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BUSINESS MODEL DESIGN FOR AGROTOURISM IN PASIR EURIH VILLAGE, TAMANSARI SUB-DISTRICT, BOGOR DISTRICT

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ABSTRACT

Background: The success of agrotourism development is primarily determined by locations with the potential of the natural environment, geographical location, types of agricultural products or commodities produced, and facilities and infrastructure that support tourism.
Purpose: This research aims to formulate the design of the Pasir Eurih Village Agrotourism business model using the customer development method, which is focused on the customer discovery stage.
Design/methodology/approach: Agrotourism development is located in Kampung Dukuh Menteng RT. 02/08, Pasir Eurih Village. Business model canvas (BMC) elements are formulated using the customer discovery method based on problem and solution testing results in the field.
Findings/Result: Based on the solution test, the BMC elements produce customer segments of individual, family, and institutional tourists aged 5-50 years; value propositions of service convenience, complete facilities, and agricultural activity visit packages; direct and indirect channels; customer relationships of souvenirs, photo documentation, and friendly service; key partnerships of raw material suppliers, Traveloka, and restaurants; key activities of seeding to harvest, maintenance, production, marketing, and services; key resources of physical, intellectual, human, and financial resources; cost structures of fixed costs and variable costs; revenue streams of visit and rental package sales.
Conclusion: The verification results of the business model canvas show that the product offered is suitable for the market. In addition, based on projected income, Pasir Eurih Village Agrotourism is feasible to implement.
Originality/value (State of the art): This study is unique because it focuses on developing the tourism potential and strategic environmental conditions of Pasir Eurih Village for agrotourism.

Keywords: agriculture, business model canvas, customer discovery, customer validation, agrotourism

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INTRODUCTION

Indonesia has a variety of natural resources that have great potential, one of which is the tourism sector. According to Tourism Law No. 10 of 2009, tourism attraction is everything that has uniqueness, beauty, and value in the form of a diversity of natural wealth, culture, and man-made products that become the target or destination of tourist visits. Data from the Indonesian Ministry of Tourism (2020), showed that in 2019 the amount of foreign exchange in the tourism sector contributed 5.5% to the national GDP, IDR 280 trillion. This value increased from the previous year, worth IDR 229.5 trillion. The data also shows that the utilization of tourism value in Indonesia has a high prospect when looking at the significant contribution of tourism in the absorption of Indonesia's foreign exchange, so sustainable development efforts are needed in this sector.

According to the Tourism Law No. 10 of 2009, tourism development is realized through the implementation of tourism development plans by considering the diversity, uniqueness, and distinctiveness of culture and nature, as well as human needs for travel. Establishing strategic tourism areas is carried out by taking into account several aspects, including natural and cultural tourism resources that can become tourism attractions, strategic locations, and enormous market potential. The great potential in the tourism sector in Indonesia is spread across several regions in West Java. This can be seen from the total tourist visits. One of them is Bogor Regency. According to data from the Central Bureau of Statistics of West Java Province in 2020, the number of tourists who visited Bogor Regency tourism objects in 2018 was ranked 2nd in West Java, with 4,411,967 tourists. In addition, Bogor is geographically located close to major cities, such as the national capital, Jakarta. Other areas, namely Depok, Tangerang, and Bekasi, are the centers of industrial activities for trade, education, transportation, and tourism. Bogor conditions are also supported by natural conditions, such as the many mountains, plantations, and agriculture that support tourism activities, one type of potential tourism is Agro-tourism.

Agrotourism is a translation of the term agrotourism which comes from English. Based on the origin of the word, agro means agriculture and tourism means tourism. According to Mayasari & Ramdhan (2013), agro business is defined as an agricultural business broadly including dry land farming, rice fields, crop fields, plantations, forestry, yards, moorlands, fields, and so on. Various processes of agricultural activities can be used in agrotourism. The development of agrotourism worldwide is due to the shift in global tourism trend. According to Handayani (2016), there has been a significant shift in interest in tourist destinations, over the past two decades. Rural tourism development is proliferating and spreading in almost all provinces in Indonesia, especially with the help of the PNPM Mandiri Tourism program. According to Kemenparekraf (2014), as many as 4,527 villages target open village tourism as the main driver to alleviate poverty through the tourism sector. Some new tours try to capture the opportunities of tourism development as well as market interest to find alternative tourist destinations outside the popular destinations that are well known either as mass tourism or conventional tourism. This shift in tourism interest trends has been addressed by the development of agrotourism whose main value is based on agro (agriculture) in local natural areas. Agrotourism development aims to become a new means of rural development by utilizing the existing environment and landscape (Lupi et al., 2017). Agrotourism developing in Bogor is currently located in various areas, both directly adjacent to urban areas or in direct rural areas. One of the potential rural areas is located in Pasir Eurih Village.

