Assessing Ticket.com App Usability Through the System Usability Scale (SUS) Method

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Abstract

The influence of technology has increased ease and comfort, especially in the online ticket ordering process. One of the online tickets booking platforms that is popular among users is Tiket.com. However, on the Tiket.com application, there are still various negative reviews given by users. One way to maintain an application is to pay attention to usability aspects, especially user input. So, this research aims to evaluate the Tiket.com application in terms of usability using the System Usability Scale (SUS) method as a data processing method. The results obtained from calculating the SUS score in usability evaluation were 55.55. This score shows that the usability level of the Tiket.com application is quite good, with the Adjective Ranking being in the OK category, and Acceptable at Marginal level and Grade D level. Even though the assessment results are acceptable, there are various things that need to be considered, including increasing the use of features. to function properly and pay attention to every user input. This is done so that it can have a significant impact on the Tiket.com application, especially in improving the usability aspect.

Keywords: Usability Scale (SUS), Usability, Evaluation, Tiket.com

1. Introduction

Technology has enhanced convenience and comfort in the process of booking tickets online. Many online ticket booking platforms such as Agoda, Booking.com, Traveloka, Tiket.com, Pegipegi, or official company-provided applications assist customers in comparing prices and quickly checking schedules. Furthermore, integration with online payment systems such as credit cards or digital wallets makes transactions easier.

One of these online ticket booking platforms is Tiket.com. Tiket.com operates under PT Global Tiket Network, which is engaged in the Online Travel Agent field. Tiket.com is a platform that provides online ticket booking services, including flight tickets, accommodations, train tickets, recreation, events, car rentals, and other travel needs. This platform is designed to facilitate ease in making online ticket reservations or purchases.

With the increasing number of users using the platform, evaluation becomes necessary. A product needs to be evaluated either before or after it is introduced to users [1]. The purpose of evaluation is to ensure user experience and optimal application success [2]. Users can continue using the application if usability factors are observed. A system can endure by considering its usability factor [3]. Usability is the level of performance at which an application is easily applicable to its users. Essentially, an application is considered usable if it is easy to use and its function or purpose aligns with user expectations [4].

Feedback obtained from observations regarding the distribution of questionnaires to students who have used the Tiket.com application revealed several issues, including e-tickets not being issued after payment, lengthy refund processing times, frequent application bugs, and inadequate response to complaint services. This indicates that the Tiket.com application has not yet achieved maximum user satisfaction.

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The method used to evaluate the Tiket.com application is the System Usability Scale (SUS) method. SUS is an approach used to test user perceptions of the usability of an application, software, or user interface [5]. This type of testing focuses on end-user understanding, making the test results more consistent with the user's perspective [6]. SUS method has five variables, including learnability, memorability, efficiency, errors, and satisfaction [7]. The usefulness of the SUS method lies in its ability to provide reliable quantitative data on user comfort and satisfaction when using the system [8]. Therefore, the SUS method becomes an important tool for driving the development of an application towards better usability, thus maximizing user satisfaction.

This research is conducted with the aim of evaluating the Tiket.com application in terms of usability aspects. By measuring the level of user-friendliness of the application, the level of errors, and user satisfaction in using the Tiket.com application.

2. Literature Review

Observations from the Google Play Store indicate that the Tiket.com application has received a rating of 4.3 out of 5. Despite the relatively high rating, there are still many negative reviews from users regarding the Tiket.com application. Through the distribution of surveys to users and observations via the Google Play Store, similar issues related to usability and user satisfaction in using the Tiket.com application were identified. The issues include e-tickets not being issued after payment, lengthy rescheduling processes, the absence of cancellation features for incorrect bookings, malfunctioning promo features, frequent occurrence of bugs, and insufficient communication between Tiket.com and vendors regarding prices, room inventory, and tickets. User reviews of the Tiket.com application is depicted in Figure 1.

