



## Evaluation of Travel App's Usability Using the System Usability Scale Method

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### Abstract.

**Purpose:** The objective of this study is to assess the usability of the Baraya Travel application, highlighting areas for enhancement to improve the online ticket booking experience for users. By concentrating on the Baraya Travel app as the research subject, the study intends to offer valuable insights for its developers. It emphasizes user feedback and recommendations to improve interface navigation, application speed, and the addition of new features, ultimately increasing convenience and ease of use. This study aims to provide an extensive examination of the app's performance, identifying precise areas where improvements can be made.

**Methods:** Using the Usability Testing methodology, particularly emphasizing the System Usability Scale (SUS), this study employs a quantitative research strategy. Surveys were administered to 409 Baraya Travel application users to gather primary data concerning usability aspects including user interface navigation, application responsiveness, and user convenience. The statistical analysis utilized both descriptive statistics, encompassing measures of central tendency and variability, to summarize the data, and potentially inferential tests like correlation analysis or t-tests, to investigate relationships and disparities between variables. The selection of statistical analysis aimed to offer a thorough interpretation of the data and extract meaningful insights into the usability of the Baraya Travel application. Furthermore, the utilization of the SUS evaluation metric provided a standardized measure to evaluate usability and facilitate comparisons across studies, ensuring consistency and reliability throughout the evaluation process.

**Result:** The examination of the SUS questionnaire indicated that users of the Baraya Travel application provided an average score of 75.26. This score suggests that the application demonstrates a commendable level of usability, earning a "Good" rating and a Letter Grade of "B". Nonetheless, there remains potential for enhancement to reach the desired standard of perfection. Users offered invaluable feedback and suggestions, highlighting the necessity for enhanced user interface navigation, improved application speed, and the implementation of additional features to augment convenience and user-friendliness.

**Novelty:** This research provides valuable insights for Baraya Travel application developers, emphasizing areas for improvement based on user feedback and suggestions. It contributes to the progression of online ticket booking systems, with the goal of enriching the overall travel experience for users. Highlighting the significance of user-friendly interfaces, efficient application performance, and convenient features is crucial for enhancing user satisfaction and fostering loyalty. Subsequent research endeavors could explore further factors influencing user satisfaction and loyalty in the context of digital travel applications.

**Keywords:** Baraya travel, Usability testing, System usability scale

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## INTRODUCTION

The ticketing application functions as a system designed to document, monitor, and manage interactions or inquiries from customers or other users. Evaluating and improving ticketing systems heavily relies on usability metrics, which gauge the efficiency, effectiveness, and satisfaction of user interactions [1]. These metrics have become increasingly important and have experienced significant growth within the online ticketing industry. They play a vital role in ensuring that applications align with user needs and expectations [2]. This application enables companies to efficiently manage customer tickets, monitor ticket resolutions, and enhance the handling of customer issues. Employing ticketing applications assists companies in converting customer messages into tickets, thereby ensuring a well-organized customer service system [3].

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These advancements present both opportunities and challenges, enabling companies to gather comprehensive customer data to tailor personalized experiences [4]. Internet connectivity holds significant importance for Indonesians, enabling access to information, global communication, and online commerce [5]. In 2022, Baraya Travel, a transportation company offering travel, cargo, and tours & travel services, introduced a mobile application for travel ticketing on both iOS and Android platforms. Despite its recent launch, as indicated in Figure 1 below, the application has faced criticism for its sluggish performance and less intuitive interface, prompting users to explore alternative booking methods. To address this issue, this study aims to assess user satisfaction through usability trials, utilizing the System Usability Scale (SUS) and SPSS for analysis. The decision to utilize the System Usability Scale (SUS) for evaluating user satisfaction in this study is grounded in its widespread acceptance, simplicity, and effectiveness in usability assessment. In contrast to other frameworks such as the Software Usability Measurement Inventory (SUMI) or the Post-Study System Usability Questionnaire (PSSUQ), SUS provides a standardized metric for easy comparison and pinpointing areas for enhancement. Its succinctness and reliability render it suitable for diverse usability assessments, ensuring elevated response rates and minimal participant burden. In summary, SUS offers a pragmatic and efficient approach to evaluating user satisfaction and enhancing the app's efficacy in ticket booking, consequently improving the user experience and overall efficiency.

