Effectiveness of Website-Based Smart Seminar Application on Islamic Learning (Case Study at Raharja University)

Abdul Hamid¹*, Arribathi¹, Suwarto¹, Ita Erliyani¹, Saryani², and Haris²

¹Departement of Computer System, Raharja University, Kota Tangerang, 1511 Indonesia
²Departement of Informatics Engineering, Raharja University, Kota Tangerang, 1511 Indonesia

*abdulhamid@raharja.info
Abstract. The purpose of this study was to determine and test the effectiveness level of smart seminar application in the learning of Islamic Religion with a case study at Raharja University, Tangerang City, with an experimental approach. The data collection technique uses a test. This study took 74 samples, consisting of 37 control groups, i.e. groups that were not given treatment, or groups that did not use the Smart Seminar application, and 37 students as experimental classes, or groups who were treated were groups who used the Smart seminar application. To test whether the application of smart seminars in the teaching of Islamic subjects is effective, the one-way Analysis of Variance (ANOVA) test is used, but first the distribution data groups must have normality distribution and come from homogeneous data groups. From the normality test table and the homogeneity test table, the Asymp value is obtained. Sig. (2-tailed) 0.318> 0.05 and sig 0.958 > 0.05 this shows that the data is normally distributed, and coming from a homogeneous data group it meets the requirements to be continued in the Analysis of Variance (ANOVA) test to test whether there is the effectiveness of the use of the Smart Seminar application in learning Islam at Raharja University. From the ANOVA test results obtained that the calculated F value of 196.236 and a sig value of 0.000 <0.05, this shows that the use of the Smart Seminar Application is very effective in learning Islam at Raharja University. Keywords: Application, Smart Seminar, Learning.

1. Introduction
Islamic religion requires that each adherent to practice the teachings of Islam in a kaffah\[1\] (overall) in various aspects of life, in accordance with the word of Allah SWT "O people who believe! Enter into Islam as a whole, and do not follow the steps of Satan. Really, he is a real enemy to you ". (Surat al-Baqarah: 208), so that one day we will become perfect people\[2\] who are able to prosper the world. For this purpose, the values of the teachings of Islam must be instilled early on until the end of life through non-formal, informal and formal channels\[3\]. In the formal pathway from kindergarten to tertiary institutions in the form of Islamic subjects or subjects. To be able to achieve effective and efficient Islamic religious learning with maximum results, various kinds of innovations have been pursued through the use of approaches, methods, tools and teaching systems.

In the millennial era or 4.0 where advances in the field of information technology are developing very rapidly, in line with that, there have also emerged websites\[4\] and android\[5\] based applications\[6\] for the needs and can help various fields of activity, including education, more specifically Islamic religious education. But no matter how sophisticated information technology innovation in the form of web-based applications and Android will not be able to help and function optimally if it is not accompanied by skilled human resources in choosing and being able to use or operate it appropriately. One way to overcome this is by organizing education through seminars and workshops for teachers, lecturers and students with non-IT backgrounds. The skill material taught is that participants must be able to choose the appropriate application according to its designation, practice operating it correctly, be able to measure the effectiveness of the application, then recommend and socialize it to the audience.

This website-based smart seminar application was first designed only for the purposes of seminars and workshops, in which its features can be contained for uploading: banners, photos, videos, pdfs and questions. Whereas on the dashboard loading; home, seminars, workshops, contact, and my events. Where are my events that previously only contained; event created home and event schedule, experience innovation by adding class lists and student classes.

With these additions, smart seminar applications can not only be used for seminars and workshops, but can also be used for online teaching such as blended learning. So that this application can be recommended and socialized to the public, it must be tested first, so it can know the extent of its effectiveness. for this purpose the researchers conducted this research based on the title "Effectiveness of the Smart Seminar Application on Islamic Learning” with a case study at Raharaja University faculty of science and technology. Henceforth, this smart seminar application is expected not only to be used for the activity of seminars and workshops, but can be used for learning Islam and various other subjects
2. Theoretical Basis

2.1 Application.

The application said, lately very familiar. Etymologically reviewed the term application comes from the English "application" which can be interpreted as an application or use. The understanding of the application according to experts include: according to Henry[7] "Application is a software unit created to serve the needs of several activities such as commerce, community service, advertising or all human processes". According to Janer[8] "An application is a software unit created to serve the needs of a number of activities such as commercial systems, community services, advertising or all human processes". Meanwhile, according Supriyanto[9] "Application is a program that has the activity of processing commands required to carry out user requests with specific objectives".

