

# Design of Ruangwakaf Application Business Model using Lean Canvas

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## ABSTRACT

Islamic boarding schools or pesantrens are places to learn about Islam that are spread throughout Indonesia. The community empowerment function of pesantren in economic terms still requires further development. One source of the problem is the difficulty in building business units, including in the fulfilment of production facilities due to lack of capital, so they need support from the society. However, access to information related to the need for production facilities in pesantrens is not well-reached by society. So, the solution that can be offered is to develop waqf application as a liaison between Islamic boarding schools and Indonesian society. The development of this application requires a business model design. This research aims to design the business model of a production facilities waqf application named Ruangwakaf using lean canvas. The data needed is secondary data collected from literature studies. After the data is collected, the next step is designing a business model, and then doing logical verification. To proceed with the validation process, the application mock-up is designed, and then is used for the problem and solution validation process. The validation process is carried out by interviewing early adopters. The result of this research is a lean canvas business model for the Ruangwakaf application. The unique value proposition offered to pesantren is one step to obtain capital assistance for production facilities and to the society is the easiest step to waqf. The solution provided in this application consists of five main features, those are RwWakaf, RwMart, RwStudy, RwConsult, and RwReport.

### Keywords:

Islamic Boarding School;  
Production Facilities; Waqf  
Application; Business  
Model; Lean Canvas.

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## 1. INTRODUCTION

Islamic boarding school or what is commonly known as pesantren is Islamic educational institutions in which the students study, understand, live and practice Islamic teachings by emphasizing the importance of religious morality as a guideline for daily behavior[1]. Besides the education function, Islamic boarding schools also have preaching and community empowerment functions. In 2022, there are 27,722 Islamic boarding schools in Indonesia with total 4,175,531 students [2]. Data from Ministry of Religion in 2022 [3] shows that there are 10,185 Islamic boarding school who have business units that spread across various fields. This number is only 36.73% of the total Islamic boarding schools in Indonesia. It

means that the other 63.27% do not have a business unit yet. In 2020, Directorate of Islamic Boarding School Database has started to compile the Islamic boarding school sovereignty roadmap by distributing Google forms to all Islamic boarding schools in Indonesia and obtained response from 6,000 Islamic boarding schools, resulting in Islamic boarding school economic typology based on the number of businesses owned by Islamic boarding school [4]. Table 1 shows the economic typology of Islamic boarding school based on the number of businesses owned.

**Table 1 - Economic Typology of Islamic Boarding School Based on The Number of Businesses**

(Source: Murdadlo, 2021)

| No | Business Category              | Percentage | Total |
|----|--------------------------------|------------|-------|
| 1  | > 5 business units             | 5%         | 300   |
| 2  | 3 - 5 business units           | 26%        | 1560  |
| 3  | 1 - 2 business units           | 54%        | 3240  |
| 4  | Don't have a business unit yet | 15%        | 900   |

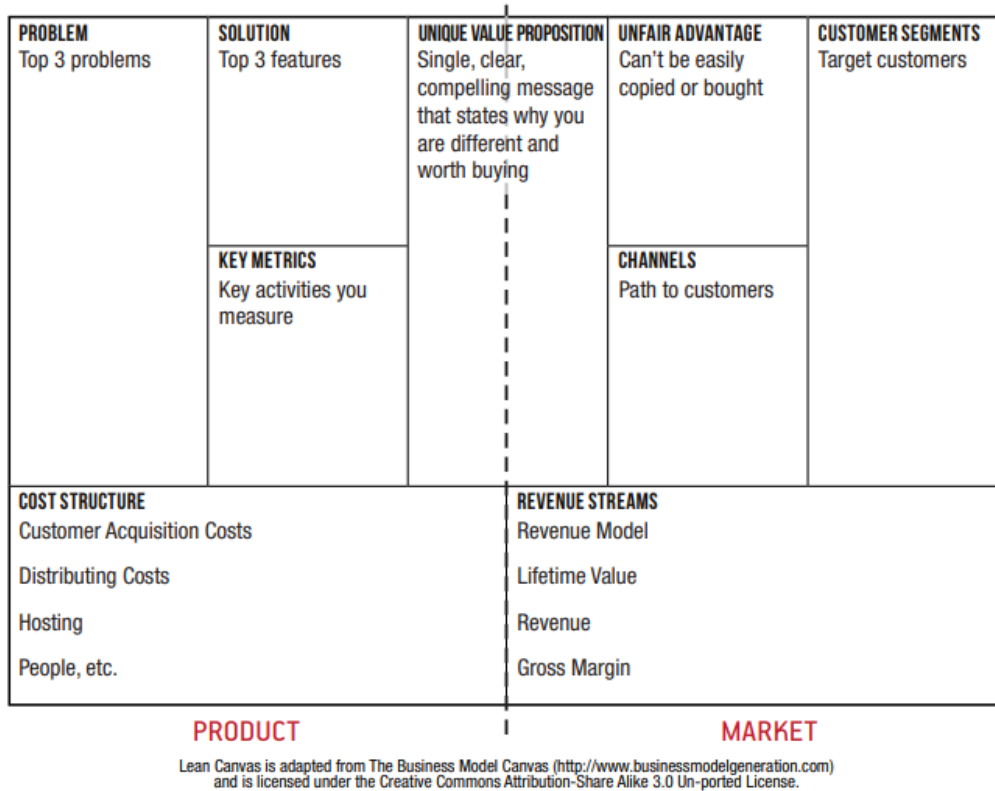
The government has issued several programs to improve the economic independence of Islamic boarding schools, one of which is providing capital for Islamic boarding school to develop their businesses [5]. Besides that, Bank Indonesia also has a program to increase business capacity of Islamic boarding schools and initiated the formation of HEBITREN, an economics association of Islamic boarding school businesses with the aims to strengthen the economic independence of Islamic boarding schools [6]. Even though there have been several programs from the government and Bank Indonesia, there are still a few Islamic boarding schools that do not yet have a business unit, with one of the main problems is the lack of funds especially in fulfilling production facilities. It is because the government program to fulfill Islamic boarding school's assistance has limited quota, and the quota amount is not comparable to the number of Islamic boarding school in Indonesia. So, the effect is not all Islamic boarding school can receive those assistance. Islamic boarding schools need capital assistance and wider access to external networks including another government institutions and societies, because increasing access to external networking is one of requirements for the development of business unit from Islamic boarding schools, especially in fulfill production facilities [7]. The access to external networking of Islamic boarding schools is still weak, especially for Islamic boarding schools which are located in remote and small areas. Meanwhile, based on the data from Databoks in 2022 [8] shows that the interest of Indonesian people in donating is high, especially to religious institutions. Thus, the problems of Islamic boarding schools related to assistance in fulfilling production facilities can be solved with donations from society. However, the media that provides information about the needs of Islamic boarding schools is limited and cannot be properly accessed by society because the information system still cannot used as well as possible.

From the problems that have been described, there is an opportunity to connect Islamic boarding schools with the society through waqf applications. According to Indonesian Decree No. 41 of 2004 about Waqf, waqf is legal act of waqif (person who does the waqf) to separate and/or hand over part of his property to be used forever or for a certain period of time for the purposes of worship and/or public welfare according to sharia [9]. In the modern era, application will make easier for people who want to do charity in the form of waqf to Islamic boarding school as the beneficiaries. To develop this application, it is necessary to design the business model. This research aims to develop a business model of waqf application using the lean canvas. This method was chosen because the business that wants to build is a new business in application development, so it is related to target of the method is startup or new business that emphasize the customer segments.

## 2. METHOD

### 2.1 Lean Canvas

Lean canvas was developed by Ash Maurya, a modified canvas that combining business model canvas and lean startup, which is a fast, concise, and effective startup concept [10]. The following are the components in the lean canvas:



**Figure 1 - Lean Canvas Template**

(Source: Maurya, 2012)

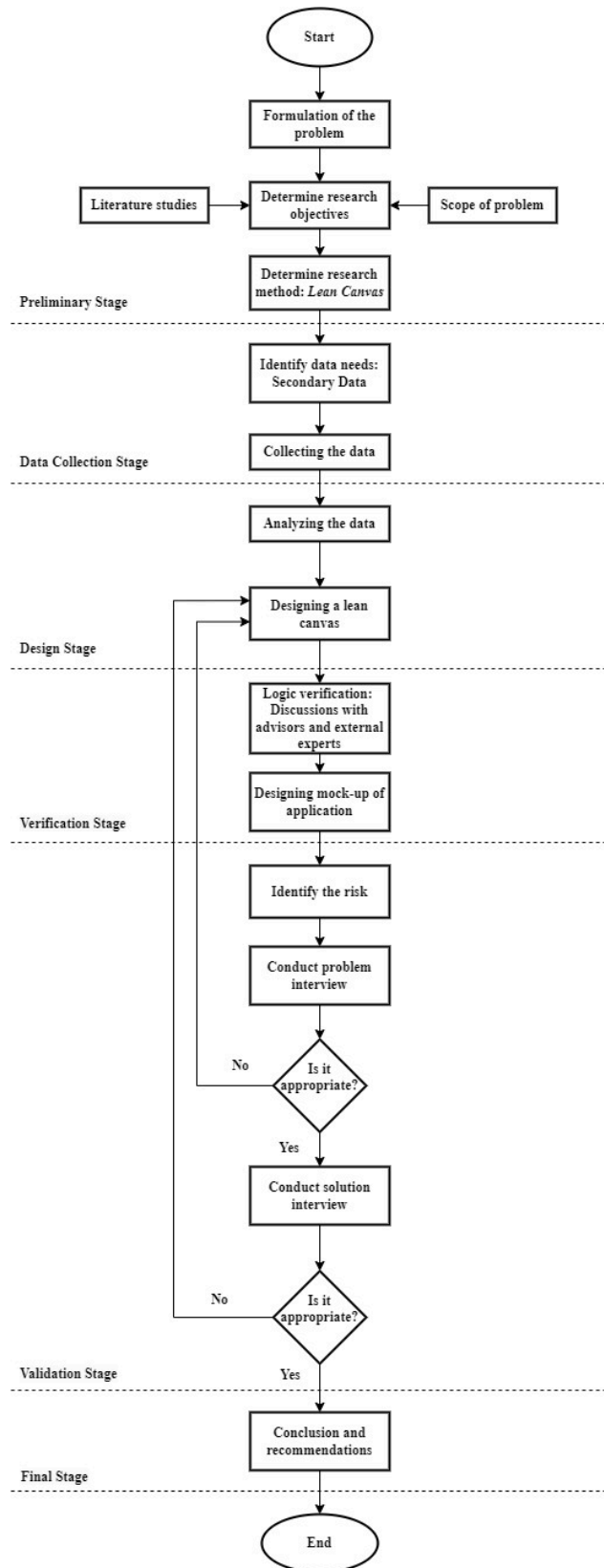
1. Problem: focus on problems that want to be solved by the application.
2. Customer Segment: explain the intended target customers because the main goal of the lean canvas is to answer the problems that customers have.
3. Unique Value Proposition: a unique value that is offered by a company product and makes this value an advantage over other products.
4. Solution: describe one or several problem-solving options that chosen by the company.
5. Unfair Advantage: describe the real advantages possessed by the company which become a competitive advantage and cannot be easily imitated by competitors.
6. Revenue Stream: describe how the company will generate revenue.
7. Cost Structure: explain the cost components incurred, so that the company can run according to the business model.
8. Key Metrics: explain several key metrics that are used to measure how well the business is performing.
9. Channels: a way to communicate the value proposition properly by considering the most effective way to reach customers.