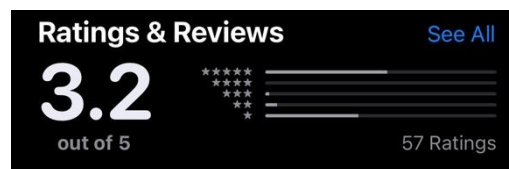


Figure 1. Users feedback

In prior research [6], it was discovered that the My TelU application meets various usability criteria, albeit with potential for improvement and the integration of features to attain the desired level of excellence. This current study is aligned with the aforementioned research, employing the same methodology, the System Usability Scale (SUS), which can serve as a key point of reference. In a related investigation [7], it was revealed that the AmBoo Mothercare application effectively promotes exclusive breastfeeding among mothers, achieving SUS scores at Grade C+ and receiving favorable ratings on the Adjective scale. Users generally accepted it, as evidenced by passive Net Promoter Score (NPS) ratings. This study also shares a connection by utilizing the SUS methodology to gauge user satisfaction. Additionally, another inquiry [8] discovered that the majority of users of the RSI Wonosobo online registration application responded positively to its usability. In a different pertinent study [9], it was observed that users responded positively to the digital dictionary of psychological terms; however, developers should prioritize technical enhancements, and users may need to undergo a learning process to effectively utilize the application. In addition, another investigation [10] evaluated the e-learning system at Qamarul Huda University, determining it to be effective and appropriate for student use, with SUS scores falling within the "Acceptable" range. Moreover, another investigation [11] revealed that the SMA PGRI 2 Palembang website necessitates improvements to ensure a favorable response from users, as indicated by SUS scores categorized as "marginal low."

Acknowledging the current research voids and the significance of appraising the usability of the Baraya Travel application, this study endeavors to furnish a thorough comprehension of its usability and present valuable suggestions for enhancing user experience. The aims of this research encompass evaluating user satisfaction, pinpointing improvement areas, and enhancing the overall usability of the Baraya Travel application.

## METHODS

### Research methods

The research process begins with identifying the issue to be examined, followed by conducting a comprehensive literature review, which involves conducting reference searches. The research then advances through various stages, including data collection, data validation, data analysis, and interpretation of research findings. The conclusion of the process entails crafting a final report, which includes summarizing research outcomes, drawing conclusions, and proposing recommendations. Figure 2 depicts the sequential stages of the study.

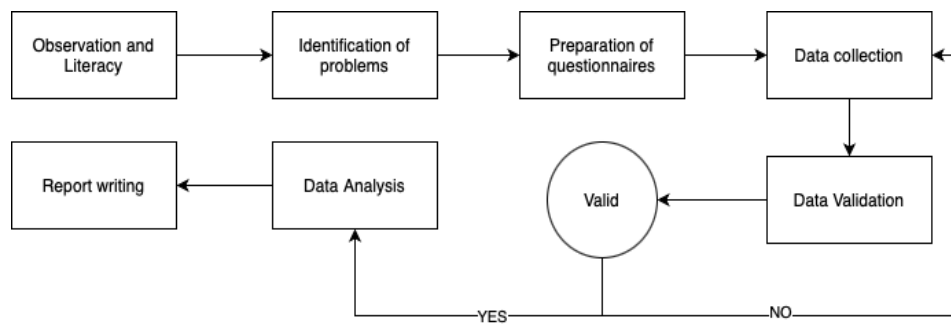


Figure 2. Research flow

### Observation & literacy

At this point, observation and literature review activities, as illustrated in Figure 2, primarily take place through social media platforms, reviews on Google Play Store and Apple App Store, as well as research from relevant journals and analyses of competitor applications. Direct observation provides hands-on insight garnered from user interactions, while literature sourced from journals and competitor application analyses offers comprehensive insights into current trends, best practices, and competitive advantages. The integration of these two methodologies, as depicted in Figure 2, empowers developers to effectively identify user needs and enhance their products within a competitive market environment.

### Identify the problem

Drawing from the outcomes of observations and literature review, various issues have been pinpointed concerning the Baraya Travel application. For instance, a persistent pattern of low ratings may indicate an underlying issue.

