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Research Article

User Experience Analysis on the KMOB Depok Application Using the System Usability Scale Method

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Abstract

To improve services to the community, Depok City has developed technology by launching KMOB, this Android-based application has met the needs of the activities of the people of West Java, especially in the centralized city of Depok. The purpose of this study is to measure the level of user experience of the KMOB application and to produce recommendations for improvements to the KMOB application based on the results of the analysis using the system usability scale (SUS) method. The method used in this research is system usability scale (SUS), the data collection used is interviews, and the distribution of SUS questionnaires to 30 KMOB application users, which are sent via google form. The results showed that the KMOB application almost on the entire assessment scale had a good (positive) evaluation, namely on the attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty assessment scale. KMOB application for Depok City was categorized as not meeting usability standards. Based on the usability evaluation, the SUS score is 44.5 with a not adjective rating including the "POOR" category and grade scale F, and is included in the marginal low category for acceptability ranges where the usability of the KMOB application for Depok City is still acceptable but with a low level of acceptance.

Keywords: KMOB Application; System Usability Scale (SUS); User Experience

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1. Introduction

To improve services to the community, Depok City has developed technology by launching KMOB, an Android-based application. This application has met the needs of the activities of the people of West Java, especially in the centralized city of Depok. To deal with this problem, a data terminal is needed, which functions as the center of the Depok City government's information system. With this KMOB application, it is hoped that Depok City government data will be more organized, valid, integrated, and consistent.

The results of a short survey conducted to find out the quality of the KMOB system show that the system has met all the needs, but there are some technical problems, such as the system being down and repaired frequently, inconsistent dashboard pages that produce the same but different pages, and logout buttons that cause users to be bored. Some employees said that the system was already being used well, but some employees said that they were still confused about operating the KMOB system, including confusion when filling out the performance reports provided. This problem may indicate that the KMOB application system still has shortcomings that make users feel uncomfortable when using it. From these cases, problems arise about how the software created can be easily used by users. The usability of software is very important to note because it is highly influential on its users, and the success of the software depends on the quality of the software itself (Putri et al., 2024).

Since there has never been a usability test of an information system at this time, it is very important to do so to determine the level of effectiveness, efficiency, and user satisfaction of a useful cash management information system. Usability testing will be the basis for the development of better systems (Veron et al., 2023). *Usability testing is one of the techniques to evaluate a system or product with the testing process carried out on users* (Sahara et al., 2022). In the usability test in this study, the System Usability Scale (SUS) method is used which is one of the usability methods to assess applications involving end users or end users (Ivan Pratama Yunus, Hasniati, 2023). The researcher evaluated the usability of the KMOB system by considering the level of usability. The purpose of this evaluation is to ensure that the system developed is in accordance with the user's criteria and whether the usability factor affects the results of filling out the report.

2. Literature Review

A. User Experience

An exemplary user experience should meet customer needs quickly. Elegance and simplicity also make the product attractive and pleasant to use (Rafid Pratama et al., 2024). The actual user experience is more than just providing a checklist feature or giving customers what they want. To create a great business user experience, services from different fields, such as engineering, marketing, graphic design, industrial, and interface design, must be combined (Amalia, 2021).

UEQ is often carried out with several objectives, namely to compare the user experience level between two products, test the user experience of a product, and determine areas of improvement (Hosea et al., 2023). There are 6 scales with a total of 26 elements categorized based on the measurement scales contained in the UEQ. The User Experience scales in the questionnaire, namely:

1. Attractiveness

   Consumer impressions of the product, how attractive a product is in terms of overall perception, whether consumers like or dislike the product.
2. Perspicuity

   How easy a product is for users to use.
3. Efficiency

   How fast and efficient the product is when used by the user, as well as, whether the user interface looks organized.
4. Dependability

   Whether the interaction can be controlled by the user?
5. Stimulation

   Is the product attractive and fun to use? Whether the user feels motivated to continue using the

product?

6. Novelty

   How innovative a product is. Does the product have an innovative and creative design? Is the product able to get the attention of users?

B. Usability

According to (Susila & Arsa, 2022) "The word "usable" is derived from the word "usable", which in general means "usable" It can be considered useful if misuse can be eliminated or minimized while providing benefits and satisfaction to the user. When a good or service can be used correctly, consumers can do what they want without hindrance, doubt, or question".

In other words, the extent to which a product can be used by a particular user to achieve a specific goal effectively, efficiently, and satisfactorily in the context of a particular use. A measure of usability should include the following three components (Hosea et al., 2023):

1. Effectiveness, defined as how well users use the system to achieve the goals and completeness they acquire while completing tasks.
2. Efficiency, defined as the resources used in relation to the accuracy and perfection achieved by users in carrying out tasks.
3. Satisfaction, which means that the user does not feel uncomfortable and has a positive attitude towards the use of the product or a subjective measure of how the user feels about using the system.

C. System Usability Scale (SUS)

System usability scale (SUS) interface testing carried out directly by the end user (Martoyo, W., U., 2020). The use of SUS itself because it conducts testing emphasizes the end-user's view more so that the test results will be more in accordance with the actual situation because SUS testing has 10 statements as a testing tool and does not require a large number of samples, thereby reducing testing costs (Hartawan, 2019).

