value of 6 UEQ scales

UEQ Scales (Mean and Variance)						
Scale	Mean	Variance	Description			
Attractiveness	0.106	1.42	Neutral Evaluation			
Perspicuity	0.340	1.88	Neutral Evaluation			
Efficiency	0.283	1.51	Neutral Evaluation			
Dependability	0.480	1.23	Neutral Evaluation			
Stimulation	0.041	1.52	Neutral Evaluation			
Novelty	-0.877	1.41	Negative Evaluation			

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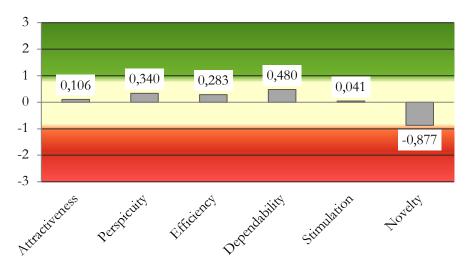


Figure 6. Mean value graph of 6 UEQ scales

From these results, five of the six scales were in the neutral category, with mean values of attractiveness 0.106, perspicuity 0.340, efficiency 0.283, 0.480 stimulation 0.041. One scale, novelty, showed a mean value of -0.877, classified as a negative evaluation. Further analysis of the Pragmatic and Hedonic quality of the website shows that the perspicuity, efficiency, and dependability scales belong to the pragmatic quality, while stimulation and novelty are related to the hedonic quality. Figure 7 and Table 4 show the graphs and mean values for Pragmatic and Hedonic qualities.

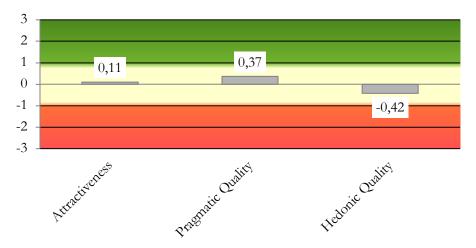


Figure 7. Average score graph of pragmatic and hedonic qualities

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Table 4. Mean value of pragmatic and hedonic quality

Pragmatic and Hedonic Quality					
	Mean	Description			
Attractiveness	0.11	Neutral Evaluation			
Pragmatic Quality	0.37	Neutral Evaluation			
Hedonic Quality	-0.42	Neutral Evaluation			

These three aspects also received neutral evaluations, with mean attractiveness 0.11, pragmatic quality 0.37, and hedonic quality -0.42. Next, analysis was conducted on each aspect of UEQ. For the attractiveness aspect, all indicators show a neutral evaluation, indicating that users do not have strong emotions towards the appearance of the product. In the perspicuity aspect, all indicators also received neutral evaluations, indicating that users felt neutral about the ease of understanding the product. The efficiency, dependability, and stimulation aspects showed similar results, with all indicators receiving neutral evaluations. Finally, in the aspect of novelty, most of the indicators received negative evaluations, indicating that the product is considered less original and innovative.

The attractiveness, stimulation and novelty aspects have the smallest mean scores among the 6 aspects. A low score in attractiveness may indicate that users do not really like the look or design of the USEPT site as the site may look outdated or unattractive. A low score on stimulation indicates that the site does not provide an enjoyable or motivating experience for users as they explore its content. A low score in novelty could mean that the USEPT site does not offer exciting new features, or innovations that users expect in this digital age. This low score will certainly have an impact on the functionality of the website such as causing the site to appear outdated or monotonous thus reducing students' desire to use the site and making them less motivated to explore other features. The average results of each indicator will be compared with the benchmark data of UNSRI's USEPT website shown in Figure 8 and Table 5.

Table 5. UNSRI USEPT website benchmark result data

Scale	Mean	Comparison to benchmark	Interpretation
Attractiveness	0.11	Bad	In the range of the 25% worst results
Perspicuity	0.34	Bad	In the range of the 25% worst results
Efficiency	0.28	Bad	In the range of the 25% worst results
Dependability	0.48	Bad	In the range of the 25% worst results

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p-ISSN: **2656-5935** http://journal-isi.org/index.php/isi e-ISSN: **2656-4882**

Scale	Mean	Comparison to benchmark	Interpretation
Stimulation	0.04	Bad	In the range of the 25% worst results
Novelty	-0.88	Bad	In the range of the 25% worst results

Figure 8 and Table 5 show the benchmark analysis results which indicate that all aspects of the USEPT UNSRI website scored "Bad" compared to similar products. Overall, this website shows a bad benchmark level.