Pasir Eurih Village is one of the villages in the Tamansari District, Bogor Regency. Priyanto & Romario (2016) stated that the Pasir Eurih Village land before 2016 mostly used for agriculture. Agricultural products are varied and have high prospects. This potential is also supported by the geographical location at the foot of Mount Salak so Pasir Eurih Village has also been confirmed as one of the villages included in the Tamansari tourism development zone. Pasir Eurih Village is the oldest tourist village in Bogor Regency and ranks 19th in tourist villages at the national level (Yudi, 2019). Pasir Eurih Village has interesting tourism objects, including cultural tourism objects. Some of the attractions in Pasir Eurih Village are the sites of the Pajajaran Kingdom and the Sindang Barang Cultural Village.

The tourism potential and environmental conditions of Pasir Eurih Village, which are strategic at a distance of 5 km from the center of Bogor City, have great opportunities to be developed as agrotourism to improve the community's economy. Planning an

agrotourism business must have a business concept that suits the needs of consumers when visiting agrotourism by utilizing existing local potential. So, this research was conducted to identify the potential and design the suitable business model for the agrotourism business in Pasir Eurih Village.

METHODS

The selection of location of the agrotourism project to be built is in the area of Kampung Dukuh Menteng, RT.02/08 Pasir Eurih Village, Tamansari District, Bogor Regency. The agrotourism location has a strategic location and is located adjacent to a potential area and still has a beautiful natural environment. This agrotourism location is selected because Bogor is geographically located adjacent to major cities, such as the State Capital, Jakarta, and other areas that are the center of industrial activities for trade, education, transportation, and tourism. Respondents in this study live in Jakarta, Bogor, Depok, Tangerang, and Bekasi (Jabodetabek). The respondent determination technique used is non-probability sampling with purposive sampling, namely, there are certain targets in selecting respondents non-randomly (Indriantoro & Supomo, 2018). The population comes from tourists who travel to West Java and live in Jabodetabek. The initial respondents were tourists who traveled to Bogor Regency 7-11 times a year and were interested in visiting agrotourism, totaling 50 people. This number of respondents is based on recommendations provided by Blank and Dorf (2012). Respondents for the problem test and solution test amounted to 25 people from the initial 50 respondents. The number of respondents follows the opinion of Charmaz (2006), namely small-scale research, where the minimum number of respondents is 25. Respondents who identified agrotourism potential were community leaders and academics (students and lecturers).

The study used two types of data: primary and secondary data. Primary data included village potential and potential consumer data obtained through surveys by observation, filling out online questionnaires, and interviews with potential customers. Secondary data is obtained through literature studies from various sources such as theses, books, journals, and the internet. The research method used is customer development popularized by Blank and Dorf (2012) which focuses on the customer discovery stage. The research began with information obtained from insights from the village government, students, and lecturers on the potential of the village to be used as an effort to improve the economy and agricultural development in the village. After that, the initial hypothesis is set through brainstorming methods, literature studies, consumer insights, and observations which are then compiled into BMC_0. Next is the problem test, which was conducted through interviews with 25 respondents, who were analyzed using descriptive qualitative techniques. These stages then produce output in the form of a verified BMC or BMC_1 and formulate a prototype Agrotourism site plan based on field testing results.

Data from the survey through questionnaires and interviews were processed and analyzed descriptively. Descriptive analysis was used to identify and describe village potential, problems, and consumer needs, BMC hypotheses, and formulate the resulting BMC (Osterwalder & Pigneur, 2010). Data processing and analysis are described at each stage of the following research:

Business model canvas hypothesis mapping

At this stage, the first business model is designed based on the hypothesis of the market to be tested. According to Osterwalder and Pigneur (2010), a business model can describe the rationale for how organizations create, deliver, and capture value. The nine main components in the model canvas include Customer segment, Customer Relationship, Channel, Revenue Stream, Value Proposition, Key Activities, Key Resources, Cost Structure, and Key Partners.