## 2.2 Lean Startup Methodology

The lean startup methodology was developed by Eric Ries where this method provides a scientific approach in creating and managing startups, and getting the products that customers want to arrive more quickly. The lean startup approach will focus more on the speed of building startups or introducing new products before the resource that they have run out [10].

A startup is a catalyst that turns ideas into feedback and data [11]. Basically, the lean startup methodology is designed to teach how to steer a startup. Instead of making a complex plan, startups can continue to make adjustments to conditions that occur through the Build – Measure – Learn feedback cycle process which aims to turn uncertainty, assumptions and risks into knowledge or things that are certain and can ultimately guide the business forward.

### 2.3 Research Design



**Figure 2 - Research Methodology**

There are several stages that must be carried out to design the Ruangwakaf application business model using lean canvas. The following is an explanation about the research methodology in figure 2.

### 1. Data collection

The required data is data to design all blocks in the lean canvas: 1) the problems faced by Islamic boarding schools to acquire production facilities, 2) the problems faced by the society to do the waqf to Islamic boarding schools, 3) the existing alternatives to solve customers' problems including the programs of government, Bank Indonesia, and other organizations, 4) existing applications and their features, 5) condition of Islamic boarding school business units in Indonesia, 6) key metrics and channels that are commonly used by applications, 7) common pattern of cost structures and revenue streams for this type of application, 8) waqf regulations in Indonesia. The type of data used is secondary data and collected using literature study techniques.

### 2. Lean canvas design

According to Maurya in 2012, there are several processes to design a lean canvas, they are: 1) sketch the canvas to take an overview of the ideas, and proceed with identifying risks, verification, and validation, 2) it is permissible to leave sections blank as this may indicate that they may pose a risk to the model, so that research or debate can be carried out from this point to find a correct answer, 3) extract the business model into its essence because canvas space is limited, 4) thinking about the problems that are happening at present, because often a businessman overpredicts the future, 5) using a customer-centric approach because when there is a change in a customer segment, it can change the overall business model. In this research, the design of lean canvas is done using all the data collected in the previous step.

### 3. Verification

The verification phase accomplished in this research is logic verification by conducting discussions with advisor who has expertise in business model and business implementation regarding the lean canvas design. After the lean canvas design is verified, it is continued with designing the mock-up of the application. Mock-up is a visual representation of a design that combine various elements such as images, colours, and typography with high accuracy to make it easier to visualize the design that want to convey [12]. This mock-up will be used in the solution validation stage and can be redesigned after problem validation.

### 4. Validation

The aim of validation is to minimize the risk of failure of the design. This step started from risk identification, and then continued with problem interview and solution interview. According to Maurya [10], risks in building a business model are grouped into three broad categories, namely product risks, customer risks, and market risks. The following are two types of validation in this research:

#### a. Problem Interview

Problem interview is important because this process aims to validate previously identified problem blocks. This process was carried out by interviewing early adopters who representing the customer segment. This selection is because the targeted customer segments is Islamic boarding school in Indonesia and Indonesian community, so it was reduced to the Bandung areas to make the validation process easier. The early adopters were chosen based on number of student that they have for Islamic boarding school side, which is less than 1000 students and who has the desire to waqf for the society side. This process was carried out by interviewing 4 respondents from Islamic boarding school side, namely Pesantren Nur Rohmah, Pesantren Cahaya Mujahadah, Pesantren Madarikul Ulum, and parties from HEBITREN. From the society side, interviews were conducted with 5 respondents who were family and close friends.

#### b. Solution Interview

Solution interview was conducted by doing demos using the mock-up that can help visualize the solutions offered. This interview was conducted to validate that these solutions can help to solve problems that customers have. Similar to the problem interview, this process was carried out by interviewing 4 respondents on the Islamic boarding school side and 5 respondents on the society side.

The result of problem interview can cause redesigned of the lean canvas on problem and existing alternative block. Meanwhile the result of solution interview can cause redesigned of the features mock-up of the application. Both the result of validation is used to improve the lean canvas.

## 3. RESULT AND DISCUSSION

### 3.1 Lean Canvas Design for Ruangwakaf Applications

The following is the design of Ruangwakaf application business model using the lean canvas method.

1. Designing problem block

Based on the literature study, it can be identified that there are some problems faced by Islamic boarding schools. However, the problems put in the problem block are only the problems that will be addressed by the company. There are top three problems that faced by Islamic boarding school, including Islamic boarding schools that have difficulties in planning and managing business units that will be developed [13], Islamic boarding schools have difficulties in procuring production facilities due to a lack of capital [5], and weak mindset in building Islamic boarding school economic independence, both in concept and spirit [13].

Meanwhile, the top three issues that will be addressed by the company from the society side, including the society tends to have an understanding that waqf is only consumptive waqf [14], the society has limited access to information on waqf needs, especially for information on waqf need in Islamic boarding schools [15], and the waqf process is interrupted after waqf and there is no further monitoring regarding the transparency of waqf management [16].

For now, existing alternatives used by Islamic boarding schools are competing to get business assistance from governments and getting assistance through existing waqf applications. The existing alternatives used by the community are receiving socialization regarding waqf literacy from BWI and doing waqf through the available waqf application.

2. Designing customer segment block

There are two sides of customers that want to be served by the application. The first side selected customer segment is Islamic boarding schools in Indonesia, particularly the small-scale Islamic boarding schools, and the second side is Indonesian community. The job of the application is connecting both. Furthermore, early adopters taken from the first side segment are Islamic boarding schools around the city of Bandung and early adopters taken from the second segment are friends and family.

3. Designing unique value proposition block

Design of this block is based on problem block and customer segments block that have been previously designed. Based on the problems that have been described, there is an opportunity to overcome those problems by implementing the waqf application. The application is named as Ruangwakaf. In creating a unique value proposition, the Ruangwakaf application must be different from existing products to attract customer attention, so a comparison was made between the Ruangwakaf application and the existing applications, namely Berkahwakaf and Wakaf Plus. Both of application aim to help parties in need to fulfill their needs in many fields, but their focus is not only for unit business of Islamic boarding school. The comparison is done based on the features needed to solve the problems. The features identification process is shown in table 2.

**Table 2 - Features Identification Process**

| <b>Problems</b>  | <b>Features</b>   |
|--|---|
| Islamic boarding schools have difficulties in planning and managing business unit that will be developed                         | Consultation features for planning needs of production facilities |
| Islamic boarding schools have difficulties in procuring production facilities due to a lack of capital                           | Waqf program for production facilities of Islamic boarding school |
| Weak mindset in building Islamic boarding school economic independence, both in concept and spirit                               | Educational features  |
| The society tends to have an understanding that waqf is only consumptive waqf  | Educational features  |
| The society has limited access to information on waqf needs, especially for information on waqf need in Islamic boarding schools | Waqf program for production facilities of Islamic boarding school |
| The waqf process is interrupted after waqf and there is no further monitoring regarding the transparency of waqf management      | Waqf management transparency report                               |

The other features – waqf program update notification, social sharing, waqf reminder- are proposed to give more facility to users. In addition, the feature of buying and selling business unit products is developed to improve the

trust of waqf and to increase the market access for Islamic boarding school products. After that, to show the advantages of the application, carried out to comparing the features that application have from table 2 with features condition from the existing application. The result of features comparison between Ruangwakaf application with existing application is summarized in a product comparison matrix in table 3.

**Table 3 - Product Comparison Matrix**

| Features  | Ruangwakaf | Berkahwakaf | Wakaf Plus |
|---|------------|-------------|------------|
| Waqf program for production facilities of Islamic boarding school | √          | ×           | ×          |
| Educational features  | √          | ×           | ×          |
| Waqf management transparency report                               | √          | √           | √          |
| Consultation features for planning needs of production facilities | √          | ×           | ×          |
| Features of buying and selling business unit products             | √          | ×           | ×          |
| Waqf program update notification feature                          | √          | √           | √          |
| Social sharing feature  | √          | √           | √          |
| Waqf reminder feature   | √          | ×           | ×          |

Table 3 shows some of the features that are owned by Ruangwakaf application but are not owned by other existing applications. The unique value proposition for Islamic boarding schools is “One step to obtain capital assistance for production facilities” and the unique value proposition for the community is “The easiest way for waqf”. High level concept that made from Islamic boarding schools side are: 1) get capital assistance easier and faster, 2) develop appropriate proposal for production facilities. Besides that, high level concept from the society side is society can do waqf easier to various Islamic boarding schools.