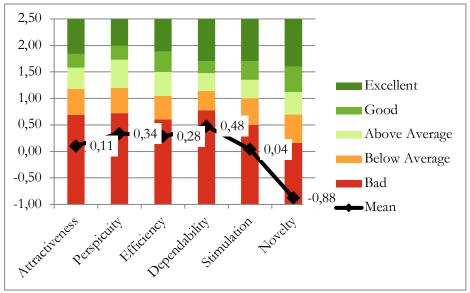


Figure 8. USEPT UNSRI website benchmark results graph

3.3.2. SUS Data Analysis

Descriptive statistical analysis using the System Usability Scale (SUS) in this study aims to find the average value of the SUS score and interpret the assessment results based on predetermined parameters, as shown in Figure 9. Usability measurement is carried out with reference to three main aspects: Acceptability, Grade Scale, and Adjective Rating. After getting the SUS score, the next step is to interpret the calculation results.

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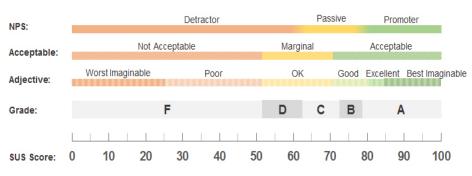


Figure 9. SUS Score Value

In the Acceptability aspect, there are three levels: not acceptable, marginal (low and high), and acceptable. The calculation results show a SUS score of 50, which means that the acceptability level of the USEPT website is in the "Not Acceptable" category. This indicates that the product has weaknesses in usability, such as a user interface that does not meet the needs, complicated navigation, and features that are difficult to access and understand, so that users have difficulty in completing the desired tasks. Furthermore, in the Grade Scale aspect, which consists of five levels (A, B, C, D, and F), the SUS score of 50 places the USEPT website at grade "F". This indicates a very low level of user satisfaction, signaling that the product fails to meet user expectations in terms of performance and usability. Finally, in the Adjective Rating aspect which includes five levels (worst imaginable, poor, ok, good, and best imaginable), the same SUS score (50) indicates that USEPT's adjective rating level is in the "poor" category. This confirms that product quality is very poor, including unattractive design, suboptimal functionality, and unsatisfactory performance.

The analyzed scores in figure 8, 9 show that the website functionality is poor because it causes an unsatisfactory experience, especially when students try to access important information such as registration, schedule, or test results. In addition, low usability can lead to negative perceptions about the institution's professionalism in providing digital services, potentially decreasing user trust. For this reason, improvements in the aspects of interface design and ease of navigation are needed. The results of the evaluation of the UNSRI USEPT website show that this site obtained a SUS score of 50 in figure 9, and falls into the bad or poor category in all aspects measured in figure 8, both in terms of usability and user experience. As a comparison in terms of benchmarks, previous research [14] examined the Open University Academic Information System (SIA UT) website and obtained excellent benchmarks in all categories in the UEQ evaluation, the SIA UT website is able to provide an excellent overall user experience. In addition, SIA UT also achieved a SUS score of 82.5 indicating a high level of satisfaction and comfort in using the site compared to the web usept which only has a score

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of 50. From the results of the research on the UNSRI USEPT website using the UEQ and SUS methods, it is recommended that improvements be made in various key areas such as ease of access, optimizing website navigation, optimizing visual appeal to be attractive, interaction efficiency, and information reliability.

3.3.3. Improvement Recommendations

Based on the evaluation that shows that all six aspects of UEQ scored "bad" and the SUS score recorded the acceptability level of the USEPT website in the "Not Acceptable" category, it is recommended to improve through a holistic approach. First, by combining aspects that have similar dimensions, four of the six aspects of UEQ-Attractiveness, Perspicuity, Efficiency, and Stimulation-can be aligned with the usability focus of the SUS method. Through correlation analysis, there is a significant positive relationship between the UEQ and SUS results, which means that improving one variable can have an effect on the other, especially in terms of user efficiency as shown in Figure 10.