The Usability Scale (SUS) system is a practical questionnaire used to measure how easy the counseling guidance information system is used by each user. Some of the advantages of the SUS questionnaire are as follows:

1. Researchers have no difficulty in performing the score calculation process with this tool, which makes it very easy to use.
2. This tool is very cost-effective as it is available for free and free.
3. This research tool has been proven to be valid and reliable even though it uses relatively few test materials.

The questionnaire has 5 Likert scale points "Strongly disagree(STS)", "Disagree(TS)", "Neutral(N)", "Agree(S)", and "Strongly agree (ST)". This 7-question questionnaire consists of ten questions that are tested based on the subjectivity or feelings of a user. In giving a response, if the user is in doubt about finding a suitable answer, the respondent must fill in the middle point of the Likert scale, which is neutral (Hosea et al., 2023).

According to the Journal ('Aisy et al., 2024), there are five contribution scales in the SUS calculation, which range from 0 to 4. In the calculation process, there are rules. For statement items with numbers 1,3,5,7, and 9 (odd), the contribution score is subtracted from the response scale; For statement items with numbers 2, 4, 6, 8 and 10 (even), the contribution score is subtracted from the response scale. To get the final value for the usability system, the amount obtained from the calculation process is multiplied by 2.5 SUS score range from 0 to 100.The above statement can be seen in the form of the SUS calculation formula as follows: (Fajar et al., 2021).

$$\text{Skor SUS} = ((Q1-1) + (5-Q2) + (Q3-1) + (5-Q4) + (Q5-1) + (5-Q6) + (Q7-1) + (5-Q8) + (Q9-1) + (5-Q10)) \times 2.5 \quad \text{.....(1)}$$

After all the data is collected, then the data is processed, for the data processing itself has a formula used in the SUS method.

$$\dot{X} = \frac{\sum x}{n} \quad \text{.....(2)}$$

x = Average score
$\sum x$ = Total SUS score
n = Number of respondents

After the data is collected, the processing process is carried out. This method uses a formula to process SUS (Arifin, Moh. Samsul, 2023).

The K-MOB application is designed to help manage employee administration. Supervising the State Civil Apparatus includes this. All employees have to fill in their task details on their respective smartphones according to their tasks. This information must be in accordance with the Decree of the Mayor of Depok Number 21.29/472/kpts/BKPSDM/Huk/2018 which stipulates the name, class, and value of the position. Implementation is under the responsibility of the Depok city government. K-Mob as an annual SKP report: through K-MOB, ASN must report performance achievements in accordance with the details of Tupoksi every day. Furthermore, the performance results will be assessed in rupiah. The model of free and documentless civil servant performance assessment is discussed further. With mobile-based reports, employees no longer need to do finger prints or use manual reports. The KMob application can help employees get Additional Income (TPP). At the end of the month, the amount of TPP and deductions received will be calculated (Sumber: BKPSDM, 2024).

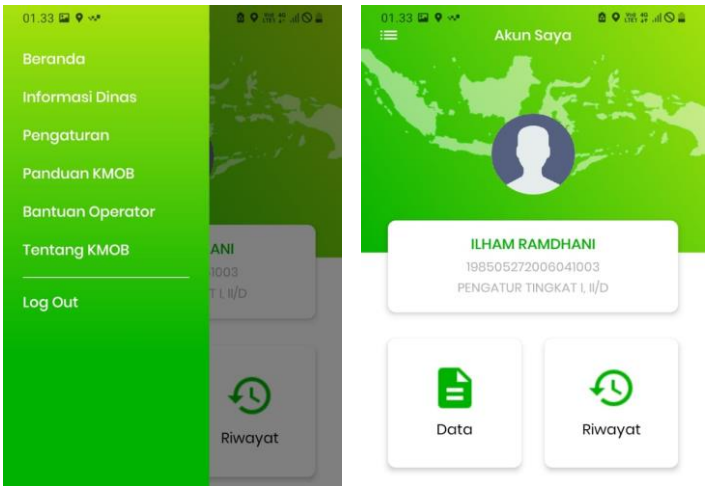


Figure 1. Depok City Government Mobile Performance Application (K-MOB)

Some of the review literature that can be used as previous research to support this research is research conducted by (Azkya et al., 2020) namely analyzing and making a prototype of the Inaventory website that has good usability for end-users, both in terms of UX and User Interface (UI) that this research is successful and has met the requirements of the heuristic test of various parameters. (Rao & Setyadi, 2023) conducted research using the UEQ method or the abbreviation of User Experience Qestionnaire, because UEQ is quite efficient and effective in measuring User Experience. UEQ has 26 queries on a linear scale of 1 to 7. UEQ measures 6 user experience factors, namely attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty.
User Experience (UX) is how users interact with a product or service offered by a company or organization. The role of users certainly greatly affects the success of an application (Indah Tri Handayani, 2024).