Test the problem

The purpose of problem testing is to find the fit between the initial business canvas model (BMC_0) and the problems experienced by potential respondents. At the problem testing stage, the first step is to build a hypothesis about the problems faced by consumers. This method involves distributing online questionnaires to respondents who match the hypothesis in BMC_0.

Prototype creation

Prototyping is used as a tool to present the product to potential respondents or customers at the solution testing stage so that the prototype can provide an overview of the product's values or features directly.

Solution test

This test is intended to determine the suitability between the assumptions of the hypothesis of the solution offered to the needs in solving the problems of potential customers.

Business model canvas update

The second stage of the BMC update is the result of data analysis conducted at the solution testing stage. The output of this stage is BMC_1 which is in accordance with consumer needs.

Business model canvas verification

The BMC verification stage is carried out based on the analysis of the results of problem testing and solution testing. There are three main points in verification, namely product suitability to the market, the intended consumer segment, and financial analysis. The output of this stage is to determine the feasibility of the business in terms of products and markets in the business model that has been designed.

RESULTS

Identification of Agrotourism Potential of Pasir Eurih Village

This study provides two identifications covering the potential of the agrotourism area and the potential of the agrotourism market

1. Potential agrotourism areas

Pasir Eurih Village has the potential to be built as an Agrotourism both geographically and with other existing potential. Previous research states that there is a rapid increase in tourist interest in rural tourism or agrotourism (Santeramo & Berbieri, 2017). Geographically, Pasir Eurih Village is located at latitudes 06037'10" - 06038'40" LS and 106042'45" - 106047'25" BT. Pasir Eurih Village has an area of 284.395 ha consisting of four hamlets and five villages, namely Sindang Barang Village, Dukuh Menteng Village, Kabandungan Village, Batu Karut Village, and Pasir Eurih Village. Pasir Eurih Village borders Parakan Village to the north, Sirnagalih Village to the east, Tamansari Village to the south, and Sukaresmi Village to the west. Pasir Eurih Village also has several existing tourist attractions located in several villages, including the Pajajaran Kingdom heritage site in RW 05, the Batu Karut site in RW 09, and the Sindang Barang Cultural Village and Boss Bray Coffee are located in one location in RW 08. Some of these attractions are managed by the government or by the private sector.

The livelihood of the population in Pasir Eurih Village in 2015 who worked as farmers ranked second after private employees, totaling 539 people. The existing agricultural activities are farming in rice fields, both planting rice and vegetables. In terms of natural potential, Pasir Eurih Village is located on the slopes of Mount Salak, so it is very potential in agriculture, plantations, and fisheries (RPJM Desa Pasir Eurih 2011). Thus, visitors who come can see views of Mount Salak to the south, and views of the city to the north. The location of agro-tourism is adjacent to rice fields, and plantations and is on the side of the main village road. The location of Pasir Eurih Village Agrotourism is adjacent to several cultural attractions, such as the Sindang Barang Cultural Village and the relics of the Pajajaran Kingdom.

2. Potential agrotourism market

According to Blank and Dorf (2015), market size is divided into three parts, namely total available market (TAM), served available market (SAM), and total market (TM). The determination of the market size is based on secondary data. Market analysis is used to study the attractiveness of market dynamics in an industry. Based on the verification of market suitability, the market segment of Pasir Eurih Village Agrotourism is tourists, be they individuals, families, or groups, such as students, company/institution employees, and communities.

Total Available Market (TAM) is the overall market potential that has the opportunity to become consumers of products/services that can be offered, namely West Java archipelago tourists in 2018 totaling 58.7 million people (BPS, 2020). Served Available Market (SAM) is part of the potential market that can use the services offered, which is taken from the number of domestic tourists in Bogor Regency totaling 4.4 million people (BPS, 2020). Total Market (TM) is part of the potential market that becomes a user of the services offered by

the company with the assumption of 1% of the overall SAM, which is 44.000 people. This assumption was made because Pasir Eurih Tourism Village was previously better known for historical and cultural tourism. Thus, the concept of agro-tourism in Pasir Eurih Village is an idea that is expected to attract more visitors. In research conducted at Ecotourism Desa Wisata Bali, it was stated that new concepts tend to emerge from practices that have long existed in indigenous communities, and in fact, it is still difficult to bring in foreign tourists and mass visitors (Suyadnya et al., 2025).

Business Model Design for Agrotourism in Pasir Eurih Village

Previous research related to creative tourism using BMC development was conducted by Cidhy et al. (2016) which focuses on the utilization of bamboo and extracurricular activities. This research discusses the design of the agrotourism business model needed for the development of a verified business model canvas (BMC) through insights from the specified user segment.

