

USABILITY EVALUATION ON WONDERFULPNG WEBSITE USING LIKERT SCALE METHOD

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ABSTRAK

Pemanfaatan teknologi informasi dan komunikasi dalam industri pariwisata saat ini merupakan suatu kebutuhan yang tidak bisa dihindari. Penelitian ini dilakukan untuk mengevaluasi kegunaan website “WonderfulPNG” yang bertujuan untuk meningkatkan aksesibilitas informasi bagi calon wisatawan di Ponorogo. Penelitian ini menggunakan metode deskriptif kuantitatif dengan pendekatan Skala Likert untuk mengukur opini pengguna terhadap enam variabel utama yaitu Learnability, Efficiency, Memorability, Errors, Satisfaction, dan Accessibility. Data dikumpulkan melalui kuesioner dari 100 responden yang dipilih secara acak. Hasilnya menunjukkan bahwa website “WonderfulPNG” memiliki tingkat penggunaan yang tinggi dengan skor rata-rata sebesar 83%. Empat kriteria yaitu Learnability, Efficiency, Satisfaction, dan Accessibility menunjukkan hasil yang sangat memuaskan, sedangkan kriteria Memorability juga menunjukkan hasil yang baik. Namun, kriteria Kesalahan berada di bawah rata-rata. Penelitian ini menyimpulkan bahwa website “WonderfulPNG” cukup user-friendly dan memenuhi ekspektasi pengguna dalam hal kemudahan penggunaan dan kenyamanan.

Kata Kunci: Kegunaan, WonderfulPNG, Pariwisata, Skala Likert, Pengalaman Pengguna, Teknologi Informasi dan Komunikasi.

ABSTRACT

The utilization of information and communication technology in the tourism industry is currently an inevitable need. This study was conducted to evaluate the usability of the "WonderfulPNG" website which aims to improve information accessibility for potential tourists in Ponorogo. This study uses a quantitative descriptive method with a Likert Scale

approach to measure user opinions on six main variables namely Learnability, Efficiency, Memorability, Errors, Satisfaction, and Accessibility. Data was collected through questionnaires from 100 randomly selected respondents. The results show that the "WonderfulPNG" website has a high level of usage with an average score of 83%. Four criteria, namely Learnability, Efficiency, Satisfaction, and Accessibility, showed very satisfactory results, while the Memorability criteria also showed good results. However, the Errors criterion was below average. This study concludes that the "WonderfulPNG" website is quite user-friendly and meets users' expectations in terms of ease of use and convenience.

Keywords: *Usability, WonderfulPNG, Tourism, Likert Scale, User Experience, Information and Communication Technology.*

1. INTRODUCTION

The utilization of information and communication technology in the tourism industry is now an inevitable need. An example is the development of the "WonderfulPNG" website. This site allows users to obtain information about existing tourist destinations in Ponorogo city. The aim is to increase the accessibility of information for potential tourists and enable them to better plan their trips. So there is a clear need to develop this website to be even better in the future.

As a product that needs to be continuously developed, websites need to be evaluated. The evaluation itself aims to determine the user's experience of the web. The evaluation of the "WonderfulPNG" website was carried out to determine the Learnability, Efficiency, Memorability, Errors, Satisfaction, and Accessibility of the website. The purpose of this research is to find out whether users feel the benefits of the "WonderfulPNG" web.

2. BASIC THEORY

Tourism Website

A website is a collection of interrelated web pages that can be accessed via the internet using a specific URL. Websites can contain various types of content, such as text, images, video, and audio. Activities or activities will be easier to do with the development of this technology, and also activities have changed from manual to systematized activities. This web technology also provides solutions to the community to be more practical in any case, especially in the data exchange process. (Sihombing & Arnomo, 2023).

Tourism is a travel or vacation activity undertaken by individuals or groups. Tourism involves visits to various destinations that offer distinctive experiences, such as natural beauty, historical sites, local culture, and entertainment activities. The development of tourism in an

area will bring many benefits to the community, namely economically, socially and culturally. (Noviandari et al., 2021).

Usability

Usability itself comes from the word usable, which generally means that it can be used well. In the interaction between humans and computers, Usability or also called "usability" is related to the ease and readability of information as well as a user-friendly navigation experience. (Handiwidjojo & Ernawati, 2016).

