USER EXPERIENCE ANALYSIS OF CANVA USING SYSTEM USABILITY SCALE (SUS) METHOD

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ABSTRAK

The Canva Design application has gained popularity among users seeking to design graphics and visual content. However, users face challenges such as difficulty finding features, slow performance, unclear user interface, and functional issues. This research aims to identify and analyze these problems through User Experience and System Usability Scale (SUS) analysis. The findings provide valuable insights to Canva's development team to address weaknesses and improve usability. This research serves as a foundation for enhancing the quality and user-friendliness of the Canva application to meet the evolving needs and expectations of users.

Keywords: Analysis, Canva, System Usability Scale (SUS), User Experience.

1 INTRODUCTION

In the present time, technological advancements have been progressing rapidly and have had a significant impact in various sectors. One example is the utilization of information technology in the past few decades. It is evident that various applications have emerged to facilitate human work and activities. [1] As technology advances and society's needs grow, the Canva Design application has become one of the most popular tools for graphic design and visual content creation. This application enables users to create captivating and professional designs without the need for specialized graphic design skills.[2]

Canva has a variety of attractive designs that make presenting information more engaging than usual [3]. One of the main features millions of Canva users love is the wide variety of templates available. Although Canva Design has gained considerable popularity, users often encounter several challenges while using it. Some problems frequently reported by users include difficulties in finding and accessing specific features, sluggish application performance, unclear user interface, as well as errors in the application's functions and responses.

To address these issues, user experience evaluation becomes crucial in the development of the Canva Design application. Evaluation is one of the crucial components in the effort to improve and enhance the quality of services.[4] In this case, user involvement is an important factor that is taken into account in the assessment. [5] User experience will provide direct insights into users' experiences when using the application. [6] And it helps identify problems that can affect user satisfaction and efficiency levels. [7]

In this study, we employ the user experience analysis and System Usability Scale (SUS) method as our approach. The focus of this research is on Canva users, and the study relies on collected data without involving customer reconfirmation.

The aim of this research is to identify and analyze the problems or complaints faced by users through the analysis of User Experience and System Usability Scale in the Canva application. Thus, the results of this study are expected to provide insights to Canva regarding weaknesses or shortcomings in their application. This will assist them in improving the quality and user satisfaction.

2 LITERATURE REVIEW

2.1 Analysis

According to the Kamus Besar Bahasa Indonesia (Indonesian Dictionary), analysis refers to the process of breaking down a main problem into various components and examining each component, as well as understanding the relationships between the parts, with the aim of obtaining accurate and comprehensive understanding of the whole [8].

According to Komaruddin, analysis is a cognitive activity that involves breaking down a whole into its components, thereby understanding the signs of the components, the relationships between them, and their respective functions within the integrated whole [9].

Based on these explanations, it can be concluded that analysis involves a thinking process of dividing a problem or object of study into structured components or interconnected parts. Subsequently, these components will be examined to ensure their accuracy.

2.2 User Experience

User experience is defined as "the overall effects and responses experienced by users during their interaction with a product, including practical, aesthetic, ergonomic, and meeting user expectations aspects" [10].

According to Garrett, user experience involves "the structure and design intentionally created to meet the user's needs in a pleasant and effective manner" [11].

User experience refers to how users interact with a product, system, or service. It encompasses all aspects of this interaction, including the user's perception, responses, and emotions while using the product.

2.3 Canva

Canva is an online graphic design platform that allows users to easily create various types of designs, including posters, invitations, brochures, presentations, social media posts, and more.[12] With Canva, users do not need to have deep design expertise or use complex design software. The platform offers an intuitive user interface and a wide range of customizable templates, graphic elements, and editing tools.[13]

2.4 System Usability Scale (SUS) Method

The System Usability Scale (SUS) method is one of the techniques used to measure the level of usability of a technology-based system, product, or service. This method was developed by John Brooke in 1986 and has been widely used in research and interaction design development [14].

SUS consists of 10 statements that assess different aspects of the usability of a system. Participants are asked to rate their level of agreement or disagreement with each statement using a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).[15] The statements cover aspects such as ease of use, complexity level, clarity of instructions, and suitability to user needs.

