

Analysis of the Kertajati Aerocity Business Model Using The Business Model Canvas

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ABSTRACT: *This article intends to analyze the business model applied to Business Park cluster, a part of the Kertajati Aerocity area through a business model canvas. This research uses a qualitative method which emphasizes quality analysis. The data collected comes from interviews, field notes, and other official documents. The results of this research show that by implementing Business Model Canvas, PBAD as a business park cluster management company can identify strategic steps that have been and are being implemented while also having a more complete plan for cluster development. With limited literature in the study of aerotropolis, especially in Indonesia, this article can provide a significant contribution, especially to the management of areas such as aerotropolis.*

KEYWORDS- *Aerotropolis, Aerocity, Business Model Canvas, Kertajati Aerocity, Business Model*

I. INTRODUCTION

The Kertajati Aerocity area in Kertajati District is predicted being able to make a significant contribution in boosting the economic sector in West Java Province, especially in Majalengka Regency. The Kertajati Aerocity area is an integrated area and is often referred to as Airport City or in other words, it is a new city developed around the airport area. The Kertajati Aerocity area is a strategy from the government to develop a new urban area in which the airport is the main driver, which includes spatial planning, infrastructure development, as well as economic activities such as airport planning, urban planning, and business planning carried out by each stakeholder.

Kertajati Aerocity with a total area of 3480 hectares in its planning (masterplan) divide by 5 (five) cluster/main zones that have been and will be collaborated, cluster/main zones include Business Park, Logistic Hub, Aerospace Park, Creative Technology Center and Residential.

The economic benefits of managing the Kertajati Aerocity business area as an Airport City/Aerotropolis will of course have an effect on additional infrastructure or accessibility, increasing the number of workers, as well as on the airport facilities themselves. Likewise, in the social sector, it will result in an increase in educational facilities and health service facilities, and will have a consequence on improving Gross Domestic Product also taxes for Regional and Central Governments. In this regard, there has been an increasing body of literature highlighting the substantive socio-economic impacts of airports and air transport on regional economies (Kasarda 2000, 2008; Graham & Shaw, 2008; Schaafsma, 2008; Dobruszkes et. al., 2011; Kasarda & Lindsay, 2011; Zhang & Graham, 2020; Dimitrios & Maria, 2018).

Seeking to take advantage of the wide range of flight destinations and high-quality services available in the airport area, companies (Especially for delivering high-value, light-weight products) are increasingly seeking locations closer to the airport. Kasarda contends that a modern framework for urban improvement, dubbed "aerotropolis," has emerged recently. Examples include the neighborhoods surrounding large international airports such as Hong Kong International Airport, Amsterdam Schiphol Airport, and Incheon International Airport in South Korea. Kasarda stated that the aerotropolis are fundamentally integrated areas of the airport that extends 32 kilometers (20 miles) from the core area and includes hotels, also offices, distribution and logistics facilities.

PT Bandarudara Internasional Jawa Barat (BIJB) as an entity formed by the West Java Provincial Government to build an airport~Kertajati International Airport and develop the Kertajati Aerocity Area, has formed a subsidiary in 2016, namely PT BIJB Aerocity Development (BIJB AD). The goal is to develop and manage the Kertajati Aerocity Area to be more focused and flexible in carrying out economic activities, particularly in the procurement of important partners, as the development of the Kertajati Aerocity Area necessitates a significant investment. To achieve successful management of Kertajati Aerocity, various influencing factors are required. Capital, human resources, careful planning can be identified as determining factors for success in business. Apart from that, managing the area with the right business model is very important in efforts to realize the development of Kertajati Aerocity.

Kertajati Aerocity as the embodiment of the concept aerotropolis, it requires an analysis of business governance in its operation, observations are made based on a review of the business model used Business Model Canvas (BMC), so that the expected goals can be achieved. In this article, a specific discussion through BMC analysis was carried out at PT PPRO BIJB Aerocity Development (PBAD) which is a joint venture between BIJB AD, PT PP Properti, Tbk and PT Manakib Rezeki for management in cluster Business Park.

