

## Conference Paper

# Strategy to Improve the Quality of Indonesian Industrial Halal through Smart Investment and Education Systems 4.0

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## Abstract

Indonesia with a Muslim population reaching 87.17% is very strategic for the development of halal industry. But the halal industry in Indonesia has not grown optimally. One reason is the lack of Islamic financial literacy, whereas literacy greatly influences the financial decisions taken. The government organization, BPJPH, which handles certification and provides Islamic financial literacy, has not yet operated. Therefore we need an innovative solution that is a smart system about Education and Investment for halal industry. The research methodology used is descriptive qualitative. Through quantitative research with one sample t test using descriptive analysis and each 1 research variable. This system is a concept of innovation in the field technology that can be a bridge for government organizations namely BPJPH to provide Islamic financial literacy. Not just giving literacy, but also offering alternative solutions for submission of sharia-compliant capital loans. This system brings together important elements in the halal industry cycle, namely halal industry players, Islamic banking, investors and the government as regulators through an application. Increased Sharia financial literacy and the potential of Return of Investment in halal industries can be realized. This is evidenced by an increase of 80% to the understanding of the halal industry from before, and the potential increase in capital and profits that reached a Return of Investment of 14.3% in the calculation of research samples in the province of East Java. This shows the benefits and success of the application of smart education and investment systems for the halal industry in Indonesia.

**Keywords:** Islamic financial literacy, Islamic finance, technology

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## 1. Background

In today's halal products have become the new belle in the market. The total Muslim population of the world reached 700 million in 2014 and is expected to increase to 2.2 billion in 2030. But not only enjoyed by Muslims, halal products have now become the life style of the world community. Proven based on 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

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and halal lifestyle reached \$ 1.8 trillion in 2014, and is expected to continue experiencing growth of up to \$ 3.1 trillion in 2022.

Indonesia has a promising market share, even 87.17% or around 201,176,162 million people of Indonesia are Muslims. Based on data from the State of the Global Islamic Economy Indicator (GIEI) in 2016/2017, Indonesia ranks 10th in the world in the halal industry sector, this is certainly far behind that of neighboring Malaysia, which has succeeded in ranking the 1 world. Indonesia is still lagging behind in the halal industry sector because the demand for halal products from both the domestic and foreign markets is very large, not yet accompanied by support from the government. One of them is that the government organization that is not yet operational is BPJPH, which handles halal product certification.

In order for halal industries in Indonesia to compete in the domestic and global halal product markets, it is necessary to have product certifications that guarantee the halal products produced by halal industries. Every halal industry requires halal supply chain which is important to ensure halal integrity up to the point of consumption (Tieman, 2011). And there is no guarantee that halal products are truly halal at the point of consumption without implementing Halal supply chain services (Abdul H. N., Yuserri Z., & Ramayah T., 2013). One of the things that is very vital in business is capital or financing. In accordance with the concept of halal supply chain, the capital applied in the halal industry must also be halal, and in accordance with Islamic financial principles. By implementing the Islamic financial system, it will be easier for halal industries to apply for certification because they manage businesses in accordance with sharia principles that should be applied.

However, the facts found are just the opposite, many of the industrial halal capital systems are still mixed with conventional finance. Evidenced by a study directed by Reuters, which examined 250 companies involved in Halal food production, it was found that many businesses did not implement Islamic financing even though they were involved in the halal food business. Yet when a businessman is involved in Halal production, all related services must also be halal. Therefore, the level of awareness, knowledge and skills related to halal financing among business actors must be truly prepared.

The above explanation has a correlation with field research conducted directly by researchers, where there is a separate need for capital for industrial halal operations, which also greatly requires the role of the government which can later strengthen the potential of industrial halal in Indonesia.

The diagram above is taken from sample data on several halal industries in East Java, especially in Malang City. from the results of research conducted on the sample, showed

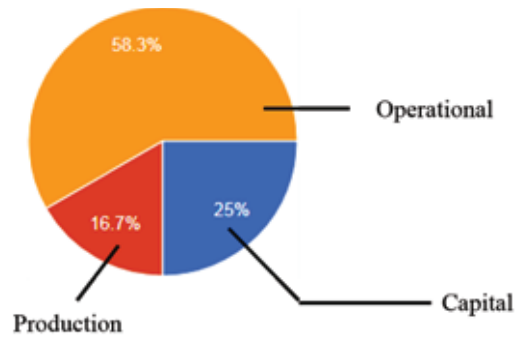


Figure 1: Problems of the Halal Industry in Indonesia.