3 RESEARCH METHOD

In this research, the applied method is the System Usability Scale (SUS) as the chosen approach. This method involves several stages that need to be conducted in its implementation. The following are the stages involved in the use of the System Usability Scale (SUS) method:

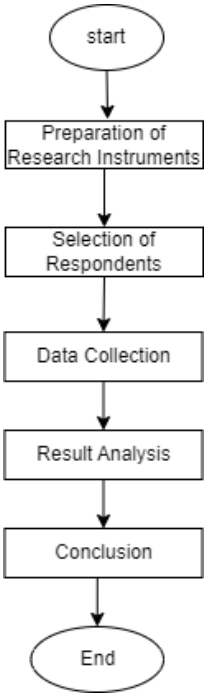

Figure 1 Stages of User Experience Research in the Canva Application

First, in preparing research instruments, researchers must develop instruments based on SUS. The instrument consists of 10 statements that must be assessed by respondents using a 5-point Likert scale. The purpose of this preparation is to ensure that the research instrument has been clearly structured and can provide relevant information regarding the usefulness of the system being evaluated.

The next stage is the selection of appropriate respondents. Respondents must be canva users. This is done so that the data obtained can represent the views of real users.

The next stage involved data collection as a step taken. Respondents were asked to fill out the SUS instrument that had been prepared. The instrument can be provided in the form of a Google form. Respondents will provide their assessment of each statement in the instrument using a 5-point Likert scale. The questionnaire used for testing is like the following example:

Table 1. Angket SUS

USER EXPERIENCE ANALYSIS OF THE CANVA APPLICATION USING THE SYSTEM USABILITY SCALE (SUS) METHOD							
No	Statement	Scale					
		1	2	3	4	5	
Q1.	I'm thinking about using the Canva app again						
Q2.	I find the Canva app cumbersome to use						
Q3.	I find the Canva app easy to use						
Q4.	I need help from another person or technician using the Canva app						
Q5.	I feel Canva's features work as they should						
Q6.	I feel there are a lot of things that are inconsistent (not compatible with the Canva app)						
Q7.	I have a feeling that others will quickly understand how to use Canva						

Q8.	I find the Canva app confusing
Q9.	I feel there are no obstacles in using the Canva application
Q10.	I need to study myself first before using the canva app

Table 2 Likert Scale variable

Likert Scale	Score
Strongly Disagree (SD)	1
Disagree (D)	2
Neutral (N)	3
Agree (A)	4
Strongly Agree (SA)	5

The next step involves evaluating the obtained results. The collected data will be analyzed by gathering scores from each statement in the SUS instrument for each respondent. These scores will then be processed to generate an overall SUS score. After collecting data from each respondent, the data analysis technique used in this study is to calculate the data using the System Usability Scale (SUS) formula. The following is the formula for calculating the SUS score:

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

Information:
$\bar{x}$ = average score
$\sum x$ = Sum of SUS scores
n = Number of respondents

Here are the rules for calculating scores in the questionnaire:

1. For odd-numbered questions (1, 3, 5, 7, and 9), the user's statement or response should be subtracted by 1. For example, if a respondent gives a response of 5 to question 1, the response would be subtracted by 1: 5-1.
2. For even-numbered questions (2, 4, 6, 8, and 10), the statement or response given by the user should be subtracted from 5. For example, if a respondent gives a response of 4 to question 2, the value 5 would be subtracted by the response: 5-4.
3. The SUS score is obtained by summing the scores from each question and then multiplying the result by 2.5.

The formula calculates the score:

$Score\ SUS$ = ((Q1–1) + (5-Q2) + (Q3-1) + (5-Q4) + (Q5-1) + (5-Q6) + (Q7-1) + (5 - Q8) + (Q9-1)+ (5-Q10)) * 2,5)

Table 3 Contoh Rekap Data

No	Respondents	Question items										Amount	Amount x 2,5
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10		
1	R1	5	1	4	1	5	2	4	3	5	2	32	85
2	R2	5	1	4	1	5	2	4	3	5	2	32	85
		dst											

Finally, the results of the evaluation will be defined. The resulting SUS score will be used to determine the usability level of the system, whether the system is good, good enough, or needs improvement. Researchers will interpret the data and provide an explanation of the findings and recommendations that can be useful for future system development.