#### 4. Designing solution block

Based on the problems that have been described, the following are the solutions in the form of features that offered by Ruangwakaf application:

- a. **RwWakaf:** the main feature of the application that can be accessed by society to direct the waqf to Islamic boarding schools. In this feature, Islamic boarding schools can propose their production facilities needs as a waqf program so that they can be assisted by society.
- b. **RwMart:** can be used for Islamic boarding schools to sell the products of their business units so they can be purchased by society. With this feature, it can foster a sense of society trust as a waqif, and it is a step for Islamic boarding school to continue to earn income.
- c. **RwStudy:** the feature contain content about knowledge in entrepreneurship, especially in the field of production that can be accessed by Islamic boarding schools. In addition, there is education content about waqf that can be accessed by society.
- d. **RwConsult:** the feature related to the planning of production facilities needs for Islamic boarding schools and aims to help Islamic boarding school who are confused about planning the production facilities needs of business units.
- e. **RwReport:** intended for the society as a form of transparency in waqf management.

#### 5. Designing unfair advantage block

This block shows the competitive advantages of applications that are difficult to imitate in the same type of market. In this business, there is an opportunity for Ruangwakaf to build partnership with universities to provide RwConsult and with the Indonesian Waqf Board to provide RwStudy.

#### 6. Designing revenue stream block

There are several alternatives of revenue streams that commonly used by this type of applications, such as transaction fee, advertising, and infaq from users. Advertising will not be used by this application at the beginning phase to avoid the inconvenience experienced by the customers, that might deter the usage of the application. So, the revenue streams that chosen for Ruangwakaf application are application user infaq from waqif and commissions from sales of business unit products.

#### 7. Designing cost structure block

In this block, the cost structure consists of capital expenditure and operational expenditure. The following is the cost structure of Ruangwakaf application:

- Capital expenditure: application development costs, information technology infrastructure costs (cloud services excluded), and legal costs. Based on survey from GoodFirms in 2023, the average application development cost is between \$12,960 (IDR195,031,152) - \$30,240 (IDR455,072,688) for simple application with minimum viable features.
- Operating expenses: employee salaries, promotion, cloud services, maintenance, and tax. There are two types of advertising expenses in Instagram Ads, those are cost per click (CPC) and cost per impressions (CPM). Based on data from a cloud service provider, the cloud service expense per month is between IDR436,600-IDR551,600. Furthermore, Appinventiv in 2022 reveals that the average maintenance expense in the first year is about 50% of development cost.

#### 8. Designing key metrics block

In this block, key metrics are selected to measure the success rate of Ruangwakaf application. The following are the key metrics used:

- Number of applications installs: to show how popular the application is among the customer segments.
- Number of account registrations: to see how far Ruangwakaf users decide to register or not.
- Number of active users: to see users who are actively using the application for a certain duration to find out the application growth.
- Retention rate: to see if the application is growing and can still attract users to keep coming back at a certain time.

#### 9. Designing channels block

This block contains channels for promoting or delivering unique value propositions of applications to the customer segment. The following are the channels used:

- Social media. This channel is used because this channel is quite important in social life, especially regarding its convenience. At the beginning of 2023, We Are Social report is revealing that the user of social media in Indonesia is 167 million, or 60.4% of total Indonesian population. To reach wide range of ages, the social media used are Instagram and Facebook.
- Word of mouth. This channel can be implemented in a way that users who have used the application provide testimonials to their closest family and friends. Based on data from HubSpot in 2012, ninety percent people trust the information from friends and families. On the other hand, Pew Research said that 72% people get the information from family and friends. This makes word of mouth as the most popular way to share the information.
- Marketing Events. There are many events which are organized by the Ministry of Religion and Bank Indonesia to encourage the economic activities of Islamic boarding schools, such as ISEF by Bank Indonesia and Pesantren Business Exhibition, which was held online in 2022 by the Religion Ministry.

After collecting the data that is needed for each block of lean canvas, the data is summarized on lean canvas template which have three different colors to show the different customer segments. The yellow one color to show the Islamic boarding school side, the blue one to show the society side, and the green one to show both of customer segments side. The result of the lean canvas design is shown in figure 1.



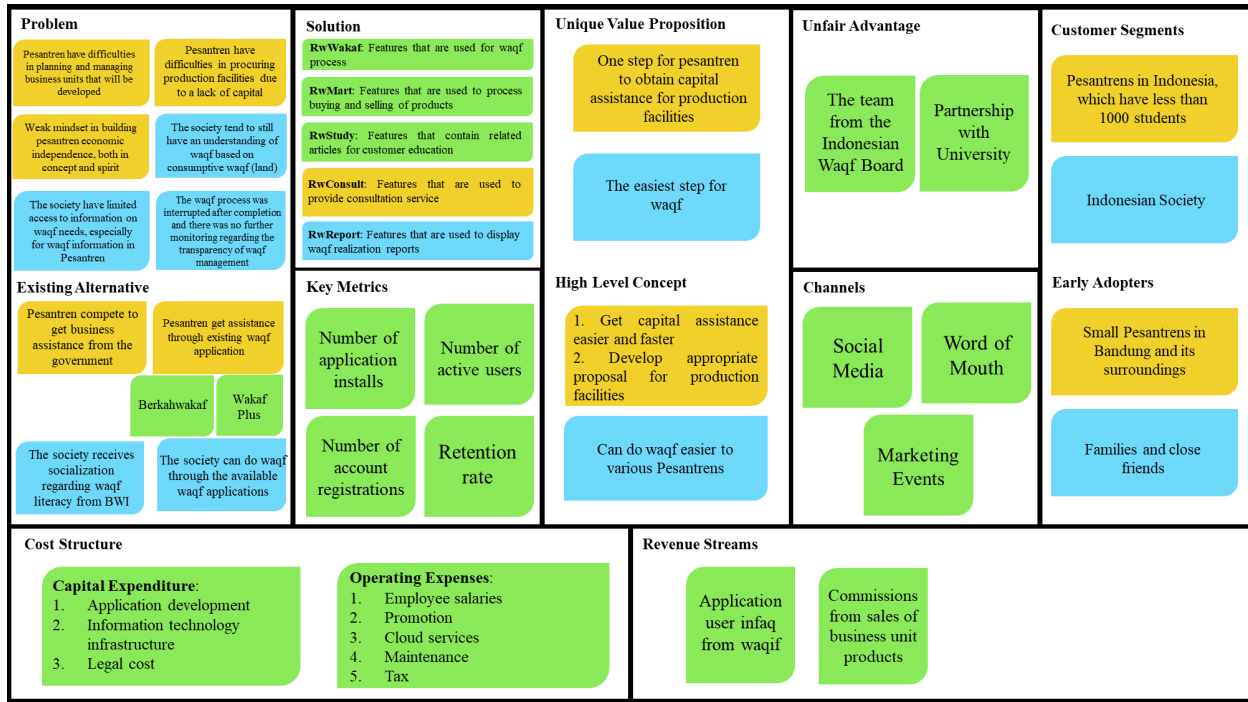


Figure 3 - Lean Canvas Design

3.2 Verification of Lean Canvas Design Results

The verification process in this research is logical verification, which was carried out by discussing with the experts. From the verification, it was found that lean canvas design was logically appropriate and there were no changes to the business model design. The summary of verification result is shown in table 4.

Table 4 - Verification of Lean Canvas Design

| Lean Canvas Block        | Description  | Result   |
|--------------------------|--|----------|
| Problem                  | The top three problems that faced by customer segments, and the existing alternatives to solve their problems                | Verified |
| Customer Segment         | The targeted customer segment with their early adopters who is representing their segment                                    | Verified |
| Unique Value Proposition | The unique value that created by the application to show their uniqueness than the other application                         | Verified |
| Solution                 | The main solution in the form of features that offered by application for the customer segments                              | Verified |
| Unfair Advantage         | The advantage that the company has and difficult to imitated by the competitors  | Verified |
| Revenue Stream           | The source that chosen by the company to get the revenue   | Verified |
| Cost Structure           | The cost that spent by the company to develop and run their business   | Verified |
| Key Metrics              | The metric that chosen by the company to measure the performance of the business   | Verified |
| Channels                 | The marketing channel that used by the company to introduce and communicate the unique value proposition to customer segment | Verified |

### 3.3 Application Mock-up Design

Application mock-up design is used to visualize the solutions offered in the application. The design started by designing the customer journey from two sides of customers in using this application, that is described with flowchart. The flowchart explains the steps in using each feature intended for Islamic boarding school. At this stage, waqf for Islamic boarding school from the society is designed to be delivered in cash. Customer journey for Islamic boarding school in using the application is shown in figure 4 and 5.