1. BMC_0 hypothesis

The initial hypothesis of the intended consumers is individual, family, and institutional tourists aged 5-50 years interested in recreating agrotourism to learn agriculture or travel. These consumers come from Jakarta, Bogor, Depok, Tangerang, and Bekasi (Jabodetabek). Customer segments determined by Pasir Eurih Village Agrotourism are included in the type of segmented customer segments. The value propositions hypothesis offered is divided into three: comfort in service, complete facilities, and various visit packages. The hypothesized channels are Traveloka, Instagram, TikTok, and word of mouth. Traveloka's 3.5 million active users and the ease of use of the Traveloka application will facilitate searching for and booking quality entertainment that can be done comfortably and safely through one application with various payment methods (Rahayu, 2019). Another positive impact of Traveloka is that it can attract Traveloka consumers to become Pasir Eurih Village Agrotourism cosumers. Instagram was chosen as one of the channels because the insight feature has an important role in helping users, especially business people, increase the effectiveness of marketing other products and services (Alfajri et al. 2019). Pasir Eurih Village Agrotourism also chose TikTok as a channel because the Ministry of Tourism (Kemenpar) launched TikTok Wonderful Indonesia to attract millennials to promote tourism in a uniquely and creatively (Kemenpar, 2019).

The hypothetical customer relationships carried out are providing souvenirs, some free photo documentation, dishes for consumers who purchase tour packages, and friendly service. The hypothesis of revenue streams of Pasir Eurih Village Agrotourism is the sale of tour packages, sales of agricultural and fishery products, hall rentals, lodging rentals, and rental of snack stalls and products. The hypothesis of essential resources owned by Pasir Eurih Village Agrotourism has four types. The hypothesized key resources of Pasir Eurih Village agrotourism include physical resources (agrotourism land, halls, lodging, snack, and product stall stands, offices, toilets, and prayer rooms), intellectual resources (consideration of agrotourism visitors who buy tour packages), human resources (employees), and financial resources (capital).

Hypothesized key activities are seeding, nursery, planting, care, harvesting, maintenance of physical assets, marketing, packaging of agricultural products, selling agricultural products, and good service to agrotourism visitors. Key partnership hypotheses are suppliers of agricultural raw materials, Traveloka, and restaurants. Agricultural raw material suppliers in the form of seeds and fertilizers. Traveloka is a partnership for booking quality entertainment that can be carried out comfortably and safely through one application with various payment methods (Rahayu, 2019). Partnerships are needed when companies require formal stakeholder collaboration to ensure resource availability (Amaliah et al., 2019). Hypothetical business model canvas (BMC0) in Figure 1.

2. Test problem

The problem test stage is carried out to prove the BMC_0 that has been mapped. Respondents to the problem test amounted to 25 people obtained from screening initial respondents who had traveled to Bogor Regency. The 25 respondents selected are potential respondents as well as potential customers. Based on the problems that respondents experience, respondents have their own solutions to overcome these problems (Table 1).

<table>
<tr>
<td rowspan="2">Key Partnerships

• Agricultural raw material suppliers
• Traveloka
• Restaurant/ dining house</td>
<td>Key Activities

• Hatchery
• Nursery
• Planting
• Maintenance
• Harvesting
• Physical asset maintenance
• Marketing
• Packaging of agricultural products
• Sale of agricultural products
• Good service to visitors</td>
<td rowspan="2">Value Propositions

• Convenience/ usability: hall, hydroponic garden, fishing and cooking area, agricultural education, camping ground, meeting point, lodging, snack and product stalls, information map, lighting, front office, toilets, musala, and parking lot.
• Design: photo spot</td>
<td>Customer Relationships

• Personalized assistance: provision of souvenirs, free photo documentation, meals for customers who purchase tour packages, and friendly service.</td>
<td rowspan="2">Customer Segments

• Individual travelers, family travelers, and institutional travelers. Aged 11-50 years old who are interested in recreating to agrotourism with the aim of learning agriculture or just traveling and come from Jabodetabek.</td>
</tr>
<tr>
<td>Key Resources

• Physical resources: agrotourism land, halls, lodging, food stalls, front office, toilets, prayer rooms
• Intellectual resources: database of agrotourism visitors who purchase tour packages
• Human resources: employees
• Financial resources: capital</td>
<td>Channels

