Development Strategy Of Competitive Health Of The Beginning Industry Through Management Of Value Added And Non Value Added Activity

Wiwik Sudarwati, Meri Prasetyawati, Anwar Ilmar Ramadhan

Abstract: Jilbab is now recognized as a fashion trend that positively impacts the widespread market of hijab in Indonesia. The impact of the expansion of the hijab market in Indonesia is the rapid growth of the hijab industry. The rapid growth of the hijab industry in Indonesia, whether on a small scale, large or medium scale, sparked competition among these industries to win the competition and or just to survive, especially for the beginner hijab industry. For the novice hijab industry the intense competition is not only as challenging as survival but a challenge to increase the competitiveness of its industry so that it can compete because it has competitive advantage. Problems that occur in this beginner hijab industry one of them is the management of hijab industry beginners who are still traditional and have not paid attention to the efficiency in every activity undertaken. To solve the problem, the step that needs to be done is to identify all value chain activities in the business hijab based on the value chain theory. Where in value chain analysis according to (Porter, 1980) can be used as a strategic analytical tool used to better understand competitive advantage, where companies can increase value added and lower costs so as to make business more competitive. The results of the analysis that has been done on the value chain activity in the beginner's hijab creative industry can be seen that the beginner's creative industry has a profit margin of 5%. Profit margin can be improved by improving the performance of the beginner's creative industry maximally by considering the role of some business process activities of the hijab industry. Business process activities to consider are incoming logistics, operations, outbound logistics, marketing and sales and service activities. Taking into account the role of value chain activities in the hijab making process is expected to improve cost efficiency and enhance the competitiveness of the beginner's industry.

Index Terms: competitive advantage, value chain, efficiency, value added

1 INTRODUCTION

In Islam, Hijab is one of the laws that must be obeyed by its adherents. Hijab serves to cover woman. During this time the hijab is identical to the burka that covers the body from head to toe like women in Arab and Afghanistan. Hijab becomes synonymous with fanatics and puritans because of its inhuman and colorless forms. But in an era that is already open with information, especially in a country like Indonesia, Hijab gradually changes its function not only to cover a woman's genitals but also a fashion for women. Hijab as fashion now comes in various shapes and colors [1]. This makes the interest of women to use hijab so that the hijab market is increasingly widespread. Given the large hijab market, hijab is now beginning to be regarded as a fashion industry. According to the data of the Ministry of Industry, fashion and handicraft is one of the sub sectors of creative economy which has contributed greatly to national economic growth, ranging from increased value-added, employment, number of firms, to export markets. The growth of the Muslim clothing industry in Indonesia has increased by 7% per year [2]. Currently, the hijab industry is starting to emerge from the hijab industry in the small to large scale; even fashion designers also have an interest to create hijab in various models according to the trend.

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This makes the beginner hijab industry challenged to improve its competitiveness. TWINS Hijab is one of the beginner's home industries located in Bintaro Tangerang. In order to compete with other hijab industries, TWINS Hijab performs various strategies such as online marketing [3-4]. But on the other hand there are chains of production problems that must be addressed are all the management activities are still done traditionally and for tailoring activities conducted in sub con so that the influence on the activities carried out to be less efficient. This has an impact on production costs that arise to be large. Thus, there is a need to increase competitiveness strategy for TWINS Hijab in production cost efficiency so as to increase the margin obtained in the hope of developing this hijab industry into an industry with a larger scale [5-6]. To overcome the above problems will be an approach that aims to optimize the potential of TWINS Hijab by eliminating various obstacles encountered and evaluate by seeing which activities have added value for TWINS Hijab. The approach used is value chain analysis. Where in value chain analysis according to [7] can be used as a strategic analytical tool used to better understand competitive advantage, where companies can increase value added and lower costs so as to make business more competitive. Based on the background and existing problems, the objective of this research is to conduct a value chain analysis by identifying supply chain activities conducted by TWINS Hijab and to design a strategy to increase competitiveness through optimizing value chain activities that have added value and alternative activities that are not valuable added.

