EVALUATION OF REPOSITORY USABILITY TEST USING NIELSEN ATTRIBUTES OF USABILITY MODEL

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ABSTRAK

An e-Repository is an important tool for publishing research findings on a larger scale. A quality e-Repository can increase the accessibility of information and enhance the reputation of the institution. Usability of e-Repository is an important factor that needs to be considered to ensure its effectiveness. This research aims to analyze the usability of e-Repository using Nielsen's Attributes of Usability (NAU) method. This research involved 55 respondents who are e-Repository users. The results showed that the e-Repository NAU score was classified as "Good". However, there are several aspects that need to be improved, such as aspects of efficiency and learnability. The results of the heuristic evaluation show that the e-Repository has several problems, such as the lack of consistency and visibility of elements between pages, and the lack of availability of relevant information. The findings provide recommendations to improve the usability of the e-Repository, such as improving design consistency between pages, increasing the visibility of elements, and adding relevant information.

Keywords: e-Repository, Usability Evaluation, Nielsen Attributtes of Usability Questionnaire, Website

1 INTRODUCTION

A repository is a useful tool for publicizing research findings on a larger scale [1]. Repositories are open-source software that can be used to store archives and also to display graphics, research reports, and text in digital format. This repository is already used by several international research organizations and bodies [2]. The system is still under development and must be improved for its functionality to be understood.

Considering that a lot of applications and systems are currently being developed among programmers and institutional needs that require applications in the form of websites or desktops [3], so this system uses the website as a means to improve the ability of the institution to be better known among the public. Currently, anyone who needs information related to academic collections can access it. The quality of a website can significantly affect the level of user engagement. The higher the quality of a website, the higher the number of users who visit it. The inability of users to use information technology systems significantly affects the quality of the system and the information it produces [4] A website should be attractive to access and display. Users' perception of convenience makes them more likely to use the website easily, motivates them to learn how to use it, and increases their productivity [3]. To create a user-friendly website, an evaluation of the Indonesian Central Bureau of Statistics website is needed, especially in various aspects of user interface performance, such as ease of use (usability) [5] Therefore, it is necessary to assess how the e-Repository works in providing the information needed by users. To understand the user experience when using the e-Repository site, Usability is the level at which a product can be utilized by specific users to achieve predetermined goals with effectiveness, efficiency, and satisfaction in a specific context of use [6][7]. usability techniques can be used as a guide [4]These techniques make it possible to evaluate web applications based on functional suitability,

compatibility, usability, and performance efficiency characteristics. Usability assessment can be done using system usability scales and heuristic evaluation techniques. Heuristic evaluation techniques are usability improvement methods to assist in decision-making, while system usability scales help end users [8]. Usability can be applied in reducing the use of software that is purely software.

As a tool to compare the quality and breadth of user-generated content in an application [9]Measurable user contributions to improve the quality of the application [4]. According to Sari and Samsuddin, system evaluation must be carried out thoroughly so that it can be used as a tool for system improvement and provide input or feedback to companies or institutions. [10].

Usability analysis using the Nielsen model has been applied to evaluate the use of the MyTelkomsel application. The results show that aspects of memorability and satisfaction have a significant influence on application users [11]. Usability testing using heuristic evaluation applied to the Brawijaya University website involves data collection, website maintenance, heuristic analysis, and user preference testing [12].

In this research, the e-Repository website will be evaluated using the Nielsen Attribute Usability (NAU) method to understand user feedback and experience when accessing the information they need on the site. It is expected that the results of the study will serve as a benchmark in an effort to improve the efficiency of the website by providing information about the profile of the institution and its collection, so that the institution can be better known and accessibility to its collection can be improved.

