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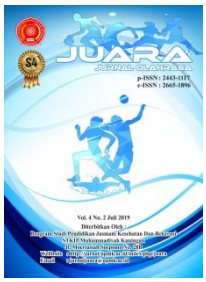

MEASURING THE LEVEL OF USER SATISFACTION WITH THE SITENOR WEB-BASED APPLICATION USING THE USABILITY SCALE SYSTEM

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Abstract

The use of applications in government agencies has become an accelerated need to help carry out various tasks. SITENOR.id is an application created by Assistant Deputy Tenor IV of the Ministry of Youth and Sports of the Republic of Indonesia as a data storage for sports personnel and organizations. It consists of data from coaches, referees, judges, and supporting personnel. This application is useful for knowing the number of sports personnel and the licenses held by these sports personnel, with the aim of determining eligibility for training participants, assistance, and so on. To provide reliable data, a database is needed as a container for storing recorded data. SITENOR.id is an application that is capable of recording data quickly (velocity) on a large scale (volume) and various types of data (variety). However, to ensure that the service continues to function well, it is necessary to know the user's perspective on an IT service such as the sitenor.id website. To find out the extent to which users use usability techniques by using the system usability scale approach as a measuring tool. After analyzing the problem, the researcher drew the conclusion that the problem was related to system usability regarding the ease of users operating the system. Therefore, summative testing was carried out on the system using the system usability scale method by filling out questionnaires and conducting interviews. The analysis results show that the SUS SITENOR satisfaction survey score of 78 is included in the good category. This means that the SITENOR application is acceptable and good for use within the Ministry of Youth and Sports.

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INTRODUCTION

Usability plays an important role in the continuity of a website; more internet users will visit a website if the site is user-friendly [1]. Usability is an aspect that measures how easy it is for users to learn and use a product to achieve their goals, as well as user satisfaction with the product. It can also show whether users like the appearance of your site [2]. Currently, various organizations are using websites to support the smooth running of their activities. Organizations that use websites are not only in industry but also in the education sector [3].

In the current era of globalization, technology has become a primary need and is developing rapidly [4]. Technology plays an important role in all fields. With the continued development of technology, a system is needed that can help carry out various tasks more easily and quickly [5]. Information and communication technology has great potential to solve the problems of developing and developed countries by providing fast, cost-effective access to quality health services [6]. One of the developments in information and communication technology in the health industry is telemedicine. Telemedicine represents the biggest change and challenge that will have a major impact on healthcare delivery in the 21st century. Telemedicine is multidisciplinary in nature and requires expertise across disciplines, namely telecommunications, health services, and information technology [7].

The use of technology in the sports sector, such as reporting and documentation systems, recording systems, billing, and direct health services such as patient monitoring and medication management, is becoming easier, faster, and more accurate thanks to existing technological developments [8]. According to [9], the technology that can be applied is "deep learning" (AI) applied to creators, brands, and agencies in the creative industries. In recent years, AI has emerged as a hot industry. ChatGPT and copywriting applications like Jasper.ai, Cohesive.so, and beta.upthinx.com have given the creative industries a new opportunity to improve the efficiency and effectiveness of their work processes.

In government agencies, personnel, and sports organizations, the Ministry of Youth and Sports of the Republic of Indonesia utilizes information technology, one of which is a data storage application called Sitenor. Sitenor is a data storage application for sports personnel and organizations that consists of data on coaches, referees, and supporting personnel. This application was built by the IT support team of the Ministry of Youth and Sports of the Republic of Indonesia in the 2022–2023 period. The Sitenor application can be accessed via https://sitenor.id/.

In this application, an evaluation is needed, especially in terms of comfort and satisfaction for application users. Because one of the goals of using information technology is the comfort and convenience of users in operating the application, assessment is a planned activity to analyze an ongoing problem using indicators or tools based on the methodology used, and the results of the assessment will be compared with benchmarks to arrive at a conclusion that can provide a solution to the problem [10].