II. LITERATURE REVIEW

Aerotropolis

Aerotropolis or airport city is a concept that is rooted in the development of areas around airports, which is caused, among other things, by the rapid increase in connectivity between cities and countries (with the existence of airports) so that it has an impact on location issues (places of business) as well as changes in the rules of competition for each industry in the area. If analogous to a metropolitan city, there is a concept Aerotropolis changing the function of the airport into an integrated city complex ranging from commercial relations to becoming a meeting place for capital-intensive businesses. So with this, the airport can become a business center area or what it can be called Central Business Districts (CBD) on Aerotropolis (Kasarda, 2008)

Kasarda further stated that the development of the airport area is estimated to increase employment opportunities 2-5 times compared to before. The increasing provision of jobs based on high technology in the area around the airport (up to 12,000 jobs), confirms Kasarda's findings that the existence of the airport as a hub has a significant influence. According to Kasarda, this accelerated growth is due to the convergence of four aspects, namely, globalization, digitalization, aviation and time-based business competition.

According to Kasarda & Appold (2014), Aerotropolis is an urban subregion in which economic activity, infrastructure development, and land use are centered around the airport. Its primary value proposition is that it enables businesses to instantly interact with their suppliers, consumers, and corporate partners on a national and global scale, hence increasing corporate and regional efficiency. Aerotropolis has quickly emerged as a hub for national and regional economic development (Canada, 2000). The establishment of an aerotropolis can enhance demand for air transportation and promote industries surrounding airports. Airport development initiatives typically involve expanding the aerotropolis in order to attract new investment, create jobs, and open up new commercial opportunities (Yeo et al., 2013). Liou et al., 2018, stated that because of the benefits airports provide in a fast-moving global economic network, Aerotropolis became interesting for enterprises, especially those connected with international commerce and trade.

Professional and practitioner on economics, also geographers, and other experts have acknowledged the importance of air transportation in structuring metropolitan economies (Button & Taylor, 2000; Debbage & Delk, 2001; Brueckner, 2003; Kasarda & Green, 2005; Alkaabi & Debbage, 2007; Johansson, 2007; Chang & Chang, 2009; Vasigh et al., 2018).

Regional Business Model

According to Porter (2000), basically the competitiveness of a country or region is based on productivity, this is the main determining factor in the standard of living of a country or region over a long period of time. Geographical location is an important element in supporting company productivity, in this case there is geographic concentration which can directly provide access to special input factors so that it can provide high performance. Rustiadi, et al, (2009) also stated that the superiority or competitiveness of economic sectors is influenced by how a region or area is able to stimulate its growth.

According to Brykova (2006), The regional business model allows the establishment of a potential sector in which there are conditions for competitive advantage and appropriate financial resources are necessary for the firm's development. This is supported by Rustiadi et al. (2009) who stated that the supremacy and competitiveness of economic aspects in a region influence the ability to accelerate growth. Regional competitiveness must be seen as the ability to ensure a high standard of living for people and income for capital owners, as well as the successful application of the region's economic potential in the production of goods and services (Aganbegyan, 1979). This is also supported by Shastitko's (2009) statement that regional/regional competitiveness has an essential role in understanding the region's economic progress and living standards. As a result, measures to promote regional competitiveness are an essential topic in national and regional economic policy.

Through the explanation above, the business model for areas such as Kertajati Aerocity, as proposed by Zott et al. (2011), namely that it can be observed how to carry out business activities from various perspectives to explain value creation, performance, and the company's competitive advantage.

There are other definitions of business models that have been suggested by previous researchers. Morris et al. (2005) and Calia et al. (2007) describe that a business model is a concise description of how to generate a sustained competitive advantage through a set of interconnected decision variables in the domains of venture strategy, economics, and architecture, taking into account six fundamental components such as value

proposition and process/competency. Internal, customer, economic model, external position, and personal/investor variables. Meanwhile Gambardella & McGahan (2010) and Teece (2010) added revenue and cost aspects in its definition is that the business model articulates the logic, availability of data, as well as other evidence that plays a role in supporting the value proposition for customers, and the income and cost structure that is feasible for the company that provides that value. In terms of development airport city as a region, Hirsh (2019) states that the essential elements that essentially decide whether a real estate project on the land side (airports) succeeds or fails, emphasizing that working with local partners and focusing on the needs of customers are the two most crucial success criteria.