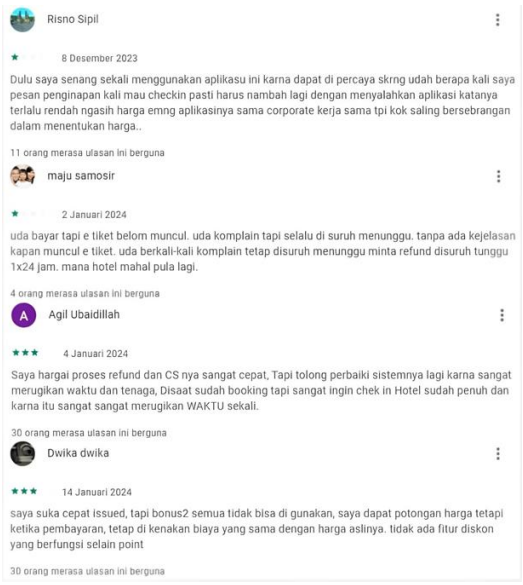

Figure 1. User reviews of the Tiket.com application

(**Source:** Personal, retrieved from Google Play Store)

Furthermore, the updates made to the Tiket.com application shown in Figure 2 have not addressed all the problems mentioned in user reviews. The updates only cover fast refund processes and the ability for the search box to display photos and ratings of searched destinations. Issues regarding e-ticket issuance, rescheduling processes, malfunctioning promo features, application bugs, unavailable cancellation features, and lack of communication between Tiket.com and vendors remain unresolved.

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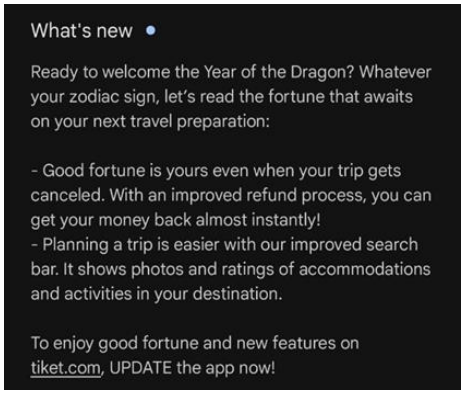

Figure 2. Application updates

(**Source:** Personal, retrieved from Google Play Store)

From the aforementioned issues, it is evident that the Tiket.com application has not yet achieved maximum user satisfaction, as several unresolved problems persist. The research aims to evaluate the usability of the Tiket.com application. Usability evaluation research focuses on issues arising when users directly interact with the system. Its goal is to identify barriers, needs, and user preferences when using the application. By conducting evaluations, researchers can gather relevant data to enhance user satisfaction and improve application efficiency. This enables developers to make appropriate improvements and enhance the overall user experience.

3. Method

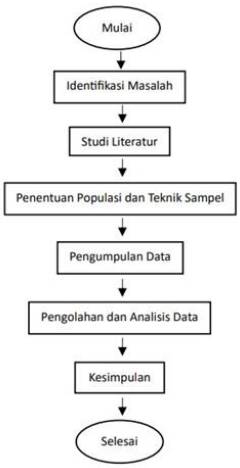

Figure 3. Research Stages

(**Source:** Personal)

The Research Stages were conducted to evaluate the Tiket.com application from the aspect of Usability using the SUS method. Research stages involve completing research problems through specific steps [9]. The research framework used by the author can be outlined as follows:

3.1. Problem Identification

This involves defining the problem and gaps to be addressed. Detailing and formulating a problem in a structured manner enables the research to be more focused [10]. Thus, it can contribute to the development in solving the problems found in the Tiket.com application. Appropriate problem identification provides a strong basis for setting research objectives and guides the methodological steps required for data collection and analysis.

3.2. Literature Review

This stage involves collecting, understanding, and analyzing various textual sources related to the research subject. Researchers search for books, journals, articles, and other sources that provide information, theories, or previous research related to the problem under study [11]. The purpose of literature review is to understand the latest developments in a specific research field, understand gaps in knowledge that still need to be filled, and develop a strong theoretical foundation to support further research [12].

3.3. Population Determination and Sampling Technique

This research involves students as respondents. The participants who filled out the questionnaire in this research amounted to 50 people. Using the Random Sampling method, where respondents are randomly selected, ensuring that they are users of the Tiket.com application.