2 LITERATURE REVIEW

ISO 9241-11 explains that usability is how far a product can be utilized for the user in question to meet predetermined goals with efficiency, effectiveness, and meet user expectations in a particular context [13]. According to Joseph Dumas and Janice Redish [14], usability refers to how easily users can analyze and utilize the product to achieve goals and the level of user satisfaction with the product. Meanwhile, Bevan et al define usability as the acceptance of a system or product and ease of use for certain users to perform certain activities in a particular environment. Acceptance determines whether the product can be used or not, while ease of use affects user performance and satisfaction [15].

Thus, usability can be defined as the extent to which a product can be easily used by its users to achieve specific goals in an efficient and effective manner, and users can feel a sense of progress during the process. usability is currently the most important factor influencing consumers' decision to buy or use a product, including functionality, ease of use, cost, and ease of maintenance. This table lists usability parameters for various standards and models: [16]

Constantine and Lock wood (1999)	ISO 9241-11 (1998)	Scheineider man (1992)	Nielsen (1994)	Preece dkk (1994)	Shackel (1991)
Efisiensi penggunaan	Efisiensi	Kecepatan kinerja	Efisiensi penggunaa n	Throug hput	Efekti vitas (kecep atan)
Kemampuan belajar	Efektivitas	Waktu untuk belajar	Kemampua n belajar	Kemam puan belajar	Kema mpuan belajar
Daya ingat		Ingatan jangka panjang	Daya ingat		
Keandalan		Tingkat kesalahan	kesalahan/		Efekti
penggunaan		oleh pengguna	keamanan		vitas
Kenyamanan pengguna	Kenyamanan penggunaan	Kenyamanan subjektif	Kenyamana n	Sikap	Sikap

Image 1 Usability Dimensions in Various Standards and Models

According to ISO 9241-11, the three aspects of usability are as follows: effectiveness, efficiency, and ease of use. Effectiveness identifies the level of accuracy and earnestness a user experiences when carrying out a particular task. Efficiency identifies the day-to-day parameters

used in relation to the passion and purity of the user's intentions when carrying out the task. Satisfaction governs the user's perception of the product as positive and feeling free from discomfort [10].

According to Jacob Nielsen, usability has five main components based on the Nielsen Attributes of Usability (NAU) Questionnaire Method. First, learnability refers to how easily users can identify basic tasks when they are faced with a design for the first time. Next, Efficiency refers to the speed at which users can perform tasks after learning a design. Third, Memorability (Easy to Remember) After some time, the design will be easy to remember Fourth, Errors (Mistakes) There are tons of mistakes made by users, some of which are very severe, and there are some mistakes that are easily corrected by users. Finally, Satisfaction: some designs are fun to use. [17]

According to Jacob Nielsen, usability is a quality attribute that clarifies or reduces some of the difficulties associated with using a particular interface. "Usability" refers to the techniques used to improve user comfort during the design process. Usability can also be defined as the extent to which a system is easy to understand, easy to perform and supports users to use it as a tool that will assist them in performing their tasks.

According to Bauer [18]the purpose of usability testing is to assess efficiency, ease of learning, and the capacity to understand how to interact without encountering difficulties. Usability testing can be done with the following steps: First, selecting the type of questionnaire package to use, where each user package has a current set of assumptions, as well as a unique approach and framework. Second, identifying a representative sample and grouping the sample by categories such as race, gender, and so on. Third, determining a representative sample size to use as input for the data collection task. Finally, analyze and interpret the data according to the characteristics of the research findings.

NAU is a type of method to conduct a qualitative study of the usability of an e-Repository in the form of a questionnaire. This study uses Nielsen's Model standard by presenting several question points on 5 usability categories. To find and get feedback as a means to improve the e-Repository, usability categories were analyzed and response times were requested. The following are the categories with the best performance on the NAU questionnaire.

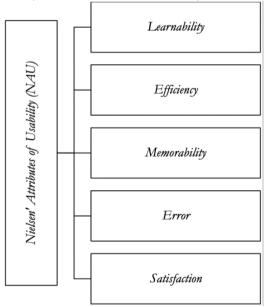


Image 2 NAU model [1]

NAU classifies usability into five categories: 1) Learnability, which describes the ease with which users can use the application and the functions available in the application; 2) Efficiency, which describes the speed and understanding of users when using the application; 3) Memorability, which describes the level of understanding of users when using the application; 4) Error, which is used to determine whether a particular application has features that are broken or

do not work; and 5) Satisfaction, which describes the level of user satisfaction with the design provided by the application.

