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Evaluation the usability of the da'wah management study program website using the heuristic evaluation method

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ABSTRACT

The Da'wah Management Study Program is one of the study programs at STAIN Bengkalis which has used the website as a place to Get information and promotional media for the Bengkalis Stain Da'wah Management Study Program. The function of this website is to make it easier for users to access information relating to institutions and the Da'wah Management Study Program. In implementing this website there are still several problems, namely: information that is not updated enough, an unattractive appearance, a lack of visitors and a website that often has errors. The aim of this research is to analyze, evaluate and measure the level of user satisfaction of the missionary management study program website using the heuristic method evaluation and to provide recommendations to the website manager of the da'wah management study program so that it can be used as a solution for increasing user satisfaction based on the success rate of the website. Data collection through observation, interviews, and questionnaires. The sampling technique uses the Slovin and Simple Random techniques Sampling. Based on research results on data obtained is that the percentage value of Usability is obtained Total testing was found to get a score of 36%, which means it shows that the website is good enough for you users, for a total not found, got a score of 32%, which means it shows that the website not good for the user.

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1. INTRODUCTION

The increasingly rapid development of information technology from time to time makes technology industries compete to provide informative innovations (Lupita Dyayu et al., 2023). IT doesn't just focus on only computer technology is used to process and store information, but also in communication technology to send information (Hilmy Farid, 2022).This is also directly proportional to the development of the internet in society. Internet even used as media exchange information and communication with in academic or educational process (Nugroho et al., 2022). The rapid development of Internet Technology has triggered the emergence of various new applications, including in the field of Information Technology (Valentino Adhy Nuantra et al., 2022). An information system is an interconnected set that functions to collect, process, store and distribute information to support decision making and monitoring within an organization (Rahmayan & Jayanti, 2023). To be able to run effectively and efficiently an information system requires several components Information system components consist of input in the form of data sources,

processing data into information, output in the form of information products supported by the control system and data storage.

Current information system technology has developed very quickly. This has a positive impact on progress in the business sector, especially in web-based systems. Web-based applications are easy to use and have an interface that can be accessed via PC and smartphone (Suriyanti et al., 2023). Web-based information technology can be used to support a part of an agency's work, remembering the rapid advances in technology that have penetrated all fields, as well as the relatively advanced lifestyle patterns of society (Kurnia et al., 2024). One of the uses of information and communication technology in higher education is the existence of a website (Sukmasetya et al., 2020). A website is a web technology-based site that allows users to obtain information from surfing. Computer users connected to the internet can surf to get information by visiting websites that are spread across cyberspace (Setiawan & Widyanto, 2018). Websites for organizations are promotional media as well as being media for conveying information and also media for interaction with the wider community (Dewi et al., 2022).

Evaluation is one of a series of activities to improve the quality, performance or productivity of an institution in implementing its program. The focus of evaluation is the individual, namely the learning achievements achieved by the group or class. Through evaluation, information will be obtained about what has been achieved and what has not been achieved. Furthermore, this information is used to improve a program (Nabilah et al., 2024)

The Da'wah Management Study Program at STAIN Bengkalis is one of the study programs at STAIN Bengkalis which is currently accredited Good. The Da'wah Management Study Program has a website with the URL https://md.kampusmelayu.ac.id/ which is based on WordPress. This website is used as a promotional medium for the Da'wah Management study program to the public. However, the use of the website as a promotional event has not been optimal. At this time the website has not been managed well. This can be seen from news that is not up to date, incomplete features, an unattractive appearance, a small number of visitors, and frequent errors when accessing the website.

To resolve this problem, it is necessary to evaluate the website. This can be done by measuring the level of satisfaction of visitors to the STAIN Bengkalis Da'wah Management Study Program website. Measuring visitor satisfaction can be done using the Heuristic Evaluation method. Heuristic Evaluation is Heuristic evaluation which is also one of the most widely used methods to measure the level of user comfort in terms of human-computer interaction (IMK). The purpose of Heuristic Evaluation is to identify problems related to interface design (Dalimunthe et al., 2019).