Usability is often divided into several key attributes, each of which focuses on a different aspect of the user experience. The key attributes of usability are Learnability, Efficiency, Memorability, Errors, Satisfaction, and Accessibility. These attributes help developers to evaluate and improve the usability of their products, thus providing a better user experience.

Usability Test

Usability testing functions in improving products or systems in accordance with the techniques carried out. Usability testing is an assessment system for the ease of users using the system. (Erwin et al., 2019). Meanwhile, website usability is an indicator of the success of a website in interacting with users.

3. RESEARCH METHOD

This research uses the "WonderfulPNG" website (wonderfulpng.undanganpng.com). This research aims to reveal new things related to the "WonderfulPNG" website. This research is a type of quantitative descriptive approach research, which aims to describe or describe the characteristics of a population or certain phenomena systematically and objectively. The research method used is the Likert scale method. Is a measurement method used to measure a person's opinion using a questionnaire to determine the attitude scale towards a particular object. (Sumartini et al., 2020).

Data collection is done by asking questions or by questionnaire to respondents. The statement uses a four-point Likert scale, namely:

1. Very Satisfactory (VS)
2. Quite Satisfactory (QS)
3. Less Satisfactory (LS)
4. Very Unsatisfactory (VU)

The data collection tool is compiled using the variables used in this website research, namely the variables of Learnability, Efficiency, Memorability, Errors, Satisfaction, and Accessibility.

Usability tests using questionnaires are used in finding data from respondents. The explanation of the description of the Likert scale indicators, namely VS symbolizes "Very Satisfactory" with a value of 4, QM symbolizes "Quite Satisfactory" with a value of 3, LS symbolizes "Less Satisfactory" with a value of 2, and VU symbolizes "Very Unsatisfactory" with a value of 1.

Table 1. Questionnaire Questions

No.	Criteria	Likert Scale			
		VS	QM	LS	VU
Learnability					
1	How is the text writing used on the "WonderfulPNG" Web page				
2	How easy is the menu to understand				
Efficiency					
3	How is the speed of the menu when clicked on the "WonderfulPNG" Web				
4	How is the website speed when opened for the first time				
Memorability					
5	How easy it is for you to remember the name of the website				
6	How easy it is for you to remember the location of the "WonderfulPNG" website menu				
Errors					
7	How is information provided if the website crashes				
8	How does the menu when clicked on link error occur				
9	How do links if clicked against link error occurrence				
Satisfaction					
10	How is the completeness of the menu on this website compared to similar websites you have visited				

11	How did you get the information during your visit on "WonderfulPNG" Web				
Accessibility					
12	How is the clarity of text on images on the "WonderfulPNG" website				
13	How is the color contrast between text and background on the "WonderfulPNG" website?				

Table 2. Interval Class

Category	Interval Class
Very Satisfactory (VS)	325-400
Quite Satisfactory (QS)	250-325
Less Satisfactory (LS)	175-250
Very Unsatisfactory (VU)	100-175

With the following calculation:

Data Area = Highest Value - Lowest Value

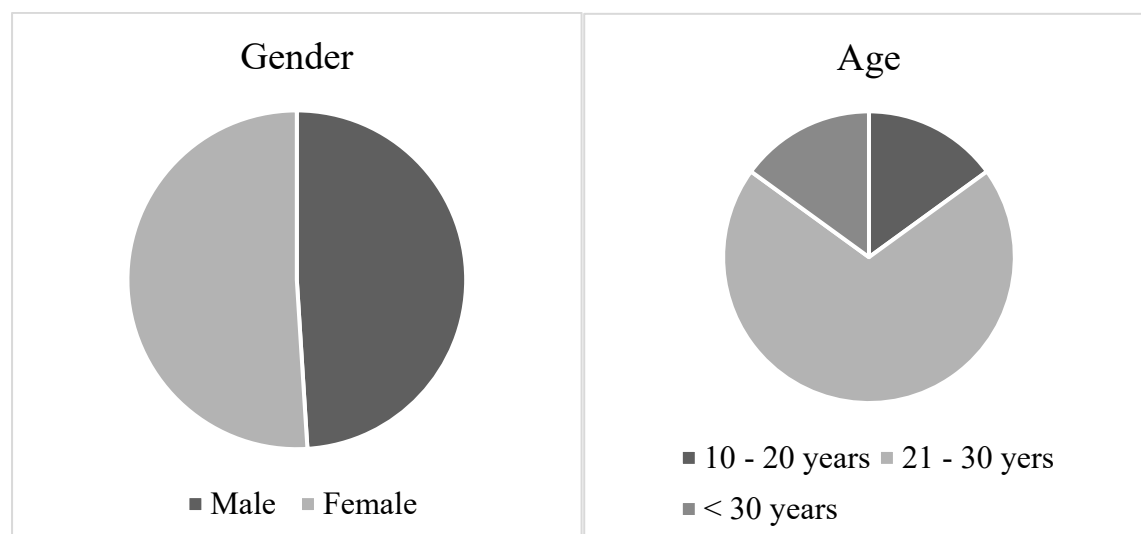
Highest score = Total Respondents x Largest Weight = $100 \times 4 = 400$

