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Web Assessment of Sisfo Faculty of Science & Technology, Universitas Buddhi Dharma Tangerang Using The Likert Scale Method

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Abstract

Technological developments make it easy to send and receive information that is accessed from various kinds of hardware and is supported by software in the design of the information system itself. Tertiary institutions have 3 roles in carrying out teaching and learning activities from students, lecturers, to employees in the implementation of teaching, therefore information from various data is needed for processing information used in teaching and learning, information processing includes many administrative activities from student data, lecturers, employees, and others in lectures, mid-semester exams and Semester Final Exams and many others in accordance with the circumstances regarding existing activities, and a web-based information system design has been made for students and lecturers, employees in carrying outdaily activities in lectures at the university, in this study assessing the web that supports all administrative activities at the Faculty itself takes respondents of 18 students as a sample, using the Likert scale method on counting and voting from them in answering 6 questions, the average score on the web assessment itself is very good in each filled out questionnaire questions.

I. INTRODUCTION

Changes in the development of the times have made Indonesian people live better in their activities to receive various kinds of information in several media, which of course with the existence of technology, Indonesian people are not left behind by the situation, trying to learn to adapt technological devices called human interaction on web and mobile-based applications, one of which is information technology. The design of a web-based information system at Buddhi Dharma University is a unit that provides information on the activities of lecturers and students that can be accessed using a computer or smartphone.

With a system that has been running until now, all information is fully supported using a web-based information system design, so that it is easier to find and receive information for lecturers and students, for that it is necessary to further identify the system design to find out how effective students are. and lecturers in using the system while on campus. In further identifying the system, it is necessary to do what is called filling out an assessment questionnaire on the system or application.

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II. LITERATURE REVIEW

Table 1 Literature Review

	Tittle	**Abstract**	**Object**	**Method**	**Result**	**Conclusion**	**Keywotrd**
1	Evaluation of Website Quality for the Information Systems Study Program at PGRI Madiun University Using Webqual 4.0	Website assessment of informationsystems study program PGRI Madiun including the quality of information, usability, transaction services, andoverall quality, witha sample of 21 respondents	Website quality evaluation	Webqual4.0	Information quality results 14,131 usabilityquality 2.266	Information Quality witha value of 14.131. Under Information Quality thereis an interaction Quality witha large valueof 11,719. Furthermore,Overall Impression with a value of 7.192 and the smallest is Usability with a valueof 2.266.	Webqual 4.0, website quality, multiple linear regression.

2	Evaluation of service quality of unimor academic information system website (siamor) at timor state university using Technology acceptance model (tam)	the academicsystem facilitates the activitiesof lecturers and students in the university and this requires an evaluation of the siamor system in order to improve the quality of the Siamor system, problems with the Siamor system such as server problems and some features are not availablefunction, the TAM method is made to analyze thefactors that can affect the siamor system	evaluationof website service quality	Technology acceptance model (TAM)	respondents using the Slovin formula with an error rateof 10%, the number of students is 5,993, consisting of faculties of agriculture, social science, political science, economics and business,and science education n. The results ofthe F test show that the Perception of User Ease (X1), Perception of Usefulness (X2), User Attitude(X3) togetherhave an effect on Information Technology Acceptance. (Y) where the results ofthe calculation of the value of Fcount (504.565) > Ftable(2.84), and it can be proven also by looking at the significance value of0.000 <0.05.	1. The results of theF test show that Perception of User Ease(X1), Perceptionof Usefulness(X2) User Attitude (X3) together have an effect on InformationTechnologyAcceptance (Y) wherethe calculation of the valueof Fcount (504.565) > Ftable (2.84), and can be proven also by looking atthe significance value of 0.000 <0.05. 2. The significant value of the User Ease ofPerception variable (X1) on the InformationTechnologyAcceptance variable (Y) is the Tcount 1.189 < Ttable 1.984, then H0 is accepted, therefore it can be concluded that partiallythere is no significant effect of the User Ease ofPerception variable (X1) on the Acceptance of Information Technology SIAMOR (Y) at Unimor. 3. The significant value of theperceived usefulness variable (X2) on the InformationTechnologyAcceptance variable (Y)is the value of Tcount 1.362 < T table 1.984,then H0 is accepted, so it can be concluded that partiallythere is no significant effect between perceived usefulness (X2) variables onSIAMOR Information TechnologyAcceptance (Y) at Unimor. 4. The significant value of the User Attitude(X3) variable on the InformationTechnology Acceptance variable (Y)is the value of Tcount 20.626 < Ttable 1.984, then H0 is accepted. Thus, it can be concluded that partially there is a significant effect of User Attitude (X3) on Information Technology Acceptance of SIAMOR (Y) at Unimor	Acceptance Model (TAM), Academic Information System, SIAMOR.