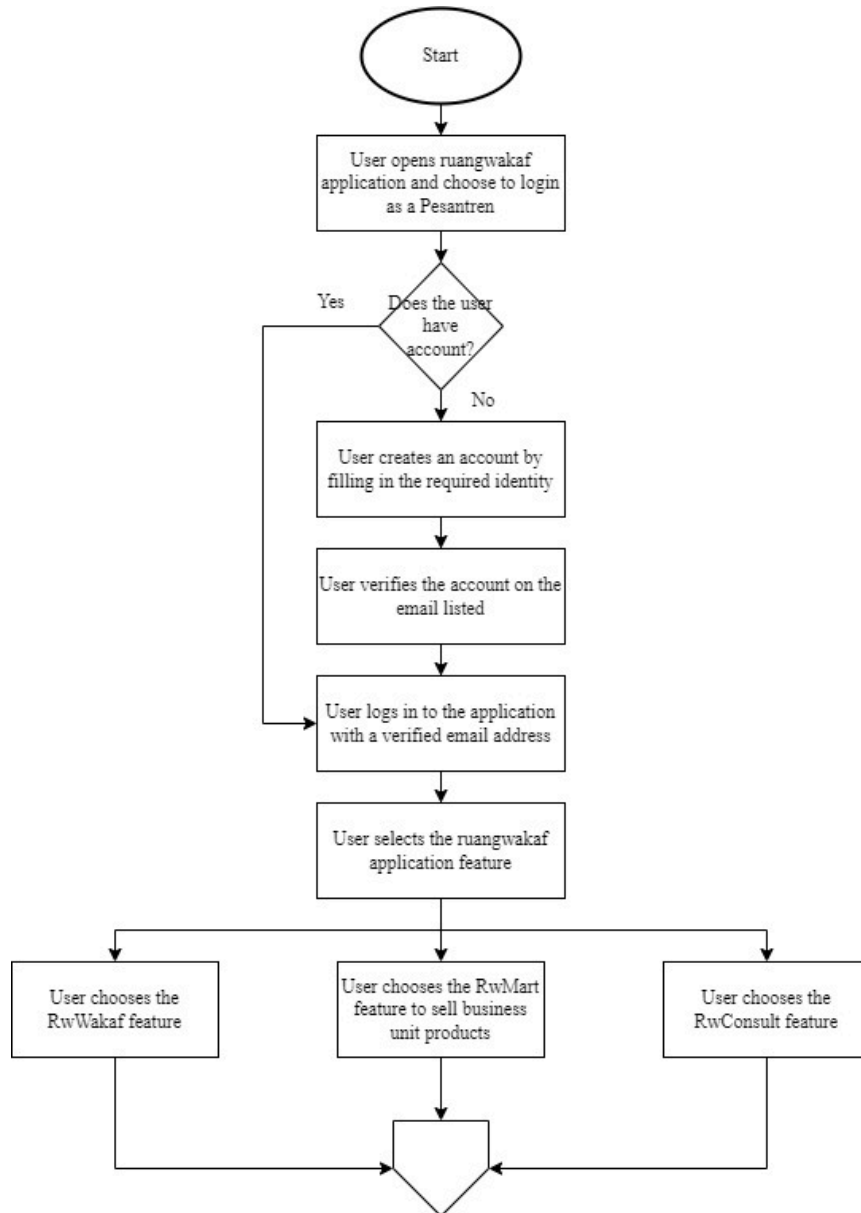


Figure 4 - Customer Journey for Islamic Boarding School in Using Application Part 1

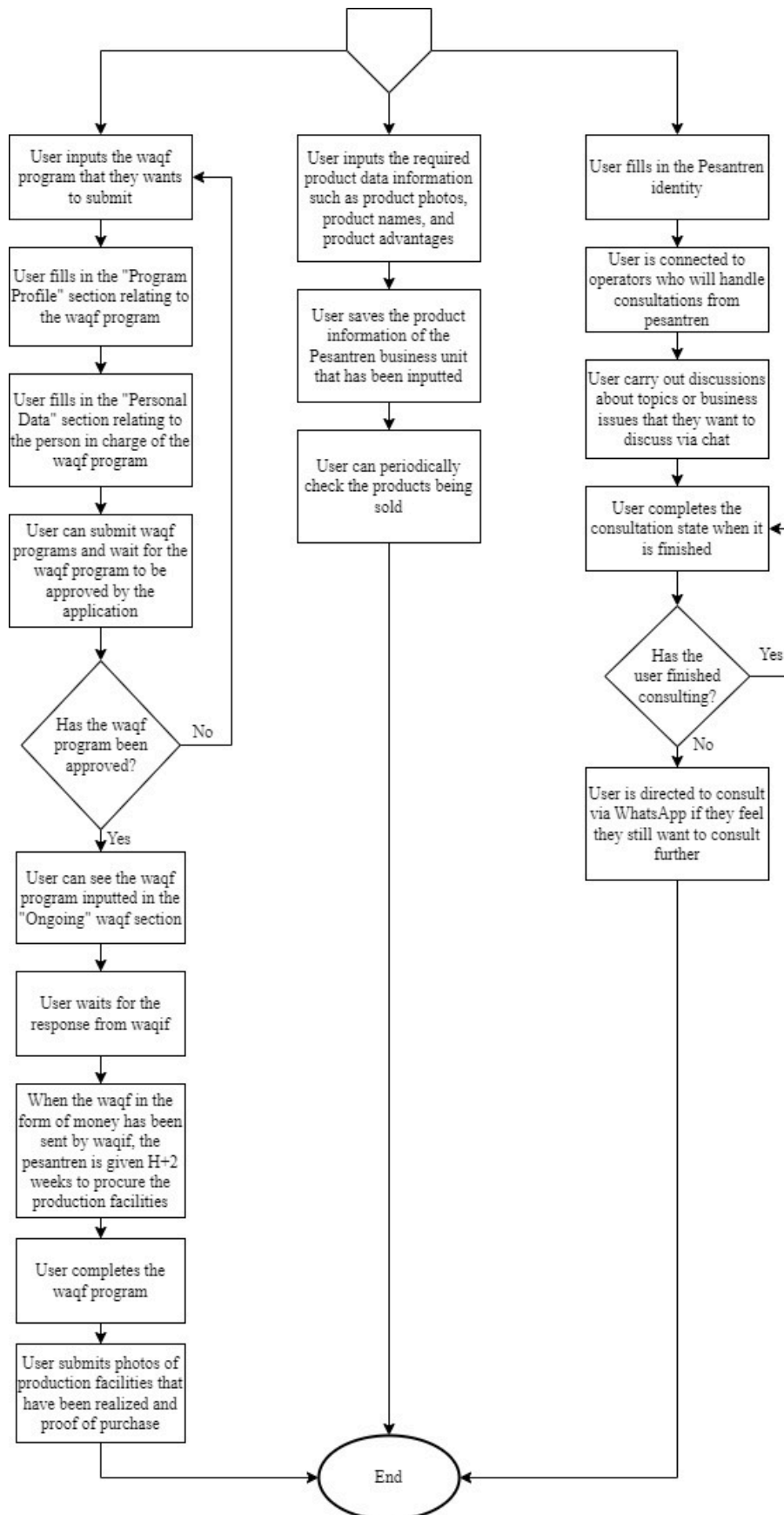


Figure 5 - Customer Journey for Islamic Boarding School in Using Application Part 2

After designing the customer journey for Islamic boarding school, it is continued to design the customer journey for society in using the application. At this stage, waqf from the society is designed to be accepted in cash. So, customer journey in using application for society side is shown in figure 6.

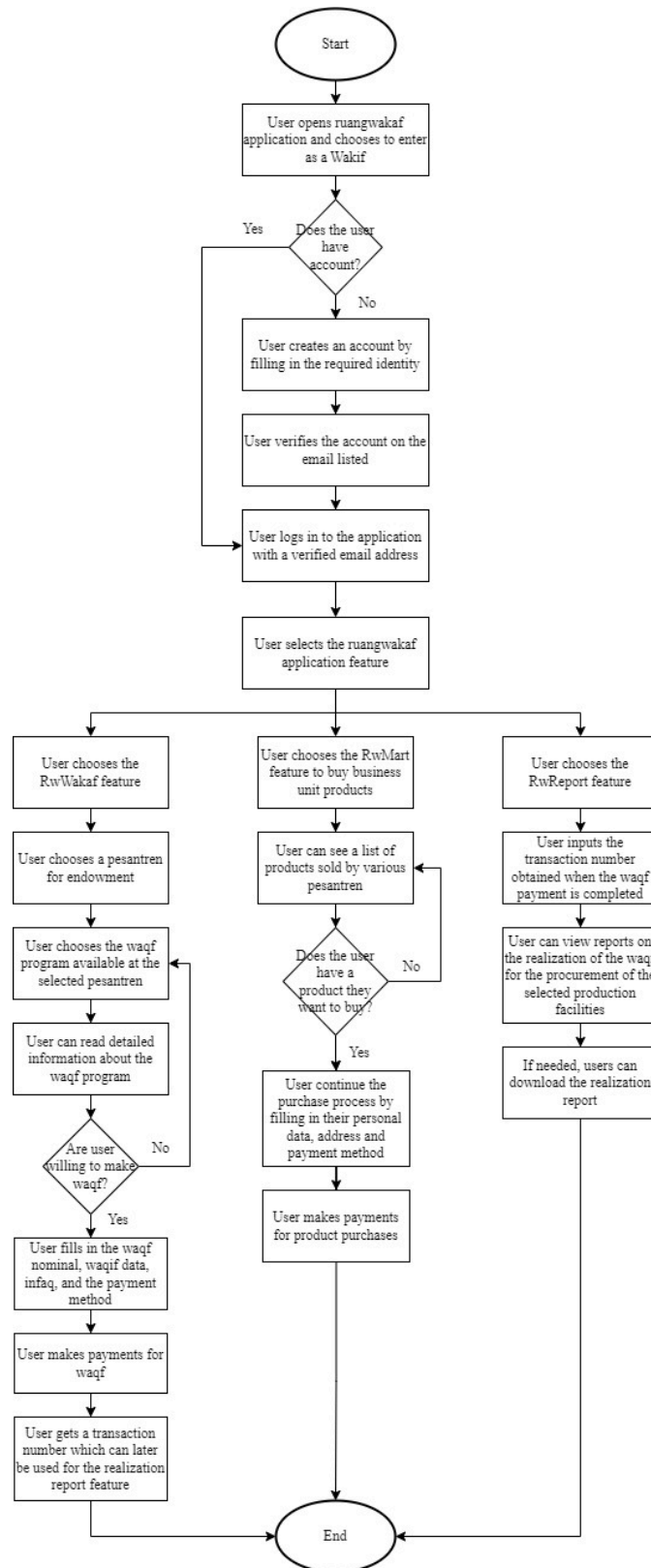


Figure 6 - Customer Journey for Society in Using Application

Next is designing mock-up of Ruangwakaf application. The mock-up visualizes the solutions that are offered by Ruangwakaf application. Each feature is designed to have a mock-up view to make the illustration of the application easier. Here are mock-ups of login, registration, and home page from the application that is shown in figure 7.

