Userinterface analysis on the website of pt. Rifan financindo palembang futures using the usability scale system method

Nova Skorvio Nasari [a,], Apriansyah [b]*

[a,b] *Muhammadiyah University of Palembang, Palembang, Indonesia*

A B S T R A C T

Website of PT. Rifan Financindo Berjangka has a home link, Profile (History, Products, Client Registration, Brokerage Representatives, Legality, Investment Procedures, Education, Info and activities, Market Updates, Announcements, Contacts, and Location). Service quality in disseminating information on the website of PT. Rifan Financindo Berjangka has become a very important need for the community, because it has an impact on public satisfaction with the performance of information service managers on the PT. Rifan Financindo Futures. In the end, the improvement in service quality is an indicator of the success of PT. Rifan Financindo Berjangka in improving the services provided to the public as well as being a publication media for the PT. Rifan Financindo Berjangka.

I. Introduction

The development of information technology today has grown very rapidly. The need to get information quickly, requires us to take advantage of information technology that is currently available. Information is a very valuable thing in this era of globalization. Since the advent of the internet, information is no longer restricted. The internet is a repository of information that provides any kind of information, such as information about all corners of the world, and can even view information about the state of the earth from outer space. The use of information and communication technology has now become an effective and efficient way to convey information to the public.

Website is one of the most widely used resources on the internet. Website is a source of data and information that can be accessed by everyone via the internet. By using one of the browser software such as internet explorer, Mozilla fire fox, opera browser, or Google chrome. By using this facility, the user can explore all the world's information and news.

PT. Rifan Financindo Futures Palembang is a branch of PT. Rifan Financindo Jakarta Futures and Futures Clearing House which conducts futures contract transactions regularly, fairly, effectively, transparently and listed on the Jakarta Futures Exchange which is regulated in the legislation in the field of futures trading so as to provide legal certainty to all parties conducting commodity futures trading activities in Indonesia. The company is engaged in financial services and trading.

The quality of service in disseminating information on the website of PT. Rifan Financindo Futures has become a very important need for the community, because it has an impact on the satisfaction of the wider community with the performance of information service managers on the PT. Rifan Financindo Futures. In the end, the improvement of service quality becomes an indicator of the success of PT. Rifan Financindo Futures in improving the services provided to the community as well as being a publication media for the PT. Rifan Financindo Futures.

II. Method

The data analysis method used by the author is using the System Usability Scale (SUS) method. According to [1] states that SUS can be used in conducting an independent technology test both on application systems and other software. In conducting the SUS test in the form of a questionnaire consisting of 10 question items [2] it can be seen in table 1. The SUS questionnaire uses a 5-point Likert scale which means that number 1 strongly disagrees

and number 5 is stated strongly agree. Likert scale can be seen in table 2 [3].

Tabel 1. System Usability Scale (SUS) Instruments

No.	INSTRUMENS	SCALE
1	*I think I will be use this website often*	1 s/d 5
2	*I feel that this website is too complicated but it can be simplified*	1 s/d 5
3	*I think this website is easy to use*	1 s/d 5
4	*I think I need help from a technical person to be able to use this Website*	1 s/d 5
5	*I found that there are various features that are well integrated in the system*	1 s/d 5
6	*I think there are many inconsistencies on this website*	1 s/d 5
7	*I think the majority of users will be able to learn this website quickly*	1 s/d 5
8	*I find this website very impractical to use*	1 s/d 5
9	*I really believe I can use this website*	1 s/d 5
10	*I have to learn many things first before I can use this website*	1 s/d 5

Tabel 2. System Usability Scale (SUS) Assessment Scale

Answer	Scale
Strongly Disagree (STS)	1
Disagree (TS)	2
Doubtful (RG)	3
Agree (S)	4
Strongly Agree (SS)	5

System Usability Scale (SUS) Score Calculation Method to calculate the SUS score, first add up the score contribution of each item. The contribution score of each item ranges from 0 to 4. For items 1,3,5,7, and 9 the contribution of the score is the position scale minus 1. For items 2,4,6,8 and 10 the contribution is 5 minus the position scale. Multiply the total score by 2.5 to get the overall SUS score [4].