2 major problems experienced by halal industry players namely, operational problems and capital. As for the existing operational problems, it turns out that after being explored by researchers, it also leads to capital problems for operational implementation. Namely capital in the form of material so that it leads to operational problems.

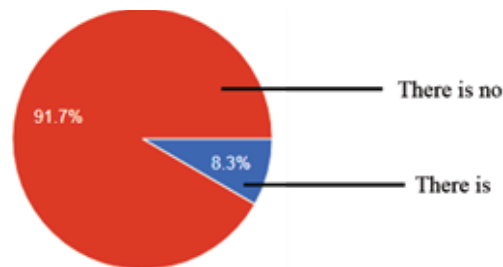


Figure 2: The Role of Government in the Halal Industry.

The diagram above shows the results of field research conducted by researchers. From the data obtained, it turns out that the role of government is still very little and is not known by halal industry players.

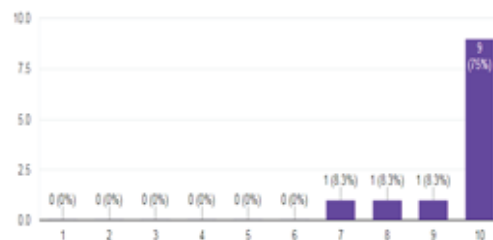


Figure 3: The Important Role of Government.

In fact, in diagram 3. above shows the urgency of the role of government by industrial halal actors in various needs including capital.

Therefore, researchers provide a solutive and innovative breakthrough to be able to optimize the development of halal industry in Indonesia, namely the Investment and Education Application for the Halal Industry, which is a concept of innovation in

technology, which provides a solution for the halal industry as an alternative access to Islamic finance.

## 1.1. Development Objectives

The objectives of developing and researching this scientific work include:

1.1.1 Explain the process of designing the technology model for the Smart System of Education and Investment in the Halal Industry.

1.1.2 Develop alternative capital and increase sharia economic literacy in the Smart System of Education and Investment in the Halal Industry.

1.1.3 Test the effectiveness of the use of the Halal Industry Education and Investment Smart System.

## 1.2. Research Scope

Discussion on scientific papers is focused on:

1.2.1 Lack of Islamic economic literacy of halal industry players, thus taking capital loans from conventional financing

1.2.2 Lack of the role of the government in providing literacy, due to the fact that the halal information system infrastructure is not yet ready which causes government institutions to not operate

1.2.3 The need for a breakthrough in the field of technology as a solution to Islamic financial literacy for halal industrialists and alternative capital lending.

## 2. Theory Review

### 2.1. Sharia Financial Literacy Paradigm and Industrial Halal

In the process of implementing Islamic financial literacy for halal industries in Indonesia, there are several problems from previous research which are the main topics in the review of the theory this time, the following is a discussion of some previous research conditions:

### 2.1.1. Literasi dan Inklusi Keuangan Syariah

According to the Financial Services Authority, financial literacy is a series of processes or activities to increase the knowledge, confidence and skills of consumers and the wider community so that they are able to manage finances better. Financial literacy is the ability to manage finances so that life can be more prosperous in the future (Chen H. & Volpe, 1998). Financial literacy is an important life skill for oneself and society (Skagerlund, et al., 2018).

The missions of Indonesian financial literacy as outlined by the Indonesian financial services authority are as follows:

1. Conduct education in finance to the people of Indonesia so they can manage finances smartly
2. Improve access to information and use of financial products and services through the development of infrastructure supporting financial literacy.

For the Indonesian financial literacy improvement program to run well, every literacy program must have inclusive, systematic and measurable principles, easy access, and collaboration. Public understanding of Islamic financial services and products is still low. Based on the results of the 2016 National Literacy and Financial Inclusion Survey (SNLIK), the Islamic financial literacy index was 8.11 percent and the Islamic financial inclusion index was 11.06 percent.

Since 2010, the G-20 and the World Bank have led initiatives to increase financial inclusion in developing countries to help reduce poverty in developing countries (GFPI 2010). This shows the importance of financial inclusion especially for developing countries. Today, digital financial inclusion for poverty reduction and economic growth attracts the attention of policy makers and academics, if handled will make finances better for individuals, government businesses and the economy (Peterson K. Ozili, 2018).

