

## Conference Paper

# Making of Smart Education and Investment System 4.0 for Halal Industry (SEISHI) Application-Based

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### Abstract

Indonesia,, with its large Muslim population, is an important market for and stakeholder in the development of the halal food industry. However, the halal industry in Indonesia has not grown optimally. One of the causes is that halal industry players currently only use Islamic banking, so they are less in touch with the wider community. This study aims to offer a solution to improve Islamic financing outside of Islamic banking, using an Islamic financing application called SEISHI (Smart Education and Investment System 4.0 for Halal Industries). SEISHI is offers an innovative fintech alternative for funding and investment for halal institutions in Indonesia. This research was designed at a regional scale in Malang and involved expert validation, material validation and 20 sample respondents to determine the acceptability of SEISHI applications. The descriptive qualitative method was used. The results of the study indicate that the application of SEISHI can bring together important elements in the halal industry cycle, namely halal industry players, Islamic banking, investors and the government regulators, and so strengthen Islamic funding and investment for halal industry players on an ongoing basis.

**Keywords:** SEISHI, Sharia Funding, Sharia Investment, Halal Industry.

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## 1. Introduction

The State of the Global Islamic Economy Report published by Thomson Ruters in 2015/2016 states that halal products in the international arena continue to experience growth, spending on the food sector and halal lifestyle reached \$ 1.8 trillion in 2014, and is expected to continue to experience growth to reach \$ 3.1 trillion by the year 2022. Indonesia has a promising market share, even 87.17% or around 201,176,162 million people in Indonesia are Muslims (BPS RI, 2010). However, with this huge market share based on the 2016/2017 State of the Global Islamic Economy Indicator (GIEI) Indonesia has only been ranked 10th in the world halal industry, which is certainly far behind that of neighbouring Malaysia, which has succeeded in ranking 1st World.

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Indonesia's backwardness in the industrial halal sector due to the huge demand for halal products from both the domestic and global markets, has not been accompanied by support from the government. One of them is that the government organization that is not yet operational is BPJPH, which handles the certification of halal products and also has the duty to provide literacy to halal industry players. This results in low literacy and Islamic financial inclusion in the halal industry. In fact, Islamic financial literacy is needed because it will affect someone in carrying out the financial behavior used (Purnomo, et al, 2016).

Islamic financial literacy, is assumed to affect one's attitude in determining financial behavior, especially in distinguishing between conventional financing and Islamic financing (Purnomo, et al, 2016). Proven National Literacy and Financial Inclusion Survey conducted by the Financial Services Authority (OJK) in 2016 showed that the sharia financial literacy index of the Indonesian people was at 8.1%. Based on a study directed by Reuters, which examined 250 companies involved in the production of Halal food, found that many businesses did not implement Islamic financing even though they were involved in the halal food business. This study shows that only 50% of companies pass the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) tests (Purnomo, et. Al, 2016).

For halal industry, all aspects of business management must be in accordance with the halal supply chain (halal supply chain) to ensure the halal products to the consumers (Tieman, 2011). Therefore, the capital that should be applied by halal industry must also be in accordance with Islamic financial principles. Which starts from investment activities, actors in the halal industry must ensure that the business carried out in accordance with the guidance of sharia is free from the elements of usury (interest), maysir (uncertainty), and gharar (gambling) (Awang, Noor, Muhammad, Abdullah, Rahman, & Yahya, 2016). Therefore, halal industry needs a solution

Based on the description above, it can be seen that the main problem is the need for media that can become a funding and investment media that connects investors and halal industry players. Therefore, the main objective of this research is how to design, build and install the SEISHI (Smart Education and Investment System 4.0 for Halal Industries) application as a funding and investment media for the halal industry in Indonesia.

## 2. Method

In accordance with the research objectives, this research uses a development approach (Research and Development). Borg and Gall (1983: 772) contain a systematic guide to the steps taken by researchers so that the product they design has a standard of eligibility. The stages in the application of SEISHI (Smart Education and Investment System 4.0 for Halal Industries) include the following:

1. Preliminary Study and Data Collection Stage

At this stage what is done is the collection of information and preliminary studies from previous research or related disciplines. Then do an analysis of what needs will be included in the media to be made.

2. Planning and Application Preparation Stage

At this stage what is done is started from planning the application framework and then making the application as the initial form of the product.

3. Expert Validation Stage

At this stage what is done is started from the first trial by experts to validate the material, media and applications. Then an improvement is made from the input provided by the expert.

Analysis of the data used in this research is descriptive data analysis. Descriptive data analysis is used to analyze the data obtained from the results of the validation of the material experts and media experts. Descriptive data analysis describes the results of research based on data that has been obtained to determine the feasibility of the material that has been developed. This data analysis technique is used to process data validation results from material experts, media experts and practitioners.

## 3. Result and Discussion

The results and discussion in this study are described in 4 points as follows:

1. Preliminary Study

The preliminary stage begins with a literature study and then continues with a field study. Literature study is done by finding references about the concept of Islamic financing which includes aspects of Islamic finance and investment for the halal industry. While the field study is conducting field observations by identifying various cases of sharia financing and conventional financing

## 2. Application Building

Data obtained from field surveys and supported by theoretical basics from the results of the literature study then the researcher compiles the application. The preparation of the application is preceded by the construction of a flow chart diagram related to the operational procedures of the application. The following is an explanation of the applications of SEISHI that have been compiled in this study.



Figure 1: Home Screen

Based on the picture shown in Figure 1, the SEISHI application starts with a starting page containing the title of the SEISHI application and 3 main buttons that will lead to another page, the SEISHI Start button to enter the main page (home screen). On the main page there are 3 menus, namely being an investor, needing capital, and a sharia room which contains instructions on using the application.