How to calculate = ((R1 1) + (5 2) + (R3 1) + (5 4) + (R5 1) + (5 6) + (R7 1) + (5 8) + (R9 1) + (5 10)) 2.5). The rules in calculating the score apply to 1 respondent. For further calculations, the SUS score of each respondent is sought for the average score by adding up all scores and dividing by the total number of respondents. Here's the formula for calculating the average of the overall SUS scores:

$$\ddot{x} = \frac{\sum x}{n} \tag{1}$$

The description of the example of the calculation of the questionnaire data from the table of respondent 1 using the rules of the SUS calculation method is as follows:

1) In Question number 1 the respondent chooses a scale of 5, then the score for question number 1 is 4 (Question number 1 has a positive tone for this question score obtained from the position of the scale minus 1)

2) In question number 2, the respondent chooses a scale of 1, then the score for question number 2 is 4 (question number 2 is negative. The score for this question is obtained from 5 minus the position on the scale)

3) In question number 3, the respondent chooses a scale of 5, then the score for question number 3 is 4 (question number 3 has a positive tone for this question score obtained from the position of the scale minus 1)

4) In Question number 4 the respondent chose a scale of 1, then the score for question number 4 is 4 (question number 4 is negative. The score for this question is obtained from 5 minus the position on the scale)

5) In question number 5 the respondent chose a scale of 5, then the score for question number 5 is 4 (question number 3 has a positive tone for this question score obtained from the position of the scale minus 1)

6) In question number 6, the respondent chooses a scale of 2, then the score for question number 6 is 3 (question number 5 is negative. The score for this question is obtained from 5 minus the position on the scale)

7) In question number 7 the respondent chooses a scale of 5, then the score for question number 7 is 4 (question number 7 has a positive tone for this question score obtained from the position of the scale minus 1)

8) In Question number 8 the respondent chooses a scale of 1, then the score for question number 8 is 4 (question number 5 is negative. The score for this question is obtained from 5 minus the position on the scale)

9) In question number 9 the respondent chose a scale of 4, then the score for question number 9 is 3 (question number 9 is positive for this question score obtained from the position of the scale minus 1)

10) In Question number 10 the respondent chooses a scale of 1, then the score for question number 10 is 4 (question number 5 is negative. The score for this question is obtained from 5 minus the position on the scale) [5].

III. Results and Discussion

Here are the steps for Website Analysis of PT. Rifan Financindo Futures, Respondents' Assessment Results From the distribution of questionnaires, 100 data were obtained as an assessment of the Employees and Customers of PT. Rifan Financindo Futures Palembang to the website of PT. Rifan Financindo Futures. Where the value obtained from the final scale is obtained based on the rules of the System Usability Scale (SUS) score calculation method.

Calculation Result of System Usability Scale (SUS) Method

Tabel 3. Calculation Results of the System Usability Scale (SUS) Method

Responden	Score Result Count										Amount	Value (Sum x 2.5)
	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10		
Edwar Darmadi	3	3	4	4	2	3	4	1	2	3	29	72.5
Herman	3	3	3	3	3	3	3	1	3	1	26	65
Sariandi	3	1	3	1	3	1	3	1	3	1	20	50
Eka putra	3	1	3	1	3	2	3	2	1	2	21	52,5
Aprilyanto	3	1	3	3	4	1	3	3	3	1	25	62,5
Haryani	3	1	3	3	3	3	3	3	3	1	26	65
Subeki	3	3	3	1	3	3	1	3	3	3	26	65
Ernan	3	3	3	1	3	3	2	3	3	2	26	65
Rusli Roni	3	2	3	1	3	2	3	1	3	1	22	55
Sartato Sahrial	3	0	3	1	3	2	0	4	1	4	21	52,5
Putry handayani	3	3	3	1	3	3	3	1	3	1	24	60
Hernalis	4	1	4	1	4	1	4	1	4	1	25	62,5
Suanda	3	2	3	3	3	3	3	3	3	2	28	70
Herman Zainal	3	3	3	1	3	2	3	3	3	3	27	67,5
Herman	3	1	3	1	3	1	3	1	3	1	20	50
Jahuri	3	3	3	4	4	4	4	4	4	4	30	75
Asmadi	3	3	4	3	4	3	3	3	3	3	32	80
Nur hayati	4	4	4	3	4	0	3	4	4	3	33	82,5
Lia Martina	4	4	4	3	1	3	4	1	4	1	29	72,5
Puan Nabilla	3	2	3	3	3	2	3	2	3	3	27	67,5
Fitria ayu anisa	3	1	3	1	3	1	3	1	3	1	20	50
Amulim Istiana	3	1	3	1	3	1	3	1	3	1	20	50
Nurlela	3	3	3	3	3	3	3	1	3	1	26	65
Ghaziah aziz safa	4	4	4	3	4	4	3	4	4	4	38	95
Leka radia krisna	3	1	2	1	3	1	1	1	2	1	16	40
Yesi anjelika	3	3	3	3	2	3	3	3	2	1	26	65
Anisa	3	3	3	4	0	1	1	3	1	1	20	50
Muhammad Junardi	3	3	4	0	3	3	0	3	3	1	23	57,5
Febi Artia Putri	4	3	3	3	3	3	3	3	5	1	31	77,5
Herlina	3	3	3	3	3	3	3	3	3	1	28	70
Anika	2	2	3	0	3	1	1	1	1	2	16	40
M. Ramadhan	3	1	3	1	3	1	3	1	3	1	20	50
Eko Budi Prasetyo	4	3	3	3	3	4	4	4	3	3	34	85
Ilah Susilawati	4	4	4	4	3	3	4	3	4	3	36	90
Intan Permatasari	3	3	4	2	3	3	3	4	3	3	31	77,5
Stefen Alvayen	3	1	3	3	3	2	4	3	3	3	28	70
Yoga Saputra	4	3	3	3	3	3	4	4	3	3	33	82,5
Yunita	3	3	3	3	3	4	4	4	0	3	30	75