Peterson also mentioned that digital financial inclusion has several benefits such as increasing access to finance between poor individuals and reducing the cost of financial intermediation for banks and fintech providers. According to Gomber, Koch and Slering (2017), digital finance encompasses the size of new financial products, business finance, software related, and new forms of customer communication and interactions delivered by fintech companies and innovative financial service providers.

### 2.1.2. Industrial Halal and Halal Supply Chain

The term halal shows the meaning of being allowed to be used / consumed (Yunos, et. Al., 2014). While halal products are products that have been declared halal in accordance with Islamic law. So it can be concluded that the halal industry is a company that runs economic activities based on permissible laws according to syariah.

According to researchers (Christopher, 1998; Van Amstel & Van Goor, 2001; van Assen et al, 2010) contained in Ngah, Abdul Hafaz, et al (2014) stated that halal requires a supply chain approach where the value chain and all activities are truly true in accordance with sharia. Halal supply chain can be defined as the integration of business processes and activities from the point of origin to the point of consumption in accordance with Islamic law (Omar & Jaafar, 2011).

### 2.1.3. Industrial Halal Certification

Products that have halal certification provide guarantees to consumers, especially Muslims, that the materials used and the production process are in accordance with sharia. Halal is a product attribute that cannot be verified by individual consumers even after consuming goods. Thus, halal certification describes the convention industry, one of the convention mechanisms and quality coordination that can be used to signify quality. Industrial conventions refer to compliance with standards, which indicate that halal-certified products are in compliance with halal standards.

Halal certification in the context of the food industry refers to the inspection of food processes (preparation, cutting, materials used, cleaning, handling, processing and storage), including transportation and distribution. This halal certification can only be obtained when food has been verified as nutritious and made from ingredients that are approved clean and hygienic. So it can be concluded that halal certification is carried out from upstream to downstream types of business carried on in the industry. This is done by an official body that has been established by the government.

Survey research conducted by Al-Nahdi and Islam (2011) contained in the journal "Understanding Mechanisms to Promote Halal Industry-The Stakeholders' Views" shows that halal certification can increase the level of consumer confidence. It also states that the perception of behavioral control is the most influential component.

The procedures for obtaining halal certificates in Indonesia are as follows:

1. Application for Halal Certificate is submitted by Business Actor in writing to BPJPH.

2. Application for Halal Certificate must be completed with documents:

- (a) business data
- (b) product name and type
- (c) list of products and ingredients used, and
- (d) product processing

3. Further provisions regarding the procedure for submitting a Halal Certificate application are regulated in a Ministerial Regulation.

Like most countries with large Muslim populations, halal certification bodies are less than optimal because there is an assumption that every food product produced in the country is halal so that halal certification is not necessary.

#### 2.1.4. Mudharabah

One of the financing practiced in sharia economy is financing based on the profit sharing principle (mudharabah). At present, in a competitive Islamic financial system, mudaraba (profit sharing) is seen as an alternative mechanism in financing techniques that distinguishes it from conventional financing (Sapuan, 2015).

Based on a journal entitled "An Evolution of Mudarabah Contract: A Viewpoint from Classical and Contemporary Islamic Scholars", mudarabah (profit sharing) involves financiers (rabbulmal), who provide a certain amount of capital and act as active partners and entrepreneurs (mudarib) who act as business agent.

Mudharib is needed to utilize and manage capital in prudence and good ways to produce optimal returns for mudarabah (profit sharing) investments, while adhering to Sharia laws. That mudarib does not invest any property in business ventures except for knowledge and skills. He also has no right to claim any wages for doing business.

## 2.2. Industrial Halal Capital Paradigm

*Capital is a long term fund of the firm; all items on the right hand side of the firm balance sheet excluding current liabilities.* This means that capital is a long-term fund of a company; all items on the right side of the company balance sheet do not include current liabilities.

It can be concluded that capital is a wealth both in the form of money and objects that can be used to produce something that adds value to wealth. Capital in the hala industry

is very important. The Malaysian government has allocated nearly RM 100 million in an effort to make Malaysia an international halal center.

## 2.3. Government Organizations and Technology in Industrial Halal

### 2.3.1. Halal Product Guarantee Agency (BPJPH)

To guarantee the realization of halal product guarantees, the government established the Halal Product Guarantee Agency (BPJPH). BPJPH is a body formed by the Government to organize Halal Product Guarantees (JPH) for a number of products consumed by the public. The purpose of the holding is to provide comfort, security, safety and certainty of the availability of halal products for the public in consuming and using products and to increase added value for businesses to produce and sell halal products.