### Preparation of questionnaires

During this stage, the careful selection and preparation of questionnaires are essential for collecting relevant information from respondents, which will be used in the research analysis. One commonly used method for assessing system usability is the System Usability Scale (SUS) questionnaire [2]. This decision is supported by insights gathered from diverse sources, including academic journals identified during the initial phases of research. For example, investigations into user experience within comparable applications or examinations of usability evaluation methodologies may offer valuable insights into the effectiveness and relevance of SUS in assessing the Baraya Travel application. By utilizing insights gleaned from these studies, the decision to adopt SUS as the questionnaire tool is validated and in line with established practices in usability evaluation research.

### Data collection

Data collection encompassed the dissemination of questionnaires, such as the System Usability Scale (SUS) questionnaire and user satisfaction surveys, directly to users. Respondents were chosen based on their engagement with the Baraya Travel application. The main objective of gathering data from users was to directly understand their experiences and satisfaction levels with the application. This data is essential for pinpointing specific usability issues and areas for enhancement, thus tackling the research objective of improving the app's performance and user interface. The distribution method involved employing both online and offline approaches, with questionnaires distributed directly to users offline to ensure a more comprehensive and representative sample.

### Data validation

In quantitative or statistical testing, validation through reliability and validity testing is imperative. Reliability testing guarantees measurement consistency, while validity testing verifies the accuracy of the measurement in capturing the intended construct. These assessments are essential for ensuring reliable and precise research outcomes.

### Valid

If the data is deemed valid and adequate, the subsequent step involves conducting data analysis. However, if the data is found to be invalid or insufficient, it's necessary to revert to the preceding stage of data collection to obtain valid data.

### Data analysis

All data collected during the data collection phase will be processed and analyzed using SPSS software to ascertain the user experience with the Baraya Travel application and understand users' expectations from the application.

### Report writing

Following the completion of the research process, the results from testing the Baraya Travel application were obtained. These results allow researchers to draw conclusions regarding whether the application meets user expectations. Additionally, researchers can offer suggestions aligned with user expectations based on these findings.

### Validity test

The validity test constitutes the assessment phase aimed at gauging the accuracy of the content or queries within the research tool. In this investigation, a validity test was performed to ascertain the questionnaire's level of validity [12]. The validity was measured employing the Pearson Product Moment Correlation method, along with its respective formula.

$$r_{xy} = \frac{N(\sum XY) - (\sum X)(\sum Y)}{\sqrt{\{N \sum x^2 - (\sum x)^2\} \{N \sum y^2 - (\sum y)^2\}}}$$

Explanation:

$r_{xy}$  = Correlation coefficient for each item  
 $X$  = Scores for each factor  
 $Y$  = Total factor scores  
 $N$  = Number of respondents

### Reliability test

Reliability assessments are employed to gauge the stability of scores obtained from instruments or queries within research surveys. The objective is to ascertain the degree to which the questionnaire yields dependable scoring outcomes. Within this study, reliability tests were executed utilizing the Cronbach Alpha Method, which will reveal the questionnaire's reliability level in generating consistent data [11].

$$\alpha = \left(\frac{\kappa}{\kappa - 1}\right) \left(1 - \frac{\sum \sigma b^2}{\sigma t^2}\right)$$

Explanation:

$\alpha$  = Instrument reliability  
 $\kappa$  = Number of questionnaire items  
 $\sigma b^2$  = Sum of item variance  
 $\sigma t^2$  = Total variance

A reliability coefficient (alpha) exceeding 0.90 indicates optimal reliability. Values falling between 0.70 and 0.90 suggest high reliability. Moderately reliable scores are indicated by alpha values ranging from 0.50 to 0.70. Reliability is deemed low if alpha is below 0.50. Low alpha scores may imply potential unreliability in one or more items.

### System usability scale (SUS)

The chosen research approach, the System Usability Scale (SUS), serves as a tool for assessing the usability of a system or product. It comprises 10 statements, each rated by users on a 5-point Likert scale, gauging from strongly agree to strongly disagree [13]. Introduced by John Brooke in 1986, SUS stands as a straightforward and dependable tool applicable across diverse products and services, ranging from hardware and software to mobile devices and websites. Renowned for its user-friendly nature, it is acclaimed for swiftly offering usability evaluations [13].

