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Digital Business Model for Digital Startup in Industrial Era 4.0

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ABSTRACT

Digital business plays a significant role in industry 4.0. Many companies rely on information technology to connect customers, employees and run their management. Many digital startups are growing very fast in Indonesia but do not have a strong and good business model to maintain sustainability. This study aims to develop a way of analyzing a digital startup's business model so that it becomes a profitable startup. The method used in this study is a method of analyzing business models using a lean canvas. The results of this study show that lean canvas can produce a strong and sustainable business model for digital startup significantly. This study concluded that lean canvas is very good for building a business model on digital startup.

Key words: Digital business models, digital startup, industry 4.0, lean canvas

1. INTRODUCTION

Industry 4.0 has become an important part of the industry today. Industry 4.0 is an era in which all company businesses depend on information technology. Information technology will create a reliable company and increase productivity on an ongoing basis. Companies are starting to enter an era where technology dependence is crucial to connecting customers easily and quickly. Industry era 4.0 which utilizes information technology fully makes the company's cycle from production to after-sales service to customers easier and faster with high-quality services. This creates a lot of loyal customers and a more productive company. The industry should apply information technology to be a strategy in building a business in the industrial era 4.0[1].

The growth of companies in Indonesia began to show significant developments with digital startup companies. Newly pioneered digital companies need information technology to be able to compete in the industrial era 4.0. This digital startup company has grown rapidly in Indonesia. This rapid growth is not matched by good and profitable management. The company is very important to build financial management so that it can get targeted benefits[2]. This is due to the low level of business model exploitation that applies to digital startups that are built. The impact is digital startup companies are not able to survive in competition and result in huge losses and even bankruptcy. The business model is very important for digital startups in carrying out the business that is needed before the company starts operating.

The business model in a company describes the service management model for its customers. This can be seen from the customer's desires, what will be paid and the company's model in meeting customer needs [3]. The business model also describes how the company organizes itself to get benefits through business services that are designed and distribute value in a certain way [4]. Business models can also be described as an organizational architecture and business financial structure [5] and also explain how the company works [6]. Business models can be explained as conceptual tools that contain a set of objects, concepts and their relationships to express the business logic of a particular company [7]. A business model must find value, create a model that is described in a thought [8]. Business models can model the way business works, the types of businesses that are run and how to communicate them to customers through measurable ways. A good business model can predict company success and be an important factor for successful companies.

The purpose of the business model is to function as a business analysis unit and become a tool to bridge technology, ideas, and potential customers. This method provides a method of getting customers and providing sponsorship value. The business model is used as a company tool in mobilizing every employee, leader, customer, and stakeholder involved in assessing the desired company values and vision [7]. The business model was chosen as a mediator to mediate between technology and the company's economic value. Business models can find opportunities and potential value by utilizing information technology and selling it back into the right

competitive strategy, the correct value proposition, market segments, value chains, cost structures, profit potential, and value networks [9]. This business model needs to add new value, create and maximize new opportunities to provide high sales value for customers [5].

Digital startup companies must have a strong business model to increase their existence as a start-up company and get big opportunities [10]. What is the right business model for a digital startup company? What techniques can be applied to digital startup companies to have the right business model? This research tries to make a digital startup business model so that it becomes a profitable startup. This research will try a business model that can be a choice for digital startup companies.

The business model with Lean canvas has the advantage of mapping and implementing the company's morning business model. The lean canvas models are very well used by companies to find appropriate and efficient business strategies [11]. The Lean canvas helps the company in maximizing the company in reaching areas that have not yet been entered so that the company's reach becomes broad and directed [12]. Lean canvas can also help startup companies calculate the benefits to be gained easily through the selection between revenue streams and cost structure [13][14]. The business model is a very suitable choice for digital startups in building their business.

2. METHOD

This research uses a descriptive qualitative method. The Canvas Business Model is applied to digital startups. Research subjects are founders of digital startups, project managers, coworkers, and customers. The number of respondents involved in this study was 120 respondents. The method of analysis in this study uses canvas business models. The data collected consists of qualitative data from interviews with respondents. Data collected from the results of these interviews are categorized as primary data and data collected from observations on digital startups consist of company profiles into secondary data. The interview technique used is semi-structured[15][16].

This study uses a purposive sampling technique to determine the number of respondents involved in this study. The validity of the data used by the triangulation method to ensure the data used is valid and reliable. Triangulation technique used is the triangulation of data sources. In conducting the analysis, researchers used the technique of analyzing the slim canvas business model models presented in the form of a complete and sequential slim canvas following the format provided on the slim canvas business model[17][18]. Data is taken in the form of tables and figures. After analysis in the form of a slender canvas, then conclusions are drawn to get the final results and presented as the final results of this study.