Products that enter, circulate and trade within the territory of Indonesia must be halal-certified. The halal certificate is an acknowledgment of the halal status of a product issued by BPJPH based on a written halal fatwa issued by MUI. The authority of BPJPH listed in Law Number 33 of 2014 concerning Halal Product Guarantee in providing halal product guarantees includes:

1. formulating and establishing JPH policies;
2. establish JPH norms, standards, procedures and criteria;
3. issue and revoke Halal Certificates and Halal Labels on Products;
4. registering Halal Certificates on foreign products;
5. socializing, educating and publishing Halal Products;
6. accredit LPHs;
7. register the Halal Auditor;
8. supervise JPH;
9. fostering Halal Auditors; and
10. cooperates with domestic and foreign institutions in the field of JPH.



### 2.3.2. Crowdfunding as an Embodiment of the Function of Financial Technology

According to Stein and Dhar, the definition of financial technology is a new program from the finance sector and uses a business model and has been integrated through technology that can support the elimination of intermediaries; can change the way companies exist in creating and providing products and services, overcoming privacy, regulatory and legal challenges, providing space for inclusive growth.

It is important to know the three main eras of the evolution of fintech. Starting from 1866 to 1967, the financial services industry still tends to be traditional without much to do with the technology that will be called the Fintech 1.0 era.

Then, in 1967 until 2008 the financial sector had changed to become virtual due to the development of a fairly massive transaction technology, this period was known as Fintech 2.0. Since that year, the Fintech 3.0 era began with startups and technology companies offering financial products to businesses and the public, as well as banks.

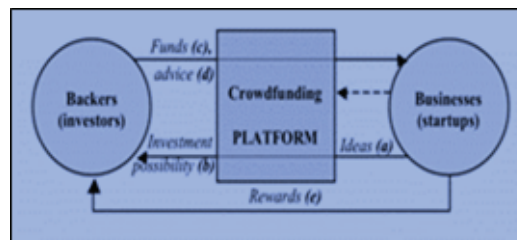


Figure 4: Framework crowdfunding.

Valanciene & Jegeleviciute (2014) defines crowdfunding as a method to connect entrepreneurs who need capital and new investors who have small capital resources with internet-based intermediary entities. Crowdfunding is divided into four categories, namely pre-selling, lending, and equity crowdfunding.

There are three main parties that become stakeholders (stakeholders), namely entrepreneurs, crowdfunding platforms, and investors (backers). Stakeholders have the role and interests of each, the first flow is the entrepreneur submits a proposal for funding through the funding platform and then promises return to investors.

Next, investors analyze the investment opportunities offered by entrepreneurs to further provide funding commitments and advice. The crowdfunding platform acts as an intermediary that brings investors and backers together (Valanciene & Jegeleviciute, 2014).

### 2.3.3. Blockchain as a real-time financial data monitoring tool

According to (Oscar, 2018) Blockchain technology exists as a result of the anxiety of some parties towards the workings of a centralized technology. This technology emerged in 2010 along with bitcoin.

Blockchain technology is a basic technology that runs the bitcoin program without relying on a centralized server, thus avoiding the risk of being downtime. This system comes by changing the stralistic approach to decentralization.

The basic principle used is to manage each server that runs the application and verify each other's existing data. Therefore, when one server is hacked, it will not cause significant problems. This makes blockchain technology relatively far stronger against attacks than centralized technology because there is always at least 1 server running to handle transactions.

## 3. Research Methods

### 3.1. Problem Approach

The problem approach used in this research is the normative and empirical approach. Normative approach, which is an approach carried out by collecting and studying the conditions of reality to events in the field that are closely related to research issues that include the halal capital industry paradigm, Islamic banking support and other sources that are closely related to the problem under study. Empirical approach, which is an approach that is done by looking at the real or direct reality of the competent parties in the research location and gathering information related to the problem under study.

### 3.2. Data source

Data is a collection of information needed in conducting a research that comes from various sources. Based on the source, the data consists of field data and literature. Types of data include primary and secondary data. The data used in the study are as follows:

### 3.2.1. Primary Data

Primary Data is data that is directly obtained by the writer directly from the field, the data referred to from this study is a need analyst for the state of the lack of capital of the halal industry and its supporting technology. Primary data obtained through need alayst halal industry owners in East Java, became one of the bases in terms of strengthening the background of the implementation of this authorship through an empirical approach.