Mauro Pineda & Macario (2011) concluded that, commercial income diversification through real estate is an important inducement for airport operators to participate in airport-centric urban development; Airport-centric development can take place at many geographic scales (from the micro scale of passenger terminals to regional or metropolitan scales), taking numerous shapes and manifestations based on considerations such as territorial authorities involvement and operators freedom to purchase and develop land outside airport limits. The aerocity concept, also known as "aerotropolis", Airport City, and "airport corridor" evolved as a descriptive model for this type of growth. The entities involved envisage the proposed airport city as a collection of multifunctional business property initiatives at the airport and in its near surroundings. Airport city development is primarily concerned with one or more of four markets includes real estate, retail, air cargo and logistics, and business travel services. Its value addition is heavily reliant on its four infrastructure pillars: node aviation, surrounding surface tissue, intermodality, and public transportation.

Business Model Canvas

The analysis of the business management of the Kertajati Aerocity area in the Business Park cluster was carried out using the Business Model Canvas. David & Fred (2006) state that functional areas in the business being run have strengths and weaknesses, so goals and strategies are set with the aim of exploiting internal strengths and overcoming existing weaknesses. In "Business Model Generation" Osterwalder and Pigneur (2010), compiled a framework in the form of a business model canvas and consists of nine boxes containing interconnected elements.

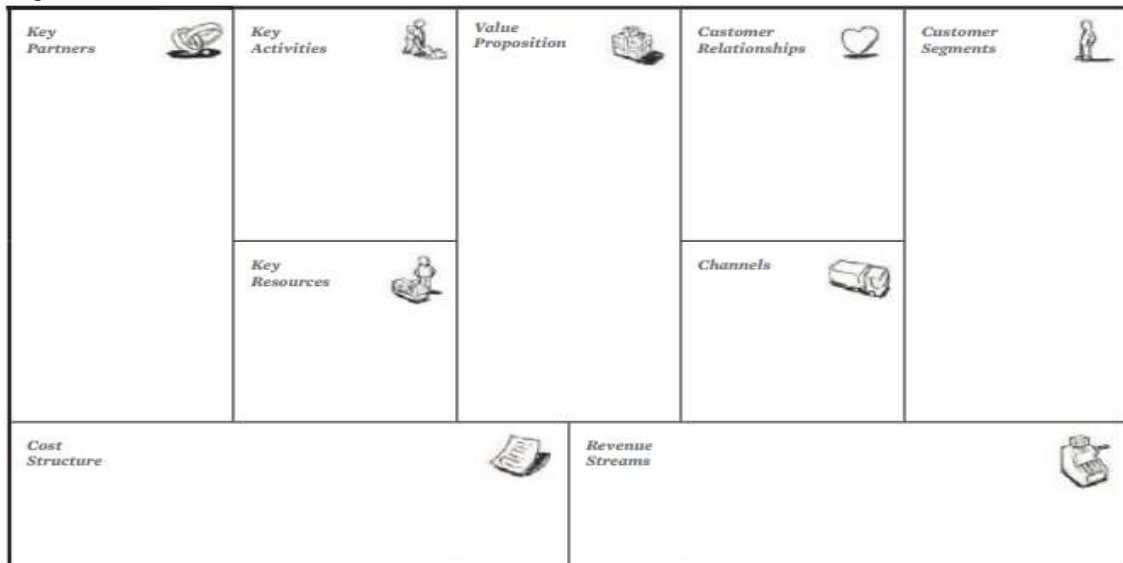


Figure 1. Business Model Canvas

Osterwalder and Pigneur (2010) define a business model canvas as a model that rationally defines how an organization generates, delivers, and collects value. Osterwalder and Pigneur use nine basic elements, namely:

1. Customer Segment, is by identifying parties who use the organization's products or services according to their needs;
2. Value Proposition, identifying the characteristics of a product or service that are worthy of customer choice;
3. Channels, lists various elements that state how an organization can communicate with customer segments and can convey its value proposition;
4. Customer Relations, carried out by identifying how to build relationships aimed at acquiring new customers while retaining old customers, and being able to offer new products and services to existing customers;
5. Revenue Stream, by explaining how the organization obtains financial income arising from each customer segment;

6. Main Resources, namely by explaining the most important assets that provide the success of the company's commercial activity;
7. Main Activities, are those that identify the success of a company business model. These actions play an important part in achieving the value proposition;
8. Main Partnership, the main partner is a partner in running the organization;
9. Cost Structure, by explaining all the costs that arise after the operation of this business model.