There are three points of view of the System Usability Scale (SUS) in determining the results of assessment calculations: acceptability, grade scale, and adjective rating.

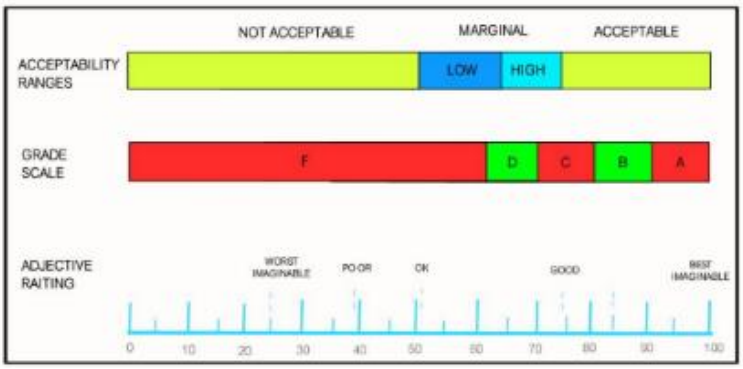

Figure 2 SUS Score

a. Acceptability consists of 3 levels, namely not acceptable, marginal (low and high), and acceptable. Acceptability is used to see the level of user acceptance of the application.

Table 3. Acceptability

Score SUS	Score Meaning
0-50,9	Not Acceptable
51-70,9	Marginal
71-100	Acceptable

b. The grade scale consists of A, B, C, D and F which are used to determine the level (grade) of the application.

Table 4. Grade Scale

Score SUS	Grade
>= 80,3	Grade A
>= 74 dan < 80,3	Grade B
>= 68 dan < 74	Grade C
>= 51 dan < 68	Grade D
<= 51	Grade F

c. Adjective rating is the level of worst imaginable, poor, ok, good and best imaginable. Adjective rating is used to determine the rating of the application

Table 5. Adjective Rating

Score SUS	Grade	Adjective Rattings
90-100	A	Excellent
80-90	B	Good
70-80	C	Okay
60-70	D	Poor
<60	F	Awful

4 RESULT AND DISCUSSION

After collecting data using the System Usability Scale (SUS) through questionnaires that have been distributed to respondents, the next step is to perform data processing. The following is the result of calculating the System Usability Scale (SUS) score for each participant:

Table 6. Respondent Results

Respondent	Jenis kelamin	Question									
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
R1	Perempuan	5	2	4	2	4	1	5	2	4	3
R2	Laki-laki	5	1	5	1	5	1	5	1	5	1
R3	Perempuan	4	2	4	2	4	2	4	3	3	4

Respondent	Jenis kelamin	Question									
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
R4	Perempuan	5	2	5	2	4	2	4	2	4	2
R5	Perempuan	5	2	4	2	4	2	4	2	3	3
R6	Laki-laki	4	2	4	3	4	2	3	2	4	3
R7	Perempuan	5	1	5	2	5	1	5	1	5	5
R8	Laki-laki	4	3	4	3	3	3	4	3	4	3
R9	Laki-laki	5	2	4	1	3	2	4	1	3	4
R10	Perempuan	5	2	5	4	5	2	5	2	4	5
R11	Laki-laki	5	2	4	3	4	2	3	2	4	4
R12	Perempuan	4	4	4	3	4	3	4	4	3	3
R13	Laki-laki	3	2	4	2	4	3	3	3	4	4
R14	Perempuan	5	2	4	2	4	3	3	2	4	3
R15	Laki-laki	5	2	4	2	5	2	4	2	4	2
R16	Laki-laki	5	2	4	1	5	2	5	1	5	3
R17	Laki-laki	5	2	4	4	5	4	5	4	4	4
R18	Laki-laki	5	5	3	4	5	2	1	3	4	5
R19	Perempuan	4	2	4	3	4	2	4	2	3	2
R20	Laki-laki	5	2	5	2	4	2	3	2	4	3
R21	Laki-laki	5	2	5	2	5	2	4	2	4	2
R22	Laki-laki	5	2	4	3	4	3	3	2	5	1
R23	Laki-laki	5	4	3	2	3	4	5	4	3	3
R24	Perempuan	5	3	3	4	4	2	2	3	3	4
R25	Perempuan	5	1	5	2	5	1	5	1	5	5
R26	Perempuan	5	1	5	1	5	2	5	1	5	4
R27	Perempuan	4	2	4	1	3	3	5	2	5	1
R28	Perempuan	5	3	3	2	4	2	3	2	4	3