Evaluating a system can be done in different ways and at different levels, depending on the method used. In this case, the author intends to make an evaluation by measuring the level of satisfaction of users of Sitenor web-based applications using the usability scale system.

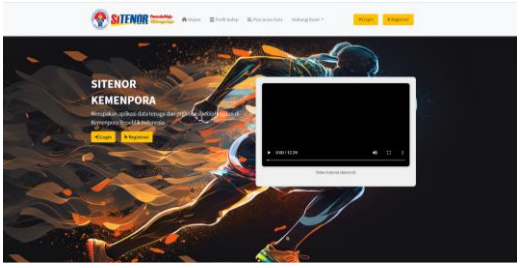
Based on the results of previous research, the System Usability Scale (SUS) is a usability testing tool that is valid and reliable after testing [11]. Therefore, researchers used SUS to test the usability of the website, which stores databases of coaches, referees, and supporting staff, namely sitenor.id. Previous research was conducted by Ade Muhammad Nur Fauzi et al. (2022) [12] in their research entitled "Measuring the Level of User Satisfaction of Archives Applications Using the System Usability Scale and Pieces Framework." This type of research is descriptive, using a qualitative approach. The similarities between previous research and this research are that the type and method of research approach used both use qualitative descriptive methods. Meanwhile, the differences between previous research and this research are that the subject in the previous research was an archiving application, whereas in this research the object is a data storage application for coaches, referees, judges, and

support staff. The location in the previous research was at the National University of Jakarta, whereas in this research the location was the Ministry of Youth and Sports of the Republic of Indonesia, Deputy for Sports Achievement Improvement, Assistant Deputy for Sports Personnel and Organizations.

METHODS

The subject studied is the website of the Assistant Deputy for Sports Personnel and Organizations, Ministry of Youth and Sports of the Republic of Indonesia, which has the domain address https://sitenor.id/landing, shown in Figure 1. In this study, the test method was SUS, which stands for System Usability Scale. A validity test was carried out to state whether the questionnaire used was valid, and a reliability test was carried out to determine whether the measurement results were reliable or consistent.

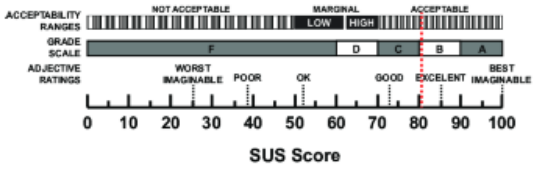
Figure 1. Sitenor database website (https://sitenor.id/landing)



Measuring the usability of a computer system (website or application).
Using the SUS method based on the user's subjective view has several advantages, as follows:
The SUS test results are in the form of a scale, namely a score of 0-100, so that they can be used easily [13].
SUS calculation, or calculation process, is easy to understand or not complicated [14].

SUS can be used at no additional cost or is available free of charge [15].
SUS is usually used with small sample sizes but has been proven to be valid, consistent, or reliable [16].
In the analysis procedure used by the System Usability Scale method, there are three assessment points of view, namely the ability to accept, evaluate, and evaluate adjectives. Acceptability has three levels: unacceptable, marginal (low and high), and acceptable. Then there are ratings, which have five levels, namely A, B, C, D, and F, and adjective ratings have more levels, starting from worst imaginable, bad, okay, good, very good, and best imaginable (Figure 1).

Figure 1. System Usability Scale (SUS) Method Assessment Score (Kesuma, 2021)



FINDINGS AND DISCUSSION

Findings

The following are the results of the analysis of answers to the System Usability Scale (SUS) questionnaire, table 1 show . Analysis of SITENOR System Usability Scale (SUS) Answers.