• Live: TikTok and Instagram
• Indirect: Traveloka and word of mouth</td>
</tr>
<tr>
<td colspan="3">Cost Structures

• Fixed costs: physical asset maintenance costs, land maintenance costs, production equipment costs, employee salaries, WiFi costs, marketing, water costs, and electricity costs
• Variable costs: costs of purchasing agricultural raw materials and purchasing agricultural product packaging</td>
<td colspan="2">Revenue Streams

• Sales of tour packages and sales of agricultural and fishery products
• Loans/rental: hall rental, lodging rental, snack and product stall rental.</td>
</tr>
</table>

Figure 1. Hypothetical business model canvas (BMC0)

3. Prototype design

The prototype is one of the implementations of a product design that will be built to generate feedback from users during the design process and produce a final design that significantly impacts users (Putman, 2014). Pasir Eurih Village Agrotourism is here to answer the problems faced or felt by consumers because access to Pasir Eurih Village Agrotourism can be said to be easy and good. This is because Pasir Eurih Village has a variety of tourism potentials that maintain local wisdom. Pasir Eurih Village has collaborated with the Bogor Regency Government through the Bogor Regency Tourism and Culture Office (Disparbud) which provides regular guidance to Pasir Eurih Tourism Village through making innovations and developing a creative economy.

In addition, Pasir Eurih Village Agrotourism is also equipped with facilities, including a front office, meeting point, toilet, merchandise stall, hydroponic area, garden land, fishing pond, hall, prayer room, management office, lodging, camping ground, kitchen, lesehan, parking lot, organic and inorganic waste bins, agro-tourism location map, lighting, and rest chairs that can almost be found in every corner of the agro-tourism location. Its attractions include several activities that can be done at once at Pasir Eurih Agrotourism. These activities include gardening, fishing, cooking, and camping at a camp or inn. Agrotourism, which has an area of 4.560 m^2, also provides organic and inorganic waste bins at many points to maintain the cleanliness of the agrotourism area.

Agrotourism certainly has similar competitors. To face competition with existing attractions, Pasir Eurih Village Agrotourism applies cooperation or collaboration of tour packages with other attractions, for example by offering educational facilities for agricultural and fishery values. The values possessed by Pasir Eurih Village Agrotourism can be obtained at the cost of offering entry to the agrotourism location. The cost of the Pasir Eurih Village agrotourism offering in Table 2.

4. Solution test

The solution test stage is carried out to determine the suitability of BMC_0 and the Pasir Eurih Village Agrotourism prototype that has been made. Respondents to the solution test are the same respondents as the problem test obtained from the respondent screening until 25 potential respondents are determined who are directly potential customers. As many as 88% of respondents answered that Pasir Eurih Village Agrotourism had met the desired tourism criteria; namely, there was easy access to the agrotourism location, had complete facilities with offers that were considered feasible or the costs incurred were by the facilities obtained. As many as 100% of respondents answered that the right promotional channel for Pasir Eurih Village Agrotourism is online through Instagram, TikTok, and Twitter because respondents as potential customers often use these social media.

As many as 92% of respondents answered that the price offered by Pasir Eurih Village Agrotourism was considered appropriate because the respondents considered the facilities provided by Pasir Eurih Village Agrotourism to be pretty complete and meet the desired tourism criteria. The ticket price offered affects tourists' interest in visiting (Bolang et al., 2021). Some respondents considered the price offered for entrance tickets affordable for the size of the tourism industry in Bogor. As many as 88% of respondents answered they were interested in visiting Pasir Eurih Village Agrotourism because it met the desired tourism criteria. The things that respondents consider when making a repeat visit to Pasir Eurih Village Agrotourism are that the location is suitable for recreation with family, especially teaching children to recognize agriculture which not only includes rice fields but also waters represented by fishing ponds. Previous research states that tourists' memorable tourism experience is formed from tourists' new experiences when visiting tourist destinations (Muhammad et al., 2018). The image of tourist destinations and the perceived value of the tourist experience are significantly related to tourist satisfaction (Setiawan, 2018). Le et al. (2021) stated that the values and norms of each influence tourists' intention to visit agrotourism destinations. In addition, respondents also assume that Pasir Eurih Village Agrotourism is an excellent destination for refreshing and relieving the fatigue of living in a metropolitan city like Jabodetabek, where access to the location is also easy to reach. Various facilities at agrotourism destinations attract tourists (Oladeji et al., 2019). In addition, research by Ikramudin et al. (2023) concluded that the marketing mix variables (product, place, price, and promotion) significantly affect visitor satisfaction, form consumer loyalty, and encourage repeat visits.