Correlations Attractiveness Perspicuity Efficiency Stimulation SUS_Score Attractiveness Pearson Correlation 786 .818 .844 .517 Sig. (2-tailed) .000 .000 000 .000 308 308 308 308 .786** .553 .809** .631** Perspicuity Pearson Correlation Sig. (2-tailed) 000 000 .000 000 Ν 308 308 308 308 308 .818** .809** .721** .512 Efficiency Pearson Correlation 1 Sig. (2-tailed) .000 .000 000 .000 308 308 308 308 308 .844** .631** .721** .392** Stimulation Pearson Correlation 1 Sig. (2-tailed) .000 .000 000 000 308 308 308 308 308 .517** .512** .392" SUS Score Pearson Correlation .553** 1 Sig. (2-tailed) .000 .000 000 000 308 308 308 Ν 308

**. Correlation is significant at the 0.01 level (2-tailed)

Figure 10. UEQ and SUS Correlation Analysis

To enhance efficiency, the website needs to be optimized to provide more intuitive navigation and make it easier for users to complete tasks quickly. Improvements in the clarity of the interface are also important, as low perspicuity scores indicate difficulty for users to understand the structure and content. Therefore, the layout needs to be organized more clearly, with appropriate use of icons and explicit guidance to help new users. Furthermore, the visual appeal of the website should be improved with a more modern and attractive design, as well as interaction

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p-ISSN: 2656-5935 http://journal-isi.org/index.php/isi e-ISSN: 2656-4882

elements that add interest, such as light animation. Finally, to increase stimulation, it is recommended to add interactive and gamification features that can increase user engagement. Feature reliability and security should be improved to provide a sense of security when using the website. Novelty also needs to be considered by introducing unique and innovative features regularly. The last recommendation is to implement usability testing regularly to identify new issues and ensure any improvements made have a positive impact on the user experience. Some suggestions for improvement recommendations resulting from the calculation of UEQ and SUS scores are an overview of which aspects need attention. Improvements to each of these low-scoring aspects can make the website more attractive and easier to use. This will make students more comfortable using the USEPT website, increase engagement, and reduce the level of error or confusion when accessing available information or services.

4. CONCLUSION

Based on the user experience and usability evaluation of Sriwijaya University's English Proficiency Test (USEPT) website, this study concludes that the website has significant challenges in user experience aspects. The analysis showed that all aspects measured by the UEQ were rated as "bad" especially in terms of attractiveness and novelty, which obtained the lowest scores, highlighting shortcomings in the attractiveness and innovation of the website. In addition, SUS resulted in a score of 50, categorizing usability as "Not Acceptable" and placing it at grade F, reflecting a bad user experience with many difficulties. These findings suggest that thorough improvements in all aspects of UEQ are necessary to increase user satisfaction. The USEPT website needs to focus on improvements in key areas, such as ease of access, website navigation optimization, visual appeal optimization, interaction efficiency, and information reliability.

The results of this evaluation not only provide an overview of aspects that need to be improved on the USEPT UNSRI website, but can also serve as a reference for other academic websites in improving the quality of experience and optimal usability. These recommendations are especially relevant in the context of academic websites that are frequently accessed by various user groups, ranging from students to faculty. Future research should include a broader and more demographically diverse sample of users, not limited to Sriwijaya University students, so that the evaluation results can be more representative. In addition, future research could consider applying additional usability metrics, such as Net Promoter Score (NPS) or Task Completion Rate, to gain a more comprehensive insight into user experience in digital education environments.

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p-ISSN: 2656-5935 http://journal-isi.org/index.php/isi e-ISSN: 2656-4882

