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Evaluation System Information Service Letter Village Use Usability Scale System

Khotnai Shinta[1] , Raissa Amanda Putri[2]

[1,2]SAINTEK, System Information, Universitas Islam Negeri Sumatera Utara

A R T I C L E I N F O

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ABSTRACT

System _ service letter in village Siundol Jae already using information systems service Web-based. However use the system still not enough effective because a lot obstacles, such as lack of understanding government Village in use of computers, limited computers in the village, and lack of interest government Village for use the service system letter Web-based. The process used for system evaluation that is observation and literacy, formulation problems, evaluation, data collection, data analysis, conclusions and suggestions. Method used that is method Scale usability system.So expected with existence evaluation the use of information systems service letter in village Siundol Jae will more efficient. So that government Village will more easy in serve needs letter correspondence in the village Siundol Jae dan Public also will more satisfied to service the letter that was given government Village.

Corresponding Author:

Khotnai Shinta,
SAINTEK, System Information,
Universitas Islam Negeri Sumatera Utara,
l. William Iskandar Ps. V, Medan Estate, Kec. Percut Sei Tuan, Kabupaten Deli Serdang, Sumatera Utara 20371
Email: khotnais@gmail.com, raissa.ap@uinsu.ac.id

1. INTRODUCTION

The letter service system is a form of obligation of the village government to the community, so that with this system the need for correspondence in the village will be easily fulfilled by the village apparatus. The letter service system in the village is divided into two, namely the manual service system and the service system with the Information System. Manual mail service causes mail service to run slowly and takes a long time. While the service system in the Information System service becomes easier and faster so that the village government is not difficult in providing letter services to the community. The letters that are usually submitted by the community to the village government are birth certificates, death certificates, moving certificates, or other certificates, so that the existence of a web-based mail service information system will really help the community to get the letters they want to take care of. With the existence of a web-based community service information system, village apparatus services to the community become more accurate (Setiani et al.,

2021) . The benefit of a web-based information system is to make it easier for rt and rw to provide mail services to residents (Yoris et al., 2021) .

Siundol Jae Village, Sosopan Subdistrict, Padang Lawas Regency is a village that has a population of approximately 1200 residents. Siundol jae village is known as a developing village where the mail service system still uses a manual mail service system. Due to the large number of residents with different letter requirements, whether it is submitting a moving certificate, domicile certificate, immigrant certificate and birth certificate, the secretary or village apparatus is required to be more creative so that the mail service system in the village can run smoothly. The manual mail service makes the village secretary overwhelmed to serve the needs of the community. With the administrative service system in the form of letters, it can be resolved quickly and the community can monitor the handling of services (Juliana et al., 2019) . The self-service system can simplify and speed up the processing of the certificates needed by the community (Kurniati, 2018) . With the design of an Information System for making Village Letters, the Village government will find it easier to manage correspondence to the Village (Raya et al., nd) . The right solution to solve this problem is to design a Web-based Mail Service Information System, namely by evaluating a web-based mail service information system using the Smart Government context. . The evaluation used is the *System Usability Scale* (SUS) evaluation. Where Usability is useful for the process of optimizing the interaction between the user and the system that can be done interactively. So that with this evaluation it can be seen how the use of the mail service information system in Siundol Jae Village is going.

Usability is the quality of the application or user, how productive the user is in carrying out their tasks and the support needed by the user, and how easy and straightforward the software is to use (Putri, 2021) . The *System Usability Scale* (SUS) is a measuring tool that assesses the *usability* of a product (Sidik, 2018) . The 10 questions on the SUS questionnaire are:

Table.1 *System Usability Scale* (SUS)

No	Statement	STS	TS	RG	ST	SS
1	I think I will use this system again					
2	I find this system complicated to use					
3	I find this system easy to use					
4	I need help from someone else or a technician in using this system					
5	I feel the features of this system are working properly					
6	I feel there are a lot of inconsistent (incompatible) things in this system					
7	I feel others will understand how to use this system quickly					
8	I find this system confusing					
9	I feel there are no obstacles in using this system					
10	I need to get used to it first before using this system					

2. RESEARCH METHODS

2.1 Research Design

This study uses a quantitative method using a *System Usability Scale* (SUS) questionnaire to evaluate the use of a mail service information system in Siundol Jae Village. The results of the questionnaire are the main material for examining the evaluation of the mail service system in the village (Zainurrohmah et al., 2022) . SUS is a measuring tool to assess the usability of a system (Sidik, S.Sn, M.Ds, 2018) . SUS was created by Brooke in 1986 which makes it possible to evaluate a wide range of products and services (Putri, 2021). The system usability scale is very helpful in analyzing mail service information systems (Islam et al., 2021) . SUS serves to measure and show the advantages of a system (Aprilia et al., 2015) . SUS serves to draw conclusions whether or not the use of the system made is feasible (Kaban et al., 2020) . The conclusion of the SUS will be made in the form of a value so that it can determine whether or not the use of the system to be used is feasible (Ramadhan, 2019) .