Fashion

Based on [8] the definition of Creative Industries Fashion / fashion subsector is a creative activity associated with the creation of clothing design, footwear design and other fashion accessories design, fashion clothing production and accessories, fashion product line consultancy, fashion products. In general, activities and related parties in the fashion industry sub-sector are as shown in the following Figure 1.

Creation	Production	Commercialization	Distribution	Market
Idea of Creative (plan of product)	cut-shape-finishing	promotion-brochures-media-exhibits	distribution options	Domestic and foreign
Fashion Company				
Support	Support	Support	Distribution Channel	
Trend and Brand of World	Leather Tanning Industry	Festival/Show	galleries and shops	
consumer preferences	Button Industry, Dyestuff And Others	Government	modern and traditional markets	
Social Research, Historical, mass culture	Fiber And Weaving Industries	Fashion of Association	Distro and FO	
	Convection, Embroidery And Sewing	Media and printing	Wholesales	
Mass			Exclusive	
Mass Production	Distro	Ready to Wear Deluxe	Adi Busana/Deluxe	

Figure 1. *The value chain of the fashion industry [8]*

From the chart above shows that the fashion industry sub-sector consists of fashion manufacturers and fashion products trading companies (distribution channels). Manufacturers of fashion products have a mass production business model, bistro, ready to wear deluxe and fashion show / deluxe. The four business models are distinguished by their own level of excellence, and the type of consumers served.

Value Chain

According to [9] understanding the value chain or value chain is "Value chain analysis refers to the process whereby a firm determines the costs associated with the organizational activities from purchasing raw materials to manufacturing product (s) and in the end is to marketing the products to the market". Value Chain is also defined as a model used to help analyze specific activities that can create value and competitive advantage for the organization. Activities are divided into 2 types, namely:

- Primary Activities: Inbound Logistics, Operations, Outbound Logistics, Marketing and Sales, Service
- Support Activities In general, support activities in the value chain fall into 4 categories of activities: Procurement, Technology Development, Human Resource Management, and Firm Infrastructure.

Manufacturing Cycle Effectiveness (MCE)

Manufacturing Cycle Effectiveness (MCE) is a measure that shows how much value an activity for the fulfillment of customer needs and is a tool of analysis of activities in the production process. MCE is calculated by utilizing cycle time or throughput time data, i.e. how much time consumed by an activity starting from handling of raw materials, product in process until finished product. According [10], formulation used to calculate the MCE, namely:

Cycle time = processing time + inspection time + moving time + storage time

$$MCE = \frac{Processing\ Time}{Cycle\ Time}$$

If MCE is 100%, then non-value adding activity can be eliminated in the production process so that the consumer of the product is not burdened with costs for non-value-adding activities. Conversely, if MCE is far from 100% means the production process still contains activity not a value enhancer for consumers.

Value-Added Activities

Value-adding activities are activities that must be implemented (required activities) to keep companies or departments to stay in business [11]. According to [11] value added activities are necessary activities to run business operations, so as to provide value and improve corporate profits.

Non Value-Added Activities

Production activities that are not important to be maintained in business activities, so considered as unnecessary activities, called non-value added activities. Non-value adding activity is an unimportant activity to be maintained in generating customer value [10]. According to [11] non-value added activities (non value added activities) are unnecessary activities and must be eliminated from within the business process as it impedes the company's performance.

Creating Production Efficiency

To create optimum production time efficiency, management must be able to suppress resource use for non-value-adding activities. To reduce non-value-adding activities can be done through the implementation of Just-In-Time or JIT Manufacturing production system, where inspection time is reduced by implementing Total Quality Control (TQC) and Zero Defect Manufacturing, moving time is lowered by applying the concept of Cellular Manufacturing, and storage time (reduced time) reduced by applying JIT Inventory System [9].