Engaging with SUS encompasses several stages. Initially, users interact with the system or product. Following this interaction, they proceed to fill out the SUS questionnaire, encompassing statements like "I perceived the system as needlessly intricate" and "I found the system user-friendly." These statements span various facets of usability, such as learnability and usability. Through the utilization of SUS, we can gather insights into user perceptions regarding product usability, pinpointing areas for enhancement to elevate the

user experience [12]. The SUS questionnaire will be disseminated to users of the Baraya Travel application via social media channels and face-to-face interactions. The questionnaire consists of 10 statements, employing a Likert scale extending from 1 to 5, assessing the degree of user agreement regarding the system's usability. Scale options range from "Strongly Disagree" (1) to "Strongly Agree" (5). Utilizing the SUS metric yields a unified score ranging from 0 to 100, facilitating comparisons of usability among various systems or different iterations of the same system.

Within SUS, a pivotal metric is the comprehensive usability score, determined through a distinct scoring mechanism. This process entails translating Likert scale responses into an aggregate score. For questions with odd numbering, 1 is deducted from the user's score; conversely, for even-numbered questions, 5 is deducted. These adjusted scores are then aggregated and multiplied by 2.5 to transform the sum into a 0-100 scale. This resultant score serves as a broad gauge of the system's usability, with elevated scores signifying enhanced usability.

The questionnaire has undergone rigorous testing and validation across diverse usage scenarios to enable comparison with prior research findings. In this investigation, the amassed data will undergo analysis to assess user perceptions and anticipations concerning the Baraya Travel application. SUS scores will be evaluated utilizing a grading system denoted by A, B, C, D, and F, corresponding to the categories of Excellent, Good, OK, Poor, and Awful [14]. While the precise score ranges for each category may fluctuate, for instance, an Excellent rating might surpass 85, Good scores typically fall within the range of 70 to 84, OK scores span from 51 to 69, and Poor scores encompass values from 0 to 50. Additionally, the category of Awful, being similar to other adjectives, might be omitted from the grading system. This structured approach enables researchers to quantitatively evaluate a system's usability, pinpoint particular areas for enhancement, and juxtapose the outcomes with usability benchmarks established in other studies.

## Sample



Figure 3. Baraya travel population

According to Figure 3, we are aware that the population size of Baraya Travel users amounts to 100,000. This knowledge allows us to ascertain the necessary sample size. In quantitative research, a sample denotes a subset of the population utilized for the study. As per Sugiyono (2017:215), a sample refers to a subset of the population, encompassing both quantity and characteristics [15]. In this research, sample selection was executed utilizing the Slovin formula owing to the considerable population size. The Slovin formula is expressed as follows:

$$n = \frac{N}{1 + Ne^2}$$

$n$  = Sample

$N$  = Populasi

$e$  = Margin Error (5%)

Therefore, in order to ascertain the quantity of participants:

$$\begin{aligned} n &= \frac{100000}{1 + 100000(0,05)^2} \\ n &= \frac{100000}{251} \\ n &= 398,4 \approx 399 \end{aligned}$$

Following the calculation provided, the minimum sample size for this research is 399 respondents. Nonetheless, the number of participants may surpass this initial estimate based on the needs of a broader and more representative investigation.

## RESULTS AND DISCUSSIONS

In this study, data collection was conducted using Google Forms, disseminated across diverse social media channels and specialized platforms like Kudata. The distribution of these forms extended over a period of two months, starting from January 16, 2024, and concluding on March 27, 2024. In total, 409 respondents actively participated and shared their feedback. The amassed data will undergo meticulous analysis to delve into the perceptions and viewpoints of respondents concerning the Baraya Travel application. This scrutiny aims to furnish an extensive comprehension of user interactions with the application [16]. The discoveries stemming from this analysis will constitute the principal foundation for crafting research conclusions and recommendations.