18 questions in the NAU questionnaire. Each question will be answered with 5 points, ranging from Strongly Disagree to Strongly Agree. [20]. The results will be analyzed using the software. According to Hasan, [19] one aspect of descriptive statistics, also known as descriptive or deductive statistics, is to study how to collect and analyze data so that it is easier to understand.

The categories provided by Nielsen's Attributes of Usability (NAU) Model are very suitable for use in obtaining quantitative results and in applying qualitative data description techniques in the form of Nielsen's Attributes of Usability (NAU) questionnaires. [2].

Nielsen defines usability as a quality indicator that evaluates and reduces the number of easyto-use tabs (interfaces) used by users. Apparently, there are only a few main usability categories. First, learnability describes how easily users understand how to use the website and its functions. including how easy it is to identify the navigation mechanism of each available menu. Next, efficiency relates to the speed and accuracy of users when interacting with the system. According to Dahal [19] efficiency indicator is an indicator that measures the average time taken by users to search for and start distorted features in seconds. Techniques to improve efficiency include limiting the number of steps, scheduling work, and providing shortcuts to complete tasks. Thus, a system can be classified as efficient if the time it takes users to complete a task is relatively short. Subraya [17] explains the relationship between web page response time and user speed shown in the following table. Third, memorability is related to the user's level of understanding when launching the system, i.e. the user's awareness of the system's features and functionality. A well-designed website has features that are easy to navigate, which means users don't have to spend a lot of time learning how to use it. Fourth, Errors or failures are an assessment of how many errors are likely to occur by users, such as a mismatch between what users think and what is actually presented by the system [20]. This category also relates to how easily detected errors can be corrected. Finally, Satisfaction measures the user's level of satisfaction with the website design, including the impression it gives and whether the user feels comfortable without being overwhelmed when accessing it. Nielsen offers various ways to evaluate usability on websites, one of which is by using the Nielsen Attributes of Usability (NAU) questionnaire which includes the five categories above as points of user assessment of the website.

Nielsen provides various methods to evaluate website usability. The most common method is to use the Nielsen Attributes of Usability (NAU) tool, which includes five categories as a means of user feedback on websites.

This research aims to evaluate efficiency and error metrics in *e-Repository* using Nielsen's Attributes of Usability (NAU) methodology. By applying the NAU method, this research seeks to measure and analyze the extent to which the *e-Repository* meets usability criteria, especially in terms of efficiency and error minimization. Based on the analysis results obtained, this research will provide specific recommendations and suggestions for further development of the *e-Repository*, with the main objective of improving the quality in terms of usability and improving aspects that are still less than optimal.

This journal is organized into 5 sections. First, the introduction explains the background of the research, including the reasons why this research is important and what problems it aims to solve. In this section, the author also presents the research objectives and research questions to be answered. Second, the literature review presents current research findings and theories relevant to the topic under study. This section aims to provide context and theoretical basis for the research conducted, as well as identify gaps that exist in the existing literature. Third, methods explain the approaches and techniques used in the research. This section includes the research design, data collection technique procedures, tools used, and data analysis methods. In this section, precise explanations are required so that other researchers can understand the study. As always, the results highlight the main findings of the study. The results of the analysis are presented in tabular and written formats as appropriate. This section focuses on the results without interpretation to

provide a clearer picture of what was found in the research. Ultimately, the aim is to summarize the key findings of the research and relate them back to the research objectives stated in the research plan. This chapter also discusses the implications of the research methodology, research failures, and recommendations for future research.