3. Method

A. Research Stages

The stages of research implementation can be seen in Figure 2 below:

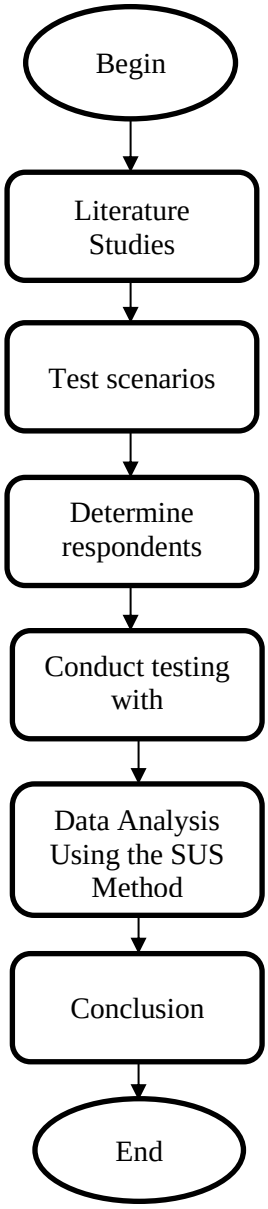


Figure 2. Research Stages

Preliminary Study

The object raised in this study is the KMOB application. Researchers are involved in KMOB applications such as Whats App and Google Form as a platform that bridges researchers and respondents (participants). Researchers in collecting all data starting from May – June 2024.

Literature Studies

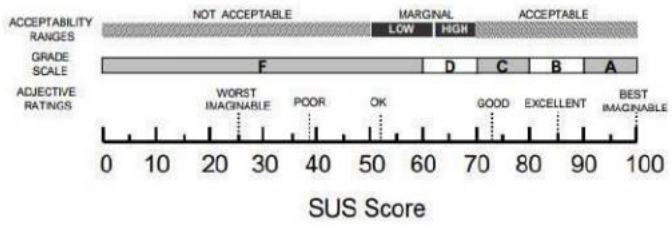
Literature studies are conducted to obtain supporting theories that will be used as a basis for research and planning that must be made. In addition, this study is also used to clarify theories related to research, namely about measuring system usability. The study also looks for sources of scientific theories that have been conducted before that can be used as a reference for analysis.

Determination of Respondents
Identifying the participants involved in the user experience survey (UEQ) is the third step. Everyone who has tried the KMOB Depok application can become a respondent, so everyone can become a respondent after trying it. The number of samples was thirty people, based on the results of the calculation with a tolerable error percentage (e) of 5%.

Testing Respondents
Then using the user system ease scaling method to collect data about the user experience of the KMOB Depok application through the use of Google Form. UEQ has 26 items (attributes) that were used as the questionnaire initially using English, but here is the UEQ questionnaire that has been translated into Indonesian. According to the rules of the SUS method, the questionnaire consists of ten statements answered by respondents to determine whether or not they agree with the statement (Fajar et al., 2021).

The following Usability Scale System rules are used to calculate the results of the questionnaire:
1. The first respondent chooses a scale of 4, so the first statement receives a score of 3, which indicates a positive aspect (the score is subtracted from the result of the scale 1).
2. The second respondent chose a scale of 3, so the second statement received a score of 2, which indicates a negative aspect (the score is subtracted from the result of the 5 scale).
3. This conversion result is then calculated as a whole for each respondent and multiplied by a factor of 2.5 to produce an average value.

Figure 3 is a scenario from the SUS range where the minimum score of a study is 52. For the SUS range, see Figure 3.



Sumber : (Hosea et al., 2023)

Figure 3. SUS Scores and Acceptability Ranges

Data Analysis
At this stage, the USE questionnaire will be tested based on data from one hundred participants collected through questionnaire distribution. To start the validity test, a Microsoft Office tool was used to calculate the correlation value of Pearson product moments. The correlation value of each questionnaire item will be calculated and compared with the value of the r-table coefficient for the number of 30 respondents, with a significant value of 5%. The value of the r-table coefficient is 0.361. If the correlation value is more than 0.361, then the questionnaire item is declared valid. If the value is less than 0.361, then the questionnaire item is invalid. After that, reliability testing is carried out only by taking valid parts of the questionnaire for analysis. The Cronbach's Alpha value is generated and compared to the reliability level of Cronbach's Alpha after the reliability test is completed. The next step is to evaluate ease of use.

Conclusion
In the last stage, the findings from the previous stage will be used to make conclusions that will answer all the problem formulations. In addition, research ideas will be given, which will serve as the basis of this research process.

B. Research Instruments
The KMOB Depok application is used to conduct research on the Usability Scale System. This study used questionnaires and likert scales to collect 10 statements based on the Usability Scale System. The sample used in this study is as many as those using the KMOB Depok application (Hosea et al., 2023).

During the System Usability Scale test, there is a scoring scale that will be used as a guide. This scale is

the Likert scale, with a score of 1 to 5 indicating a very high disapproval of the examiner's statement.