Table 1. Distribution of problems and solutions from respondents

Type of Problem	Total	Solution
Access that is difficult to reach	15	Not making a return visit; Visit tours that are easier to reach
Incomplete facilities	13	Did not make a return visit; Provide criticism and suggestions to the manager; Looking for facilities needed outside the tourist attractions
Expensive	11	Rarely make a return visit; Visit tours that suit the current economic situation; Stay at home
No uniqueness	8	Do not make a return visit
Service is not good	6	Provide criticism and suggestions to the manager; Do nothing; Resigned
Dirty	4	Do not take actions that make the situation more dirty
Few food vendors	2	Buying food outside; Hiding food before entering the tourist attractions
Narrow land	1	Do nothing

Table 2. The cost of the Pasir Eurih Village agrotourism offering

Category	Price	Facilities	Activities
Admission Ticket			
Student	IDR 20.000	Public facilities	Wander around visiting each public facility, take pictures and can buy packages or food on site
Regular	IDR 25.000		
1-Day Training			
Student Regular	Rp 100.000 Rp 150.000 /person + The price of fruit or vegetables per kilo harvested, ranges from IDR 5000 to IDR 50.000.	General facilities, guide, training materials, certificate, rice box, merchandise.	Training on agricultural activities from planting to harvesting fruit and vegetable crops, and hydroponics. In addition, experience in directly planting plants and harvesting plants that will be consumed either on the spot or taken home.
Group training			
Company	IDR 600.000 /pax/day	Public facilities, 24-hour access, WiFi internet, lodging, hall, three meals per day, training, outbound, and merchandise.	Group pick-up using transportation, stay at the inn, agricultural training, planting and harvesting crops, cooperation and leadership training, fishing in the pond, outbound, and bonfire. In addition, visitors get traditional meals three times per day.
Rental			
Hall	IDR 1.300.000 /day	WiFi internet, 50-100 people capacity, projector, and microphone	Use the rented facilities and public facilities provided.
Lodging	IDR 350.000 /night	WiFi Internet, 4-person capacity (up to 10 people), 2 rooms, 1 toilet, 1 living room	
Shop stand	IDR 1.500.000 /month	WiFi internet, warehouse, stall stand, 1 toilet	
Additional package			
Photographer	IDR 100.000 /hour	Photographer and 5 printed 4R photos and soft copy photo files.	Photographing visitor activities and directing to designated photo spots.
Fruit and vegetable sales	IDR 5.000 – IDR 50.000 /kg	Harvested fruits and vegetables	Get harvested fruits or vegetables that have been cleaned and packed in the provided packaging.
Hydroponic installation	IDR 2.500.000 / installation	The installation measures 2 meters long, 1 meter wide, and 2 meters high.	Received a set of hydroponic installations with a total of 120 seedling holes that were ready to use.

5. Business model canvas update

After the solution test, there were BMC updates on the elements of the customer segment, value propositions, channels, revenue streams, essentials resources, and cost structure. This BMC update comes from input in the form of suggestions from potential respondents who are directly potential customers. Updates to the value propositions are electric scooters and outbound. Electric scooters and outbound include convenience or usability-type value propositions. The update to the channels is Twitter. Twitter is one of the company's direct channels. Updates to revenue streams are electric scooter rentals. According to Osterwalder and Pigneur (2010), electric scooter rentals include revenue streams of the loan/rental/leasing type. Updates to key resources are electric scooters and outbound equipment. Electric scooters and outbound equipment are vital resources of the physical resource type. Updates to the cost structure include purchasing and maintaining electric scooters including, fixed costs. The business model canvas update can be seen in Figure 2 and is highlighted in red.

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• Fixed costs: physical asset maintenance costs, land maintenance costs, production equipment costs, employee salaries, WiFi costs, marketing, water costs, and electricity costs, and electric scooter purchase and maintenance.
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<td colspan="2">Revenue Streams

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Figure 1. Hypothetical business model canvas (BMC1) (red indicates an update)

Business model canvas verification

Verification is carried out based on the results of the problem test and solution test and determines the suitability of the business model for the business to be run. BMC verification consider three things: product compatibility with consumers, consumer segments with their channels, and profits generated by the business model.