3. RESULT AND DISSCUSION

Business Model Canvas

The lean canvas business model used in digital startups can be displayed in nine systematic steps that are presented in a structured chart format. canvas business model to explain the formation of a digital startup business model See Figure 1 below.
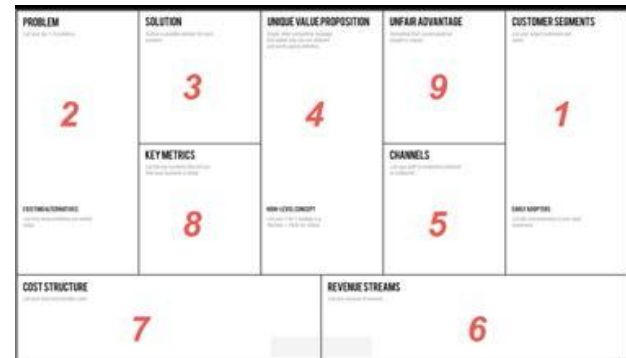

Figure 1: The lean canvas business model

All components of the lean canvas pad in Figure 1 can be explained as follows:

The first component is the customer segment. In this section, digital startup companies analyze the market segments that they will enter. This is useful for getting consumers/customers in more specific market segments. The choice of market segments must be adjusted between value propositions, channels, customer relationships and what is needed by the customer more specifically. The second component is the value propositions. A value proposition is the company's bargaining position to provide pride or services by the needs of the market segments. Digital startup companies will have additional support to support additional activities such as newness, customization, accessibility, and convenience[19]. Newness is a new product or service offering and has never been offered by a company before. This is very important to give the bargaining position of digital startup companies to develop with a unique position compared to its competitors. Customization, where digital startup companies must be able to modify products or services according to customer needs. Accessibility, where digital startup companies must provide facilities that can be accessed by customers. The easier the company is to access, the more customers use the services or products of the company. Convenience, where digital startup companies must provide convenience in the services or products offered. The third component is the channel[20]. This component is a part for digital startup companies to market their products specifically to their customers, this part is often called the indirect sales channel. With this component, companies can easily connect with their customers with various media such as websites, applications or through exhibitions, shows, and others. The

fourth component is the customer relationship. This component allows digital startup companies to communicate directly with customers. How to communicate with customers through two ways, namely dedicated personal assistance and community. This component is very supportive of other parts, namely the company's values and key activities. The fifth component is revenue streams. This component is a calculation of the company's revenue stream through a usage fee where the company gets income from customer payments for products or services offered. In this section, a digital startup company can detail the profitable profit it will achieve. This section can ensure the company will survive and continue to run its business. The sixth component is the key resources. This component becomes important to describe the company's resources that can be used to build strong competitiveness[22]. This section can be analyzed using other tools such as SWOT analysis to get detailed business strategies. This section can be done simply by looking at the strengths owned by the company that can be used to maximize the opportunities that exist, then look at the weaknesses of some parts of the body that must be minimized to face the threats that will arise. Thus the digital startup company can simply build their business easily and develop in a clear direction. The seventh component is the key activities. This component records activities to be added such as trading or other supporting digital startup companies. The eighth component is the key partnership. This component, digital startup companies build partnerships with various parties to run the main business of digital companies. The ninth component is the cost structure. In the cost structure component, the company focuses on the costs incurred to carry out its business activities. The main focus of the company is on the calculation of the cost structure owned by the company, which is used to produce quality products or services. Costs in the form of fixed costs and variable costs owned by the company must be regulated so that no significant changes are needed. This is because the company's fixed costs cannot be cut or minimized because these costs are wages or salaries given to company employees. Also, variable costs include; purchasing raw materials for playing business as well as for supplying goods in the company's warehouse, purchasing general trading products from the company to the supplier.

The easy way to use a lean canvas business model starts with determining the target customers that will be the segmentation of digital companies. In this position, the startup must determine who the target customer will be achieved. Target customers can be made according to targets such as demographic, psychographic, lifestyle or behavior. For example, residence, gender, occupation, age, level of education, total income per month, and others. Second, formulate problems that occur with customers and validate correctly. In this position, get an existing solution and measure the results. Digital startup companies must address

three main issues that will be solved through ideas that will be approved. Furthermore, digital startups must re-check what solutions have been offered so far to solve the problem. Third, find the right solution and the potential that customers are interested in to open up opportunities to build a business. In this section, it contains three product features that will be offered as the main parts of the product and are built based on the problems that customer needs. Fourth, determine the unique value proposition in this section digital startup companies build unique business models compared to similar businesses. Fifth, determine the method that will be used to gather prospective customers. This channel is used as a tool to publish solutions for digital startups offered to prospective customers. Sixth, the income stream. Contains how digital startups benefit from the revenue that is designed by the company. Seventh, the cost structure consists of costs that will be incurred to finance all company costs, both directly and indirectly. Eighth, the key metric is the measuring tool obtained in the form of KPI (Key Performance Indicators) from business progress. This key metric is useful for measuring company business performance. Ninth, unfair advantage. Unfair advantage is a unique thing that cannot be duplicated by competing companies so that digital startup companies remain unique and have special secrets.