Table 1 Analysis of SITENOR Usability Scale (SUS) Answer

No	Respondent	Score										Amount	Mark
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10		(Amount x 2.5)
1	Respondent 1	5	1	5	1	5	2	5	1	4	1	30	75
2	Respondent 2	5	3	5	3	5	3	5	3	3	3	38	95
3	Respondent 3	4	2	4	2	3	2	3	2	4	2	28	70
4	Respondent 4	5	3	5	3	5	2	5	3	5	3	39	97.5
5	Respondent 5	4	2	4	2	4	2	4	2	4	2	30	75
6	Respondent 6	4	2	4	2	5	1	5	2	5	2	32	80
7	Respondent 7	4	2	4	2	4	2	4	2	3	2	29	72.5
8	Respondent 8	5	2	5	2	5	3	5	2	3	2	34	85

9	Respondent 9	4	2	4	2	5	3	5	2	4	2	33	82.5
10	Respondent 10	3	3	3	3	3	2	3	3	3	3	29	72.5
11	Respondent 11	4	2	4	2	4	3	4	2	4	2	31	77.5
12	Respondent 12	4	2	4	2	4	3	4	2	4	2	31	77.5
13	Respondent 13	5	1	5	1	5	1	5	1	4	1	29	72.5
14	Respondent 14	4	2	4	2	5	2	5	2	4	2	32	80
15	Respondent 15	4	2	4	2	4	2	4	2	4	2	30	75
16	Respondent 16	5	1	5	1	4	1	4	1	4	1	27	67.5
17	Respondent 17	4	2	4	2	5	2	5	2	4	2	32	80
18	Respondent 18	5	2	5	2	5	1	5	2	4	2	33	82.5
19	Respondent 19	3	3	3	3	4	2	4	3	4	3	32	80
20	Respondent 20	5	2	5	2	4	2	4	2	4	2	32	80
Average Score (Final Result)													78

The analysis results show that the SUS score is 78 and is in the good category

Discussion

A satisfaction survey conducted regarding the SITENOR application for employees of the Ministry of Youth and Sports in the field of Sports Personnel showed good results. This means that employees responded well and were greatly helped by the use of the SITENOR application that was developed.

Usability is an analysis technique that carries out a qualitative assessment to find out how easy it is for users to use an application. The usability aspect is an aspect used to document the success of an application and is an indication of user acceptance of the application. Usability testing can be done on all platforms (cross-platform). In carrying out the usability test, several measurement techniques are used, including the System Usability Scale (SUS. Each method used certainly has different indicators or tools [17].

A system usability scale is a method used to assess or rank an application by measuring its level of usability. This method uses a simple questionnaire with ten questions to evaluate the application. The questions follow the SUS method, where odd numbers have affirmative sentences and even numbers have negative sentences. And to evaluate the results of the questionnaire, just use the specified Linkert scale [18]

Apart from the SUS method, this research also uses the PIECES Framework method to measure the level of satisfaction of Sitenor application users. The PIECES Framework is a method that can make evaluation easier. Just like the SUS method, the PIECES method also uses a questionnaire that is distributed to respondents to assess the application based on indicators that existed in the previous PIECES method. The indicators used in this method are performance, information, economy, control, efficiency, and service. Besides that The ISO 22301:2019 standard establishes a Business Continuity Management System (BCMS) as a systematic and comprehensive approach. The aim of implementing this standard is to increase the company's readiness to face the risks of resilience and business continuity in the future [19].

CONCLUSION

Based on the research carried out by the author above, the author can draw the conclusion that, by using the Sitenor application, KEMENPORA administrators at National University can manage files more easily and quickly. Moreover, the data files stored are soft copies, so the data will be easy to find and manage. In the results of the analysis after

obtaining questionnaire data using the System Usability Scale method, it received a rating of 78, being in the Good category and grade B. With this value, the Sitenor application is considered very good, and users are satisfied with the presence of the application. Apart from that, the results of system testing carried out via PageSpeed Insights obtained an average score of 78 Sitenor application performance values.

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