### 3.2.2. Secondary Data

Secondary data is data obtained through library research (library research), by examining and quoting from library materials and reviewing the laws and regulations relating to the discussion. Secondary data used in this study consisted of:

1. Halal industry data;
2. Government capital data on halal industries in Indonesia; and
3. Data implementation of the solution that has been done

## 3.3. Data Collection and Processing Procedure

### 3.3.1. Data Collection Procedure

Data collection procedures in this study were carried out with the following steps:

1. Library research (library research), is the collection of data by examining and quoting from library materials and conducting a review of the laws and regulations and the conditions of industrial halal development relating to the discussion.
2. Field research (field research), conducted in an effort to collect data directly in the field of research in order to obtain the required data. Field studies are carried out by looking for data directly related to cases that will be discussed in research.

### 3.3.2. Data Processing Procedure

The data that has been obtained during the subsequent research is processed with the following stages:

1. Data Selection

The collected data is examined to determine the completeness of the data, then the data is selected according to the problem under study

## 2. Data Classification

Data placement according to groups that have been determined in order to obtain data that is really needed and accurate for research purposes.

## 3. Data Compilation

Placement of data which is interconnected and constitutes a unified and integrated unit in the sub-topics according to the systematic stipulated to facilitate the interpretation of the data.

### 3.4. Data Analysis

After data processing is complete, quantitative data analysis is carried out, meaning that it is thoroughly depicted to be interpreted and summarized and analyzed with the One Sample t analysis technique that tests facts specific to the subject under study, and provides innovative solutions to current conditions and conducts further analysis of how the effectiveness of the solutions offered in answering.

### 3.5. Thinking Framework

## 4. Discussion

### 4.1. Concept of Smart Education and Investment System 4.0 for Halal Industries

The development of the Smart Education and Investment System 4.0 for Halal Industries will later bring together halal industry players, Islamic banks, investors and the government to become regulators in one application. Through this concept, the researcher wants to propose an application that will serve as an infrastructure for the halal industry in Indonesia. This application will be implemented by BPJPH as a representative of the government, which will be the regulator and guarantor for the sustainability of the halal industry in Indonesia. By connecting the halal industry and Islamic finance, it can lead to a harmonious system that supports one another.

The contract that will be applied in the case of capital lending is the mudharabah agreement. Where investors will invest their funds through Islamic banks. The agreement used between investors and Islamic banks is mudharabah. The mudharabah

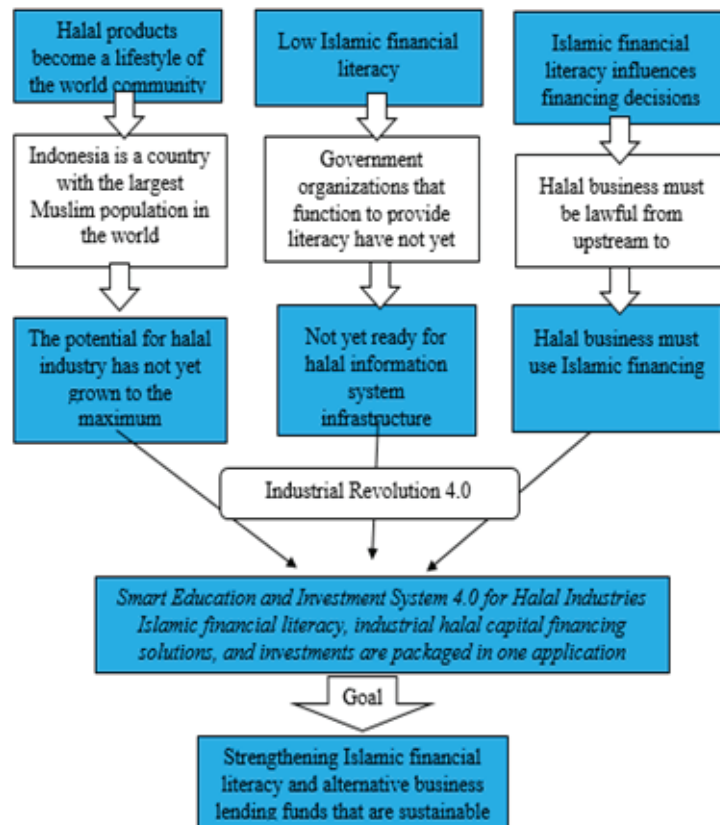


Figure 5: Thinking Framework.