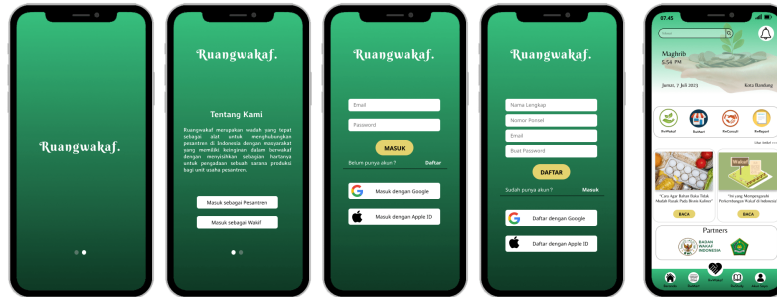


Figure 7 - Login page, Registration page, and Home page

RwWakaf feature can accessed by both of customer segments. But they have a different mock-up view, and it is adjusted to the needs of each segment. This feature is used to input waqf program for Islamic boarding school and to do waqf for the society. The mock-up is shown in figures 8 and 9.

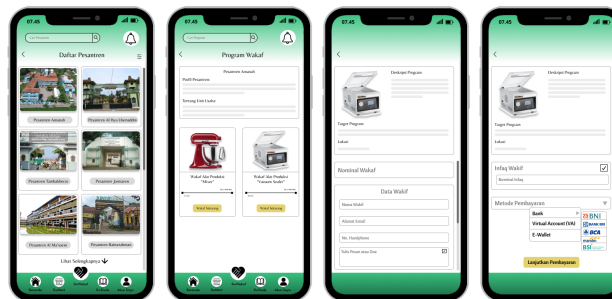


Figure 8 - RwWakaf Feature for Society

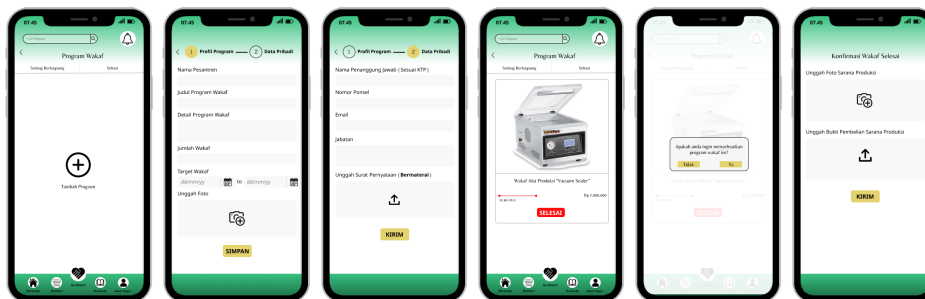


Figure 9 - RwWakaf Feature for Islamic Boarding School

RwMart Feature is used to product transaction between Islamic boarding school and the society. So, it can be accessed by both of segments. At this feature, Islamic boarding school can sell business unit products and be purchased by the society. Besides that, this feature can improve the trust and the validity of business unit for society. The mock-up is shown in figures 10 and 11.

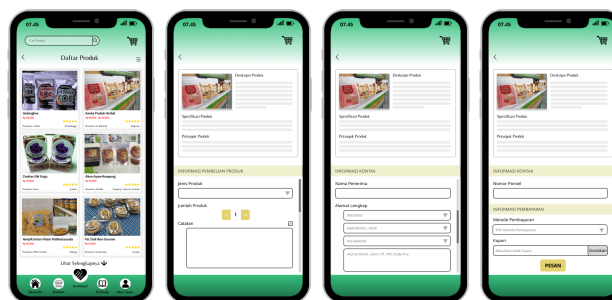


Figure 10 - RwMart Feature for Society

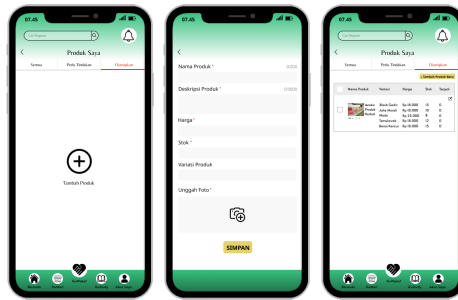


Figure 11 - RwMart Feature for Islamic Boarding School

RwStudy feature can be accessed by both of segments and has only one mock-up view for both of them. This feature contains content about entrepreneurship, production process, and waqf. The mock-up is shown in figure 12.

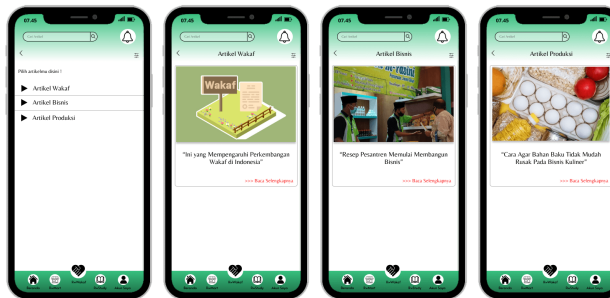


Figure 12 - RwStudy Feature

RwConsult is accessed only by Islamic boarding school because the aim is to help Islamic boarding school for making discussion about production facilities planning of business unit. The mock-up is shown in figure 13.

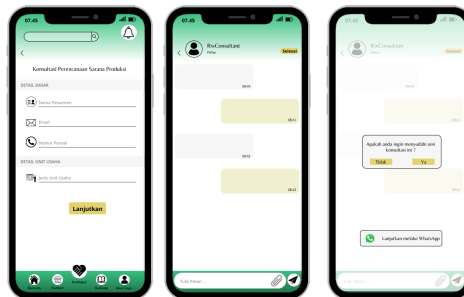


Figure 13 - RwConsult Feature

RwReport feature is accessed only by society because the aim is to provide a report about waqf program realization. This feature will show the transparency of waqf program management in Islamic boarding schools. The mock-up is shown in figure 14.

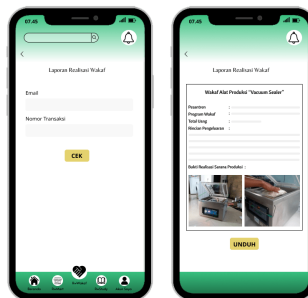


Figure 14 - RwReport Feature

### 3.4 Validation of Design Results

The validation process is carried out to reduce the risk of business failure. There are three types of risks, those are product risk, customer risk, and market risk. The product risk from Ruangwakaf application is whether the features in the application can overcome the problems that occur and can be accepted by Islamic boarding school and the society. And then, the customer risk from Ruangwakaf application is related to the product's ability to reach as many customers as possible. The last is market risk that related to business feasibility, whether the development of Ruangwakaf application is economically feasible and able to compete with competitors [10].

In this research, there are two types of validation carried out, namely problem validation and solution validation.

#### 1. Problem Validation

This validation process is carried out to validate all the hypotheses that have been mentioned in the problem block. The goal is to measure how customers react to the top three problems that have been identified. The problem validation process was carried out by interviewing respondents from 3 Islamic boarding schools and 1 representative of HEBITREN on the Islamic boarding school side, and by interviewing 5 respondents from society side. From the interviews, pain points are identified, and it is shown in figure 15.

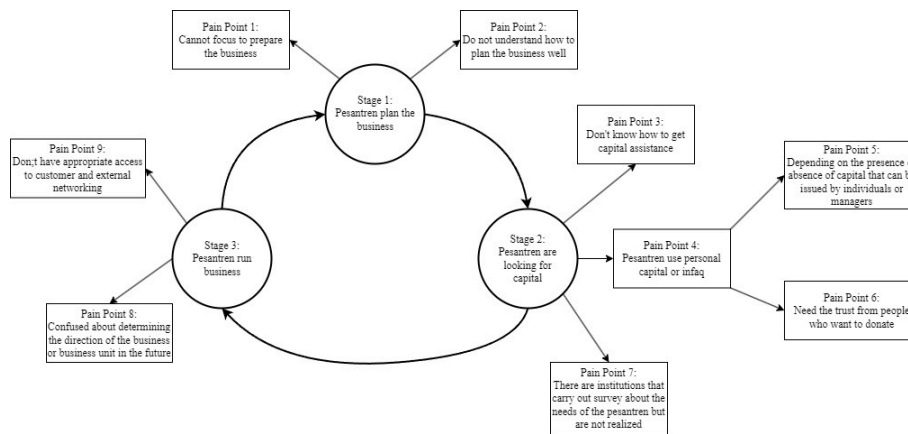


Figure 15 - Pain Points of Islamic Boarding School

The results of problem validation show that on the problem block of Islamic boarding school side, there is nothing that needs to be reduced or added because the problem is in accordance with what is experienced by Islamic boarding schools. However, there is an additional existing alternative, that is using personal capital. Furthermore, the problem validation process for the society side customer segment was carried out by interviewing 5 people from the society. The pain points of society side are described in figure 16.

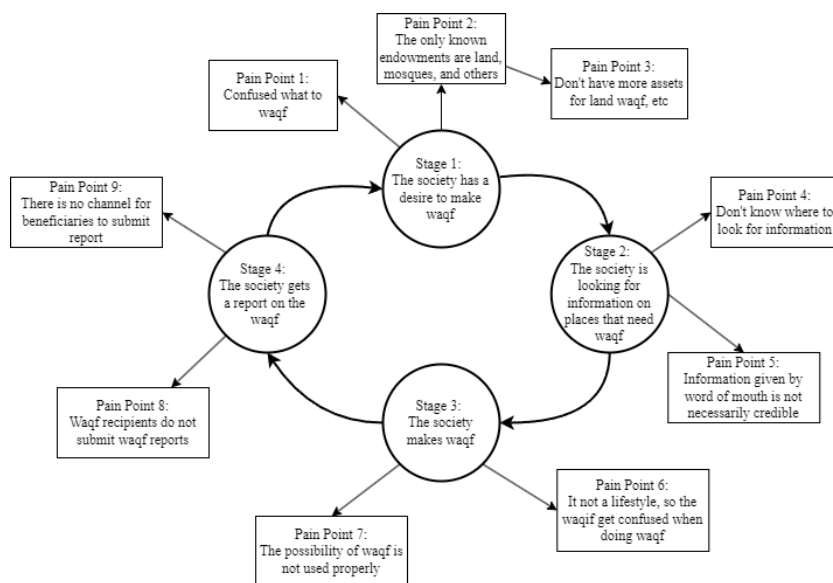


Figure 16 - Pain Points of Society

Based on the problem validation, the results show that on the society side, there are no problems that need to be reduced or added because they are in accordance with what the society experience. However, there is additional existing alternatives, that is seeking information from the ulama.