### Respondents characteristics

Table 1. User characteristics by age

Age	Frequency	Percentage
<25	315	77%
26-50	88	21.5%
50>	6	1.5%
<b>Total</b>	409	100%

Table 1 above categorizes respondents into three age groups: under 25 (adolescents), 26-50 (adults), and above 50 (elderly) [17]. Through analysis of the distributed questionnaires, researchers gained insights into the demographic characteristics and profiles of individuals utilizing the Baraya Travel application. Notably, a significant majority of respondents were under 25 years old (adolescents), comprising 77.3% of the total sample. This prevalence within the younger age group can be attributed to various factors observed during the study. For example, the notable presence of students or young adults in this demographic may stem from targeted promotional initiatives by Baraya Travel aimed at this specific audience. Furthermore, the application's features or services might better suit individuals within this age bracket, affecting their propensity to adopt and utilize the application. Conversely, respondents aged 26-50 years (adults) represented 21.2% of the sample, signifying a substantial presence but not as prominent as the younger demographic. Meanwhile, respondents aged over 50 years (elderly) constituted a smaller proportion of 1.5%. The subsequent graph delineates these user characteristics, emphasizing the predominance of respondents under the age of 25.

### Results

Table 2. System usability scale (SUS) value validity test results

Questionnaire	r-Count	r-Table	Result
I would like to use Baraya Travel more often.	0,187	0,098	Valid
I feel Baraya Travel doesn't have to be made this complicated.	0,624	0,098	Valid
I think Baraya Travel is easy to use.	0,224	0,098	Valid
I need help from a technical person to use Baraya Travel.	0,640	0,098	Valid
Overall, I am satisfied using Baraya Travel.	0,161	0,098	Valid
I found a lot of inconsistencies on Baraya Travel.	0,559	0,098	Valid
I feel that many people will find it easy to learn the use of Baraya Travel.	0,183	0,098	Valid
I found Baraya Travel very complicated to use	0,559	0,098	Valid
I am very confident in using Baraya Travel.	0,168	0,098	Valid
I need to learn before using Baraya Travel.	0,563	0,098	Valid

According to Table 2, the validity of the questionnaire was deemed acceptable if the calculated correlation value (r-count) exceeded the critical correlation value (r-table) for a sample size of 400 at a significance level of 5%, with the r-table set at 0.098. Below are the validity test outcomes for the questions in this study, which were computed using Statistical Package for the Social Sciences (SPSS) software [18].

Table 3. System usability scale (SUS) value reliability test results

Cronbach Alpha Value	Result
0,614	Reliable

In Table 3, the questionnaire's reliability was evaluated using the Cronbach's Alpha method applied to the System Usability Scale (SUS) questionnaire. A variable is considered reliable if the Cronbach's Alpha value surpasses 0.6. The computations resulted in a reliability value exceeding 0.652, as presented in the table. Therefore, it can be inferred that the data is dependable, coherent, and credible [19].

Table 4. System usability scale (SUS) value percentage results

Likert Scale	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	0,7%	27,9%	1%	43,8%	2,2%	36,7%	2,9%	47,4%	2,9%	53,3%
2	5,4%	48,4%	3,4%	34%	2,9%	36,7%	2,2%	31,5%	3,9%	27,9%
3	13,4%	13,2%	13%	14,9%	13,7%	16,1%	12,2%	10%	11%	8,8%
4	43,8%	4,2%	56,7%	3,9%	52,8%	6,4%	51,1%	6,6%	46,7%	6,4%
5	36,7%	6,4%	26,9%	3,4%	28,4%	4,2%	31,5%	4,4%	35,5%	3,7%

Table 5. System usability scale (SUS) value results

Questionnaire	1	2	3	4	5	Average
I would like to use Baraya Travel more often.	3	22	55	179	150	3,08
I feel Baraya Travel doesn't have to be made this complicated.	114	198	54	17	26	2,83
I think Baraya Travel is easy to use.	4	14	53	232	106	2,99
I need help from a technical person to use Baraya Travel.	179	139	61	16	14	3,05
Overall, I am satisfied using Baraya Travel.	9	12	56	216	116	2,98
I found a lot of inconsistencies on Baraya Travel.	150	150	66	26	17	2,9
I feel that many people will find it easy to learn the use of Baraya Travel.	12	9	50	209	129	3,03
I found Baraya Travel very complicated to use	194	129	41	27	18	3,05
I am very confident in using Baraya Travel.	12	16	45	191	145	3,04
I need to learn before using Baraya Travel.	218	114	36	26	15	3,13
Total Average						30,1
Score SUS = Total Average*2,5						75,26