In this study, researchers tried to use a slender canvas to be implemented in a digital startup company that was about to be operated. Business models that can be generated using a lean canvas can be seen in table 1.

Table 1: Lean Canvas Business Model 'Beautiful Memories'

PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
• Photo offers are limited by package. • Video offers are limited by package. • Offering decoration services are limited by package. • Souvenir offers are limited by package. • It's hard to find a photographer quickly • It's hard to find a video editor quickly • It's hard to find/find decorating services quickly • It's hard to find interesting & quality souvenirs quickly	• Does not offer packages. • All according to user needs & desires. • Bringing customers & photographers together. • Bringing together a video editor. • Bringing customers & decoration service companies. • Helping customers find interesting souvenirs, quality & fast service. • Cooperating with the best souvenir companies	• The photo features to make it easier for customers to find photographers. • Video features to make it easier for customers to find a video editor. • The decoration features to make it easier for customers to find a decoration service company. • The Decoration features to make it easier for customers to find interesting & quality souvenirs. • Photographer certification • Video editor certification • Certification of souvenir quality • Certification of the quality of decoration services	-	• Couples who will get married. • The family of someone who edited. • Everyone's birthday. • Everyone who graduated. • Everyone who has an official or non-official event
	KEY METRICS • Photographer certification. • Video editor certification. • Certification of souvenir quality. • Certification of the quality of decoration services. • 10% of each photographer services order. • 10% of every order for video editor services. • 10% of every souvenir order. • 10% of every order for decoration services.		**CHANNELS** Social media ☐ Youtube. ☐ Instagram. ☐ Facebook. Print media ☐ Brochures ☐ Newspaper ☐ Business magazine	
COST STRUCTURE • Making Application Rp. 7,000,000 • Analyst System Salary Rp. 5,000,000 • Company Admin Salary Rp. 4,000,000 • Salary for Professional Photographers Rp. 3,000,000 / certification • Salary for Professional Video Editor Rp. 3,000,000 / certification		**REVENUE STREAMS** • Photographer Certification Rp. 200,000 / person • Certification Video Editor Rp. 200,000 / person • Decoration certification Rp. 200,000 / company • Souvenir Quality Certification Rp. 200,000 / company • 10% of each photographer services order. • 10% of each video editor service order. • 10% of every souvenir order. • 10% of each order decoration service.		

This digital startup company was built with a thought that every person has important moments in his life who want to be perpetuated even willing to spend a lot of time and energy that is not small with a large budget to get the best results. To be able to capture the moment, they look for skilled personnel from far-away days because it requires time and energy. Some do not have acquaintances, far from the city center, do not have vehicles and some even live on an island where there is no expert staff and it makes them have to cross the ocean just to find experts who can capture their important moments. Not a few also failed to capture their important moments because

of impromptu and do not have much time to look for experts who then lead to regret. Also, many expert services offer packages at unaffordable prices so that not all consumer needs are met and the budget that consumers must pay is very expensive.

The main ideas and solutions offered as seen in table 1 is to create a new business opportunity that is the android mobile commerce application as a medium for ordering services that can answer the needs of consumers, help consumers order the desired service, describe the details of order services, view order details and prices easily, anytime and anywhere using mobile android owned. A business opportunity is used as a digital startup company based on Beautiful Memories Application as a Service Booking Media to Facilitate Organizing Events. By looking at the problems that emerge, this digital startup company identifies the chances of success of this application seen from, There is no application for ordering photography, videography, decoration & souvenir services so that Beautiful Memories will be the first to come as an answer and to provide convenience in organizing events. Also, this application will be the first application that does not offer packages when all photography and videography services are competing to offer inexpensive packages. This application is designed to listen and answer user needs, without offering a package. This application will also be an application that makes photographers and videographers flooded with consumers. Based on the analysis of every photographer & videographer currently forming a community and from that community some of them are looking for & getting consumers, those who are not included in the community are generally difficult to get consumers because they are less known by the public. This application will also function as an application that makes the company service and souvenirs flooded with orders. Because based on the author's analysis, every person who holds an event will need decoration and souvenir services. Also, most mobile phone users have Android for this application, so this application will be an option and can be used by all people, both consumers and service providers. This application has a strong business model and promises big profits in the future. Thus, this application is very likely to be successful and be the only application that answers and facilitates consumers and service providers.

4. CONCLUSION

This research can conclude that lean canvas is very good for building business models on digital startups. Stages of analysis of digital company business models using a canvas business model that shows the company's business model is very good if it is built using a lean canvas business model, besides being easy to use, this model is very easy to create competitive business models , build appropriate and efficient corporate strategies to run by a digital startup company. This model is highly recommended for use by digital startup

companies in running their business. This model can also map the company's steps in the future and choose the right business strategy to ensure the company's sustainability in the future.

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