The Usability Testing of Website In Bina Darma University Merrieayu Puspita Hannah, Firdaus, A.Haidar Mirza

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Abstract

Information is an important thing that is needed in all aspects of life. Information technology is major prop for service innovation and main weapon to strategy business to win over the competition. With the use of information technology is expected to become the most effective way to find and distribute information. The web site is one of public information services that already is an important part to support the success of particular agencies. Bina Darma University has the website located at http://www.binadarma.ac.id. The need for web based service is measured to know the quality of the website. If a website difficult to used, the users would then not going to even visit the website. Visitors want a website that could be easily used and studied. One way to measure the quality of the web is by using theusability testing method. Five components contained in this method are learnability, efficiency, memorability, errors, and satisfaction (Jacob Nielson: 2003). Based on the above analysis, writer take on title The Usability Testing of Website In Bina Darma University".

Keywords: Website, Usability Test, Web

1 INTRODUCTION

In the modern life, all aspects of life need information. We can get information from anywhere such as electronic media, the mass media, etc. Information technology is major prop for service innovation and main weapon to strategy business to win over the competition. With the use of information technology is expected to become the most effective way to find and distribute information. The presence of information technology increasingly benefit in supporting our daily activities. And the website is one of public information media services that is already an important part to support the success of particular agencies, because there were information activities, marketing products and services on those kind of agencies. Website is the information distributor on all over the internet (Jovan, 2007). Websites are location or address on internet, consisting of files and preserved in various computer which is called the server (Pardosi, 2005). Bina Darma University has the website located at http://www.binadarma.ac.id. In the website can be seen display home, Bina Darma profile information such as vision and mission, history, facilities, and also the logo. This website is also contained information about academic, information about a diploma and bachelor degree,

graduate programme, academic calendar and also describing procedures of student service at Bina Darma University. In addition there are also video of universitys activities and Bina Darma contact number or address. In top right there are menu to replace language, menu webmail and menu login. On the left side of web page there are also the announcement and menu link about Bina Darma University.

To know the quality of this web site, it is required the measurement of the quality of web by using usability testing with charging respondents through questionnaire. Usability is a measure of a characteristic which described how effective user interaction with a product (Jeff Axup, www.upasoc.org, 2004). Knowing how good the quality of a website, this might make users would feel its impact. Users will not reluctant to re-visit the website. Users feel ease using the website. It is not difficult to study the things associated with the web .So users will be satisfied with the website each time they visit. It being taken by writer to do usability testing on the website to know the quality of of website by using five components of usability testing method which developed by Jacob Nielsen (1993), learnability, efficiency, memorability, errors, and satisfaction. Based on the above analysis therefore writer take on title Usability Testing on Bina Darma University Website.

2 RESEARCH METHODOLOGY

Eko saputra, Zanial mazalisa, Ria andryani in their researches used usability testing method. Phases done in their researches determine the evaluators, conducted a survey with questionnaire, perform the function of elections, make the task of usability testing, composing usability test scripts, implement usability tests with interviews, do data analysis of the results of the test and usability survey, draw up recommendations for the improvement application, where data collection will be requiring direct observation to the office of the inspectorate, and then do the interview, furthermore give the questions that have been concluded in which the questionnaire will be filled by respondents, and then they will give out their assessment towards the website.

Himma Wijaya used the usability testing method to test the interface of North Sumatra University website library. In his research, he explained that the usability testing method is to measure how the website is easy to be used, to be learned, and how efficient the website is to satisfy its users. One of the method is formal usability test. The respondents are his students, staff and lecturers. The collection of the data was done in two ways which recorded every actions of taken by respondents and conducted interviews which also recorded every comments given by respondents.

Anetta Hinchliffe and W. Kerry Mummery in their research used the usability testing method. Data collection technique using the merger of two methods, qualitative and quantitative. The technique does consisting performance measurement (of time taken), observation directly to users, users subjective (questionnaire and interview). Respondents consist of three levels, users, experts, and subjective user preference. Data analysis uses the method triangulation approach. Then Lecerof et al (1998) has proposed definition of usability is as one who focus on how system relevant with users needs, that is how well system serve the needs of users is how efficient users can perform the tasks using the system or the security system, such as theusers rights to cancel some actions that is not clear.

Badre (2002: 229) give a definition of usability testing as follows, Usability testing has traditionally meant testing for efficiency, ease of learning, and the ability to remember how

to perform interactive tasks without difficulty or errors. In other words, it is to measure efficiency, easy to be learned, and the ability to remember how to interact without difficulty or error.

Usability derived from a usable word, which in general means can be used well. Usability as the measurement of user experience when interacting with products or system on website, software application, technology move, and other tools operated by the user (Jakob Nielsen, 1993).

3 RESULT AND DISCUSSION

The web site must be designed as ergonomic as possible with the principle of human-centred design, which makes it easy for people to use the website. After the discussion research methodology, hence writers choose to use the usability testing method to gauge the quality of the website. A system testing was done through the distribution of questionnaire poll made in the form of a score four points with a model likert scale. According to Sutrisno Hadi (2008), the absence of a choice between skeptical about reasons namely they have a category a double sense, can be defined as not answering, neutral, or in doubt. These kind of answers are not expected under the instrument.