Table 5 offers a synopsis of user contentment with the Baraya Travel app, gauged via the System Usability Scale (SUS). Corresponding to each SUS query (Q1-Q10), there is an average rating and an analysis of user viewpoints. The findings unveil different facets of user interaction. Overall, users indicate contentment (Q1: 3.08) and assurance (Q9: 3.04) with the app but acknowledge opportunities for enhancement to optimize functionality. Although some perceive the app as moderately straightforward (Q2: 2.83), there's a

perceived necessity for familiarization prior to usage (Q10: 3.13), highlighting a gap between usability and user preparedness. Contentment with convenience levels (Q3: 2.99) aligns with ease of comprehension (Q7: 3.03), indicating favorable initial encounters. Nonetheless, notwithstanding encountered obstacles (Q4: 3.05) and the requirement for technical aid, there's acknowledgment of the significance of enhancing usability (Q8: 3.05) to tackle these hurdles. Users recognize features as effectively integrated (Q5: 2.98) but observe minor irregularities (Q6: 2.9), emphasizing the necessity for fine-tuning to achieve a smooth user experience. In essence, the data underscores the importance of ongoing enhancements in usability, feature integration, and consistency to elevate user contentment and enhance the efficiency of the Baraya Travel app.

Tables 4 and 5 furnish a summary of the mean responses for every question item, computed utilizing the SUS formula. The cumulative average score is subsequently multiplied by 2.5, yielding a final score of 75.26. This score signifies that the Baraya Travel app garners a rating of "Good" or secures a B grade, implying that the app offers adequate quality for utilization. Drawing from the data extracted from the mean scores of each question, the ensuing analysis delineates the outcomes derived from the distribution of the System Usability Scale questionnaire. Our discoveries align with earlier research in this domain, as corroborated by citations [20][21][22], all of which disclosed matching SUS scores, evaluations, and letter grades for analogous applications.

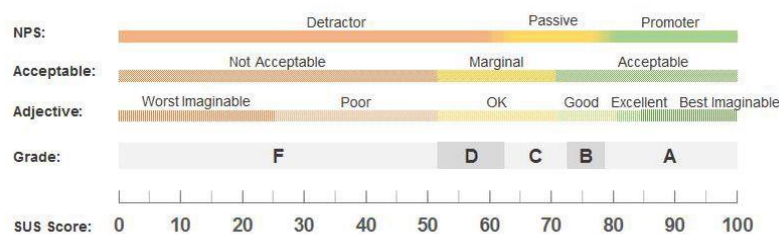


Figure 4. System usability scale score

Per Figure 4, the ultimate score of this application falls within the "Acceptable" range. This categorization indicates that users generally perceive the system as satisfactory. While the system may not be without its flaws, it effectively fulfills users' essential requirements. It guarantees usability without imposing major hurdles, thereby enabling users to accomplish their objectives efficiently. Despite its shortcomings, the system's functionality suffices for everyday use and delivers an overall positive user experience. Our findings resonate with prior research in this field [23], which also identified systems falling within the "Acceptable" classification. This conformity with earlier studies bolsters the credibility of our findings and implies that our application meets established usability standards.

However, according to the Net Promoter Score (NPS), it appears that users maintain a passive attitude. The "Passive" label generally represents users with neutral feelings towards the system. Our results support prior research [24], which also identifies this group as occupying a middle ground. These users aren't enthusiastic enough to promote the product to others, nor are they dissatisfied enough to offer active criticism. Their mixed feelings highlight a nuanced viewpoint, acknowledging the system's strengths while also noting areas where enhancements could boost overall satisfaction. This neutral stance might arise from various factors, such as the absence of standout features, minor usability concerns, or a preference for alternatives that better suit individual tastes or requirements. Even though these users aren't enthusiastic endorsers, their input remains valuable for refining the system's design and functionality through iterative improvements. Thus, comprehending the motivations and expectations of this passive user segment can drive the refinement of the product to better align with a wider range of user preferences and experiences.