4. Result

Validity Test Results

In this study, a validity test was carried out to find out whether the question items used succeeded in measuring what should be measured (valid). This validity test was carried out by calculating the Pearson Product Moment correlation coefficient (r calculate), which means correlating the total score of each question item with the correlation coefficient. To check if the statement under test is valid, use the rcalculate (Corrected Item-Total Correlation) > rtable of 0.361 (df = 30). α = 0.5 If the r value of the SPSS calculation result is greater than the value of the rtable 0.361, then the tested item/statement is declared valid and vice versa. Figure 4 shows the test results based on the following SPSS test results:

Correlations

		att1	att2	att3	att4	att5	att6	Attractiveness (X1)
att1	Pearson Correlation	1	.681**	.797**	.705**	.835**	.838**	.947**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	30	30	30	30	30	30	30
att2	Pearson Correlation	.681**	1	.723**	.585**	.572**	.602**	.802**
	Sig. (2-tailed)	.000		.000	.001	.001	.000	.000
	N	30	30	30	30	30	30	30
att3	Pearson Correlation	.797**	.723**	1	.706**	.695**	.593**	.877**
	Sig. (2-tailed)	.000	.000		.000	.000	.001	.000
	N	30	30	30	30	30	30	30
att4	Pearson Correlation	.705**	.585**	.706**	1	.800**	.468**	.833**
	Sig. (2-tailed)	.000	.001	.000		.000	.009	.000
	N	30	30	30	30	30	30	30
att5	Pearson Correlation	.835**	.572**	.695**	.800**	1	.598**	.881**
	Sig. (2-tailed)	.000	.001	.000	.000		.000	.000
	N	30	30	30	30	30	30	30
att6	Pearson Correlation	.838**	.602**	.593**	.468**	.598**	1	.797**
	Sig. (2-tailed)	.000	.000	.001	.009	.000		.000
	N	30	30	30	30	30	30	30
Attractiveness (X1)	Pearson Correlation	.947**	.802**	.877**	.833**	.881**	.797**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	30	30	30	30	30	30	30

Figure 4. Attractiveness Validity Test Results

From the results in Figure 4, the Attractiveness variable (X1) has valid criteria for all work discipline items based on the calculation criteria above 0.361 on the table, so this tool can be used for further investigation.

Correlations

		per1	per2	per3	per4	Perspicuity (X2)
per1	Pearson Correlation	1	.467**	.510**	.781**	.809**
	Sig. (2-tailed)		.009	.004	.000	.000
	N	30	30	30	30	30
per2	Pearson Correlation	.467**	1	.827**	.594**	.858**
	Sig. (2-tailed)	.009		.000	.001	.000
	N	30	30	30	30	30
per3	Pearson Correlation	.510**	.827**	1	.546**	.847**
	Sig. (2-tailed)	.004	.000		.002	.000
	N	30	30	30	30	30
per4	Pearson Correlation	.781**	.594**	.546**	1	.869**
	Sig. (2-tailed)	.000	.001	.002		.000
	N	30	30	30	30	30
Perspicuity (X2)	Pearson Correlation	.809**	.858**	.847**	.869**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	30	30	30	30	30

Figure 5. Perspicuity Validity Test Results

From the results of Figure 5, the Perspicuity variable (X2) has valid criteria for all work discipline items based on the calculation criteria above 0.361 in the table, so this tool can be used for further investigation.

Correlations

		ef1	ef2	ef3	ef4	Efficiency (X3)
ef1	Pearson Correlation	1	.394*	.291	.105	.654**
	Sig. (2-tailed)		.031	.118	.582	.000
	N	30	30	30	30	30
ef2	Pearson Correlation	.394*	1	.589**	.030	.726**
	Sig. (2-tailed)	.031		.001	.876	.000
	N	30	30	30	30	30
ef3	Pearson Correlation	.291	.589**	1	.179	.757**
	Sig. (2-tailed)	.118	.001		.344	.000
	N	30	30	30	30	30
ef4	Pearson Correlation	.105	.030	.179	1	.538**
	Sig. (2-tailed)	.582	.876	.344		.002
	N	30	30	30	30	30
Efficiency	Pearson Correlation	.654**	.726**	.757**	.538**	1
	Sig. (2-tailed)	.000	.000	.000	.002	
	N	30	30	30	30	30

Figure 6. Results of Efficiency Validity Test

From the results of Figure 6 above, the Efficiency variable (X3) has valid criteria for all work discipline items based on the calculation criteria above 0.361 in the table, so this tool can be used for further investigation.

Correlations

		dep1	dep2	dep3	dep4	Dependability (X4)
dep1	Pearson Correlation	1	.824**	.723**	.775**	.892**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	30	30	30	30	30
dep2	Pearson Correlation	.824**	1	.780**	.875**	.942**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	30	30	30	30	30
dep3	Pearson Correlation	.723**	.780**	1	.794**	.904**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	30	30	30	30	30
dep4	Pearson Correlation	.775**	.875**	.794**	1	.940**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	30	30	30	30	30
Dependability	Pearson Correlation	.892**	.942**	.904**	.940**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	30	30	30	30	30

Figure 7. Dependability Validity Test Results (Accuracy)

From the results of Figure 7 above, the Dependability variable (X4) has valid criteria for all work discipline items based on the calculation criteria above 0.361 on the table, so this tool can be used for further investigation.