Product-market fit

Product-market fit has three components as parameters. The first component is whether the intended problem or need is urgent or important to consumers. Based on the results of the problem test, several problems were found that were felt or experienced by potential respondents who were potential customers, including access that is difficult to reach, incomplete facilities, expensive, no uniqueness, poor service, dirty, few food vendors, and narrow land. Based on the results of the solution test, it is known that 88% of respondents are interested in visiting Pasir Eurih Village Agrotourism because the respondents feel that Pasir Eurih Village Agrotourism answers the problems faced or felt by consumers. After all access to Pasir Eurih Village Agrotourism is easy and good.

In addition, Pasir Eurih Village Agrotourism is also equipped with facilities, including a front office, meeting point, toilet, merchandise stall, hydroponic area, garden land, fishing pond, hall, prayer room, management office, lodging, camping ground, kitchen, lesehan, parking lot, organic and inorganic waste bins, agro-tourism location map, lighting, and rest chairs that can almost be found in every corner of the agro-tourism location. Fajrin et al. (2021) found that tourist facilities and locations significantly positively affect return visit interest through visitor satisfaction. The uniqueness of Pasir Eurih Village Agrotourism is that in one tourist area, various activities can be done, namely gardening, fishing, cooking, and camping on the camping ground or staying at the inn. In order to maintain cleanliness, Pasir Eurih Village Agrotourism will prepare organic and inorganic waste bins at many points because of the location of the agrotourism which is arguably quite large, namely 4.560 m^2. This large area will also be equipped with electric scooters and outbound upon input from respondents.

Consumer segments and how to reach consumers

The selected customer segments are individual, family, and institutional tourists aged 11-50 interested in recreating agrotourism to learn agriculture or travel from Jabodetabek. The company reaches consumers through TikTok, Instagram, Twitter, Traveloka, and word of mouth. Sales of products and services are carried out directly when visitors visit Pasir Euih Village Agrotourism. Furthermore, Achmad et al. (2022) mentioned that entertaining and interactive advertisements can encourage consumer engagement and trigger their desire to buy products, which in this study is to visit Pasir Eurih Village Agrotourism.

How companies make money

The income obtained by Pasir Eurih Village Agrotourism is through the sale of tour packages, sales of agricultural and fishery products, hall rentals, lodging rentals, rental of snack stalls and products, and rental of electric scooters. The initial target market amounted to 44.000 people. Suppose it is assumed that the new target market is 88% of the initial target market because 88% of respondents are interested in visiting Pasir Euih Village Agrotourism. In that case, the new target market is 38.720 people. This figure can be assumed to be a potential consumer who visits Pasir Euih Village Agrotourism. In addition, Pasir Eurih Village Agrotourism has other strengths. These namely revenue streams that are more than one stream, so it does not only rely on the sale of entrance tickets but also the sale of tourist visit packages, sales of agrocultural and fishery products, hall rentals, lodging rentals, snack stall stand rentals and products, and electric scooter rentals.

According to Campbell and Brown (2003), before developing a business, economic feasibility can be determined through Cost Benefit Analysis (CBA) which consists of Net Present Value (NPV), Internal Rate of Return (IRR), and Benefit Cost Ratio (BCR).

NPV (Net Present Value) calculation, is the present value of an investment activity, which is carried out within a certain period of time. If the resulting NPV value is above the assumed bank loan interest rate, then the project is feasible.

NPV = ((C1/(1+r)1 + (C2/(1+r)2) + (C2/(1+r)3) + (C2/(1+r)4) + (C2/(1+r)5) + (C2/(1+r)6) + (C2/(1+r)7) + (C2/(1+r)8)) - C0.

If r = 12% then the NPV value is:

NPV (Interest 20%) = 12.124.035.465 - 405.800.000
= 2.718.235.465
NPV (Interest 25%) = 10.321.404.200 - 405.800.000
= 915.604.200

The calculation of IRR (Internal Rate of Return) is a value that is identical to how much interest is earned from an investment when compared to the prevailing interest rate in the bank. If the calculation results are above the bank interest rate, then the project is feasible.
IRR formula = Ir + (NPV Ir/NPV Ir - NPV It) * (It - Ir).
Ir: Low interest
It: High interest

IRR = 15% + (12.124.035.465/1.802.631.265) x 10%
= 87,26%

The calculation of BCR (Benefit Cost Ratio) compares the value of project benefits against all the cost values that are a burden (project value). If the results of the BCR calculation are > 1, then the project is feasible to implement. The BCR formula is NPV / Project Value.