3.4. Data Collection

By distributing questionnaires to students who have used the Tiket.com application. Questionnaire completion aims to collect data from respondents. The data consist of respondents' perspectives on usability aspects of using the Tiket.com application. The responses collected will then be processed for calculation purposes.

The questionnaire provided to participants is online using Google Form. The SUS consists of 10 statements as shown in Table 1, with 5 response options in likert scale format [13]. Respondents are asked to choose the most appropriate answer based on their condition, with statements ranging from 1 to 5, where 1 indicates Strongly Disagree (SD) and 5 indicates Strongly Agree (SA) [14].

Tabel 1. SUS Question

No	Question
1	I think I will often use the services on the Tiket.com application.
2	In my opinion, the Tiket.com application doesn't have to be this complicated.
3	I find the Tiket.com application easy to use.
4	I need help from others in using the Tiket.com application.
5	In my opinion, the features or menus in the Tiket.com application are well-integrated.
6	In my opinion, the features or menus in the Tiket.com application are...
7	I feel that others can easily understand how to use the Tiket.com application.
8	I find the Tiket.com application confusing.
9	I feel there are no obstacles in using the Tiket.com application.
10	I need to get used to using the Tiket.com application.

The questionnaire distribution stage commenced from December 28, 2023, to January 28, 2024. By collecting a total of 50 respondents to provide their perspectives on the Tiket.com application. According to [15], the sample size ranging from 30 respondents up to 500 respondents is considered suitable for a research study.

3.5. Data Processing and Analysis

Using the SUS method to measure usability aspects based on users' subjective evaluations [15]. Developed by John Brooke in 1986, SUS is one of the most reliable, popular, effective, and cost-effective usability measurement techniques [16]. In Figure 3, the formula for the SUS method can be observed.

The criteria used to calculate the SUS score are as follows:

For each odd-numbered question, namely: 1, 3, 5, 7, and 9, the total points given by the respondent are subtracted by 1.

Formula = $\sum Px - 1$

Where: Px is the total number of odd-numbered questions.

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For each even-numbered question, namely: 2, 4, 6, 8, and 10, 5 is subtracted from the value given by the respondent.

Formula = ∑ 5 – Pn

Where: Pn is the total number of even-numbered questions.

The resulting points from each respondent are then summed up, multiplied by 2.5 to obtain a score range between 0 – 100.

Formula = (∑ odd scores − ∑ even scores) x 2.5

After determining the score for each respondent, the next step is to calculate the average score by summing up all scores and dividing by the number of respondents.

There are five approaches in figure 4 and figure 5 that can be used to interpret the SUS score, namely Percentile Rank, Grade, Adjective, Acceptance Level, and Net Promoter Score (NPS).

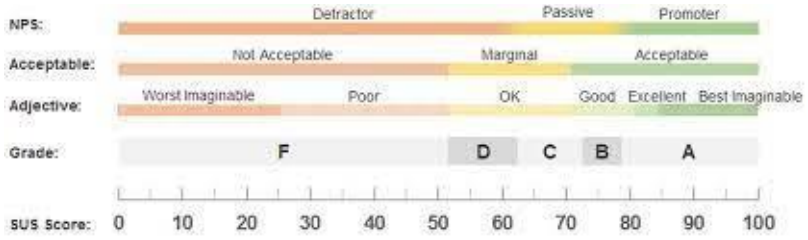

Figure 4. SUS Score, Grade, Adjective, Acceptable, and NPS

(**Source:** https://jurnal.mdp.ac.id/index.php/jatisi/article/download/1356/408/)