## CONCLUSION

Our study aimed to thoroughly assess the usability and user satisfaction of the Baraya Travel application. To accomplish this, we distributed the System Usability Scale (SUS) questionnaire to a significant sample of 409 users. The findings showed that the application received a SUS score of 75.26, translating to a "Good" rating and a letter grade of "B." This score positions the application within an acceptable range. However, despite this positive usability rating, the Net Promoter Score (NPS) indicates that users maintain a passive stance. Despite this, the Baraya Travel application's usability remains commendable according to



the NPS. The consistency of these findings across various studies strengthens the credibility and accuracy of the SUS as a usability metric. The "Good" rating and associated "B" grade signify that users typically perceive the Baraya Travel application as user-friendly and satisfactory. However, the score also pinpoints specific areas for improvement. Although the application meets a commendable usability standard, there's still potential to fine-tune and enrich its features. Improving the application's usability might entail tackling any particular challenges users have highlighted, refining the user interface for a smoother experience, and integrating extra features to enhance overall user satisfaction. By concentrating on these aspects, the application could aim for an "Excellent" rating and attain a higher letter grade in forthcoming evaluations.

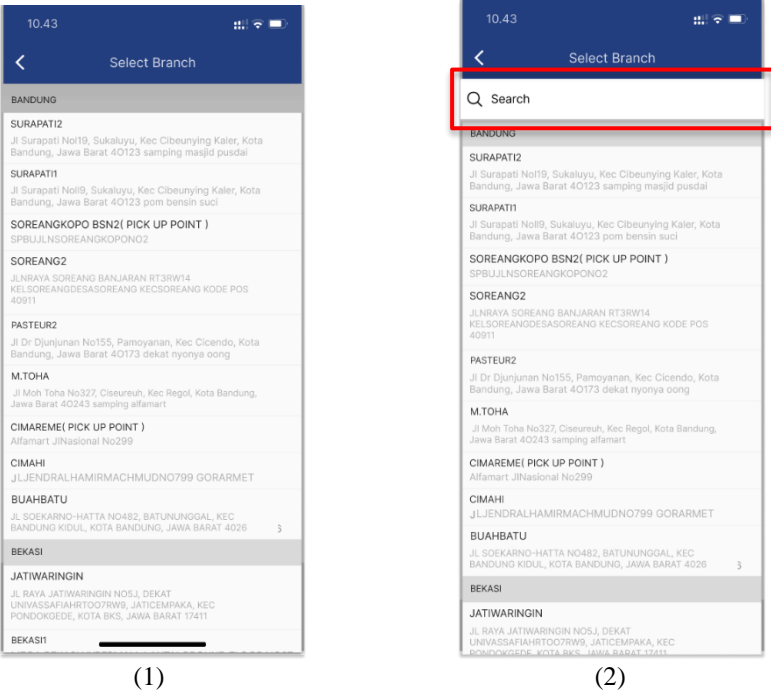


Figure 5. Baraya travel destination selection page existing (1) and search form proposed (2)

The destination selection page, as shown in Figure 5, lacks a search feature, necessitating users to manually browse through their destination options. This absence of search functionality can introduce inefficiencies into the user's selection process, potentially leading to frustration and diminished satisfaction [25]. This observation aligns with the broader recognition that user satisfaction hinges significantly on the ease and efficiency of their interactions with a platform. Our research outcomes offer valuable suggestions to improve the Baraya Travel application. A key recommendation, inspired by the depiction in Figure 5, is to integrate a search function for departures and destinations. This addition would greatly aid users in swiftly finding their desired locations. With a search feature in place, users can input their preferred departure and destination points, simplifying the search process and conserving time. Figure 5 provides a visual representation of how the page would look with the inclusion of a search feature. Incorporating this feature would enrich the user experience, boost search effectiveness, and ultimately lead to heightened user satisfaction. This suggestion stems from the recognition that user satisfaction is intricately tied to the effectiveness and user-friendliness of their interactions with the application. The absence of a search feature was highlighted as a notable usability concern, as indicated by the correlation with questions Q2 and Q8 in the SUS questionnaire. These studies revealed that when Likert scale responses of 4 and 5 were aggregated, the findings showed a frustration and decreased satisfaction rate of 10.6% for Q2 and 11% for Q8. These statistics further reinforce our suggestion to introduce a search feature.