In this research the author will analyze the website using the usability method. According to Nielsen, Heuristic Evaluation is a method usability engineering to find deep usability problems user interface so that it can be used as part of redesign process (Subhan & Indriyanti, 2021). usability aspects to know how users can learn deep use the product in order to obtain a goal so that it can be known how much whether they are satisfied or not its use (Pratama et al., n.d.).

Similar research has been carried out with the title usability evaluation of online news websites using heuristic evaluation method evaluation that has been carried out by using the heuristic method on the website bertuahpos.com has managed to find the problem usability (Mantiri, 2014). Similar research has also been carried out with the title system usability scale vs heuristic evaluation: a review From the results of the study it was found that heuristic evaluation (HE) can carried out simultaneously with other testing techniques but requires large costs and processes easier testing (Ependi et al., 2019). further research with the title Evaluation Of Usability Of The Satu Sehat Application Using The System Usability Scale Method Using the System Usability Scale (SUS) method, usability evaluation results were obtained The Satu Sehat application has an OK usability score with a D rating with a total SUS score of 64.75. From data Therefore, it is recommended to use the system usability scale method to help the evaluation process faster and easier (Institut Teknologi Telkom Purwokerto et al., 2023). The next research is entitled Usability Evaluation Using the System Usability Scale (SUS) Method and Discovery Prototyping in the PLN Mobile Application (Case Study PT. PLN) This method of testing is carried out by involving end users, where testing with this method places more emphasis on the end user's point of view so that the test results will be more in line with what is being encountered by users (Kaban et al., n.d.). Laifu Healthy Usability Analysis Using The System Usability Scale Method, the

results obtained are Healthy Laifu has an average SUS score of 71.91. Occupy the Marginal High level in the Acceptability position Ranges, in terms of Grade Scales, the system occupies Grade C. Meanwhile, in terms of Adjective Rating is in a GOOD position. Healthy Laifu has a usability score that is not very good, however still acceptable to (Sukmasetya et al., 2020)

Based on the problems above, an evaluation needs to be carried out to see to what extent the quality of the website has functioned well according to user satisfaction. The title of this research is Evaluation of the Usability of the Da'wah Management Study Program Website Using the Heuristic Evaluation Method.

2. RESEARCH METHOD

Usability according to ISO is the extent to which a product can be used by users to achieve predetermined targets based on efficiency, effectiveness and satisfaction in a certain context. The context of use consists of tasks, users, and equipment such as hardware and software (ISO, 1998). Usability from the business side of the application. Evaluation of the usability of the user interface and user experience can be carried out using other evaluation methods so that it can produce maximum results (Putri & Indriyanti, 2023). Meaning of Usability Testing or testing usability is "usability testing has traditionally meant testing for efficiency, ease of learning, and ability to remember how to perform interactive tasks without difficulties or errors" (Jumiati, 2021).

The basis of Usability assessment is a felt experience users when using the application. According to ISO 9421-11, the usability standard is Well, there are 3 components, namely, effectiveness can be measured from number of errors made by users, efficient can be measured by the time required by users to achieve the desired goals, and satisfaction can be measured from that freedom obtained by the user to achieve convenience of a product (Elma, 2020). This test method is because the SUS method has been used and tested for over 30 years and still proves to be a reliable method for evaluate the usability of a system based on industry standards (Ramadhan, 2019).

Usability measurements are carried out to assess whether the interaction between users with the application can run well. Measurements are made follows the concept of user testing, with an emphasis on measurement and not testing, as follows: Determine goals in exploring questions, Selecting paradigms and measurement techniques in usability, Design tasks that will be a means of measurement, Select participants who will become users to try the application, Prepare measurement conditions, Plan the course of measurements, Carry out evaluation, analysis and presentation of data (Huda, 2019).