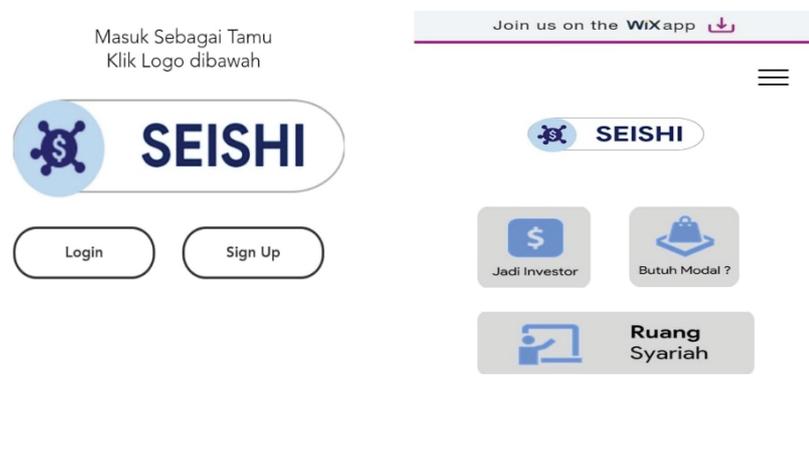


Figure 2: Login Screen – Menu Screen

We can see in Figure 2 (login screen), to be able to enter into the case, we must register first by inputting the initial data and then the user will get a username and

password. On the next page we will choose to become an investor or those who need capital (debtor). Our decision to choose the investor menu will give us the opportunity to place funds in the business that will be displayed on the next page. The business that will be displayed is the user entering the application as the party that needs capital. To facilitate investors in determining the business that will become an investment partner, this application will provide various information needed to determine the investment decisions of investors. The following is a display of users as investors and debtors.



Figure 3: Menu investor – Menu Debitur

When we enter the menu as an investor menu displayed, among others; capital status, see daily data, balances, forums, news and reports. Furthermore, when the user chooses to become a party that needs capital / debtors, the menu that must be done is that they must upload a proposal for submitting funds related to the business that has been run. The proposal submitted by the debtor will later be submitted to the investor. The investor can choose for an attractive and profitable business. In addition, in order to increase investor confidence in fund managers, this application provides periodic reports to investors. Reports that are displayed in the application are financial statements, through this report it is expected that company performance will be known in a certain period.

### 3. Model Testing

Model tests include the validity and reliability of the questionnaire, the validation of the expert team, the level of acceptance of the SEISHI application

#### (a) Validity and Reliability Test of Questionnaire

Validity shows the extent to which the measuring instrument to measure what is measured whether an instrument is valid or not can be determined by comparing the Pearson Product Moment correlation index with a significance

level of 5% with its critical value. The validity and reliability test is divided into two, namely the validity and reliability test for experts and respondents. Based on the results of the expert validity test it is known that the whole questionnaire question items for experts and respondents have a probability value (sig) of less than 0.05 so it can be said that all the question items in the questionnaire for experts are valid.

The reliability test used was Cronbach's Alpha. The reliability test results showed that the variables in the questionnaire had a Cronbach Alpha coefficient of greater than 0.6 so that it could be said the question instrument used on the questionnaire of respondents and experts was reliable or reliable.

(b) Expert Judgment

The validity of the assessment in this study refers to the opinion of Sugiyono (2013: 168) states that a valid instrument means that the measuring instrument used to obtain data (measure) is valid. Valid means that the instrument can be used to measure what should be measured.

Media assessment is carried out by experts or practitioners through assessment instruments based on existing theories and then used as indicators in the assessment by experts.

TABLE 1: Results of Media Assessments by Experts

Variable	Score	Conclusion
Program	73,0%	Good
Content	67,0%	Good
Interface	78,5%	Good

Based on table 2 it can be seen that the acceptance score is above 60% so it is stated that based on three elements of assessment namely the aspects of programming, content, and appearance that are made are considered good. Thus the experts in this study agreed to accept the SEISHI application that had been made functioning.

(c) The Level of Acceptance Test of SEISHI Applications by respondents

Evaluation of the level of acceptance of SEISHI applications by respondents was conducted to find out whether respondents felt satisfied and helped with the SEISHI application. The results of the respondents' assessment of the application are explained in the following table:

The table above shows that the acceptance score of the SEISHI application as a learning media is more than 80%, which means that based on the aspects of appearance,

TABLE 2: Application Test Results by Respondents

Variabel	Score	Conclusion
Interface	85,0%	Reliable
Material	80,5%	Reliable
Benefit	85,8%	Reliable

material, and also the benefits of the SEISHI application that is made is considered very good by respondents and can attract respondents to use the SEISHI application.

## 4. Conclusion

Based on the results and discussion above, the conclusion in this study is the SEISHI application that has been designed and built has fulfilled the application criteria that can be used by strengthening the results of the validation test and the acceptance test for respondents as follows:

1. Based on the results of media assessments by experts it is known that the acceptance score is above 60% so it is stated that based on three elements of assessment namely the aspects of programming, content, and appearance that are made are considered good. So, SEISHI application based on the programming, content and appearance aspects are feasible to use.
2. Based on the results of the application acceptance test by respondents, it is known that the acceptance score of the SEISHI application as a learning medium is more than 80%, which means that based on the aspects of appearance, material, and also the benefits of the SEISHI application that is made is considered very good by respondents and can attract respondents.

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