Correlations

		sti1	sti2	sti3	sti4	Stimulation (X5)
sti1	Pearson Correlation	1	.821**	.785**	.829**	.901**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	30	30	30	30	30
sti2	Pearson Correlation	.821**	1	.879**	.844**	.940**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	30	30	30	30	30
sti3	Pearson Correlation	.785**	.879**	1	.921**	.961**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	30	30	30	30	30
sti4	Pearson Correlation	.829**	.844**	.921**	1	.959**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	30	30	30	30	30
Stimulation	Pearson Correlation	.901**	.940**	.961**	.959**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	30	30	30	30	30

Figure 8. Stimulation Validity Test Results

From the results of Figure 8 above, the Stimulation variable (X5) has valid criteria for all work discipline items based on the calculation criteria above 0.361 in the table, so this tool can be used for further investigation.

Correlations

		nov1	nov2	nov3	nov4	Novelty (X6)
nov1	Pearson Correlation	1	.495**	.821**	.866**	.892**
	Sig. (2-tailed)		.005	.000	.000	.000
	N	30	30	30	30	30
nov2	Pearson Correlation	.495**	1	.688**	.611**	.785**
	Sig. (2-tailed)	.005		.000	.000	.000
	N	30	30	30	30	30
nov3	Pearson Correlation	.821**	.688**	1	.888**	.949**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	30	30	30	30	30
nov4	Pearson Correlation	.866**	.611**	.888**	1	.942**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	30	30	30	30	30
Novelty	Pearson Correlation	.892**	.785**	.949**	.942**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	30	30	30	30	30

Figure 9. Novelty Validity Test Results

From the results of Figure 9 above, the Novelty variable (X6) has valid criteria for all work discipline items based on the calculation criteria above 0.361 on the table, so this tool can be used for further investigation.

Correlations

		p1	p2	p3	p4	p5	p6	p7	p8	p9	p10	Total SUS
p1	Pearson Correlation	1	.346	.629**	.458*	.365*	.658**	.394*	.647**	.530**	.306	.703**
	Sig. (2-tailed)		.061	.000	.011	.047	.000	.031	.000	.003	.101	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p2	Pearson Correlation	.346	1	.694**	.701**	.516**	.534**	.544**	.404*	.546**	.255	.714**
	Sig. (2-tailed)	.061		.000	.000	.004	.002	.002	.027	.002	.174	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p3	Pearson Correlation	.629**	.694**	1	.643**	.522**	.675**	.570**	.662**	.659**	.311	.824**
	Sig. (2-tailed)	.000	.000		.000	.003	.000	.001	.000	.000	.094	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p4	Pearson Correlation	.458*	.701**	.643**	1	.675**	.770**	.637**	.501**	.737**	.363*	.850**
	Sig. (2-tailed)	.011	.000	.000		.000	.000	.000	.005	.000	.049	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p5	Pearson Correlation	.365*	.516**	.522**	.675**	1	.657**	.473**	.291	.475**	.578**	.755**
	Sig. (2-tailed)	.047	.004	.003	.000		.000	.008	.118	.008	.001	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p6	Pearson Correlation	.658**	.534**	.675**	.770**	.657**	1	.613**	.536**	.709**	.390*	.862**
	Sig. (2-tailed)	.000	.002	.000	.000	.000		.000	.002	.000	.033	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p7	Pearson Correlation	.394*	.544**	.570**	.637**	.473**	.613**	1	.610**	.573**	.088	.708**
	Sig. (2-tailed)	.031	.002	.001	.000	.008	.000		.000	.001	.643	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p8	Pearson Correlation	.647**	.404*	.662**	.501**	.291	.536**	.610**	1	.636**	.261	.728**
	Sig. (2-tailed)	.000	.027	.000	.005	.118	.002	.000		.000	.164	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p9	Pearson Correlation	.530**	.546**	.659**	.737**	.475**	.709**	.573**	.636**	1	.287	.799**
	Sig. (2-tailed)	.003	.002	.000	.000	.008	.000	.001	.000		.123	.000
	N	30	30	30	30	30	30	30	30	30	30	30
p10	Pearson Correlation	.306	.255	.311	.363*	.578**	.390*	.088	.261	.287	1	.573**
	Sig. (2-tailed)	.101	.174	.094	.049	.001	.033	.643	.164	.123		.001
	N	30	30	30	30	30	30	30	30	30	30	30
Total SUS	Pearson Correlation	.703**	.714**	.824**	.850**	.755**	.862**	.708**	.728**	.799**	.573**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	
	N	30	30	30	30	30	30	30	30	30	30	30

Figure 10. Results of the System Usability Scale (SUS) Validity Test

From the results of Figure 10 above, the System Usability Scale (SUS) variable has valid criteria for all work discipline items based on the calculation criteria above 0.361 in the table, so this tool can be used for further investigation.