Lowest Value = Total Respondents x Smallest Weight = $100 \times 1 = 100$

Interval = Data Area / Number of Classes = $(400-100)/4 = 300 / 4 = 75$

4 RESULTS AND DISCUSSION

Data collection was carried out using a questionnaire with a total of 100 respondents. After being distributed 100 questionnaires were successfully collected back along with the answers. The profile and characteristics of the respondents can be seen in the following chart:



Based on the table of profiles and characteristics of respondents, the respondents with male gender are 49 people and 51 women, with an age range between 13 and 55 years, with the dominant age being between 20-30 years as many as 70 people.

After taking data using a questionnaire, the calculations for each data can be seen in the summary table below:

Table 3. Assessment Criteria

Category	Value
Very Satisfactory (VS)	4
Quite Satisfactory (QS)	3
Less Satisfactory (LS)	2
Very Unsatisfactory (VU)	1

Based on the respondent's assessment criteria table, the explanation of the Likert scale indicators, namely VS symbolizes "Very Satisfactory" with a value of 4, QS symbolizes "Quite Satisfactory" with a value of 3, LS symbolizes "Less Satisfactory" with a value of 2, and VU symbolizes "Very Unsatisfactory (VU)" with a value of 1.

The data for the question values of each usability attribute are summarized in the following table:

A. Learnbility**Table 4. How is the text writing used on the "WonderfulPNG" Web page**

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	39	39%	156
2	Quite Satisfactory (QS)	59	59%	177
3	Less Satisfactory (LS)	2	2%	4
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	337

The text writing used on the "WonderfulPNG" Web page has a total score of 337 which means Very Satisfactory (VS), with a Percentage Score of $337: 400 \times 100 = 84\%$ The text writing used on the "WonderfulPNG" Web page is very satisfactory..

Table 5. How easy is the menu to understand

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	39	39%	156
2	Quite Satisfactory (QS)	57	57%	171
3	Less Satisfactory (LS)	4	4%	8
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	335

The existing menu in ease of understanding has a total score of 335 which means Very Satisfactory (VS), with a Percentage Score of $335: 400 \times 100 = 83.75\%$ of the menu is easy to understand.

B. Efficiency**Table 6. How is the speed of the menu when clicked on the "WonderfulPNG" Web**

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	43	43%	172
2	Quite Satisfactory (QS)	53	53%	159
3	Less Satisfactory (LS)	4	4%	8
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	339

The speed of the menu when clicked on the "WonderfulPNG" Web has a total score of 339 which means Very Satisfactory (VS), with a Percentage Score of $339: 400 \times 100 = 84\%$ the menu has good speed when clicked.

Table 7. How is the website speed when opened for the first time

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	49	49%	196
2	Quite Satisfactory (QS)	48	48%	144
3	Less Satisfactory (LS)	3	3%	6
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	343

The speed of the website when opened for the first time has a total value of 343 which means Very Satisfactory (VS), with a Percentage Value of 343: 400 x 100 = 85.75% when the website is opened for the first time it has good speed.

C. Memorability

Table 8. How easy it is for you to remember the name of the website

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	48	48%	192
2	Quite Satisfactory (QS)	49	49%	147
3	Less Satisfactory (LS)	3	3%	6
4	Very Unsatisfactory (VU))	0	0%	0
Total		100	100%	345

Your ease of remembering the website name has a total score of 345 which means Very Satisfactory (VS), with a Percentage Score of 345: 400 x 100 = 86% of users easily remember the name of the website "WonderfulPNG".

Table 09. How easy it is for you to remember the location of the "WonderfulPNG" website menu

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	45	45%	180
2	Quite Satisfactory (QS)	50	50%	150
3	Less Satisfactory (LS)	5	5%	10
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	340

How easy is it for you to remember the location of the "WonderfulPNG" website menu has a total score of 340 which means Very Satisfactory (VS), with a Percentage Score of 340: 400 x 100 = 85% ease of remembering the location of the "WonderfulPNG" website menu.