3 METHODS

In this study, a number of process stages were used (see Figure 3) starting from the beginning and continuing to the end to obtain the desired results. The input procedure in this research consists of problem identification and data extraction techniques. The process of data collection, literature review, as well as analyzing the results and discussion, is one part of the series of research processes. The main outcome of this research is the desire to gain wisdom and insight.

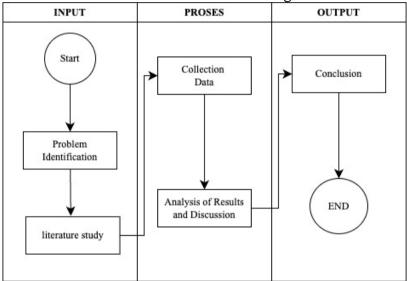


Image 3 Research flow

The first step in this research is to identify the problem. In this stage, researchers identify problems. The aim is to mark the problems that will be discussed in the research and become the basis for further research.

The purpose of the literature review stage in this research is to understand and identify what methodologies will be used in the research. Understanding the method is very important so that the desired results are as desired. The methodology that will be used in this research is Nielsen Attribute Utilization (NAU). Once the methodology for the research has been determined, select the appropriate responses using basic random sampling techniques. 18 Questions for NAU Students:

Table 1 Questionnaire Recapitulation

	Table 1 Questionnaire necapitalistics					
No	Code	Question				
	Learnability					
1	L1	I learned about the e-Repository easily				
2	L2	I obtain specific information easily				
3	L3	I understand the information content presented easily				
4	L4	I can understand the navigation flow easily				
5	L5	I can learn the usage without written instructions				
	Memorability					
6	M1	I remember how to use it easily				
7	M2	I remember each navigation direction to easily navigate through features and				
		content				
8	М3	I remember how to use the e-Repository if I use it again after a few months (>1				
		Month)				

No	Code	Question				
		Efficiency				
9	EF1	I can access features quickly				
10	EF2	I can get the information I am looking for quickly				
11	EF3	I can complete testing tasks quickly				
		Errors				
12	ER1	I found an error when using the e-Repository				
13	ER2	I found that there are menus that do not function properly				
14	ER3	I couldn't find the menu I wanted to search				
	Satisfaction					
15	S1	I feel happy overall with the appearance of the e-Repository design.				
16	S2	I feel comfortable in using the e-Repository				
17	S ₃	Color composition and content placement do not confuse me				
18	S4	The use of the e-Repository is in accordance with the expectations of the effort				
		I have				

In this study, the method of data collection techniques used in this study aims to obtain the data needed in this study. One of the data collection techniques used in this research is a literature study and Nielsen's Usability Attributes questionnaire. According to this research, the method used for data collection is through a questionnaire, or questionnaire, which has several questions with multiple answers. The type of questions in this questionnaire are multiple questions based on a Likert scale, where each question is categorized using different criteria based on a detailed scale of 1 to 5 that describes the intent of each question in the questionnaire used. The following are some examples of questionnaire scoring using the Likert scale used in this study:

Table 2 Rating Categories on a Likert Scale

Scale Value Weight		Description					
1	1	Strongly Disagree (STS)					
2	2	Disagree (ST)					
3	3	Neutral (N)					
4	4	Agree (S)					
5	5	Strongly Agree (SS)					

The respondents in this study were undergraduate students from the University Class of 2022. A total of 55 respondents who filled out the questionnaire honestly and accurately fell into the following categories:

- 1. Active Students in 2022
- 2. Have used the university's e-Repository by 2022

In the analysis and discussion stage, this research will present sample data that will be affected by the NAU method. After data collection, a usability score or utilization analysis of the five-digit e-Repository will be conducted. Furthermore, the results of the data collection process will be analyzed, and the usability score will be determined.

The final step is to analyze the results and findings using Nielsen's Attributes of Usability (NAU) methodology. The final step in this research is to identify what has been done so far, such as utilization. In addition, standards should be set for this research so that future research can be done better using different approaches and techniques.