Reliability Test Results

The Alpha Cronbach technique, a calculation performed by calculating the mean correlation between each statement in the questionnaire, was used to test the reliability of the instrument. If the alpha value of the variable is greater than 0.70, then the variable is considered reliable. The researcher used the SPSS statistical program version 25.0 to measure the reliability of the research. The results of the reliability test calculation of this study are as follows:

Table 1. Reliability Test Results

Variable	*Cronbach's Alpha*	Criterion	Information
System Usability Scale (Y)	0,899	0,70	Reliable
Attractiveness (X_1)	0,928	0,70	Reliable
Perspicuity (X_2)	0,866	0,70	Reliable
Efficiency (X_3)	0,872	0,70	Reliable
Dependability (X_4)	0,936	0,70	Reliable
Stimulation (X_5)	0,953	0,70	Reliable
Novelty (X_6)	0,809	0,70	Reliable

From Table 1, it can be seen that the results of the reliability coefficient of the instrument for each variable in this study produce a "Cronbach Alpha" value > 0.70. Therefore, the equipment used for these three variables can be said to be reliable and can be used in further research.

Multiple Regression Test

Quantitative analysis is used to prove the hypothesis proposed by using a multiple regression analysis model to analyze the data obtained from the results of research in this field. This proof aims to test the variation of the regression model used to explain the free (X) and bound (Y) variables by testing the significance of the regression coefficient. Below are the results of the regression model calculated with the SPSS 25.0 program.

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	40.107	10.676		3.757	.001
	Attractiveness (X1)	.155	.575	.101	3.003	.000
	Perspicuity (X2)	.702	.862	.332	1.814	.424
	Efficiency (X3)	.869	.784	.322	3.108	.003
	Dependability (X4)	.231	1.011	.153	3.012	.021
	Stimulation (X5)	.231	.780	.162	3.043	.002
	Novelty (X6)	.181	1.043	.123	4.002	.000

a. Dependent Variable: Total SUS

Figure 11. Multiple Linear Regression Analysis Test Results

Based on Figure 11, the calculation with the help of the SPSS program using Full Model Regression, the regression equation is obtained as follows:

$$Y = 40.107 + 0{,}155\ X1 + 0{,}702\ X2 + 0{,}869X3 + 0{,}231X4 + 0{,}231X5 + 0{,}181X6$$

Information:

a. A constant value of 40.107 means that if all user ecperience variables do not exist, there is a system usability scale value of 40.107 units..
b. The value of the regression coefficient of the Attractiveness variable (X1) = 0.155 means that if the Attractiveness value is increased by 0.1 units, then the level of the system usability scale will increase by 0.155 units assuming that other independent variables remain.
c. The value of the regression coefficient of the Perspicuity variable (X2) = 0.702 means that if the Perspicuity value is increased by 0.1 units, then the level of the system usability scale will increase by 0.702 units assuming that other independent variables remain.
d. The value of the variable regression coefficient Efficiency (X3) = 0.869 means that if the Efficiency value is increased by 0.1 units, then the system usability scale level will increase by 0.869 units assuming that other independent variables remain.
e. The value of the regression coefficient of the variable Dependability (X4) = 0.231 means that if the Dependability value is increased by 0.1 units, then the system usability scale level will increase by 0.231 units assuming other independent variables remain.
f. The value of the variable regression coefficient Stimulation (X5) = 0.231 means that if the Stimulation value is increased by 0.1 units, then the system usability scale level will increase by 0.231 units assuming other independent variables remain.

g. The value of the regression coefficient of the Novelty variable (X6) = 0.181 means that if the Novelty value is increased by 0.1 units, then the system usability scale level will increase by 0.181 units assuming other independent variables remain.

Determination Coefficient Analysis

The determination coefficient is used to find out how much the contribution or contribution of organizational culture, job training and communication variables is. The value of the determination coefficient is determined by looking at the R square value contained in Figure 12 below:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.536[a]	.287	.180	1.958

a. Predictors: (Constant), Novelty (X6), Attractiveness (X1), Efficiency (X3), Perspicuity (X2), Stimulation (X5), Dependability (X4)
b. Dependent Variable: Total SUS

Figure 12. Determination Coefficient Test Results (R^2)

Based on Figure 12 above, the magnitude of the R Square determination coefficient value is 0.287. This means that the ability of the free variable to explain the variance of the bound variable is 28.7%. This means that there are 71.3% (100% - 28.7%) of the variance of the bound variable explained by other factors that were not studied in this study.