2.2 Smart Seminar.

Smart Seminar's ideas and terms depart from concern, where in general there are still many seminars and workshops that are held conventionally starting from the announcement of the event, registration of participants, to the process of organizing the event. So it is felt less effective and unsustainable with questions and answers that can improve the quality of the event. Therefore, web and android-based Smart Seminar and Workshop systems are needed, which can facilitate event announcements and participant registration online, attendees attendance with QRCode, and allow participants to ask questions directly through the application without interrupting the contents of the material being delivered by the speaker. The research method carried out in the first stage is to collect data and information regarding the application of the Smart Seminar and Workshop system needed to create a web-based system and android, through interviews, literature studies, and Focus Group Discussions (FGD) with seminar and workshop experts. The second stage, to build this system is the Waterfall type SDLC (System Development Life Cycle) method. The Waterfall[10] model provides a sequential or sequential software life cycle approach starting from analysis, design, coding, testing, and maintenance. The results of the Smart Seminar and Workshop system design can facilitate educational institutions in conducting seminars and workshops in an effective and more quality manner, as well as being more interactive between participants and speakers in terms of questions and answers. This application can be accessed through a web browser or with the Android application.

![Figure 1. Smart System Architecture Seminar and Workshop](image)
means the process, deeds, ways of teaching or teaching so that students want to learn. Learning is an assistance given by educators so that the process of acquiring knowledge and knowledge, mastery of skills and character, and the formation of attitudes and beliefs in students. In other words, learning is a process to help students to be able to learn well. So that learning has several components including: students, educators, objectives, teaching material, methods, media and evaluation [12].

3. Research purposes
The purpose of this study was to determine and test the effectiveness level of smart seminar application on the learning of Islamic religion with a case study at the University of Raharja, Tangerang city in the faculty of science and technology.

4. Research methods
The research took place at the University of Raharja in Tangerang, a science and technology faculty, involving 74 student samples, consisting of 37 students as the control group and 37 students as the experimental group. In the control group the learning process did not use the Smart Seminar application, while in the experimental group the Smart Seminar application was used at each time the learning took place along with the test. Data analysis was performed by comparing the mean differences between the two groups, using Analysis of Variance (ANOVA). Before data analysis is performed for hypothesis testing, it is first ensured that the data groups are normally distributed and come from homogeneous data groups. To find out normal and homogeneous data distribution, it can use normality and homogeneity test, in this case will be assisted using the SPSS application.

5. Results and Discussion
To test whether the application of smartseminar in learning Islamic courses is effective, the one-way Analysis of Variance (ANOVA) test is used, but first the distribution data group must be distributed normally and come from homogeneous data groups, as a prerequisite before statistical tests to answer the hypothesis. The results of normality and homogeneity tests can be seen in the following table:

Table 1. Test for normality

| One-Sample Kolmogorov-Smirnov Test | Learning outcomes |
|------------------------------------|-------------------|
| N                                  | 74                |
| Normal Parameters^a,b               |                   |
| Mean                               | 77.53             |
| Std. Deviation                     | 15.605            |
| Absolute                           | .111              |
| Most Extreme Differences           |                   |
| Positive                           | .111              |
| Negative                           | -.098             |
| Kolmogorov-Smirnov Z               | .958              |
as. Test distribution is Normal.
b. Calculated from data.

Table 2. Homogeneity
Levene's Test of Equality of Error Variances
Dependent Variable: Hasil Belajar

| F    | df1 | df2 | Sig. |
|------|-----|-----|------|
| .003 | 1   | 72  | .958 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Design: Intercept + X

From Table 1, the normality test shows that the Asymp value. Sig. (2-tailed) 0.318 > 0.05, this shows that the data is normally distributed, and the homogeneity test table and sig 0.958 > 0.05, this shows that the data group comes from a homogeneous data group that meets the requirements to be continued in the test Analysis of Variance (ANOVA) to test whether there is an effective use of the SmartSeminar application in the study of Islamic Religion at Raharja University.