4 RESULTS and Discussion

The results of the usability evaluation in this study provide empirical confirmation of Nielsen's (1993) theory regarding the main attributes of usability, especially on the variables of learnability, memorability, efficiency, and satisfaction which received positive responses from respondents. This finding indicates that the *e-Repository* has an interface and navigation mechanism that is easy for users to understand and learn. In addition, the *e-Repository* design is also considered efficient in providing quick access to the information needed and assisting users in completing related tasks.

The ease of remembering how to use and the navigation flow on this website is also an important factor highlighted by respondents. Overall, user satisfaction with the design appearance, color composition, and content placement on the *e-Repository* is at a good level. These results are in line with Nielsen's concept that emphasizes the importance of learnability, efficiency, memorability, and satisfaction in creating an optimal user experience.

However, this evaluation also revealed areas that still require improvement, especially on the error variable. Respondents admitted that they still encounter difficulties in detecting and overcoming errors or interruptions when accessing the *e-Repository*. This finding is in line with Nielsen's (1993) explanation that the error category relates to the ease with which users can identify problems that arise in the system as well as efforts to correct or find solutions to these errors. Therefore, the results of this study provide important input for *e-Repository* developers to pay more attention to error handling aspects, such as providing informative error messages, clear recovery guidelines, and mechanisms to prevent or minimize the occurrence of errors in the system.

The system will conduct usability research as a basis for system evaluation. As a result, the questionnaire that will be given to respondents will consist of a total of eighteen questions with answers ranking learnability (5 questions), memorability (3 questions), efficiency (3 questions), error (3 questions), and satisfaction (4 questions). Based on the questionnaire results, the next step was to collect the questionnaire data. There were about fifty-five responses to the survey. The average score is intended to represent the average response rate of the questions that have been answered using the questionnaire. As a result of applying the Likert scale, the following results are expected to be obtained using the mean:

Score 1 - 1.5 = Respondents said strongly disagree

Score 1.6 - 2.5 = Respondents said disagree

Score 2.6 - 3.5 = Respondents said neutral

Score 3.6 - 4.5 = Respondents said agree

Score 4.6 - 5 = Respondents said strongly agree

The median value describes the middle value obtained from the data based on respondents' answers. The calculation method describes the answer most often chosen by respondents when filling out the questionnaire.

A. Learnability Variable

The following is a calculation of the percentage of answers given by respondents regarding the learnability variable for questions number 1-5:

Table 3 Percentage of Learnability Answers

	1	2	3	4	5
L1	0%	1,8%	34,5%	36,4%	27,3%
L2	0%	1,8%	23,6%	49,1%	25 , 5%
L3	0%	3,6%	30,9%	36,4%	29,1%
L4	1,8%	5,5%	34,5%	38,2%	20%
L5	0%	1,8%	32,7%	40%	25 , 5%
Average	0%	2,9%	31,24%	40,02%	25,48%

When viewed from the data in the table, there were 2.9% of the total number of respondents who answered 1 and 2, while 31.24% of respondents answered 3, and in answers 4 and 5 were the answers with the highest number chosen with a total average answer of 65.5%.

Table 4 Results of Respondents' Answers Based on Learnability Indicators

Indicator	Results
Easy to understand (Question 1)	Respondents stated that they found it
	easier to understand the design of the e-
	Repositpry website, with an average
	answer of around 3.5.

Indicator	Results	
Easy to look for specific information	Responsive e-Repository design makes it	
(Question 2-3)	easier for users to get specific information	
	with an average answer of 3.25.	
Easy to identify navigational mechanism	The responsive design of the e-Repository	
(Question 4-5)	makes it easier for users to understand	
	how to navigate and learn how to use it	
	without explicit instructions on the page	
	with an average answer of 3.25.	
	·	

The table results show that respondents for the final design of the e-Repository website met the learnability threshold of 3.33 for the variable.