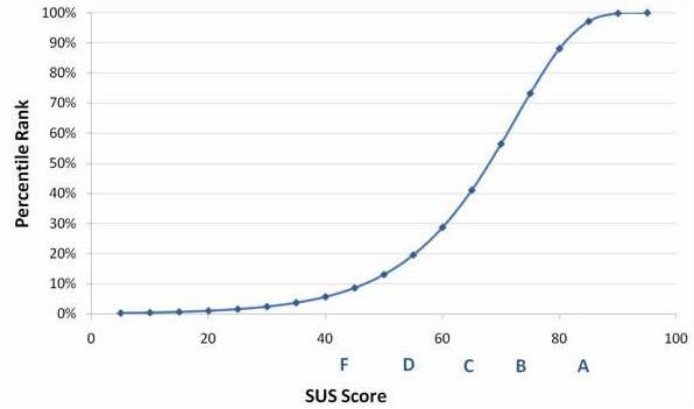

Figure 5. Percentile Rank

(**Source:** https://uxpamagazine.org/sustified/)

Observed from the Percentile Rank in Table 2, there are assessment grades consisting of A, B, C, D, and F. Grade A with a score ≥ 78.9. Grade B with a score ≥ 72.6 and < 78.9. Grade C with a score > 62.7 and < 72.6. Grade D with a score ≥ 51.7 and < 62.7. Grade F with > 51.

Table 2. SUS Interpretation Scale

Grade	SUS Score	Percentile	Adjective	Acceptable	NPS
A+	84.1-100	96-100	Best	Acceptable	Promoter
A	80.8-84.0	90-95	Excellent	Acceptable	Promoter
A-	78.9-80.7	85-89	Good	Acceptable	Promoter
B+	77.2-78.8	80-84	Good	Acceptable	Passive
B	74.1-77.1	70-79	Fair	Acceptable	Passive
B-	72.6-74.0	65-69	Fair	Acceptable	Passive
C+	71.1-72.5	60-64	Good	Acceptable	Passive

C	65.0-71.0	41-59	Fair	Acceptable	Passive
C-	62.7-64.9	35-40	Fair	Acceptable	Passive
D	51.7-62.6	15-34	Average	Acceptable	Not a Detractor
F	0-51.6	0-14	Poor	Detractor	

3.6. Conclusion

Providing a summary obtained from the research analysis. The summary entails determining the usability level of the Tiket.com application.

Prior to conducting this research, the researcher conducted several studies related to previous research using a similar method, namely the SUS method. This was done to gain understanding in addressing the issues in this research. Research conducted by Pangestu et al. (2020) in a case study titled "Usability Evaluation of Simantan Web GIS Using the SUS Method." This research aimed to determine the ease of use of the Simantan Web GIS using the SUS method consisting of five negative and five positive questions. Based on the research results, the Simantan Web GIS scored a final SUS score of 70.50. Therefore, the acceptance range of the Simantan Web GIS falls into the "marginal high" category, the assessment scale is in the "D" level, and the adjective rating is in the "good" level [17].

Research conducted [17], in a case study titled "Usability Analysis of the Sambara Application Using the System Usability Scale and USE Questionnaire Methods." This research aimed to test the usability of the Sambara system using the System Usability Scale (SUS) and USE Questionnaire methods. The data processing results of the SUS method provided an average score of 62.91. This score is considered OK with a grade C, percentile rating of 35%, acceptable margin, and passive NPS. This means that the Sambara application can be adopted by marginalized groups with passive users, who do not recommend the application to others. The data processing results using the USE Questionnaire method achieved an average score of 76.1%, indicating that the Sambara application is considered usable. The average questionnaire result is 5.32 out of a maximum score of 7. This can be interpreted as Sambara's usability being good [18].

Research conducted [19], in a case study titled "Usability Evaluation of the OVO Application Using the System Usability Scale (SUS) Method." In this research, evaluation was conducted by testing the usability of the application from the user's perspective so that the application can be used as intended. The data processing results of the OVO application evaluation obtained an average score of 69.23. This score indicates that the usability level of new users for the OVO application is already OK, meaning it is acceptable with a number of improvements including enhancing the use of better features so that it can function well. The interface is improved to be easier to understand and use to enhance good usability when using the OVO application [19].

Research conducted [20], in a case study titled "Usability Evaluation and Redesign of the PI-Mobile ITTP Application Using the User-Centered Design (UCD) Approach." This research aimed to measure usability quality and redesign the PI-Mobile ITTP application. Redesigning the interface based on user feedback obtained from 34 ITTP students surveyed, usability attribute testing was conducted. The SUS reached a usability rating score of 79.78, which falls between >=74 and <80.3, indicating a good attribute rating B. Based on the usability test results using SUS and using the UCD method, usability increased by 28.68, from the initial score of 51.10 in the poor attribute rating and type D to 79.78 in the good attribute rating and type B [20].