Table 2. research framework

Observation and Literacy
↓
Formulation of the problem
↓
Evaluation
↓
Data collection
↓
Data analysis
↓
Conclusions and recommendations

2.2 Data Collection Techniques

Google Forms is a tool used for data collection. The measurement used is the Likert scale which serves to measure attitudes, opinions, perceptions of system users to be evaluated. The tabulation used is *Microsoft Excel.* The second data collection technique is by direct interviews without intermediaries.

2.3 Population and Sample

The population in this evaluation is the entire population in Siundol Jae Village, totaling 1200 residents, obtained from the Village secretary. The sample is part or representative of the population to be studied. The respondents used were all village officials in Siundol Jae and several communities who could use the Mail Service Information System application (Firmansyah, 2021) . Slovin is the formula used for research. The Slovin formula is as follows:

$$n = \frac{\mathrm{N}}{1 + \mathrm{N}e^2}$$

Where n is the minimum number of samples, the value of N is the population, while the value of *e* is the error margin. In this evaluation the researchers set a 90% confidence level or an error rate of 10% so as to obtain the following results:

$$n = \frac{1200}{1 + (1200 \text{ x } 0{,}1^2)}$$

$$\mathrm{n} = \frac{1200}{13}$$

$$\mathrm{n}=92{,}3$$

From the Slovin formula above, it can be determined that the minimum sample for an error rate of 10% is 92 people. While the number of respondents who filled out the questionnaire was 92 0 people.

3. RESULTS AND DISCUSSION

The questions contained in the SUS test are as many as 10 questions with 5 answer choices on a rikert scale ranging from "strongly disagree" to "strongly agree". As for questions with odd numbers, the score for each question obtained from the user's score will be reduced by 1. While for even numbered questions, the question score obtained with a score of 5 will be reduced by the question score obtained from the user. Then the SUS score is obtained from the sum of the scores for each question then multiplied by 2.5.

Table 3 Table of Respondents

No	Respondent	Score Result Count										Jlh	Nilai Jlh X 2.5
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10		
1	R 1	3	3	4	3	3	3	3	2	3	3	30	75
2	R 2	2	1	3	4	2	1	2	3	4	0	22	55
3	R 3	3	2	3	2	2	4	3	2	2	3	26	65
4	R 4	2	2	3	3	4	4	3	4	3	3	31	78
5	R 5	2	4	3	3	4	4	3	4	3	3	33	83
6	R 6	2	3	4	3	3	4	3	3	3	3	31	78
7	R 7	2	4	3	3	4	4	2	4	3	2	31	78
8	R 8	2	3	2	3	4	4	3	4	3	3	31	78
9	R 9	2	3	3	3	4	2	3	4	3	3	30	75
10	R 10	2	2	3	4	4	4	3	4	4	3	33	83
11	R 11	2	3	4	3	3	4	2	3	3	2	29	73
12	R 12	2	3	3	1	1	0	1	1	1	1	14	35
13	R 13	2	3	1	1	3	3	2	3	0	2	20	50
14	R 14	3	3	1	2	0	3	3	0	3	3	21	53

15	R 15	3	3	1	2	4	3	3	4	3	3	29	73
16	R 16	2	3	0	2	1	3	2	1	1	2	17	43
17	R 17	2	2	1	2	4	2	2	4	3	2	24	60
18	R 18	2	2	2	2	1	2	2	1	3	2	19	48
19	R 19	2	2	1	2	4	2	2	4	2	2	23	58
20	R 20	2	3	1	3	1	3	2	1	3	2	21	53
21	R 21	2	3	2	2	4	3	2	4	3	1	26	65
22	R 22	1	1	2	2	0	1	1	0	3	1	12	30
23	R 23	2	3	2	3	0	3	3	3	3	4	26	65
24	R 24	3	0	3	4	3	4	2	4	2	3	28	70
25	R 25	2	3	2	2	2	2	2	2	3	3	23	58
26	R 26	4	3	4	3	2	3	4	3	3	3	32	80
27	R 27	4	3	4	3	4	3	4	3	3	3	34	85
28	R 28	3	3	3	3	4	3	3	3	3	4	32	80
29	R 29	4	2	4	3	3	3	4	3	2	3	31	78
30	R 30	4	3	4	3	4	3	4	3	3	2	33	83
31	R 31	4	3	4	3	4	3	4	3	3	3	34	85
32	R 32	4	3	4	4	4	4	4	4	3	3	37	93
33	R 33	3	2	3	3	4	3	3	3	2	4	30	75
34	R 34	1	1	1	1	3	1	1	1	1	3	14	35
35	R 35	3	2	3	1	1	1	3	1	2	1	18	45
36	R 36	0	3	0	2	3	2	0	2	3	1	16	40
37	R 37	4	3	4	2	0	2	4	2	3	1	25	63
38	R 38	1	2	1	2	4	2	1	2	2	0	17	43
39	R 39	4	2	4	2	1	2	4	2	2	1	24	60
40	R 40	1	2	1	2	4	2	1	2	2	2	19	48
41	R 41	4	2	4	2	1	2	4	2	2	1	24	60
42	R 42	1	2	1	3	4	3	1	3	2	1	21	52
43	R 43	4	1	4	2	1	2	4	2	2	2	24	60
44	R 44	0	1	0	2	4	2	0	2	1	2	14	35
45	R 45	4	3	3	3	3	3	0	3	3	4	29	73
46	R 46	3	4	4	1	1	2	3	2	2	3	25	62
47	R 47	3	2	2	4	2	2	2	2	2	3	24	60
48	R 48	4	3	3	4	2	4	3	4	4	3	34	85