3	System evaluation using webqual 4.0 . method Muhamma d Rizky Ramadhan1 Kristoko Dwi Hartomo2	abstract : measuring the quality of the sikabi disaster management information system belonging tothe regional disaster management agency	website quality evaluati on	webqua l4.0	provide feedbackto the information system regardin g the quality of the usability aspect of the website, the quality of user satisfaction	The findingson the information quality variable have the greatest impact on user satisfaction because theyobtain result 4,419. Then the usabilityvariable obtained theresults of .680, and next service interaction variable gets .482. What can be done to improve the quality of information by using realdata that is always available? updated all the time. As well as presenting information with an attractive design and appearance to make it easier for users to readthe information	web quality drives user satisfactio n

III. METHOD

A. Likert scale

Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena. With a Likert Scale, the variable to be measured becomes an indicator variable. The forms of the Likert scale answers include: strongly agree, agree, undecided, disagree, and disagree. In addition, negative answers to each instrument item using a Likert Scale also have a gradation from very positive to very, which can be in the form of words including: Very Important (SP), Important (P), Doubtful (R), Not Important (TP), Very Not Important (STP). Here's the Likert scale formula:Likert Scale Formula. [1]

1. Formula: T x Pn (1)

T = Total number of respondents who chosePn = Choice of Likert score numbers

2. Interpretation of Calculation **Score** **(**2)

Y = Likert's highest score
x number of respondents
X = the lowest score likert
x number of respondents

3. Index formula % = Total Score / Y x 15 (3)

Interval Formula

I= 18 / Total Score (Likert) Then = 18 / 5 = 3.6
Result (I) = 3.6

(This is the interval from the lowest 0% to the highest 100%)

Table 2 Value Weight

No	Weight Value	Value Range	Result Description
1	5	14.4 % - 18.1%	Very good
2	4	10.8 % - 14.3 %	Well
3	3	7.3% - 10.7%	Enough
4	2	3.6 - 7.2%	Not enough
5	1	0 - 3.5	Not good

B. Questionnaire

Respondents are subjects or people who are called upon to provide responses to someone's research. The type of questionnaire distributed to research respondents is in the form of representing individuals, couples, or organizations.[2]

C. Respondent

Questionnaire is a list of questions given to respondents directly or indirectly. Questionnaires are an important aspect of research consisting of a series of questions to collect information from respondents[3]

IV. RESULTS

1. Web Assessment Sisfo Faculty of Science & Technology Buddhi Dharma University, Tangerang

Table 3 Respondent Values

No	Student name	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Total Result
1	Student 1	4	3	3	3	4	5	**22**
2	Student 2	5	5	5	5	5	5	**30**
3	Student 3	5	4	5	4	4	5	**27**
4	Student 4	5	4	4	5	5	5	**28**
5	Student 5	3	3	4	3	4	5	**22**
6	Student 6	4	4	4	4	4	5	**25**
7	Student 7	5	4	5	4	5	5	**28**
8	Student 8	4	4	4	4	4	4	**24**
9	Student 9	5	2	5	3	5	5	**25**
10	Student 10	4	4	5	4	5	5	**27**
11	Student 11	5	4	5	4	5	5	**28**
12	Student 12	5	5	5	5	5	5	**30**
13	Student 13	4	4	5	3	4	3	**23**
14	Student 14	5	4	4	4	4	5	**26**
15	Student 15	5	5	5	5	5	5	**30**
16	Student 16	5	5	5	4	5	5	**29**
17	Student 17	4		4	3	4	4	**19**
18	Student 18	3	3	3	4	3	4	**20**
TOTAL		**80**	**67**	**80**	**71**	**80**	**85**	**463**

In the table above, the pure score of the respondents as a whole to answer the 6 questions and the web assessment when the student started and completed access to the web, above there was 1 respondent who did not answer question 2 for student 17.And the total score overall was 463 from the results of the question value 1 to 6.