D. Errors**Table 10. How is information provided if the website crashes**

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	28	28%	112
2	Quite Satisfactory (QS)	57	57%	171
3	Less Satisfactory (LS)	15	15%	30
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	313

How is the information provided if the website errors has a total value of 313 which means Quite Satisfactory (QS), with a Percentage Value of $313: 400 \times 100 = 78.25\%$ of the information provided if the website errors is quite satisfactory.

Table 11. How does the menu when clicked on link error occur

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	26	26%	104
2	Quite Satisfactory (QS)	63	63%	189
3	Less Satisfactory (LS)	11	11%	22
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	315

How does the menu if clicked on the occurrence of a link error have a total value of 315 which means Quite Satisfactory (QS), with a Percentage Value of $315: 400 \times 100 = 78.75\%$ of the menu if clicked on the occurrence of a link error is quite satisfactory.

Table 12. How do links if clicked against link error occurrence

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	27	27%	108
2	Quite Satisfactory (QS)	59	59%	177
3	Less Satisfactory (LS)	13	13%	26
4	Very Unsatisfactory (VU)	1	1%	1
Total		100	100%	312

How the link if clicked against the occurrence of link errors has a total value of 312 which means Quite Satisfactory (QS), with a Percentage Value of 312: $400 \times 100 = 78\%$ links if clicked against the occurrence of link errors are quite satisfactory.

E. Satisfaction

Table 13. How is the completeness of the menu on this website compared to similar websites you have visited

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	31	31%	124
2	Quite Satisfactory (QS)	60	60%	180
3	Less Satisfactory (LS)	9	9%	18
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	322

How the completeness of the menu on this website compared to similar websites that you have visited has a total value of 322 which means Quite Satisfactory (QS), with a Percentage Value of 322: $400 \times 100 = 80.5\%$ the completeness of the menu on the website compared to similar websites that have been visited is quite satisfactory.

Table 14. How did you get the information during your visit on "WonderfulPNG" Website

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	44	44%	176
2	Quite Satisfactory (QS)	47	47%	141
3	Less Satisfactory (LS)	9	9%	18
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	335

How is the information you get while visiting the "WonderfulPNG" Web has a total score of 335 which means Very Satisfactory (VS), with a Percentage Score of 335: $400 \times 100 = 83.75\%$ of the information obtained during a visit to the "WonderfulPNG" Web is very satisfying.

F. Accessibility

Table 15. How is the clarity of text on images on the "WonderfulPNG" website

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	44	44%	176
2	Quite Satisfactory (QS)	55	55%	165
3	Less Satisfactory (LS)	1	1%	2
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	343

How the clarity of the text on the images on the "WonderfulPNG" website has a total score of 343 which means Very Satisfactory (VS), with a Percentage Score of 343: $400 \times 100 = 85.75\%$ the clarity of the text on the images on the "WonderfulPNG" website is very satisfying.

Table 16. How is the color contrast between text and background on the "WonderfulPNG" website

No.	Answer Options	Frequency	Percentage	Value
1	Very Satisfactory (VS)	45	45%	180
2	Quite Satisfactory (QS)	52	52%	156
3	Less Satisfactory (LS)	3	3%	6
4	Very Unsatisfactory (VU)	0	0%	0
Total		100	100%	342

How the color contrast between text and background on the "WonderfulPNG" website has a total score of 342 which means Very Satisfactory (VS), with a Percentage Score of 342: $400 \times 100 = 85.5\%$ the color contrast between text and background on the "WonderfulPNG" website is very satisfying.

5 CONCLUSION

Based on the results of the research, the following conclusions can be drawn:

1. The "WonderfulPNG" website has a good level of usability with an average score of about 83%. This shows that the "WonderfulPNG" website is quite user-friendly and meets user expectations in terms of ease of use and convenience.

2. Of the six criteria, four criteria namely Learnability, Efficiency, Satisfaction, and Accessibility indicate that the website is easy to learn, efficient in its operation, provides high satisfaction, and has good accessibility.
3. Memorability criteria showed good results with a score of 86% for remembering the site name and 85% for remembering the menu location. However, the Errors criterion is below average with a score of 78.25% for information when the site crashes, 78.75% for menu crashes, and 78% for link crashes.

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