Hypothesis Test (t-Test)

Based on the output, you can see the t-table value obtained by each variable. To make a conclusion of accepting or rejecting Ho, it must first determine the t-table values to be used. This value depends on the size of the degree of freedom (df) and the level of significance used. Using a significance level of 5% and a df value of n = 30, a t-table value of 1.697 was obtained. A summary of the results of regression analysis using the SPSS 25.00 for Windows program in this study can be seen in Figure 13 below:

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	40.107	10.676		3.757	.001
	Attractiveness (X1)	.155	.575	.101	3.003	.000
	Perspicuity (X2)	.702	.862	.332	1.814	.424
	Efficiency (X3)	.869	.784	.322	3.108	.003
	Dependability (X4)	.231	1.011	.153	3.012	.021
	Stimulation (X5)	.231	.780	.162	3.043	.002
	Novelty (X6)	.181	1.043	.123	4.002	.000

a. Dependent Variable: Total SUS

Figure 13. Test Results of the Hypothesis Test t

1. Based on research that shows the Attractiveness value (X_1), a calculated t value of 3.003 was obtained. When compared with the table T value of 1.697, the calculated T value is greater than the table T value. Significant value 0.000 < 0.05. Therefore, H_0 is rejected and H1 is accepted. This means that the Attractiveness variable (X_1) has a significant effect on the usability scale system in the KMOB Application which turns out to be true.
2. Based on the research that shows the Perspicuity value (X_2), a calculated t value of 1.814 was obtained. When compared with the table T value of 1.697, the calculated T value is greater than the table T value. Significant value 0.424 > 0.05. Therefore, H_0 is accepted and H_2 is rejected. This means that the Perspicuity variable (X_2) does not have a significant effect on the system usability scale in the KMOB Application which turns out to be incorrect.
3. Based on the research that shows the Efficiency (X_3) value, a calculated t value of 3.108 was obtained. When compared with the table T value of 1.697, the calculated T value is greater than the table T value. Significant values 0.003 < 0.05. Therefore, H_0 is rejected and H_3 is accepted. This means that the Efficiency (X_3) variable has a significant effect on the system usability scale in the KMOB Application which turns out to be true.

4. Based on research that shows the Dependability value (X_4), a calculated t value of 3.102 was obtained. When compared with the table T value of 1.697, the calculated T value is greater than the table T value. Significant value 0.021 < 0.05. Therefore, H0 is rejected and H_4 is accepted. This means that the Dependability variable (X_4) has a significant effect on the system usability scale in the KMOB Application which turns out to be true.
5. Based on the research that shows the Stimulation value (X_5), a calculated t value of 3.043 is obtained. When compared with the table T value of 1.697, the calculated T value is greater than the table T value. Significant value 0.002 < 0.05. Therefore, H_0 is rejected and H_5 is accepted. This means that the Stimulation variable (X_5) has a significant effect on the system usability scale in the KMOB Application which turns out to be true.
6. Based on research that shows the Novelty value (X_6), a calculated t value of 4.002 was obtained. When compared with the table T value of 1.697, the calculated T value is greater than the table T value. Significant value 0.000 < 0.05. Therefore, H_0 is rejected and H_6 is accepted. This means that the Novelty variable (X_6) has a significant effect on the system usability scale in the KMOB Application which turns out to be true.

Hypothesis Test (Test F)

To test this hypothesis, F statistics are used with decision-making criteria, if $F_{cal} > F_{tabel}$ then H_o is rejected and H_a is accepted, which means that the independent variable has a significant influence on the dependent variable by using a probalita significance level of 0.05, if the value of $F_{cal} > F_{table}$, then together all independent variables affect the dependent variable. To determine the magnitude of F the table is searched with the condition n = 30. so F table = 2.421, the criterion is said to be significant if the F value is calculated > F of the table or ρ value < Sig. 0.05. The results of the simultaneous significance test (test F) can be seen in Figure 14 below:

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.109	6	9.352	14.263	.001[b]
	Residual	816.557	23	35.502		
	Total	872.667	29			

a. Dependent Variable: Total SUS

b. Predictors: (Constant), Novelty (X6), Attractiveness (X1), Efficiency (X3), Perspicuity (X2), Stimulation (X5), Dependability (X4)

Figure 14. Test Result F (Simultaneous)

Based on Table 14, F_{cal} was obtained 14,263 while the value of F_{tabel} was 2,421. So it can be seen that F_{cal} 14,263 >F_{table} 2,421 and a significance value of 0.001< 0.05, which means that Ho is rejected and Ha is accepted or it can be said that the variables of all user experience variables together (simultaneous) have a significant influence on the system usability scale variable.

5. Discussion

UEQ Data Analysis

The analysis of the processed data can use common standards to evaluate the average value of each aspect. From the scale means per person, a recalculation is then carried out to determine the final result of the UEQ questionnaire. The results of the UEQ questionnaire were searched using a mean value. Values between -0.8 and 0.8 represent evaluations that are more or less of the corresponding scale, values >0.8 represent positive evaluations and <-0.8 values represent negative evaluations.

Table 2. UEQ Average Score Results

	N	Mean	Kategori
Attractiveness (X1)	30	4,42	Excellent
Perspicuity (X2)	30	4,26	Excellent
Efficiency (X3)	30	4,24	Excellent
Dependability (X4)	30	4,19	Good
Stimulation (X5)	30	4,07	Good
Novelty (X6)	30	4,12	Good

From the results of the study, it can be seen in Table 2 that the KMOB application on almost the entire evaluation scale has a good evaluation (positive), namely on the assessment scale of attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty, where the final score on each of these assessment scales is >0.8, so it can be concluded that the evaluation has very satisfactory results even though it does not reach a bad (negative) assessment. Based on the assessment of the respondents, it will be summarized in the distribution table of answers per item. In the answer distribution table per item, you can see the answers for a single item, as well as items that show polarization in the answers (a tendency to negative and positive assessments and not many neutral assessments).