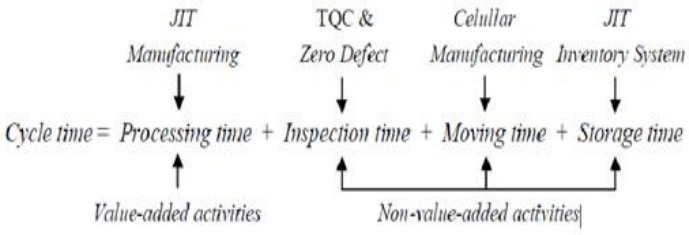

Figure 2. *Management of Value Added Activities and Non Value Added Activities [9]*

2 Research Method

This research is done by case study approach. According to [6] case study is a method that refers to research with the elements of how and why on the main questions of his research and examine the contemporary problem and the selection of cases done purposively. The object of this research is TWINS Hijab, which is a Home industry which produces various kinds of hijab where TWINS Hijab is located in Bintaro at Tangerang. This study requires data about TWINS Hijab both primary and secondary data. Primary data collection is done through interviews and observations.

Interviews are conducted by asking various questions to business owners in an effort to dig useful information for the research. Observation done simultaneously with the interview. In observation activities observation of production activities, including documents and records of the company. Secondary data collection is done through literature review, that is studying theory and concept from some literature, like book, journal, and internet related to research topic. After the data is collected, the researcher organizes, classifies, and processes the data with the following steps:

1. Identify and categorize activities that include value-adding activities and non-value adding activities.
2. Calculates the total value of each value-adding activity and non-value adding activity
3. Analyze the results of MCE calculations based on the theoretical studies in the previous chapter.

3 Results and Discussion

TWINS Hijab is a fashion industry home that produces a wide range of hijab products. In identifying and categorizing activities that are included in value-adding activities or non-value-added activities are required value chain frameworks. Based on research results [12-13] Value chain is a model used to help analyze specific activities that can create value and competitive advantage for the organization. Value chain analysis takes into account the organization as a sustainable process in value creation activities. The analysis is done by studying the potential of value creation. The stages of the value chain of making the hijab in TWINS Hijab are generally elusive in the following Figure 3.

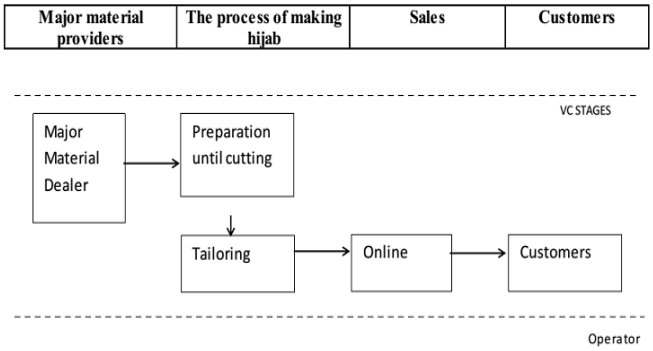

Figure 3. *The general value chain of the Hijab production process*

The description of the activities in the value chain of the hijab production process in the TWIN Hijab home industry is a general illustration that the production process of TWINS Hijab home industry consists of 4 major activities that are in the value chain are classified into two categories: main activities and supporting activities. In the main activities will be studied in terms of raw material procurement, operations and marketing. The supporting activities consist of preparation of industrial supporting infrastructure, human resource development, technology development and procurement. Grouping activities is done based on the main activity and supporting activities. The results of the identification of value-added and non-value added activities are presented in a grouping of activities based on its value chain as follows Table 1:

Table 1. *TWINS Hijab activities based on the grouping of the value chain*

Activities Group	Activities is on IHP Bintaro	Value-added activities (minute)	Non-value-added activities (minute)
Inbound Logistic	Planning material needs to be purchased		30
	Transportation of raw material		60
Operation	Preparation		30
	Make a design	120	
	Creating Patterns	75	
	Measurement	75	
	Cutting of cloth	60	
	Transport delivery of fabric that has been cut and patterned to the tailor		40
	Transportation of hijab stitching		40
	Checking stitch results		170
	Packaging	100	
Outbound Logistic	Receive orders	20	
	Setting up an order		30
	Submitting orders	90	
Marketing and sales	Instagram promotion, shopee (content update)		
	Pricing		
	Selection of distribution agents		
Services	Product quality commitment		
	Product customization		
Procurement	Planning material needs to be purchased	240	
Technology Development			
Human Resource Management	Purchase of raw materials		
Firm Infrastructures	Selection of main and supporting materials		