Figure 6: Application Concept.

contract offered is divided into 2, namely: mudharabah mutlaqah in which the investor hands over the management of the funds provided to the Islamic bank with the agreed profit sharing, and the second is the mudharabah muqayyadah, namely investors can choose the industry’s halal criteria as to what will be receive funding from it, and then the profit sharing margin in accordance with what was agreed upon.

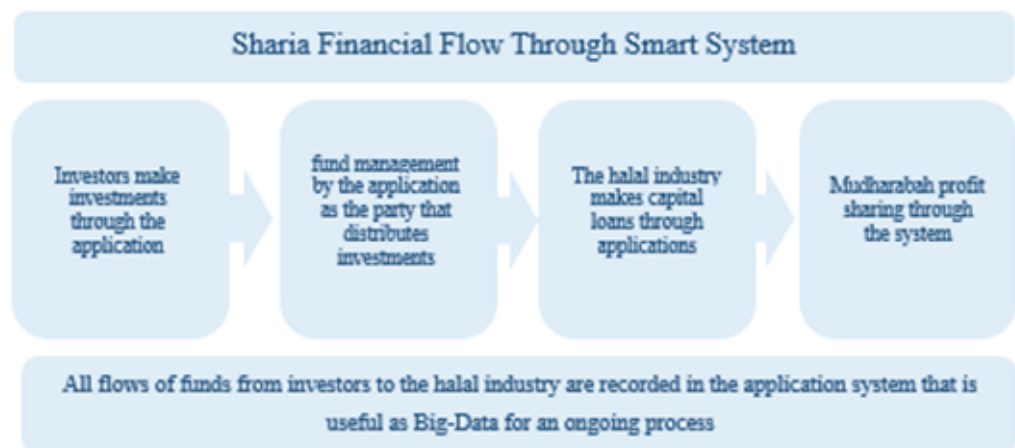
The duties of BPJPH as representatives of the government are as regulators and supervisors of the Islamic finance system which are carried out, so that they are always in accordance with established standards. This step can also facilitate BPJPH in the halal certification process, because companies that use the Islamic finance system will be recorded through the system.

#### 4.1.1. Application for Investments From Investors Through the Platform

In distributing capital from investors to halal industries, the government cooperates with Islamic banks as fund managers from investors. Following is the flow of the process of the halal financial industry by the application:

1. The public makes investments to Islamic banks online or offline through an account that has been registered by the application, by reading the concept of revenue sharing applied.
2. Funds processing by Islamic banks selected by the public, in the context of strengthening the Islamic financial industry

Industrial Halal makes loans through the application and gets capital recommendations that match the halal capital requirements of the industry.



**Figure 7:** Flow of Application Financial Implementation.

Next is the flow of investment that can be carried out by investors or the general public, as an initial step in the application of investment through this application, as follows:

#### 4.1.2. Sharia Fund Integration System as Support for Acceleration

##### Equitable Capital in Indonesia

Smart Education and Investment System 4.0 for Halal Industries is an Android-based application that connects an important element in the process of industrial halal capital, which is the community as a capital accelerator.

This application program, will be focused on the massive integration of capital facilities through technology. Application, through the four simple steps in the process of

TABLE 1: Initial Steps for Implementing Investment

No	4-Simple Step	Information
1	Register	The initial stage of Application for investors is to register at the institution, through registration using big-data integration, where the uniqueness of Application is through the data that is based on the registered investors, which will be used as big-data and main data in the evaluation of the halal industry. in Indonesia by the Ministry.
2	Invest in capital	After the registration process is carried out as an investor, the next step will be to know through the application of steps in investing capital, which companies will obtain capital, and will know the conditions of industry needs. Select the amount of capital to be invested through the application, as well as the submission of capital to the application through the application, which has been directed with the complete guidelines and documents required.
3	Financial statements	The uniqueness of Application is the technology that is able to report periodically on the period of capital use. Through blockchain technology that is used as a ledger, which is able to display the conditions of capital use in real time through technology that can assist the government in monitoring the use of funds only through applications.