After validation problem was carried out, it found that there is addition in existing alternative block. So, redesign is carried out. The following is a redesign of the lean canvas resulting from the problem validation interview that shown in figure 17.

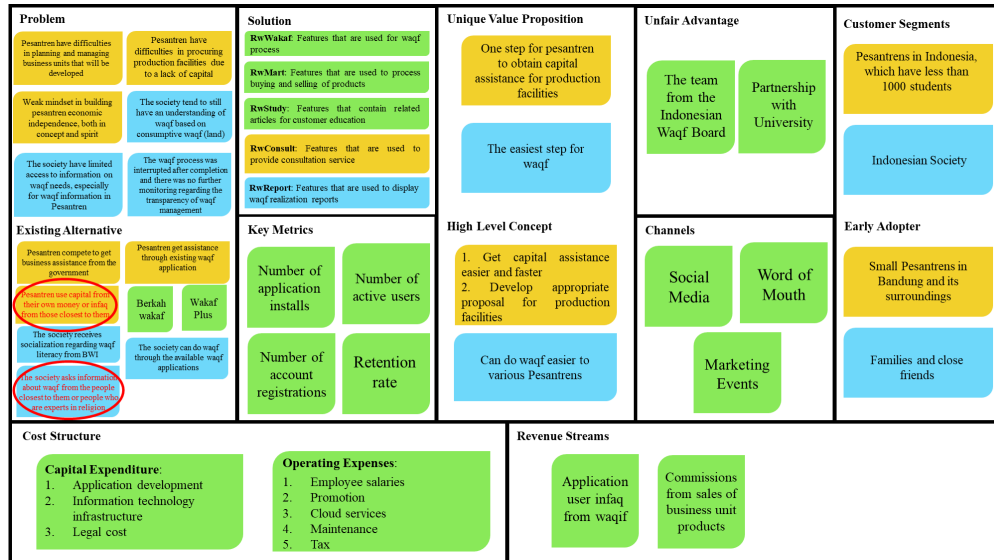


Figure 17 - Redesigning Lean Canvas After Problem Validation

2. Solution Validation

This process is carried out to help customers visualizing the solutions offered and validating that these solutions can solve their problems. After conducting interviews with respondents from three Islamic boarding schools and HEBITREN, generally the solutions offered are accepted, except in the form of waqf. It is proposed that the waqf delivered in the form of production facility. The other adjustment is in the RwMart feature, that is additional process after order comes. The last point of feedback is the importance to give notification at the waqf transaction that the waqf is a permanent waqf. The new flowchart of customer journey for Islamic boarding school in using application after solution validation is shown in figures 18 and 19. The red fonts show the adjustments.

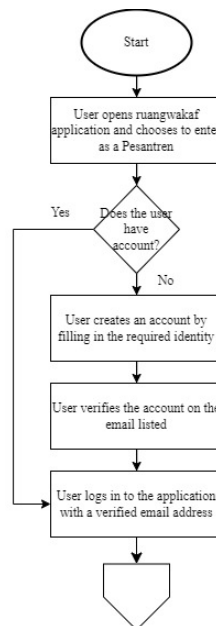


Figure 18 - Redesigning Customer Journey for Islamic Boarding School in Using Application After Solution Validation Part 1



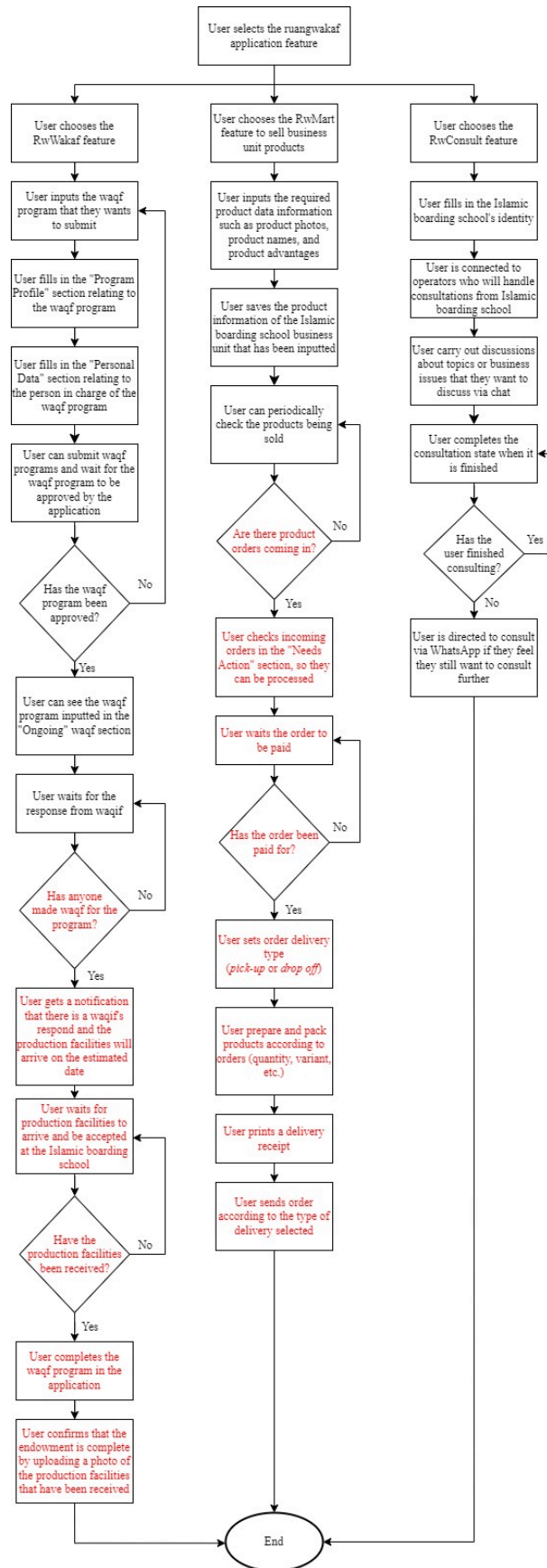
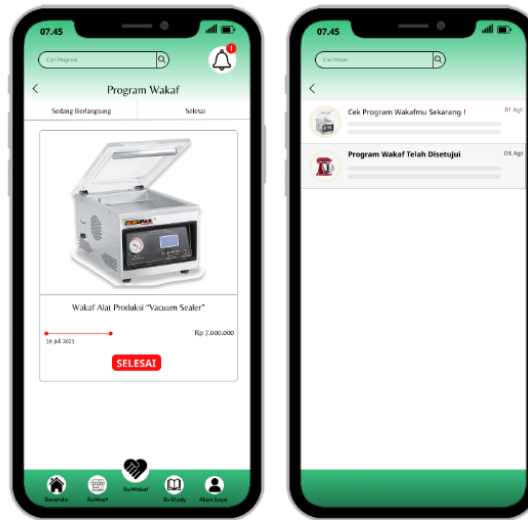


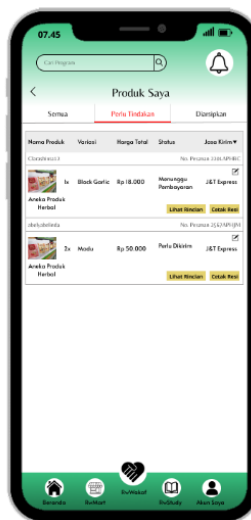
Figure 19 - Redesigning Customer Journey for Islamic Boarding School in Using Application After Solution Validation Part 2

Because there are changes in customer journey, especially in RwWakaf and RwMart feature. So, it is continued to design a new mock-up based on Islamic boarding school preference after solution validation. The result is needed to add new mock-up view between the existing mock-up for RwWakaf feature. The new one is showing the step when Islamic boarding schools get notification about waqf program respond. The new mock-up for RwWakaf feature is shown in figure 20.



**Figure 20 – Additional Mock-up of RwWakaf Feature for Islamic Boarding School After Solution Validation**

And then, for RwMart feature is added one mock-up view in last process to show the step when Islamic boarding schools get the product order comes. The new mock-up design for RwMart feature is shown in figure 21.



**Figure 21 – Additional Mock-up of RwMart Feature for Islamic Boarding School After Solution Validation**

Then a solution validation process was carried out for the society. According to 5 respondents, generally the features in the Ruangwakaf application are appropriate and very helpful. However, further development is needed for RwMart feature by adding a column for comments, criticism, suggestions. The changes in the customer journey in using application by Islamic boarding schools, especially in RwWakaf feature will also affect the customer journey in using application for the society, so that a redesign is carried out related to the customer journey. The customer journey of society in using application after solution validation is shown in figure 22. The red fonts show the adjustments process.