Then the results of the respondents' answers above were calculated using the SUS method. Following are the SUS calculation steps:

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

$$\bar{x} = \frac{1692,5}{28} = 60,44 \rightarrow 60$$

Information:

$\bar{x}$ = average score

$\sum x$ = Sum of SUS scores

n = Number of respondents

The following is the result of calculating the score obtained:

Table 7. Result Calculating SUS

Question										SUM	Total Scoring (*2.5)
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10		
4	3	3	3	3	4	4	3	3	2	28	62,5
4	4	4	4	4	4	4	4	4	4	36	90
3	3	3	3	3	3	3	2	2	1	23	57,5
4	3	4	3	3	3	3	3	3	3	28	70
4	3	3	3	3	3	3	3	2	2	25	62,5
3	3	3	2	3	3	2	3	3	2	24	60

Question										SUM	Total Scoring (*2.5)
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10		
4	4	4	3	4	4	4	4	4	0	31	77,5
3	2	3	2	2	2	3	2	3	2	21	52,5
4	3	3	4	2	3	3	4	2	1	25	62,5
4	3	4	1	4	3	4	3	3	0	25	62,5
4	3	3	2	3	3	2	3	3	1	23	57,5
3	1	3	2	3	2	3	1	2	2	19	47,5
2	3	3	3	3	2	2	2	3	1	22	55
4	3	3	3	3	2	2	3	3	2	24	60
4	3	3	3	4	3	3	3	3	3	28	70
4	3	3	4	4	3	4	4	4	2	31	77,5
4	3	3	1	4	1	4	1	3	1	21	52,5
4	0	2	1	4	3	0	2	3	0	15	37,5
3	3	3	2	3	3	3	3	2	3	25	62,5
4	3	4	3	3	3	2	3	3	2	26	65
4	3	4	3	4	3	3	3	3	3	29	72,5
4	3	3	2	3	2	2	3	4	4	26	65
4	1	2	3	2	1	4	1	2	2	18	45
4	2	2	1	3	3	1	2	2	1	17	42,5
4	4	4	3	4	4	4	4	4	0	31	77,5
4	4	4	4	4	3	4	4	4	1	32	80
3	3	3	4	2	2	4	3	4	4	29	72,5
4	2	2	3	3	3	2	3	3	2	23	57,5
				SUM						705	**1692,5**
				AVERAGE							**60,44**

The final SUS score from the responses of 28 participants is 60. According to the SUS interpretation guidelines, this score falls into the Marginal range for the Acceptability Ranges version, indicating a grade of F in terms of user acceptance. Furthermore, for the Adjectives Rating version, the score falls into the OK category, and it is above average. The score of 60 is analyzed using the following three assessment methods:

a. In the interpretation using acceptability ranges:
   1. Referring to Figure 2, the SUS score of 60 falls into the Marginal range.
   2. Referring to Figure 2, the SUS score of 60 falls into the Low range.
b. In the interpretation using the grade scale as shown in Figure 2, the SUS score of 60 receives a grade of D.
c. In the interpretation using adjective ratings as shown in Figure 2, the SUS score of 60 is rated as Poor.

5 CONCLUSION

The User Experience research results using the SUS method for the Canva application indicate a final score of 60. In interpretation, this score falls into the Marginal category according to the Acceptability Ranges, grade D according to the Grade Scale, and the Poor category according to the Adjectives Rating. The conclusion is that the user acceptance level of the Canva application still requires significant improvement, with low acceptance and room for enhancing the user experience.

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