4. Result and Discussion

4.1. Validity Test

The R-table value, crucial for this study's validity test, is contingent upon the number of respondents (N). The test was rigorously conducted with a predefined significance level of 5%, ensuring statistical robustness. To assess the validity, a sample size of 50 respondents was meticulously selected, representing a comprehensive cross-section. Consequently, the R-table value derived from this meticulous process of validity testing stands at 0.279, underscoring its significance in evaluating the reliability of the findings within this study.

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Table 3. Validity Test

Question	R-calculated	R-table	Description
Q1	0,537646349	0,279	Valid
Q2	0,28204133	0,279	Valid
Q3	0,631446931	0,279	Valid
Q4	0,611846783	0,279	Valid
Q5	0,506647623	0,279	Valid
Q6	0,376304091	0,279	Valid
Q7	0,610886479	0,279	Valid
Q8	0,530819538	0,279	Valid
Q9	0,566493843	0,279	Valid
Q10	0,441707238	0,279	Valid

The validity test presented in Table 3 indicates that the calculated R-value surpasses the R-table value, which is noted as 0.279. This outcome confirms the questionnaire's validity, as it meets the established criteria. Consequently, the assessment tool demonstrates reliability in measuring the intended constructs effectively. This validation underscores the questionnaire's suitability for gathering accurate data pertaining to the research objectives, thereby enhancing the credibility and robustness of the study findings.

4.2. Reliability Test

Reliability test using Cronbach's Alpha will be considered reliable if the value is greater than 0.6.

Table 4. Reliability Test

Nilai Cronbach's Alpha	Number of Questions	Description
0,676939837	10	Reliable

In this study, the Cronbach's Alpha value in Table 4 for the 10 questionnaires is 0.676939837, which exceeds the threshold of 0.6. This indicates that the questionnaire can be considered reliable for measuring the variables under investigation. Thus, the reliability level of the questionnaire is deemed sufficient for use within the context of this research.

4.3. Usability Test

The next step is to calculate the usability test using the SUS method. The results of the usability test are conducted step by step as explained in the SUS method [3]. The usability test will determine the user satisfaction quality towards the Tiket.com application. Out of 50 respondents in Table 5 who filled out the questionnaire via Google Form, the average SUS score calculation is obtained.

Table 5. SUS Score Results

Respondent	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	SUM	(SUMx2,5)
R1	3	1	4	2	3	0	4	3	4	3	27	67,5
R2	3	1	3	1	3	1	3	1	3	1	20	50