TABLE 2: Types of Application Users

No	User Type	Description
1	Industrial Halal	Used by industrial halal accounts, which will require funding in terms of product, brand, business development, including labor that operates in the industry, has features to communicate with other industries and also customer service. Halal industry obtains funding from funds under development as well as financing all other needs.
2	Investor	Comes from the people who use Islamic banks and want to invest their capital in a sharia way, and can exercise control over the process of using funds that have been done before.

integrating industrial Halal capital in Indonesia, the easy steps to integrate capital in Indonesia are as follows:

Apart from the core activities carried out, the following supporting activities in the application are as follows:

1. Management of industrial Halal Big-Data in Indonesia, through the financial reporting system in real time and obtaining accurate data.
2. Risk Management, interbank blockchain technology that is used in a modern way, is a risk management process, this action provides the function that digital books are largely used and takes a decentralized approach to data storage.

The process of using capital by halal industry, the uniqueness of this application is through this process, with the periodic period of nominal use of funds taken, it is required to report its use from various aspects, ranging from physical evidence to non-physical through digital uploads.

TABLE 3: 4 Simple-Step

No	4-Simple Step	Description
1	Register	The initial step of the 4 simple steps Application is registering at the institution, through registration using big-data integration, where the uniqueness of Application is through data that is based on the registering institution, the condition of the institution is registered by identifying conditions such as: photo of the institution, certificate establishment, and other completeness documents.
2	Get Capital	After the industrial halal registration process is carried out, the institution will know through the application of steps in submitting a proposal, which will obtain capital, and will know the conditions of capital requirements. Select the amount of capital that will be needed through the application, as well as the submission of proposals to the application through the application, which has been directed with the complete guidelines and documents required.
3	Report	The uniqueness of this application is the technology that is able to report periodically on the period of capital use. Through blockchain technology that is used as a ledger, which is able to display the conditions of capital use in real time through technology that can assist the government in monitoring the use of funds only through applications.
4	Forum	After monitoring and producing quality capital, in terms of community development through applications that will be used by the institution. With the forum, it will further facilitate the expansion of information dissemination, both from the customer service application, as well as the exchange of information between Halal capital user industries in Indonesia

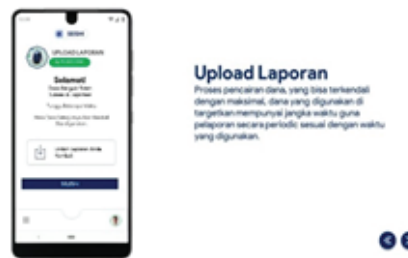


Figure 8: Report Financial.

### 4.1.3. Comparison of Solutions

Basically, the Government has made a solution to the problem of equal distribution of industrial halal funding outside of halal industry through cooperation with existing financial technology, although news circulating now states that if it is still in the selection stage of fintech that will be invited to work together, the following authors try to explain the comparison of existing solutions with application, as follows:



TABLE 4: Cmparasion Solution

No	Comparative Aspects	Smart System	Fintech Cooperation
1	The gathering of big-data halal industry	V	
2	Use of Blockchain in crowdfunding	V	
3	Management of business capital	V	V
4	Facilitation of forum and customer service	V	
5	Certainty the use of funds through monitoring	V	

#### 4.2. Hypothesis Use of Industrial Halal Smart Applications

This application is able to be applied in a wide range of domains so that an increase in Islamic financial literacy will be achieved. In its implementation, it carries the concept of crowdfunding and blockchain system so that it can provide great benefits both from the investor side and halal industry players. Prediction of the results to be obtained in using this concept is an increase in sharia literacy and make an alternative acquisition of sharia capital alternatives by 80%.

$$H_o = M > 80\%$$

$$H_a = M < 80\%$$

#### 4.3. Hypothesis Test Results and Implementation of (Smart Education and Investment System 4.0 for Halal Industries)

In the application testing process, after the application has been tested on the user, several instruments have been developed in making a questionnaire on the potential of this intelligent system application, the following are instruments for testing the application of the halal industry investment system and education:

The following is a description of each range of values given by respondents:

Following are the results of the implementation of the halal industry smart application in 13 samples of the halal industry in various fields in East Java Province:

Based on these data the calculation is done using the one sample t test method for capital decisions and increasing financial literacy through this smart system, the following are calculations that have been made:

t count:

$$\frac{X_{mean} - M_o}{s/\sqrt{n}}$$

TABLE 5: Instrument for Research

No	STATEMENT	1-4	5-6	7	8	9-10
1	How interested are you in borrowing capital through this smart system					
2	In your opinion, this application uses Islamic banks as the main instrument.					
3	Will it continue to use if required to use a Sharia Bank					
4	On a scale of 1-10 how important is this application in the future					
5	On a scale of 1-10 how important is the role of government in this system?					
	<b>TOTAL</b>					

TABLE 6: Value of Assessment Resp.