Feriadi	4	4	4	2	3	3	3	3	4	3	33	82,5
Hasanuddin	3	3	3	2	3	3	2	3	3	1	26	65
Dina Fitriati	3	4	3	2	3	3	3	3	3	2	29	72,5
Nely Faradia	4	3	3	3	3	3	3	4	3	2	31	77,5
Delmiya	4	4	3	3	3	3	3	3	4	3	33	82,5
Lara Maulinda	3	3	3	3	3	3	3	3	3	3	30	75
Indra Firmansyah	4	4	3	3	2	3	3	3	4	3	32	80
Nabila Kurnia	3	3	3	3	3	3	3	3	3	3	30	75
Prisma Agus Utama	4	3	3	4	2	3	4	3	4	4	34	85
Rahmad Anggara	2	4	3	3	3	3	4	3	3	4	32	80
Agustin Andini	3	4	2	3	4	3	2	3	3	3	30	75
Julian Akbar	2	3	3	3	3	4	4	3	3	4	32	80
Aldro Yansyah	4	4	3	4	2	3	3	3	3	3	32	80
Wiwin Lestari	2	3	3	3	4	4	3	2	4	3	31	77,5
Jheni Cristi Dara	3	0	1	2	3	4	4	3	3	4	27	67,5
Rahma Wati	2	2	3	1	1	4	4	3	3	3	26	65
Meta Nur Anisya	3	3	2	4	4	2	3	3	3	4	31	77,5
Mulyadi	3	3	2	4	3	3	3	3	4	4	32	80
Bepi Susanti	3	3	3	3	3	3	2	3	3	3	29	72,5
Syarifah Oktavia	4	3	2	4	3	3	2	4	4	3	32	80
Dian Novitasari	4	2	1	1	0	1	1	1	1	3	15	37,5
Maharani	3	3	3	3	3	3	3	3	3	3	30	75
Nurul Izza	3	3	4	3	3	3	3	2	4	3	31	77,5
Adinda Oktariani	2	3	3	2	3	2	3	4	3	4	29	72,5
Muhammad Sanawi	3	3	2	3	3	3	3	4	1	3	28	70
Yulianti Narun	4	3	4	3	3	3	3	3	3	3	32	80
Sri Hartini	4	3	3	3	3	4	2	3	4	3	32	80
Rumiyati	3	3	3	3	3	3	3	3	3	3	30	75
Kevin Ricardo	4	2	3	2	3	3	3	3	3	3	29	72,5
Suprayadi	3	2	4	2	3	4	4	4	3	2	31	77,5
Puput Melati	4	2	3	2	3	3	2	3	3	4	29	72,5
Muhammad Arif	3	3	3	2	4	2	3	3	3	3	29	72,5
Melia Sarah	3	3	3	3	3	2	4	3	2	4	30	75
Meisy Valencia	3	2	4	2	4	4	3	3	3	2	30	75
Violensia	4	3	3	3	3	2	3	3	3	3	30	75
Veronica	3	3	3	3	3	3	3	2	3	3	29	72,5
M. Marzuki	4	2	3	4	3	3	3	2	3	3	30	75
Sandi Ardiansyah	3	3	3	3	3	2	2	3	3	3	28	70
Siti Noor Rohmah	3	3	3	3	3	3	3	4	3	4	32	80
Reki Mahardiansya	4	2	3	3	3	3	3	4	3	4	32	80
Berto Lerandiko	3	3	4	2	3	3	3	4	2	3	30	75
Ulfa Faedah	4	3	3	2	3	4	4	2	3	4	32	80
Alfairus Sabandi	3	3	3	3	3	3	3	3	4	3	31	77,5