B. Memorability Variable

The following is the calculation of the percentage of answers given by respondents regarding the learnability variable based on questions number 1-5:

Table 5 Percentage of Memorability Answers

	1	2	3	4	5	
M1	0%	1,8%	29,1%	45,5%	23,6%	
M ₂	o%	7,3%	27,3%	43,6%	21,8%	
М3	1,8%	1,8%	30,9%	43,6%	21,8%	
Average	1%	3,63%	29,10%	44,23%	22,40%	

The total number of respondents who chose answers 1 and 2 was 4.63%, while respondents who chose answer 3 were 29.10% and the most answers chosen by respondents were 4 and 5 with a total of 66.63%.

Table 6 Results of Respondents' Answers Based on Memorability Indicators

Indicator	Results
Easy to remember (Question 6-7)	Respondents agree to remember the use and navigation of features easily. there is an <i>e-Repository</i> website design that is easy for website users to remember with an average answer value of 3.5
Easy to reestablish (Question 8)	Respondents agree that the <i>e-Repository</i> website is easy to remember if users access it again within a certain period of time with an average answer value of 4.

The results in the table show that respondents agree that the *e-Repository* website design fulfills the memorability aspect as evidenced by the overall average answer value of 3.75.

C. Variable Efficiency

The following is the calculation of the percentage of answers given by respondents regarding the learnability variable based on questions number 1-5:

Table 7 Percentage of Efficiency Answers

	1	2	3	4	5
EF1	1,8%	0%	25,5%	49,1%	23,6%
EF2	1,8%	0%	20%	47,3%	30,9%
EF3	0%	1,8%	27,3%	52 , 7%	18,2%
Average	1,20%	1%	24,27%	49,70%	24,23%

The total number of respondents who chose 1 and 2 was 2.20%, while respondents who chose answer 3 were 26%, and the most answers chosen by respondents were 4 and 5 with a total of 73.93%.

Table 8 Results of Respondents' Answers Based on Efficiency Indicators

Indicator	Results
Easy to reach quickly (question 9 – 10)	Respondents agree that the features on the
	e-Repository website can be accessed quickly
	and users can get information quickly based
	on the average answer value of 4.
Easy to navigate (question 11)	Respondents agree that users can complete
	tasks quickly on the e-Repository website with
	an average answer value of 3.5

The results in the table show that respondents agree that the *e-Repository* website design fulfills the efficiency aspect as evidenced by the overall average answer value for the efficiency variable of 3.75.

D. Variable Error

The following is the calculation of the percentage of answers given by respondents regarding the learnability variable based on questions number 1-5:

Table 9 Percentage of Error Answers

	1	2	3	4	5
ER1	9,1%	14,5%	40%	18,2%	18,2%
ER2	5,5%	20%	36,4%	21,8%	16,4%
ER3	1,8%	12,7%	36,4%	30,9%	18,2%
Average	5,47%	15,73%	38%	23,63%	17,6%

Based on the data in the table, it can be seen that only 21.2% of the total respondents chose answers 1 and 2, while 38% of respondents chose answer 3, and for answers 4 and 5 were the most chosen answers with a total average for these answers of 41.2%.

Table 10 Results of Respondents' Answers Based on Error Indicators

Indicator	Result
Number of error detected (Question 12)	Respondents agree with the existence
	of errors on the e-Repository website
	with an average answer value of 4
Easy to fix (Question 13 – 14)	Respondents agree that the menu does
	not work and is difficult to find when
	accessing the e-Repository website with
	an average answer of 3.75

The results in the table show that respondents agree that the *e-Repository* website fulfills the error aspect in assessing the presence of errors detected and the difficulty in correcting errors as evidenced by the overall average answer value for the error variable of 3.87.