R3	3	1	2	2	2	1	2	2	2	2	19	47,5
R4	2	1	2	3	3	3	3	3	2	1	23	57,5
R5	0	2	3	3	3	2	2	2	2	2	21	52,5
R6	1	2	3	2	2	2	2	2	3	1	20	50
R7	1	2	2	4	2	3	3	3	3	3	26	65
R8	4	0	4	2	4	2	4	4	2	1	27	67,5
R9	2	2	2	2	2	2	2	2	2	2	20	50
R10	4	1	4	0	4	1	3	1	4	1	23	57,5
R11	2	1	2	1	2	2	2	2	2	1	17	42,5
R12	1	2	3	2	2	2	2	2	3	1	20	50
R13	1	2	3	0	3	2	3	2	0	0	16	40
R14	2	1	3	1	3	3	3	1	2	1	20	50
R15	3	2	3	2	3	2	3	3	2	1	24	60
R16	1	2	3	4	3	2	3	3	3	1	25	62,5
R17	1	1	2	0	3	2	3	3	1	0	16	40
R18	2	2	3	4	2	2	3	2	2	1	23	57,5
R19	2	1	2	1	2	2	2	2	2	1	17	42,5
R20	3	2	3	1	4	1	3	2	3	1	23	57,5
R21	0	2	3	3	3	3	3	3	3	2	25	62,5
R22	4	2	4	3	3	4	4	2	3	1	30	75
R23	3	2	3	3	2	2	3	1	3	1	23	57,5
R24	2	1	2	2	3	1	2	2	2	2	19	47,5
R25	2	1	3	3	3	2	3	3	3	1	24	60
R26	4	1	3	4	3	2	1	3	3	0	24	60
R27	3	1	3	2	3	1	3	2	2	1	21	52,5
R28	3	4	3	1	3	2	3	2	3	0	24	60
R29	2	2	2	2	2	2	2	3	2	2	21	52,5
R30	3	1	3	1	3	3	3	3	3	1	24	60
R31	4	4	4	4	4	4	4	4	2	2	36	90
R32	1	2	2	1	2	2	2	2	2	2	18	45
R33	1	1	2	1	3	2	2	2	2	0	16	40
R34	3	1	3	3	3	2	3	2	3	2	25	62,5
R35	0	4	0	4	0	4	0	4	0	4	20	50
R36	2	1	2	2	2	2	3	2	2	1	19	47,5
R37	2	2	2	2	2	2	2	2	2	2	20	50
R38	3	2	3	3	3	3	3	3	3	2	28	70
R39	1	2	2	0	2	3	2	3	1	0	16	40
R40	2	2	3	1	1	2	2	1	2	0	16	40
R41	2	1	2	2	2	3	2	2	2	2	20	50
R42	1	2	2	1	3	4	3	1	3	0	20	50
R43	4	2	4	4	4	4	4	4	4	4	38	95
R44	3	1	3	1	4	1	4	1	3	1	22	55
R45	2	1	2	3	3	2	3	3	2	1	22	55
R46	2	3	3	3	3	3	3	3	3	2	28	70
R47	0	2	2	1	3	2	2	2	2	2	18	45
R48	1	2	3	3	3	3	3	3	3	2	26	65
R49	2	1	2	4	2	2	2	2	2	2	21	52,5

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R50	2	1	2	3	1	3	2	2	2	2	20	50
Average												55,55

Based on Table 6, the evaluation results obtained from the SUS calculation from 50 respondents is 55.55. According to the SUS Score in Figure 4, with the SUS calculation result of 55.55, it indicates that the Tiket.com application falls into the Grade scale D category, with an OK Adjective rating, and an Acceptable Range in the Marginal category. Thus, the Tiket.com application can still be considered acceptable by its users.

Although the Tiket.com application still falls into the Acceptable category, there are several aspects that need to be considered and improved, especially in terms of usability. This is done to help the Tiket.com application function well and meet the needs of its users as shown in figure 6 below.

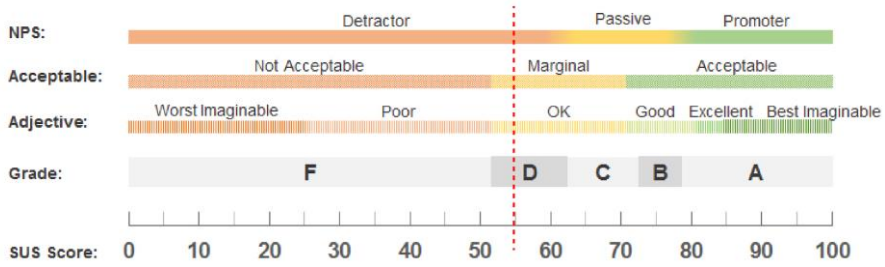

Figure 6. SUS Score Results

5. Conclusion

Based on the usability evaluation conducted on the Tiket.com application using the SUS method, with a total sample of 50 participants consisting of students, the average SUS score for the Tiket.com application usability evaluation is 55.55. This score indicates that the usability level of the Tiket.com application is relatively good, with the adjective falling into the OK category, and the acceptance level in the Marginal category with Grade D. Overall, the Tiket.com application has a fairly good usability score and is deemed suitable for use by users. Although this assessment is generally acceptable, there are various aspects to consider, such as improving the user-friendliness of the Tiket.com application by enhancing the functionality of features and refining the visual interface to make it easier to understand and use for new users.