Table 1: Tabel Nilai					
PK	STS	TS	S	SS	
Nilai	1	2	3	4	

Keterangan : PK = Pertanyaan Kuisioner, S = Setuju, STS = Sangat Tidak Setuju, SS = Sangat Setuju, TS = Tidak Setuju

Population in this research are lecturers, staff employees and students of Bina Darma University. A population of lecturer at Bina Darma are 237 people consisting of lecturers graduates from graduate programme of the faculty of computers and non computer and permanent and non permanent lecturers. Employees are 94 people with with senior high school graduates or an undergraduate degree of the faculty of computers and non computer. Population active students are 5997 people consisting of the various. The technique of sample collection in this research is using a technique purposive sampling or judgemental sampling, the sample taking based on special selection (Djarwanto, 1998).

As for characteristic of sample that will be used for respondents are: And the data collection method are:

1. Questionnaire

Questionnaire is a list of questions written addressed to respondents. The respondents consisted of the students, staff and lecturers of Bina Darma. The respondents answers over all the questions in the questionnaire then noted/recorded.

2. Observation

Observation involves all the senses (vision, hearing, olfactory, smelling, flavoring). Recording the results can be done with the aid of electronic instrument record.

Respondents Characteristic Lecturer As a lecturer Computer faculty or non-computer faculty Can be able use computer application Working for more than 5 years Must be understand about vision and mission Bina Darma University **Employee Staff** Staff operation Can be able use computer application Working for more than 5 years Must be understand about vision and mission Student Registered as an active student Computer faculty or non-computer faculty Student in less than 6th semester Can be able use computer application

Table 2: Respondents and characteristic of the sample

3. Interview

The taking of data through interviews/orally directly to the source of the data, either through face-to-face or of passing by telephone, a teleconference. The respondents' answers recorded and concluded by the researchers.

4. Document The taking of data over the document written or electronic from the institution. Documents are necessary to support the completeness of data.

The writer uses the usability testing is to find the extent to which could be ease website, ease of use, satisfaction and efficiency of the website. According to Nielson (1993), usability is an attribute to assess how easythe interface of website to used. Usability also often used to increase the ease of users during the design.

Usability is very important for the sustainability of a website. If a website difficult to used so users will not visit the website. If a homepage fail to provide an explanation or information of difficult tobe understood, people are not going to visit the website.

Usability have fivevery important components:

1. Learnability

The ease level of a system to be studied, is measured by the time needed to studies the use of system to reach the level of requiered skill. There will be measure for users in understanding habit of frequently visit the websit, know their reason to access it and identified what they have been seeking.

2. Efficiency

Nielsen (1993) linked to the needs of resources efficiency, business as time and money to achieve the aim of the use of the system. In this aspect would be seen how efficient this web site can be presenting information quickly for the users.

3. Memorability

Memorability criteria is stand alone in spite of criteria learnability. Memorability associated with the process of recalling (considering) users after they not visit the website for some time. It is a measure for user, when the website experienced some changes, so the users will take some time to adjust and learn the website again.

4. Errors

Nielsen (1993) argue that when the errors of use are in the high level, it indicates thatlow usability system are needed. In this aspect, we might want to check if any link is not being used (broken link) or web pages still in process (under construction).

5. Satisfaction

Satisfaction criteria becomes a consideration for Nielsen (1993). Users satisfaction on the website indicates that the system is feasible.

4 CONCLUSION

From a research conducted above, the onclusions from five usability testing components are learnibility, efficiency, error, memorability, and satisfaction. All variable such listed before provide facilities for users. This website presents information fast enough for users. Users have no trouble getting and finding out information from the website. And in terms of website interface has been quite interesting and display a menu that there are also easy to remember by users. So users are easy to remember how to use the system, not getting trouble in using it and no need a long time to find what users need, users can predict the outcome of a menu that they chose and the level of errors in the website is so small that give satisfaction to the users which will make them want to visit or access the website again in the future.

References

- Hinchliffe, Anetta and Kerry, W., 2015, Applying usability testing techniques to improve a health promotion website, Avalaible: http://www.infosihat.gov.my/infosihat/artikelHP/bahanrujukan/HE_DAN_ICT/PDF/Applying%20usability%20testing%20techniques%20to%20health%20promotion%20website.pdf. Viewed:13 Februari 2015
- Badre, A.N, 2002, Shaping Web Usability: Interaction Design in Context, Boston: MA: Addison Wesley Professional
- Djarwanto, 1998, *Statistik Sosial Ekonomi*, BagianPertama, EdisiKedua, Cetakan-Ketiga. Yogyakarta: BPFE.
- JeffAxup, 2004, Usability Professionals Association About Usability. [Online]. Available: http://www.upassoc.org. viewed April 2015
- Jovan, FN, 2007, Panduan Praktis Membuat Web dengan PHP untuk pemula, Cetakan Pertama, Media Kita, Jakarta Selatan.
- Lecerof, A. & Patrn, F, 1998, Automatic support for usability evaluation, *IEEE Transactions on Software Engineering*, vol. 24, no. 10

- Nielsen, J., 1993, Guerrilla HCI: Using Discount Usability Engineering to Penetrate the Intimidation Barrier, Usable Information Technology.[Online]. Available: http://www.useit.com/papers/guerrilla_hci.html. Viewed April 2015.
- Pardosi, M, 2005, Belajar Sendiri Website Gratis, Surabaya: Dua Selaras.
- Saputra Eko, Zanial Mazalisa, Ria Andriyani, 2014, USABILITY TESTING UNTUK MENGUKUR PENGGUNAAN WEBSITE INSPEKTORAT KOTA PALEMBANG. Jurnal mahasiswa Teknik Informatika.
- Sutrisno Hadi, 2004, Metodologi Research Jilid III. Yogyakarta :PenerbitAndi
- Himma wijaya.http://repository.usu.ac.id/bitstream/123456789/16089/1/pus-des2008-%20%281%29.pdf.diakses: 12 Februari 2015