BCR = 12.124.035.465 / 9.405.800.000 = 1,29

Pasir Eurih Village Agrotourism has a cost-benefit. The Net Present Value (NPV) of Pasir Eurih Village Agrotourism with a low-interest rate (20%) is 2.718.235.465 and with a high-interest rate (25%) is 915.604.200, a positive NPV value means that the project is feasible to implement. The Internal Rate of Return (IRR) value of Pasir Euih Village Agrotourism is 87.26%; the IRR value which is above the interest rate value means that the project is feasible to implement. The Benefit Cost Ratio (BCR) value of Pasir Euih Village is 1.29; the BCR value of more than one means that the benefits are greater than the costs, so the project is feasible to implement. Analysis of social and economic data shows that agrotourism is one of the possible and sustainable adaptation strategy to deal with economic pressures and climate change (Little & Blau, 2020). This reinforces that agrotourism is one of the tourism potentials that needs to be developed. According to Blank and Dorf (2012), a business model that has been verified through the customer discovery stage, the next stage is customer validation to prove that a business model that has been tested and iterated (repetition) in the customer discovery stage has a business model that can grow and develop, which can attract the number of consumers needed to build a company when implemented.

Managerial Implications

The business strategy outlined in this study was developed in response to the problems and needs identified by respondents for improving Pasir Eurih Village Agrotourism. By adopting and implementing key elements of the Business Model Canvas (BMC), management can enhance the efficiency and effectiveness of Pasir Eurih Village Agrotourism development. Implementing the right strategy will enable Pasir Eurih Village Agrotourism to compete with similar businesses and create new opportunities for the surrounding community.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Pasir Eurih Village Agrotourism is a design concept worth developing to overcome the problems felt by consumers. Pasir Eurih Village Agrotourism is located in Kampung Dukuh Menteng, Pasir Eurih Village, Tamansari District, Bogor Regency, which is geographically located on the slopes of Mount Salak, supported by an agricultural-based environmental ecosystem and local community wisdom. The potential of natural resources owned by Pasir Eurih Village such as the availability of largely agricultural land, close water sources, and unspoiled ecosystems.

Pasir Eurih Village Agrotourism has main facilities, including a front office, meeting point, toilet, merchandise stall, hydroponic area, garden land, fishing pond, hall, prayer room, management office, lodging, camping ground, kitchen, lesehan, and parking lot. Supporting facilities include organic and inorganic waste bins, agro-tourism location maps, lighting, and rest chairs in every corner of the agro-tourism location. BMC planning for Pasir Eurih Village Agrotourism, namely: Customer segments are individual, family, and institutional tourists aged 5-50 years; Value propositions offered are divided into three, namely good service to visitors, complete facilities ranging from primary and supporting facilities, and various tour packages; Channels used are Traveloka, Instagram, TikTok, Twitter and word of mouth; Customer relationships carried out are giving souvenirs, some free photo documentation, providing meals for consumers who purchase tour packages, and friendly service; Revenue streams are the sale of tour packages, sales of agricultural and fishery products, hall rentals, lodging rentals, electric scooter rentals and rental of snack stalls and products; Key resources owned by Pasir Eurih Village Agrotourism, including: physical resources (agro-tourism land, halls, lodging, snack and product stall stands, offices, toilets, electric scooters, outbound equipment and prayer rooms), intellectual resources (services to agro-tourism visitors who buy tour packages), human resources (employees), and financial resources (capital); Key activities are seeding, nursery, planting, maintenance, harvesting, maintenance of physical assets, marketing, packaging of agricultural products, selling agricultural products, and good service to agrotourism visitors; Key partnerships are suppliers of agricultural raw materials, Traveloka, and restaurants or restaurants. Suppliers of agricultural raw materials in the form of seeds and fertilizers: Cost structures are grouped into two, fixed and variable costs.

Recommendations

Based on the results of the research that has been carried out, further research needs to be conducted to develop the concept of agrotourism and add the concept of

education to perfect the existing agrotourism concept. This research also needs to develop the situation during the New Normal, because Agrotourism planning was designed at the beginning of the pandemic so that Agrotourism can adjust to government regulations after the New Normal. Then, it is necessary to develop a prototype so that the building model can be better visualized in real terms. In addition, research can be continued by continuing the stages of customer development, namely customer validation, to validate each BMC element further, especially the value proposition aspect. Then, it is necessary to collaborate with related parties such as architects, contractors, farmers, and community leaders to realize this agrotourism.

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