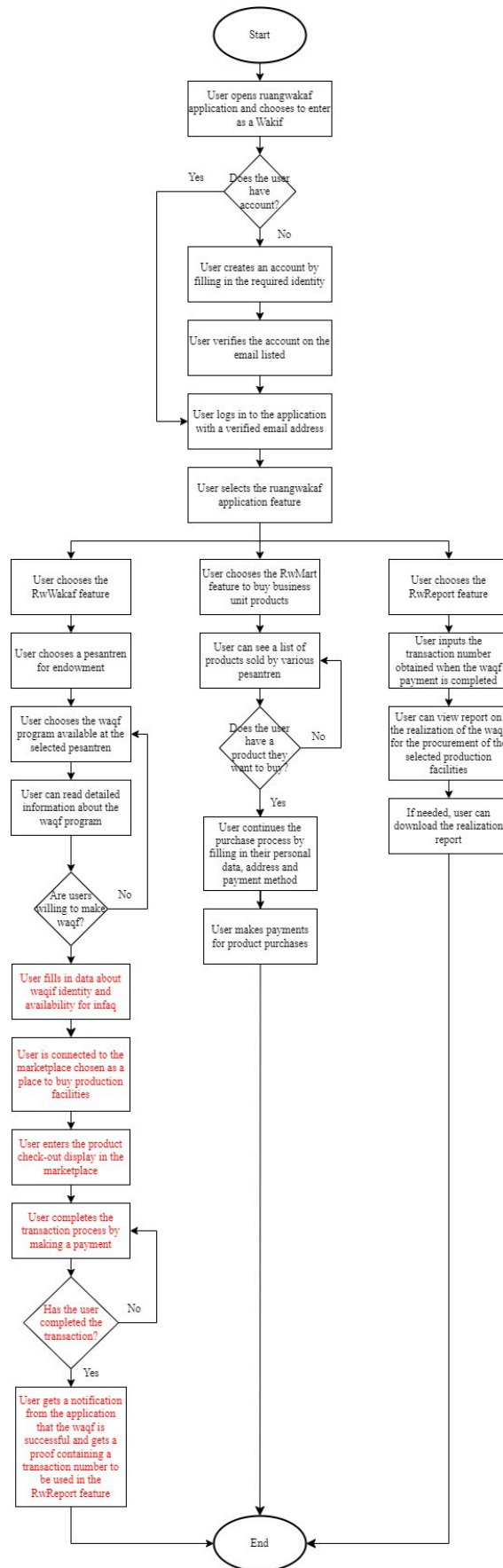


Figure 22 - Redesigning Customer Journey for Society in Using Application After Solution Validation

### 3.5 Final Design

#### 3.5.1 Final Design of Lean Canvas

The result of lean canvas design for Ruangwakaf application after problem and solution validation is shown in figure 23.

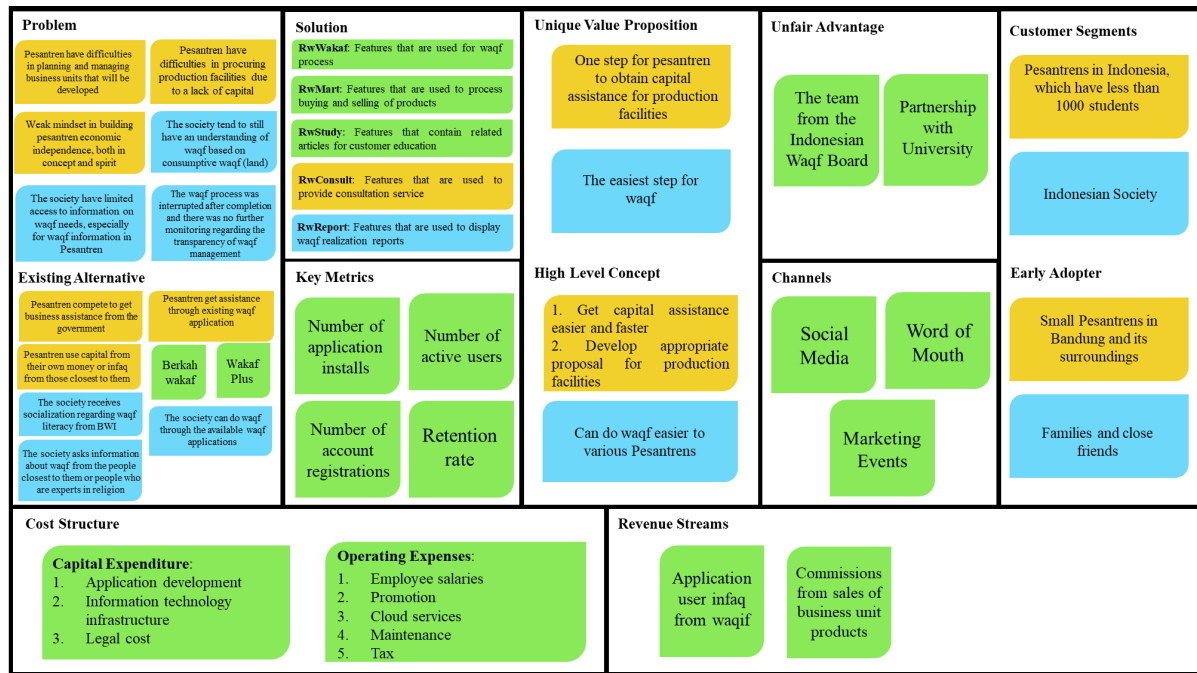


Figure 23 - Final Lean Canvas After Validation Process

The lean canvas of Ruangwakaf after solution validation can be explained as follows:

- The validated problems experienced by Islamic boarding schools are: 1) difficulties in planning and managing business unit, 2) difficulties in procuring production facilities due to a lack of capital, and 3) a weak mindset of building economic independence both in concept and spirit. The alternatives currently had by Islamic boarding schools are competing for business assistance from the government, obtaining assistance from available waqf platforms, and using personal capital or donations from the closest people. Furthermore, the validated problems experienced by society are: 1) the society tends to still perceive that waqf is only consumptive waqf or land, 2) the society has limited access to information on waqf needs, especially in the Islamic boarding schools, and 3) monitoring problems. Existing alternatives for the society are receiving waqf socialization from BWI, doing waqf using existing applications and asking information from ulama and close friends.
- The customer segments of Ruangwakaf application are small Islamic boarding schools in Indonesia and Indonesian society, with early adopters are Islamic boarding schools around the city of Bandung for Islamic boarding school side and friends and family from community side.
- The unique value proposition of Ruangwakaf application are “One step in obtaining capital assistance to procure production facilities” for Islamic boarding schools and “The easiest step to donate” for the society. The high-level concept that made for Islamic boarding school side are: 1) getting capital assistance easier and faster and 2) develop appropriate proposal for production facilities. For the society side, the high-level concept is “society can do waqf easier to various pesantrens”
- The solution offered by Ruangwakaf application are five main features, namely RwWakaf as a waqf feature, RwMart as a way for buying and selling Islamic boarding schools products, RwConsult as a consulting feature for Islamic boarding schools, RwReport as a feature to obtain reports on the realization of waqf for the society, and RwStudy as a feature for education.
- The unfair advantage of Ruangwakaf application proposed is building partnership with team from Indonesian Waqf Board and also the involvement of entities from the Universities.

6. The revenue streams from Ruangwakaf application are application user infaq from waqif and commissions from product sales of the Islamic boarding school business units.
7. The cost structure of Ruangwakaf application is divided into capital expenditures consist of application development, information technology, and legal cost, and operating expenses consist of employee salaries, promotion, cloud service, maintenance, and tax.
8. The key metrics for Ruangwakaf application are the number of application installs, the number of account registrations, the number of active users, and the retention rate.
9. The channels that used by Ruangwakaf application are social media, word of mouth, and marketing events.

### 3.5.2 Final Design of Customer Journey

After validation process was carried out, these are the result of customer journey from Islamic boarding school side and the society side. The customer journey is showing steps in using application from the beginning until the end. Customer journey for Islamic boarding school is shown in figures 24 and 25.

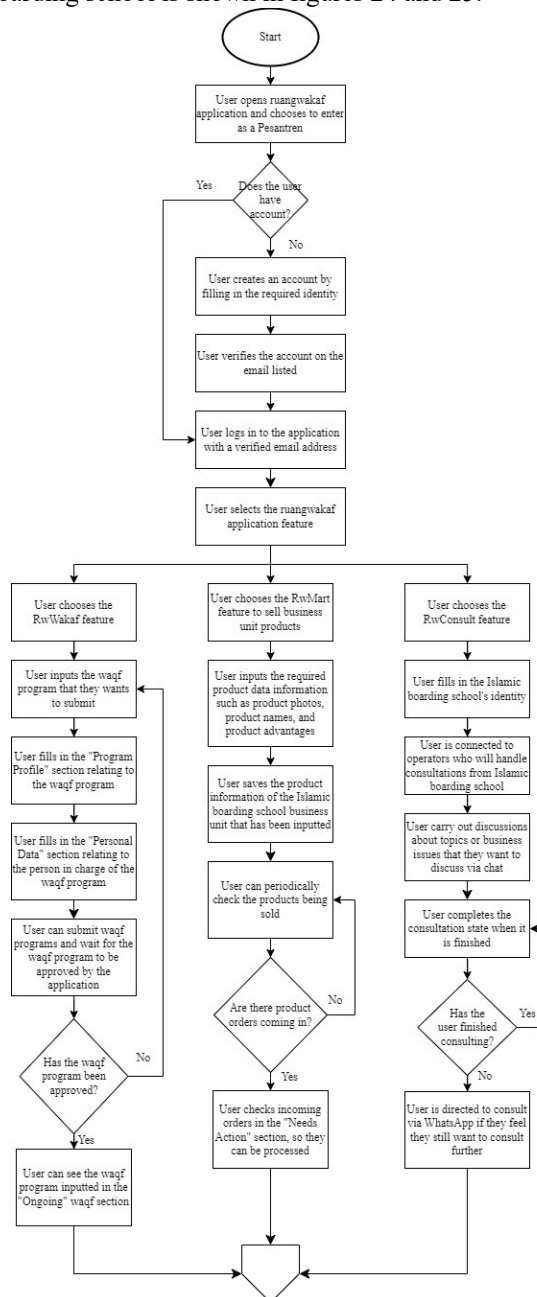


Figure 24 - Final Customer Journey of Islamic Boarding School After Validation Process Part 1