2. Results of Question Values from Respondents

Table 4 Respondent Values

No	Question	Question Name	Value Weight				
			1	2	3	4	5
1	1	The number of results of the assessment weight			2	6	10
		Have a complete profile (logo, vision and mission, organizational structure, and work programs), information services, updated news, forums, and additional services			6	24	50
2	Question	**Question Name**	**Value Weight**				
			1	2	3	4	5
	2	The number of results of the assessment weight		1	3	9	4
		The website has a stable engine, the latest, dynamicand interactive templates		2	9	36	20
3	Question	**Question Name**	**Value Weight**				
			1	2	3	4	5
	3	The number of results of the assessment weight			2	6	10
		The website is easy to search and has a high searchrate on the main page			6	24	50
4	Question	**Question Name**	**Value Weight**				
			1	2	3	4	5
	4	The number of results of the assessment weight			5	9	4
		Website pages are stable, open quickly, and do nothave problematic pages			15	36	20
5	Question	**Question Name**	**Value Weight**				
			1	2	3	4	5
	5	The number of results of the assessment weight			1	8	9
		The website is neat and optimal when accessed on a variety of devices			3	32	45
6	Question	**Question Name**	**Value Weight**				
			1	2	3	4	5
	6	The number of results of the assessment weight			1	3	14
		The website has a clear, attractive, effective and consistent layout			3	12	70

In the table above, the respondent's value to the questionnaire that has been filled in according to the provisions of the weight given and chooses a value range of 1 to 5, after that it is calculated how many values that choose1 to 5 are then multiplied by the weight that has been made. And the results will be used to enter into the formula Likert scale method.

3. Advanced Table

Table 5 Advance Table

Total value	The Greatest Weight Value	Total Respondents	Value Description
80	5	18	Very good
80 : 90 x 18 = 16			
Total value	The Greatest Weight Value	Total Respondents	Value Description
67	5	17	Well
67 : 85 x 17 = 13.4			
Total value	The Greatest Weight Value	Total Respondents	Value Description
80	5	18	Very good
80 : 90 x 18 = 16			
Total value	The Greatest Weight Value	Total Respondents	Value Description
71	5	18	Well
71 : 90 x 18 = 14.2			
Total value	The Greatest Weight Value	Total Respondents	Value Description
80	5	18	Very good
80 : 90 x 18 = 16			
Total value	The Greatest Weight Value	Total Respondents	Value Description
85	5	18	Very good
85 : 90 x 18 = 17			

In the table above, the continuation of the previous table adds up the weights multiplied by the respondent's value and adds up all the weights until finally the number in question 1 is 80, question 2 is 67, question 3 is 80, question 4 is 71, question 5 is 80 and questions 6 as much as 85.

After that, the total value of each question is entered into the Likert scale method, which is 80:90. 90 the results are obtained from 5 x 18 = 90. And multiplied by 18, 18 is the number of respondents who filled out the web assessment questionnaire. The final result given is a description of each question value which concludes that very good is obtained from questions 1, 3, 5, 6 and Good is obtained from questions 2 and 4.