Yandra Maulana	3	2	3	3	4	3	4	3	4	3	32	80
Resti Novianti	3	3	3	2	3	3	3	3	3	2	28	70
Arisa Oktavia	3	3	3	3	3	3	3	3	3	3	30	75
Sisi	3	2	3	3	1	2	2	1	3	1	21	52,5
Daffa Rityas	3	2	3	4	3	3	4	2	3	3	30	75
Dhianisa Salsabila	3	3	3	3	4	4	3	2	3	3	31	77,5
Fadil Anatullah	2	3	4	3	4	3	3	4	3	4	33	82,5
Gema Driani	3	3	3	3	3	4	3	3	3	4	32	80
Azizah Zalfira	3	3	2	3	2	4	3	4	3	2	29	72,5
Gita Putri Amalia	3	3	3	3	3	3	3	3	3	3	30	75
Angga Satria	4	3	4	3	3	2	3	3	3	3	31	77,5
Nahrowi	3	3	3	3	3	3	3	3	3	3	30	75
Supriadi Arief	4	3	3	3	4	2	3	4	2	3	31	77,5
Ami Fitiani	4	3	3	2	3	3	3	2	3	2	28	70
Anita Yulianti	4	2	3	3	3	2	3	3	3	3	29	72,5
Zulkifli	3	3	3	2	4	2	3	3	4	3	30	75
Heny Hidayaty	3	3	3	2	3	3	4	3	4	3	31	77,5
Purwohandoyo	3	2	3	3	3	3	3	3	3	3	29	72,5
Nova Skorvio	3	3	3	3	3	3	3	3	3	3	30	75

System Usability Scale (SUS) Score Analysis Results

The results of the recapitulation of the assessment carried out by 100 respondents after carrying out the calculation steps in accordance with the SUS rules.

$$\ddot{x} = \frac{\sum x}{n}$$

$$\ddot{x} = \frac{5819}{100}$$

$$\ddot{x} = 58.19$$

IV. Conclusion

The conclusion of how to use SUS is that after calculating the average SUS score of all respondents. The score is then adjusted for the SUS assessment. In which category the test results with the average score have been obtained. Assessment of the SUS score category on the website of PT. Rifan Financindo Futures are as follows:
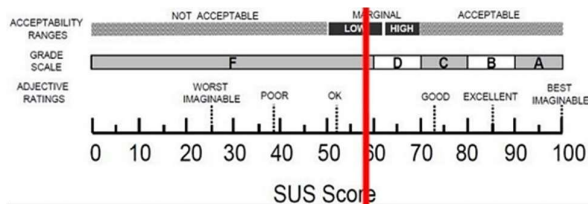

Figure 1.   Picture SUS Website PT. Rifan Financindo Futures

Based on Figure 4.28 above, it is obtained from the results of the calculation of the average score of SUS getting a value of 58.19 with acceptability ranges at a marginally low level, on the grade scale side it occupies grade F and the last one on the adjective side of the rating is in the OK position. For that, from the results of the assessment given by the respondents, the results of the assessment of the website of PT. Rifan Financindo Berjangka is the average SUS score obtained is 58.19, the acceptance rate is included in the Marginal Low category, the scale grade level is in the F category, the rating adjective is in the OK category.

In accordance with the results of these studies, the website of PT. Rifan Financindo Berjangka certainly does not have a good user interface, from the appearance and use it has not been fully explained by end users. This shows that the user has the potential to become a deductor. This can lead to a decrease in the number of users for that we need an improvement and evaluation of the website of PT. Rifan Financindo Futures is in the stage of developing its interface.

The System Usability Scale (SUS) method can be used as an analysis of the assessment of an application that is judged to have been measured and structured accurately. There are various ways to determine the results of the assessment as shown when analyzing the assessment from the PT. Website. Rifan Financindo Futures Palembang, the conclusions are as follows:

1) From the results of the analysis conducted on the website of PT. Rifan Financindo Futures Palembang

only got a SUS score of 58.19 which means the PT. Rifan Financindo Futures Palembang has not been declared acceptable or successful

2) Because it is still included in the acceptability ranges, it occupies a marginal low level

3) On the side of the grade scale occupies grade F

4) On the adjective side, the rating is in the OK position. Because the SUS score is considered good if it is worth more than 70.4 and above.

5) So that the website user interface of PT. Rifan Financindo Futures Palembang is not feasible or successful to be used by end users as a medium for presenting news and information for employees and customers of PT. Rifan Financindo Futures Palembang.

6) From the results of the study it can be concluded that the level of user interface on the Website of PT. Rifan Financindo Futures Palembang has not been declared to meet the criteria for a good and attractive user interface in terms of appearance such as good menus and features, therefore evaluation and development of PT. Rifan Financindo Futures Palembang to further

interface to improve the criteria of the Website PT. Rifan Financindo Futures Palembang and requires other evaluation methods to identify problems.

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