Table 3. ANOVA table
Tests of Between-Subjects Effects
Dependent Variable: Hasil Belajar

| Source        | Type III Sum of Squares | Df | Mean Square | F     | Sig.  |
|---------------|-------------------------|----|-------------|-------|-------|
| Corrected Model | 13004.87                | 8  | 1           | 13004.87 | 196.236 | .000  |
| Intercept     | 444772.5                | 54 | 1           | 444772.5 | 6711.34  | .000  |
| X             | 13004.87                | 8  | 1           | 13004.87 | 196.236  | .000  |
| Error         | 4771.568                | 72 | 66.272      |       |       |
| Total         | 462549.0                | 74 |             |       |       |
From the ANOVA table, it is seen that the F price is 196.236 and the sig value is 0.000 <0.05, this shows that the use of the Smart Seminar application is very effective in learning Islam in Raharja University.

6. Conclusion

From the results of the Smart Seminar Application implementation test, with a sample of 74 respondents, consisting of 37 control groups, namely groups not treated, or groups not using the SmartSeminar application, and 37 students as experimental classes, or groups that were treated, namely groups using the Smart application seminar. To test whether the application of smartsseminar in learning Islamic subjects is effective, the one-way Analysis of Variance (ANOVA) test is used, it can be concluded that the use of the SmartSeminar application is very effective in learning Islam in Raharja University, it can be proven where the ANOVA table results are seen the price of F count is 196.236 and the sig value is 0.000 <0.05.

7. Suggestion

Inviting stakeholders and institutional policy makers to use the smart seminar application in addition to being used for seminars and workshops, it can also be a medium for learning Islam or other subjects.

References

[1] Quraish Shihab, Tafsir Al-Misbah, (Iantera Hati, Jakarta, 2006), p. 449
[2] Imam Qurthub, Tafsir Al-Qurthubi, (Dar al Kotob al-Ilmiyah Beirut, Lebanon, tt), juz 20, p. 101-102 laqob from Abu 'Abdullah Muhammad bin Ahmad bin Abu Bakr Al-Ansharal-Qurthubi
[3] The obligation to teach Islamic Religious Education to all levels of education (formal, informal, non formal) is something that must be carried out based on Government Regulation Number 55 of 2007 concerning religious education and religious education.
[4] Bekti, Bintu Humairah, Adept at Creating Websites with Adobe Dreamweaver CS6, CSS and JQuery, (Yogyakarta, ANDI, 2015), p. 35
[5] Arifianto, Teguh, Makes Android Application Interface Cooler with LWUIT, (Yogyakarta: Andi Publisher, 2011), p. 1
[6] HM, Jogiyanto, Analysis and Design of Information Systems: Structured Approaches to Business Application Theory and Practice, (ANDI Yogyakarta, Yogyakarta. 1999), p. 12
[7] Khaidir, Microsoft Visual Basic 6.0., (Elex Media Komputindo, Jakarta, 2004), p. 12
[8] Eko, Peel Completely Microsoft Visual Basic 6.0. (Elex Media Komputindo, Jakarta, 2004), p. 12
[9] Supriyanto, Application Design. (Widyastana, Surabaya, 2005), p. 2
[10] Roger S. Pressman, Software Engineering Practitioner Approach Book One, (ANDI, Yogyakarta, 2002), p.37
[11] M. Ngalim Purwanto, Education: theoretical and practical, (Project Section for Provision of Elementary School Children's Reading Books, Jakarta, 1997), p. 85
[12] Purwadinata, Educational Psychology with New Education, (PT Remaja Rosdakarya, Bandung, 1967), p.22
[13] Sugiyono, Quantitative, Qualitative and R&D Research Methods, (ALFABETA, Bandung, 2019), p. 269
Acknowledgment : RISTEKDIKTI