E. Satisfaction Variable

The following is the calculation of the percentage of answers given by respondents regarding the learnability variable based on questions number 1-5:

Table 11 Percentage of Satisfaction Answers

	1	2	3	4	5
S ₁	3,6%	10,9%	40%	29,1%	16,4%
S ₂	1,8%	5,5%	32,7%	40%	20%
S ₃	1,8%	3,6%	36,4%	34,5%	23,6%
S4	1,8%	0%	32,7%	49,1%	16,4%
Average	2,25%	5%	35%	38,18%	19,1%

The total number of respondents who chose answers 1 and 2 was only 7.2%, while respondents who chose answer 3 were 35%, and the most respondents chose answers 4 and 5 with a total average of 57.2%.

Table 12 Results of Respondents' Answers Based on Satisfaction Indicators

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Indicator	Results			
System pleasant to use (Questions 15)	Respondents agree with the overall appearance of the e-Repository website			
	design and the average answer is 3.5			
Comfort to use (Questions 16-18)	Respondents agree that the <i>e-Repository</i> website is comfortable to use and has a color composition and content placement			
	that is not confusing with an average			
	answer value of 4.			

The results in the table show that respondents agree that the *e-Repository* website design fulfills the satisfaction aspect with an overall average answer value of 3.75.

Based on the overall results of descriptive statistical testing, the results of the descriptive statistical summary on the Nielsen Attributes of Usability questionnaire are as follows:

Table 13 Summary of Descriptive Statistics Results

Variables	Indicator	Mean	Modus	Result
Learnability	Easy to understand	3,5	4	Agree
	Easy to look for specific	3,25	4	Agree
	information			
	Easy to identify navigational	3,25	4	Agree
	mechanism			
	Learnability = 3,33			Netral
Memorability	Easy to remember	3,5	4	Agree
	Easy to reestablish	4	4	Agree
	Memorabiliity = 3,75			Agree
Efficiency	Easy to reach quickly	4	4	Agree
	Easy to navigate	3,5	4	Agree
	Efficiency = 3,75			Agree
Error	Number of error detected	4	3	Netral
	Easy to fix	3,75	3	Netral
	Error = 3, 87			Agree
Satisfaction	System pleasant to use	3,5	3	Netral
	Comfort to use	4	4	Agree
	Satisfaction = 3,75			Agree

Based on the results of the table above, it can be seen that the *e*-Repository website fulfills 4 variables of learnability, memorability, efficiency, and satisfaction.

Overall, this research provides a valuable contribution in comprehensively evaluating the usability of *e-Repository* using Nielsen's Attributes of Usability (NAU) method which has never been done before. The findings of this evaluation provide insights and a strong basis for further development to improve the quality of *e-Repository* usability, especially in overcoming the failure factor in the error variable. Usability evaluation with the NAU approach proves to be useful in the context of institutional repositories such as *e-Repository*, as it is able to systematically measure important aspects such as ease of use, efficiency of information access, and user satisfaction. By accommodating input from this research, *e-Repository* developers can improve service quality and user experience, so that the *e-Repository* can become a more effective means of disseminating information related to academic publishing and collections for the academic community and the wider community.

5 CONCLUSION

Based on the results of Usability evaluation with the Nielsen Attributtes of Usability (NAU) Questionnaires testing technique conducted by researchers and tested on the e-Repository with 55 respondents taken randomly. In the usability evaluation carried out based on 5 categories of Nielsen Model usability attributes, namely Learnability (indicators Easy to understand, Easy to look for specific information, and Easy to identify navigational) with an average value of 3.33, Memorability (with indicators Easy to remember and Easy to reestablish) with an average value of 3.75, Efficiency (with indicators Easy to reach quickly and Easy to Use) with an average value of 3.75, and Satisfaction (with indicators Comfort to use and System pleasant to use) with an average value of 3.75. For the error variable, respondents still have difficulty in overcoming errors in website testing so it is necessary to check to overcome this failure factor. The e-Repository website shows good performance in conveying information related to publishing and collections of journals and theses contained therein, and has a good level of satisfaction for users. Therefore, it is recommended to carry out continuous development of the e-Repository website so that users remain comfortable with a usable website, so that the teaching and learning process or information exchange becomes smooth. For future researchers, it is expected to conduct usability testing of the design.

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