III. RESEARCH METHOD

Research methods are scientific methods/rules utilized to obtain data for a specific purpose. The scientific method/principle in question can be interpreted as meaning that this activity is based on scientific methods.

This research uses a qualitative method which emphasizes quality analysis. The data collected comes from interviews, also from field notes, and other company or governmental documents. The fundamental purpose of this qualitative study is to define the empirical reality of problem phenomena through an in-depth and thorough discussion, in detail and can be discussed thoroughly. Therefore, this qualitative use is through matching and comparing activities, which then looks for connections between theory and empirical reality using descriptive methods.

The problem investigated by the author is connected to business management in the Kertajati Aerocity area using internal and external factors as an analytical lens, which is highly appropriate employing qualitative research methodologies, with the phenomenon of business management in the Kertajati Aerocity area, namely in cluster Business Park in Kertajati District, Majalengka Regency. According to Satori and Komariah (2011), qualitative approaches can provide a description of research outcomes in the context of establishing the premise of the research hypotheses applied.

IV. RESULT AND DISCUSSION

Implementation Business Model Canvas (BMC) on Aerotropolis concept especially in cluster Business Park can provide a more comprehensive understanding of the elements that need to be considered in designing and developing this project. On management cluster Business Park these elements can be detailed as follows:

1. Customer Segment:
 - Entrepreneurs and companies: Marketing activities must be carried out in order to attract entrepreneurs and companies to open offices and facilities in cluster Business Park.
 - Individuals and families looking for housing.
 - Investors looking for property for investment.
 - Property developers who need land or property for development projects.
2. Value Proposition:
 - Accessibility: Offers efficient transportation infrastructure to ensure good accessibility to and from the airport.
 - Business Facilities: Provide office space, conference centers, trade centers, and other business facilities to attract companies and entrepreneurs.
 - Connectivity: Offers strong connectivity between regions (cluster), airports and surrounding areas to encourage economic growth.
 - Offering quality properties with attractive designs.
 - Strategic property location.
 - Easy access to public facilities and transportation.
 - Satisfactory after-sales service.
3. Distribution Channels:
 - Internal/In house marketing team.
 - Property agents and brokers.
 - Online platforms and company websites.
 - Property exhibitions and marketing events.
4. Customer Relations:
 - Customer Service: Providing responsive and friendly customer service to meet customer needs and expectations.
 - Business Partnerships: Building strategic partnerships with companies and entrepreneurs to create a mutually beneficial business environment.
 - Direct interaction with customers through property agents.
 - Responsive and quality customer service.
 - Offer discounts or special packages to customers.

5. Source of Income:
 - Income from Rentals: Earn income from rental of office space, conference centers and other business facilities in cluster Business Park.
 - Revenue from Parking: Collect revenue from parking vehicles in the area cluster Business Park.
 - Direct sale of property to buyers.
 - Commission from property sales through property agents.
6. Key Resources:
 - Land and Property: Own or manage land and property around the airport for development cluster Business Park.
 - Manpower: Having a skilled and qualified workforce to operate and manage cluster Business Park.
 - A team of property developers and designers.
 - Wide network of property agents.
 - Capital for property acquisition and development.
7. Key Activities:
 - Infrastructure Development: Plan, build, and manage infrastructure cluster Business Park.
 - Marketing and Promotion: Develop marketing and promotional strategies to attract companies, entrepreneurs and tourists.
 - Operational Management: Manage daily operations cluster Business Park, including security, maintenance, and support services.
 - Purchase of suitable land or property.
 - Property planning and design.
 - Construction and property development.
 - Property marketing and promotion.
 - Rental and property management.
8. Key Partnerships:
PT BIJB, PT PPRO, and PT BIJB AD.
 - Local Government: Work with local government to obtain necessary policy support and permits.
 - Property Developer Partners: Collaborate with other property developers to plan and develop infrastructure and buildings in cluster Business Park.
 - Construction material supplier.
 - Financial institutions for property loans.
 - Property agents and brokers.
 - Government and property-related regulatory authorities.
9. Fee Structure:
 - Land or property acquisition costs: these costs include land acquisition to build the cluster.
 - Construction, infrastructure and property development costs.
 - Real estate agent salaries and commissions.
 - Marketing and promotion costs.
 - Property operational and maintenance costs: include costs for electricity, water, security, cleaning and other routine maintenance to keep the cluster operating well.
 - Regulatory and licensing costs: In some cases, licensing costs and meeting regulatory requirements can be an important factor. This includes costs for obtaining construction permits, operating permits, environmental permits, and meeting other legal and regulatory requirements.
 - Development and research costs: For this strategy, cluster Business Park may involve divisions/departments of research and development (R&D), or solving specific problems related to the project. These costs include experts, consultants, testing, and other resources required for R&D. So from the explanation above it can be described as follows:

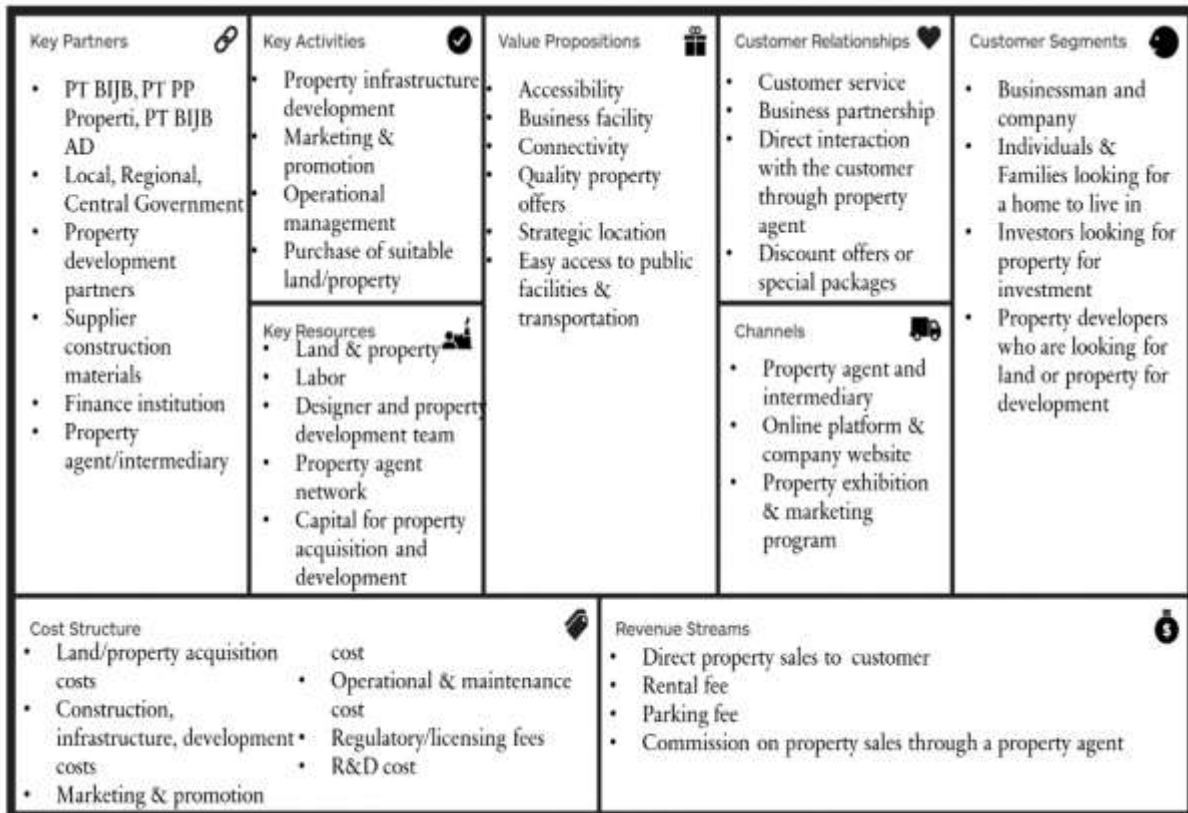


Figure 2. Business Model Canvas PBAD

V. CONCLUSION

Through the implementation of BMC, PBAD as the Business Park cluster manager can understand holistically the targeted customer segments, the value proposition presented, the distribution channels used, and the sources of income generated. It also helps identify key activities that must be carried out, resources required, as well as partnerships that need to be built for the successful development of the Business Park cluster.

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