Based on the results of the usability evaluation research conducted on the Tiket.com application, there are recommendations for future research. In future studies, different evaluation methods could be employed, such as the USE Questionnaire method, Heuristic Evaluation method, and others. Increasing the number of respondents and expanding the geographical coverage to assess research accuracy could also be considered. Since this study only focused on usability evaluation, future research could also focus on UI/UX design of the Tiket.com application, such as making recommendations for more user-friendly designs or adding order cancellation features based on feedback from previous users. This is done to help improve the quality of the application to meet user needs.

6. Declarations

6.1. Author Contributions

Conceptualization: S.I.P. and K.L.; Methodology: K.L.; Software: S.I.P.; Validation: S.I.P., K.L.; Formal Analysis: S.I.P., K.L.; Investigation: S.I.P.; Resources: K.L.; Data Curation: K.L.; Writing Original Draft Preparation: S.I.P. and K.L.; Writing Review and Editing: K.L. and S.I.P.; Visualization: S.I.P.; All authors have read and agreed to the published version of the manuscript.

6.2. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.3. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

6.4. Institutional Review Board Statement

Not applicable.

6.5. Informed Consent Statement

Not applicable.

6.6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

[1] N. Shifa, "Evaluasi User Interface (UI) dan User Experience (UX) menggunakan User Centered Design (UCD) (Studi Kasus: Aplikasi Kanggo)," 2022.

[2] M. A. Kusumadya, R. Rasmila, F. Hidayat, and D. Chandra, "Analisis Website Petani Kode Menggunakan SUS (System Usabilty Scale)," *J. Inform. Polinema*, vol. 8, no. 4, pp. 41–46, 2022, doi: 10.33795/jip.v8i4.908.

[3] M. Y. A. Putra, I. H. Santi, and S. N. Budiman, "Evaluasi Usability Pada Aplikasi Google Classroom Menggunakan Metode System Usability Scale," *Semin. Nas. Sist.*, no. September, pp. 3346–3355, 2022, [Online]. Available: https://www.jurnalfti.unmer.ac.id/index.php/senasif/article/view/417

[4] A. Saputra, "Penerapan Usability pada Aplikasi PENTAS Dengan Menggunakan Metode System Usability Scale (SUS)," *JTIM J. Teknol. Inf. dan Multimed.*, vol. 1, no. 3, pp. 206–212, 2019, doi: 10.35746/jtim.v1i3.50.

[5] Z. Miftah and I. P. Sari, "Analisis Sistem Pembelajaran Daring Menggunakan Metode Sus," *Res. Dev. J. Educ.*, vol. 1, no. 1, p. 40, 2020, doi: 10.30998/rdje.v1i1.7076.

[6] E. Kaban, K. Candra Brata, and A. Hendra Brata, "Evaluasi Usability Menggunakan Metode System Usability Scale (SUS) Dan Discovery Prototyping Pada Aplikasi PLN Mobile (Studi Kasus PT. PLN)," *J. Pengemb. Teknol. Inf. dan Ilmu Komput.*, vol. 4, no. 10, pp. 3281–3290, 2020, [Online]. Available: http://j-ptiik.ub.ac.id

[7] Fatmasari, M. D. Richardo, and M. Ulfa, "Evaluasi Usability Web User Menggunakan Metode System Usability Scale (Studi Kasus : E-Learning Universitas Bina Darma)," *J. Informanika*, vol. 8, no. 1, pp. 60–67, 2022.

[8] W. Welda, D. M. D. U. Putra, and A. M. Dirgayusari, "Usability Testing Website Dengan Menggunakan Metode System Usability Scale (Sus)s," *Int. J. Nat. Sci. Eng.*, vol. 4, no. 3, pp. 152–161, 2020, doi: 10.23887/ijnse.v4i2.28864.

[9] A. Lupita Dyayu, B. Beny, and H. Yani, "Evaluasi Usability Aplikasi PeduliLindungi Menggunakan Metode Usability Testing dan System Usability Scale (SUS)," *J. Manaj. Teknol. Dan Sist. Inf.*, vol. 3, no. 1, pp. 395–404, 2023, doi: 10.33998/jms.2023.3.1.720.