Testing is the final stage in this study. Testing is carried out to see if the solution provided and the design that has been built can be used easily and comfortably by users. The test involved 30 respondents using a SUS usability questionnaire (system usability scale). The following is brief data from 5 respondents who have filled out the SUS questionnaire to assess the KMOB Application.

1. Acceptability Ranges, Grade Scale, dan Adjectives Rating

   The determination of Acceptability Ranges, Grade Scale, and Adjectives Rating is used to see the extent of user acceptance of the Palembang Polytechnic website. To determine the Acceptability Ranges, Grade Scale, and Adjectives Rating, a comparison of the results of the average assessment of respondents of 68.4 was carried out with the provisions as shown in Figure 4.4. For this reason, from the results of the assessment given by the respondents, the results of the assessment of the Depok City KMOB application are as follows:

   a) Acceptability Ranges, assigning scores below 50 as "unacceptable", scores between 50-70 as "marginally acceptable", and scores above 70 as "acceptable". Based on the results of calculations from all respondents with an average SUS score on the Depok City KMOB Application of 68.4, the Depok City KMOB Application is in the marginal category which means that the Depok City KMOB Application can be accepted and used by its users.
   b) Grade Scale, Bangor developed an assessment scale where if the SUS score below 60 is "F" where F is the worst class, the SUS score between 70 and 79 is "C" where C is the class above average and the SUS score above 90 is "A" where A is the best class. The results of the calculation of all respondents with an average SUS score on the Depok City KMOB Application is 68.4, then the determination that has been set on the Depok City KMOB Application is 68.4 is included in grade C, which means that it can be accepted by users if it is based on the assessment of letters F to A with grades above the average.
   c) Adjectives Rating, Bangor describes the average SUS result using adjectives rather than numbers to describe the user experience such as "good", "poor", or "excellet". Based on the results of calculations from all respondents with an average SUS score on the Depok City KMOB Application of 68.4, then the Depok City KMOB Application is 68.4 included in the "Good" category or considered to have received according to the adjective assessment.

2. The results of the assessment carried out on the Depok City KMOB Application received a SUS score of 68.4, showing that the Depok City KMOB Application was declared marginal and included in grade C with a rating of "Good*".*

This research refers to the research (Hosea et al., 2023) The SUS score must be more than 68 to be included in the acceptable category and it can be said that the system is good, if the score produced is

below 68 then the usability of the system is below average or not good. From the results of the study with 30 end-user respondents, the usability calculation on the Depok City KMOB Application using the System Usability Scale resulted in a score of 68.4, which means that the KMOB application already has usability that can be accepted by its users. However, the usability in the KMOB application is expected to produce a score above 70 to be able to penetrate grade A, this is the point where users will use the application more often.

The results of the usability test the researcher proposed several improvements, namely, to change the layout of the search facility to the main page of the application to make it easier to find the desired information, in addition to that the KMOB application must update information about Depok City government activities more frequently, and it is hoped that the KMOB application applies a responsive design concept so that the information displayed can be conveyed and received well by its users. This improvement recommendation, taken by the researcher from the suggestions given by the respondents, is expected to be a benchmark to be able to increase the usability value of the Depok City KMOB application.

6. Conclusion

From the results of the study, it can be seen that the KMOB application on almost the entire evaluation scale has a good evaluation (positive), namely on the assessment scale of attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty, where the final score on each of these assessment scales >0.8, so it can be concluded that the evaluation has very satisfactory results even though it does not reach a bad (negative) assessment.

The Depok City KMOB application is categorized as not meeting usability standards. Based on the usability evaluation, a SUS score of 68.4 was obtained with an adjective rating including the "GOOD" category and grade scale C, and included in the marginal category for acceptability ranges where the usability (usefulness) of the KMOB Depok City application is still acceptable but with an acceptance rate that is still not close to grade A.

Recommendations

1. For KMOB Application Developers
   With this research, it is hoped that the KMOB application developer will consider this research as a development benchmark. If you want to increase the usability value of the KMOB application, you should immediately improve and develop the system and also improve the performance of the development staff.
2. For Further Research
   The researcher hopes that the next research on the usability of the KMOB Application can make this research a guideline and is expected to provide concrete solutions to existing problems

Research Limitations

Based on the assessment of the research results, the author intends to provide suggestions that hopefully can be useful for the institution and for future researchers, namely as follows:

1. The researcher is then expected to examine more sources and references related to evaluation using the System Usability Scale method so that the research results are better and more complete.
2. In the development or design of the system, it is hoped that there will be user participation so that the system is easier to use by the intended users.
3. Testing using methods other than System Usability Scale (SUS) to determine the results obtained from other methods so that it can be used as a comparison to improve usability.
4. The use of usability assessment characteristics other than those used in this study is satisfaction, learnability, error and efficiency.

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