Value	Description
1-4	Very less
5-6	Less
7	Enough
8	Well
9-10	Very good

TABLE 7: Respondent Result

	Q1	Q2	Q3	Q4	Q5
R1	10	10	10	5	8
R2	10	10	10	5	8
R3	10	10	10	6	8
R4	10	10	10	8	8
R5	10	10	9	8	9
R6	10	10	9	8	9
R7	10	10	9	8	9
R8	10	10	9	9	10
R9	10	10	9	9	10
R10	10	10	9	9	10
R11	7	10	10		10
R12	7	7	7	10	10
R13	7	7	7	10	10

Q = Question

R= Respondent

$$\frac{9,02 - 8,0}{0,22598/\sqrt{13}}$$

$$\frac{1,02}{0,062}$$

$$16,45$$

t table

Titik Persentase Distribusi t (df = 1 - 40)

Pr	0.25	0.10	0.05	0.025	0.01	0.005	0.001
df	0.50	0.20	0.10	0.050	0.02	0.010	0.002
1	1.00000	3.07768	6.31375	12.70620	31.82052	63.65674	318.30884
2	0.81650	1.88562	2.91999	4.30265	6.96456	9.92484	22.32712
3	0.76489	1.63774	2.35336	3.18245	4.54070	5.84091	10.21453
4	0.74070	1.53321	2.13185	2.77645	3.74695	4.60409	7.17318
5	0.72669	1.47588	2.01505	2.57058	3.36493	4.03214	5.89343
6	0.71756	1.43976	1.94318	2.44991	3.14267	3.70743	5.20763
7	0.71114	1.41492	1.89458	2.36462	2.99795	3.49948	4.78529
8	0.70639	1.39682	1.85955	2.30600	2.89646	3.35539	4.50079
9	0.70272	1.38303	1.83311	2.28216	2.82144	3.24984	4.29681
10	0.69981	1.37218	1.81246	2.22814	2.76377	3.16927	4.14370
11	0.69745	1.36343	1.79588	2.20099	2.71808	3.10581	4.02470
12	0.69548	1.35622	1.78229	2.17881	2.68100	3.05454	3.92963

With a value of df = 13-1 and using a 5% research significance.

In testing this hypothesis using the One Sample t test analysis technique, because the data used are interval data and use and use descriptive analysis or with each of the 1 variables namely alternative capital and Islamic financial literacy with the one tail method. The calculated t value was 16.45 and the t table value was 2.17881 (one sample t test calculation is attached). The results of the normal data distribution based on the calculated t value and t table data are as follows:

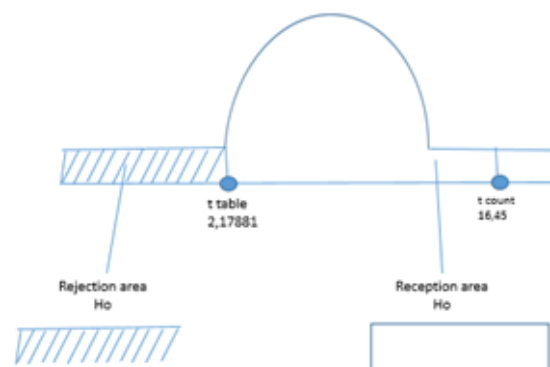


Figure 9: Results of normal data distribution.

Based on the results of the normal distribution data it can be concluded that, H0 Hypothesis is accepted that an increase in sharia literacy and make an alternative acquisition of sharia capital alternatives by 80%.

## 5. Conclusion

From the above explanation it can be concluded as follows:

5.1 Literacy of Islamic finance is very important, and can influence the selection of financing taken. As for Indonesia because BPJPH has not yet operated, causing one of its functions to provide literacy to halal industries is not realized.

5.2 Techniques for implementing the Smart Education and Investment System 4.0 for Halal Industries include planning, designing and creating applications, socializing, applying technology and evaluating. In its implementation, it requires government support, technicians, investors, Islamic banking, halal industry players and the public.

5.3 This smart application is applied in a wide range of domains so that an increase in financial literacy will be achieved. In its implementation, carrying out the concept of crowdfunding and blockchain based systems.

5.4 Based on the trials conducted, the application of Smart Education and Investment System 4.0 for Halal Industries can overcome the existing problems. This platform is also appropriate for harmonizing the industrial halal system with the Islamic financial system.

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