[10] F. G. Sembodo, G. F. Fitriana, and N. A. Prasetyo, "Evaluasi Usability Website Shopee Menggunakan System Usability Scale (SUS)," *J. Appl. Informatics Comput.*, vol. 5, no. 2, pp. 146–150, 2021, doi: 10.30871/jaic.v5i2.3293.

[11] A. Rizma, R. Putri, and A. D. Indriyanti, "Evaluasi Usability User Interface dan User Experience pada Aplikasi M . Tix dengan Metode Usability Testing (UT) dan System Usability Scale (SUS)," *J. Emerg. Inf. Syst. Bus. Intell. Univ. Negeri Surabaya*, vol. 04, no. 02, pp. 21–32, 2023, [Online].

[12] P. A. Raharja and B. Z. Pramudya, "Evaluasi Usability Aplikasi Augmented Reality Morphfun Menggunakan System Usability Scale," *Multinetics*, vol. 8, no. 2, pp. 122–130, 2022, doi: 10.32722/multinetics.v8i2.4702.

[13] A. dwi Purwati and Jemakmun, "Evaluasi Usability Website Menggunakan," 500-Article%20Text-1566-2-10-20200124%20, pp. 588–595, 2019.

[14] M. P. Eugenia, M. Abdurrofi, B. Almahenzar, and A. Khoirunnisa, "Pendekatan Metode User-Centered Design dan System Usability Scale dalam Redesain dan Evaluasi Antarmuka Website," *Semin. Nas. Off. Stat.*, vol. 2022, no. 1, pp. 573–584, 2022, doi: 10.34123/semnasoffstat.v2022i1.1454.

[15] M. Indra Gunawan, R. Indah Rokhmawati, and N. Hendrakusma Wardani, "Evaluasi dan Perbaikan Antarmuka Pengguna Menggunakan Pendekatan User Centered Design (UCD) dan Card Sorting (Studi Kasus: Website Awake Project Malang)," *J. Pengemb. Teknol. Inf. dan Ilmu Komput.,* vol. 3, no. 5, pp. 4835–4845, 2019, [Online]. Available: http://j-ptiik.ub.ac.id

[16] R. W. dan J. Maknunah, "Analisis Website STIMATA Menggunakan System Usability Scale (SUS)," *J. Ilm. Komputasi,* vol. 20, no. 3, pp. 331–338, 2021, doi: 10.32409/jikstik.20.3.2776.

[17] H. K. Agung Yoga Pangestu, Rahmat Safe'i, Arief Darmawan, "Evaluasi Usability pada Web GIS Pemantauan Kesehatan Hutan Menggunakan Metode System Usability Scale (SUS)," *J. Manajemen, Tek. Inform. dan Rekayasa Komput.,* vol. 20, no. 1, pp. 19–26, 2020.

[18] F. Felicia, A. S. Talita, and N. Umniati, "Analisis Usability Aplikasi Sambara dengan Metode System Usability Scale dan USE Questionnaire," *JATISI (Jurnal Tek. Inform. dan Sist. Informasi),* vol. 10, no. 2, pp. 215–227, 2023, [Online]. Available: https://jurnal.mdp.ac.id/index.php/jatisi/article/view/3240

[19] H. Al Rosyid, D. P. Rakhmadani, and S. D. Alika, "Evaluasi Usability pada Aplikasi OVO Menggunakan Metode System Usability Scale (SUS)," *JURIKOM (Jurnal Ris. Komputer),* vol. 9, no. 6, p. 1808, 2022, doi: 10.30865/jurikom.v9i6.5073.

[20] A. F. Nabawi and P. A. Raharja, "Evaluasi Usability dan Redesign Aplikasi PI-Mobile ITTP Menggunakan Pendekatan UCD (User Centered Design)," *JURIKOM (Jurnal Ris. Komputer),* vol. 10, no. 1, pp. 10–18, 2023, doi: 10.30865/jurikom.v10i1.5515.