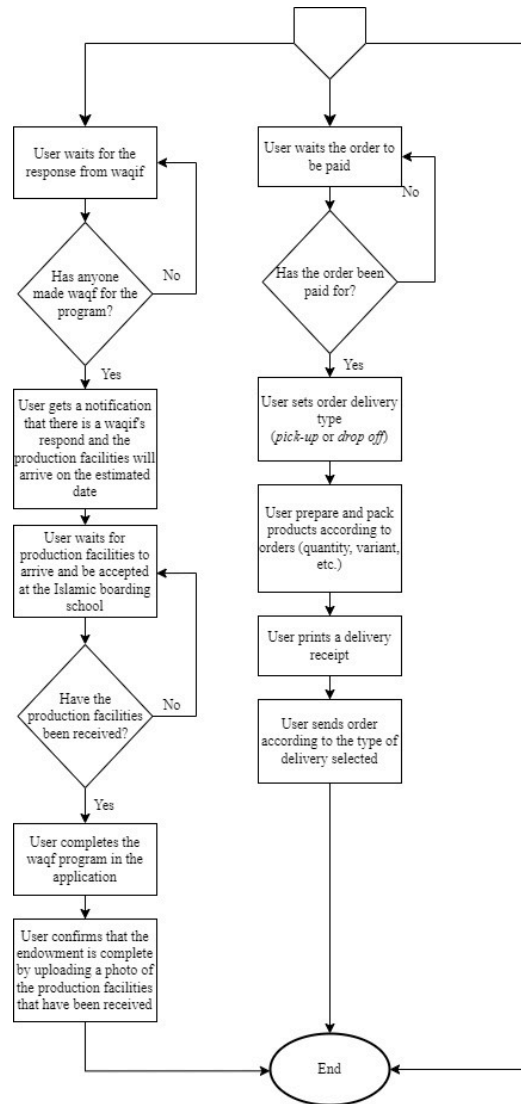


Figure 25 - Final Customer Journey of Islamic Boarding School After Validation Process Part 2

Meanwhile, here is the customer journey of society after validation process is carried out. The customer journey is showing the process of society in using application clearly. Customer journey is shown in figures 26 and 27.

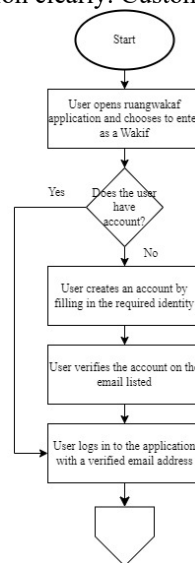


Figure 26 - Final Customer Journey of Society After Validation Process Part 1

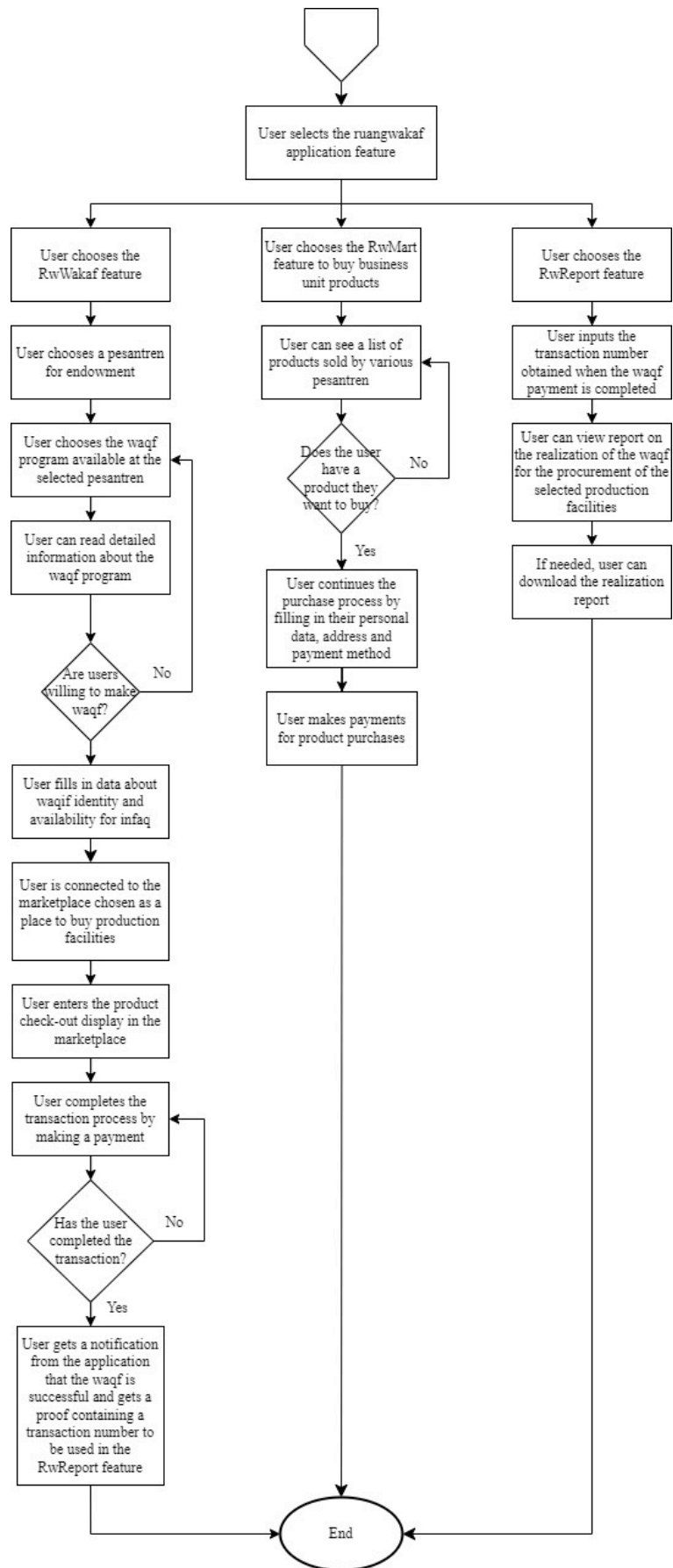


Figure 27 - Final Customer Journey of Society After Validation Process Part 2

### 3.5.3 Final Design of Mock-up Application

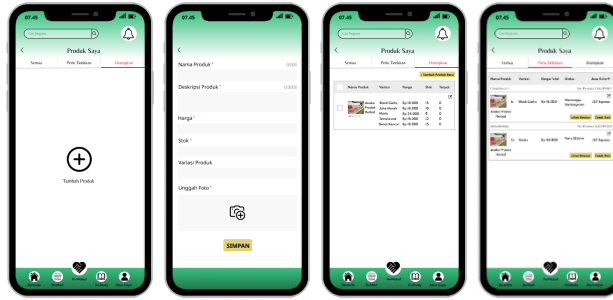
After validation process was carried out, these are the result of mock-up application based on customer segments preference. There are changes to the mockup of the RwWakaf and RwMart features from Islamic boarding school side. Meanwhile, the entire mock-up of Ruangwakaf application for the other features has not changed. So, here are the final mock-up of application after validation process that are summarized and shown in table 5.

**Table 5 - Mock-up Design of Application After Validation Process**

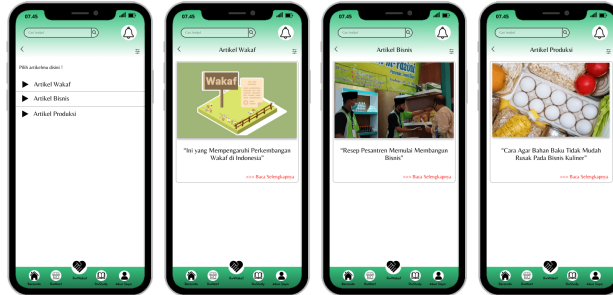
| Feature                             | Mock-up Design |
|-------------------------------------|----------------|
| Login, registration, and home page  |                |
| RwWakaf for society                 |                |
| RwWakaf for Islamic boarding school |                |
| RwMart for society                  |                |



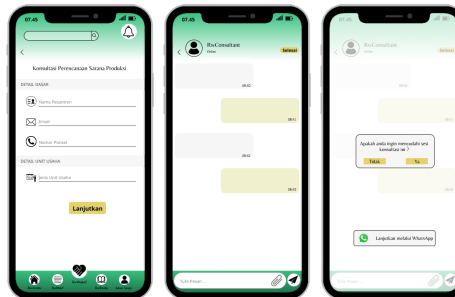
RwMart for Islamic boarding school



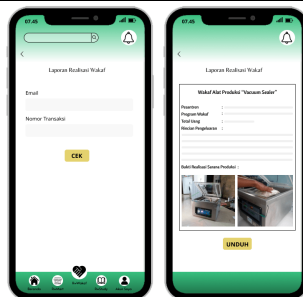
RwStudy



RwConsult for Islamic boarding school



RwReport for society



4. CONCLUSION

The problem that was discussed in this research is taken from two sides of customer segments. They are Islamic boarding school and Indonesian community. The problem that faced by Islamic boarding schools are they have difficulties in planning and managing business unit, difficulties in procuring production facilities due to lack of capital, and a weak mindset to build economic independence both in concept and spirit. Beside that, the problem that faced by society are they still have understanding that waqf is only for consumptive waqf like land waqf, they have a limited access to information of waqf needs, and no transparency and monitoring about waqf program. To solve those problems, the solution was offered to develop an application that focuses on waqf. Because it can connect both of segments. So, it is needed to make the business model first. The research results in the business model for the Ruangwakaf application, that is a waqf application to provide production facilities to help Islamic boarding schools to develop their business units, described using the lean canvas. The mock-up described in this research only facilitates waqf from single waqf for non-cash waqf. At the beginning, the application can be developed with this condition. In the future, it is recommended to develop crowd waqf to provide waqf in the form of production facilities.

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