According to Figure 6, the promotional information section, indicated in red, is presently non-clickable, causing confusion among users regarding how to redeem the promotions due to the absence of detailed information. For instance, if a user is a student and notices that students are entitled to a Rp 15,000 discount, the lack of supplementary details poses a considerable problem. This hinders the student from benefiting from the promotion, which is deeply disappointing for the user. To resolve this concern, it is advised to

enable click ability for the promotional section highlighted in Figure 6. This action would lead users to a new page containing comprehensive information about current promotions. By incorporating this feature, users would gain access to detailed promotional information, consequently improving their overall experience with the application [26]. Figure 6 provides a visual representation of how the page would look after this enhancement. Developing a dedicated page that offers comprehensive information about promotions would afford users convenient access to all relevant details. This enhancement would result in a more immersive and gratifying user experience. Furthermore, integrating this improvement would enhance the overall usability of the application and elevate user satisfaction. Consequently, more users may be inclined to capitalize on the application's promotional offerings. This usability concern was pinpointed based on its correlation with Question 6 in the System Usability Scale (SUS) questionnaire. Across these studies, the combination of Likert scale responses of 4 and 5 accounted for 10.8% of the total responses, signaling a significant degree of user frustration.

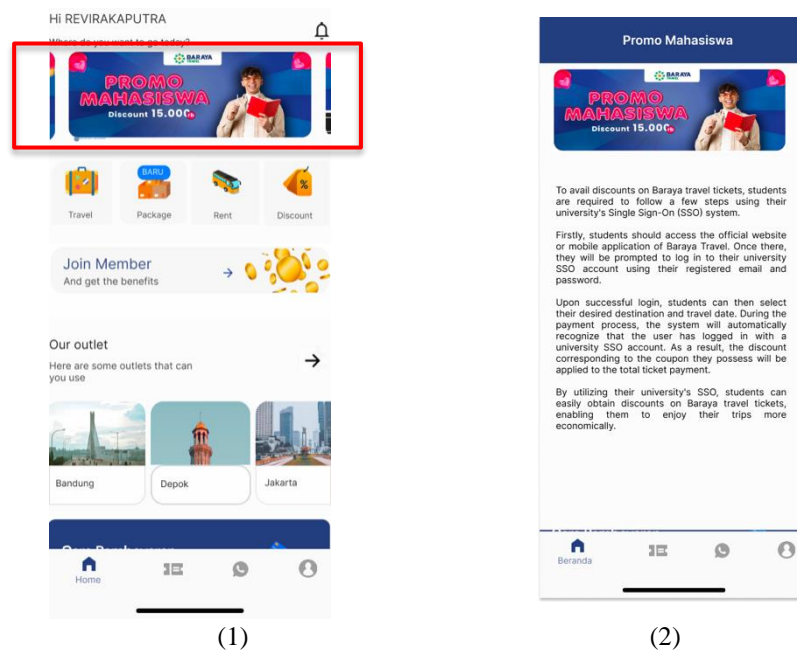


Figure 6. Baraya travel home page (1) and Baraya travel student page purposed (2)

This research goes beyond mere evaluation, providing actionable recommendations to improve the usability of the Baraya Travel application, thus better meeting users' needs and expectations. By integrating the proposed enhancements, such as adding a search feature and enabling click ability for promotional sections, the application can deliver a smoother and more user-friendly experience. Furthermore, this study paves the way for future research by proposing alternative assessment methods to delve further into user evaluations and offer more precise measurements of usability. Serving as a cornerstone in the domain of mobile application usability, this research aids in advancing user-centered design principles, thereby laying the foundation for the creation of similar applications with improved usability and heightened user satisfaction. In the end, the attained SUS score not only validates the efficacy of the proposed method in assessing user satisfaction and perceptions but also emphasizes the opportunity for ongoing enhancement in digital applications through focused improvements driven by user feedback and empirical data.

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