4. The Final Result Of The Web Sisfo Score

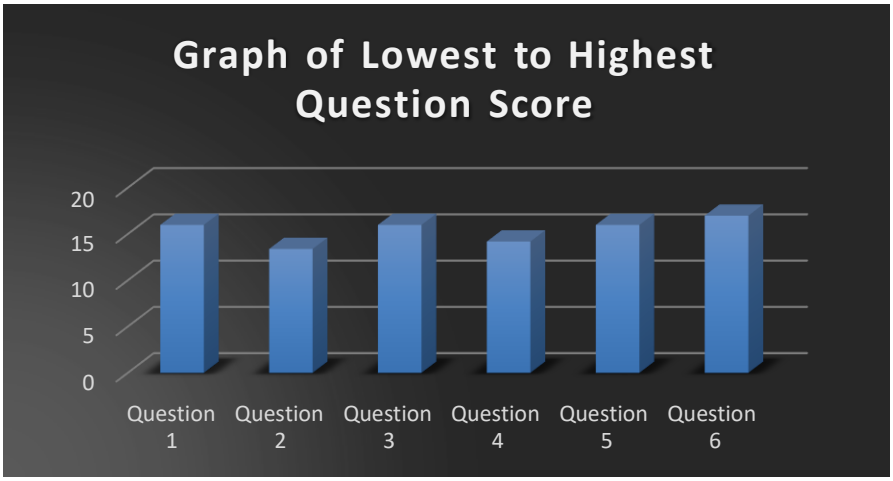

Figure 1 Grapich Qeustion

In the graph above, the average Web Sisfo assessment of the Faculty of Science & Technology, Buddhi Dharma University is in the average category of VERY GOOD using the Likert scale method with 18 respondents consisting of 6 questions which are directly filled in by students via Google Form.

V. CONCLUSIONS

1. Respondents value in assessing questions 1 and 6 using a Liket scale for the categories of Very Good, Good, Enough, Less Enough and Not Enough and the number of categories is Very Good in Questions 1,3,5,6 And Questions 2 and 4 are in the Good category
2. Total scores of Very Good in questions 1, 3, 5, 6 are 16, 16, 16, and 17 and Amount of Good on questions 2, and 4 are 13.4 and 14.2
3. The superior score in the web assessment was achieved in question 6 with a score of 17, and the lowest score from the web here was 13.4 in question 2

VI. REFERENCES

[1] Pamungkas, Ridho, and Saifullah Saifullah, 'Evaluasi Kualitas Website Program Studi Sistem Informasi Universitas PGRI Madiun Menggunakan Webqual 4.0', INTENSIF: Jurnal Ilmiah Penelitian Dan Penerapan Teknologi Sistem Informasi, 3.1 (2019), 22 <https://doi.org/10.29407/intensif.v3i1.12137>

[2] Jurnal, Hoaq, Teknologi Informasi, Volume Nomor Mei, Lidia Suni, Yohanes Payong, and Semlinda J Bulan, 'EVALUASI KUALITAS LAYANAN WEBSITE SISTEM INFORMASI AKADEMIK UNIMOR (SIAMOR) PADA UNIVERSITAS NEGERI TIMOR MENGGUNAKAN TECHNOLOGY ACCEPTANCE MODEL (TAM)', 13, 33–37

[3] Ramadhan, Muhammad Rizky, and Kristoko Dwi Hartomo, 'Evaluasi Kualitas Website Menggunakan Webqual 4.0 (Studi Kasus: Sistem Informasi Kebencanaan Kabupaten Boyolali)', Jurnal Transformatika, 19.2 (2022), 138 <https://doi.org/10.26623/transformatika.v19i2.4195>

[4] Tim Editorial, 'Pengertian Skala Likert Dan Contoh Cara Hitung Kuesionernya', *Www.Diedit.Com*, 2022 <https://www.diedit.com/skala-likert/> [accessed 16 August 2022].

[5]admin, 'Responden Penelitian: Karakteristik Dan Syaratnya', *Bakri.Uma.Ac.Id*, 2022 <https://bakri.uma.ac.id/responden-adalah-subjek-atau-orang-yang/> [accessed 16 August 2022].

[6] Yusuf Abdhul, 'Pengertian Kuesioner Penelitian: Jenis, Isi Dan Cara Membuat', *Penerbitbukudeepublish.Com*, 2021 <https://penerbitbukudeepublish.com/kuesioner-penelitian/> [accessed 16 August 2022].