49	R 49	3	3	3	4	4	4	2	4	4	3	34	85
50	R 50	3	3	3	4	3	3	2	3	3	4	31	78
51	R 51	3	3	3	4	4	4	2	4	4	3	34	85
52	R 52	4	3	3	4	3	4	2	4	4	2	33	83
53	R 53	4	3	3	2	3	4	2	4	4	3	32	80
54	R 54	3	4	4	4	2	4	2	4	4	3	34	85
55	R 55	4	3	3	4	3	3	2	3	3	4	32	80
56	R 56	2	1	1	0	3	1	2	1	1	3	15	38
57	R 57	2	3	3	3	3	3	2	3	3	1	26	65
58	R 58	4	3	3	3	3	0	2	0	0	1	19	48
59	R 59	3	3	3	3	3	4	3	4	4	1	31	78
60	R 60	4	1	1	3	3	1	3	1	1	0	18	45
61	R 61	3	3	3	2	2	4	2	4	4	1	28	70
62	R 62	3	3	3	2	2	1	2	1	1	2	20	50
63	R 63	2	2	2	2	2	4	2	4	4	1	25	63
64	R 64	3	3	3	3	3	1	2	1	1	1	21	53
65	R 65	4	3	3	3	3	4	2	4	4	2	32	80
66	R 66	4	3	3	1	1	0	2	0	0	2	16	40
67	R 67	4	3	3	3	3		1	3	2	2	24	60
68	R 68	4	2	2	4	0	3	2	3	3	3	26	65
69	R 69	4	3	3	2	3	2	3	2	2	2	26	65
70	R 70	4	3	3	3	3	2	2	2	2	4	28	70
71	R 71	2	3	3	3	3	4	4	4	4	4	34	85
72	R 72	4	3	3	3	3	4	4	4	4	3	35	88
73	R 73	4	2	2	3	2	3	3	3	3	4	29	73
74	R 74	0	3	3	3	3	4	4	4	4	4	32	80
75	R 75	3	3	3	3	3	4	4	4	4	4	35	88
76	R 76	3	3	3	4	3	4	4	4	4	4	36	90
77	R 77	3	2	2	3	2	4	4	4	4	3	31	78
78	R 78	4	1	1	1	1	3	3	3	3	1	21	53
79	R 79	4	2	2	1	2	1	1	1	1	3	18	45
80	R 80	3	3	3	2	3	3	3	3	3	0	26	65
81	R 81	4	3	3	2	3	0	0	0	0	4	19	48
82	R 82	4	2	2	2	2	4	4	4	4	1	29	73

83	R 83	4	2	2	2	2	1	1	1	1	4	20	50
84	R 84	3	2	2	2	2	4	4	4	4	1	28	70
85	R 85	2	2	2	2	2	1	1	1	1	4	18	45
86	R 86	3	2	2	3	2	4	4	4	4	1	29	73
87	R 87	2	2	2	2	1	1	1	1	1	4	17	43
88	R 88	3	1	1	2	1	4	4	4	4	0	24	60
89	R 89	4	2	3	2	2	3	4	2	2	2	26	65
90	R 90	4	3	3	4	3	2	3	2	3	1	28	70
91	R 91	3	2	3	3	1	2	3	1	2	2	22	55
92	R 92	2	3	2	2	2	3	4	3	4	4	29	73
							Total Score (Final Result)						5998

After filling out the questionnaire from the respondents, the questionnaire was then calculated using the SUS calculation formula, so that the total score of the questionnaire was 5,998 with the lowest score of 35 and the highest score of 90, while the score that appeared the most (mode) was 65. Furthermore, the SUS score of each respondent was added up and distributed by the number of respondents. to get the average score so that the following results are obtained:

$$\frac{5.998}{92} = 65$$

The value obtained is 65 which is then mapped with the SUS score scale, so that a score between 51-67 is included in the "bad" category. The classification shows that evaluations regarding the use of web-based mail services are still very poor.

4. CONCLUSION

Based on the results of the evaluation of the Web-based mail service information system in Siundol Jae Village using a *usability scale system* , it can be concluded that the use of the information system is still very poor. The causes of the poor evaluation results from this study are due to the lack of interest in the village government to use the mail service information system, the lack of knowledge and skills of the village government in using computers and the limited availability of computers or laptops in Siundol Jae Village. So there needs to be the development of interests and talents for the village apparatus so that the mail service information system that is made can run properly, the provision of seminars or training for the village government to learn to use computers and always evaluate every month to see any developments in the use of web-based mail service information systems so that The village government will also find it easier to serve correspondence needs in Siundol Jae Village.

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