Heuristic Evaluation is a user-based evaluation system for computer software. This system involves evaluators to provide input which is then categorized into heuristic principles (Anshori et al., n.d.). The goal of heuristic evaluation is to improve design effectively. There are 10 general principles of Jakob Nielsen for interaction design, namely (Trimarsiah & Arafat, n.d.). Visibility Of System Status, the display of the information system is designed so that users can provide feedback or the system provides feedback, Match between system and the real world, a match between the user and the system, where the system can understand the user's communication style, User control and freedom, User control and freedom. Users often select system functions by mistake and need a place to exit the system view, Consistency and standards Consistency is whether different words, situations, or actions mean the same thing, Error prevention, Error prevention. Even better than good error messages is careful design that prevents problems from occurring. Either eliminate error-prone conditions or check for them and give users a confirmation option before they perform the action, Recognition rather than recall. Minimize user memory load by making objects, actions, and options visible. Users should not need to remember information from one part of the dialogue to another. , Flexibility and efficiency of use, Flexibility and efficiency of use. Accelerators – invisible to novice users – may often speed up interactions for expert users so that the system can cater to experienced users and allow users to customize frequently performed actions, Aesthetic and minimalist design, Aesthetic and minimalist design. Dialogue should not contain information that is irrelevant or rarely needed, Help users recognize, diagnose, and recover from errors, Help users recognize, diagnose, and recover from errors. Error messages should be stated in simple language (no code), precisely indicate the problem, and constructively suggest a solution. and standard. Users don't need to ask questions, Help and documentation,

Help and documentation. Although it is better if the system can be used without documentation, it may be necessary to provide help and documentation.

3. RESULTS AND DISCUSSIONS

Based on the results of the statistical analysis carried out by the author, it is possible to determine the level of success of the website in terms of usability. The results of the analysis can be given the following conclusions:

Validity Test Results

Based on research entitled "How to Determine the Right Number of Participants for Usability Studies" by, found that the optimal number for usability studies is 10 (Nirwana et al., 2022).Test results are carried out by comparing the product moment correlation value or R table with the calculated R, where the calculated R must be greater than the R table. In the R table, the product moment for 35 respondents with a significance level of 10% is 0.163. Based on the results of validity data processing, it can be seen that the data processing obtained for each statement item is valid according to the validity measurement, the correlation value is greater than the R table.

Reliability Test Results

Based on the results of the reliability test carried out on 10 statements and the results of the reliability test with an alpha value of 0.42, the statement received a Cronbach alpha value of 0.334 which is greater than the alpha value.

Usability Testing Results

Based on the usability testing results, the lowest percentage variable is variable H3 P5 36% which means quite good for website usability, variable H5 P8 21% which means quite good for website usability, variable H7 P10 11% which means not good for website usability, variable H7 P11 14% which means not good for website usability, variable H8 P12 17% which means not good for website usability, variable H8 P13 38% which means not good for website usability, variable H9 P14 22% which means quite good for website usability, variable H9 P15 32% which means quite good for website usability, variable H10 P16 34% which means good for website usability.

Final Results

The analysis results obtained and the total not obtained obtained a value of 20.13% which shows that the situation is quite good for users of the STAIN Bengkalis Da'wah Management Study Program website.

4. CONCLUSION

Based on the results of the evaluation that the author has carried out on the website of the STAIN Bengkalis da'wah management study program, the following conclusions can be given: Evaluation of the website's success level in terms of usability using the Heuristic Evaluation method found that several variables showed low results and regular improvements must be made as soon as possible so that the STAIN Bengkalis Da'wah Management Study Program website can function as it should, From the results of calculating the usability problem, the lowest percentage is for the H3 P5 variable 36%, the H5 P8 variable 21%, the H7 P10 variable 11%, the H7 P11 variable 14%, the H8 P12 variable 17%, the H8 P13 variable 38%, the H9 variable P14 22%, variable H9 P15 32%, variable H10 P16 34% so it is hoped that quick improvements to the website are in accordance with the recommended solutions, Based on the 10 principles of Heuristic Evaluation which influence the success of implementing a website at the usability level, namely getting recommendations as a solution, namely the recommendation that can be given is that there needs to be a menu for criticism, suggestions and input so that visitors can interact with the STAIN Bengkalis da'wah management study program via the website.

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