REFERENCES

- [1] S. Saepudin, E. Pudarwati, C. Warman, S. Sihabudin, and G. Giri, "Perancangan Arsitektur Sistem Pemesanan Tiket Wisata Online Menggunakan Framework Zachman," *Jurnal Sisfokom (Sistem Informasi dan Komputer)*, vol. 11, no. 2, pp. 162–171, Aug. 2022, doi: 10.32736/sisfokom.v11i2.1415.
- [2] D. A. Fitriana, I. Iftadi, and R. D. Astuti, "User Experience Evaluation and Interface Redesign Using User Experience Questionnaire and Google Material Design (Case Study: SIAKAD UNS)," *Jurnal Teknik Industri*, vol. Vol.12 No.2, 2023.
- [3] S. Curle, D. Yuksel, I. Aizawa, G. Thompson, and M. Rakhshandehroo, "Academic success in English Medium Instruction programmes in Turkey: Exploring the effect of gender, motivation, and English language proficiency," *Int J Educ Res*, vol. 123, Jan. 2024, doi: 10.1016/j.ijer.2023.102288.
- [4] F. Liadi and S. Faridah, "Pembelajaran Bahasa Indonesia Di Universitas Muhammadiyah Banjarmasin Berwawasan Global Dan Berdaya Saing Sebagai Trademark," *JIS: Journal Islamic Studies*, vol. 1, 2023.
- [5] F. Kesuma Bhakti, I. Ahmad, and Q. J. Adrian, "Perancangan User Experience Aplikasi Pesan Antar Dalam Kota Menggunakan Metode Design Thinking (Studi Kasus: Kota Bandar Lampung)," *Jurnal Teknologi dan Sistem Informasi (JTSI)*, vol. 3, no. 2, pp. 45–54, 2022.
- [6] R. Herdjuno Pawenang Kusumo and B. S. Suranto, "Evaluasi User Experience Sistem Informasi Manajemen Tugas Akhir (SEKAWAN) Informatika Universitas Islam Indonesia Menggunakan Metode User Experience Questionnaire (UEQ)," *AUTOMATA*, vol. Vol.4 No.1, 2023.
- [7] I. Akbar, "Penerapan System Usability Scale dalam Pengukuran Kebergunaan Website SMKN 13 Bandung," INTERNAL (Information System Journal), vol. 7, no. 1, pp. 1–7, 2024, doi: 10.32627.
- [8] Ali Ibrahim, Onkky Alexander, Ken Ditha Tania, Pacu Putra, and Allsela Meiriza, "Assessing User Experience and Usability in the OVO Application: Utilizing the User Experience Questionnaire and System Usability Scale for Evaluation," *Jurnal RESTI (Rekayasa Sistem dan Teknologi Informasi)*, vol. 7, no. 4, pp. 953–963, Aug. 2023, doi: 10.29207/resti.v7i4.5137.
- [9] B. A. Habsy, N. Mufidha, C. Shelomita, I. Rahayu, and M. I. Muckorobin, "View of Filsafat Dasar dalam Konseling Psikoanalisis _ Studi Literatur," Indonesian Journal of Educational Counseling, vol. Vo. 7, No. 2, pp. 189–199, 2023.

Vol. 6, No. 4, December 2024

p-ISSN: 2656-5935 http://journal-isi.org/index.php/isi e-ISSN: 2656-4882

- [10] D. Pibriana and L. Fitriyani, "Penggunaan Model EUCS Untuk Menganalisis Kepuasan Pengguna E-learning Di MTs N 2 Kota Palembang EUCS Model Usage to Analyze E-learning User Satisfaction at MTs N 2 Palembang," *ITSI*, vol. 3, no. 1, pp. 69–80, 2022.
- [11] Nawassyarif, M. Julkarnain, and K. R. Ananda, "Sistem Informasi Pengolahan Data Ternak Unit Pelaksana Teknik Produksi Dan Kesehatan Hewan Berbasis Web," *Jurnal JINTEKS*, vol. Vol.2 No.1, 2020.
- [12] A. I. Purnamasari and A. Setiawan, "Evaluasi Usability Pada Aplikasi Pembelajaran Tari Menggunakan System Usability Scale (SUS)," *Jurnal ICT: Information Communication & Technology*, vol. 20, pp. 70–75, 2020.
- [13] I. Rachmawati and R. Setyadi, "Evaluasi Usability Pada Sistem Website Absensi Menggunakan Metode SUS," *Journal of Information System Research (JOSH)*, vol. 4, no. 2, pp. 551–561, Jan. 2023, doi: 10.47065/josh.v4i2.2868.
- [14] M. R. Maulana and D. Nurdiana, "Pengukuran Kebergunaan dan Pengalaman Pengguna Website Sistem Informasi Akademik Universitas Terbuka (SIA UT) Menggunakan Metode System Usability Scale (SUS) dan User Experience Questionnaire (UEQ)," *Journal of Informatics and Communication Technology (IICT)*, vol. 6, no. 1, pp. 1–17, Oct. 2024, doi: 10.52661/j_ict.v6i1.325.