Table 1 provides an overview of the time required to perform activities that have added value and that have no added value. There are some activities that cannot be written how much time is needed because of its nature at any time or must be done especially activities undertaken by the manager or factory owner for example guarantee product quality. Activity to ensure product quality is a mandatory activity where the form of activities to ensure product quality is inspection or control. So activity that can be seen time is activity related to production, whereas activity related to managerial mostly cannot be seen its time. So based on the above table can be grouped value-added activities and activities that are not worth adding in accordance with the time contribution are as follows.

3.1. Value-Added Activities

Activities that become value adders in the production process starts from handling raw materials to completion of finished goods. These activities are required to produce products that include value-added activities for both customers and businesses [10].

Table 2. *Value Added Activity*

No	Activities	Time (minute)
1	Make of design	120
2	Make of Patterns	75
3	Measuring	75
4	Cutting fabric	60
5	Packaging	100
6	Shipping order	90
7	Purchase of raw materials	240
8	Receive orders	20
Total Value Added time		780

The above value-adding activity is a production process activity conducted by TWINS Hijab in making hijab. In the production process of making the hijab there is no sewing process. Sewing process is done subcontract to tailor wholesale outside TWINS Hijab management. This is done because TWINS Hijab is a novice player in this fashion

creative industry. It is necessary to develop business so that TWINS Hijab can own sewing machine and own tailor power.

3.2. Non-Value-Added Activities

Non-value adding activities do not directly affect changes in processed products, both quantity and quality, which are beneficial to the customer. This activity needs to be reduced to achieve the efficiency of the production process [10].

Table 3. *Activity is not a value enhancer*

No	Activities	Time (minute)
1	Planning material needs to be purchased	30
2	Transportation of raw material	120
3	Preparation	30
4	Transport delivery of fabric that has been cut and patterned to the tailor	40
5	Transportation of hijab stitching	40
6	Checking stitch results	170
8	Setting up an order	30
	Total time non-Value Added	460

3.3. Manufacturing Cycle Effectiveness (MCE)

These two values of added value-added activities (VAA) and non-value-added activities (NVAA) become the following components of Manufacturing Cycle Effectiveness (MCE):

$$MCE = \frac{Processing\ Time}{Cycle\ Time}$$

$$MCE = \frac{760}{760 + 420} = \frac{760}{1180} = 0{,}644 = 64{,}4\%$$

Based on the value of MCE above is known that the activity of adding product value of 64.4% of the overall activity. And there are still 35.5% non-value-added activities. MCE results indicate that the activity is still not optimal. These activities can still be optimized so that all activities can run more efficiently which impact on decreasing cost and increase profit.

3.4. Strategy of Value Added and Non Value Added Activities

To overcome the lack of optimal implementation of each activity to cause activities that is not worth adding the necessary management of all these activities. Activity management can be done by applying the following JIT Manufacturing components:

1. Activity planning of raw material requirement includes quantity and quality of raw material of hijab cloth needed to ensure purchasing of raw material has been in accordance with requirement. Management can reduce the activity planning of this raw material needs by applying JIT Purchasing system, which is planning as well as purchasing raw materials with the amount according to the needs of production in a timely manner and quality according to established standards. So that the activity of raw material requirement planning can be combined with raw material purchasing activity (a value added activity) and transportation activity of raw material purchase (non-value added)
2. Activity Preparation of the production process of making the hijab can be reduced by the application of 5 R, so that all tools and materials have been available neatly in place. This activity can be combined with other production process activities.
3. Delivery activities of fabric that has been patterned and cut to the tailor and hijab activities that have been sewed this activity that cannot be avoided during TWINS Hijab has not had a sewing machine and self-tailor. Management needs to do business development by buying sewing machines and recruiting tailor power, thereby reducing the activity of moving goods and can optimize all resources owned. To be able to develop a business need to study the feasibility of business development investment.
4. The finished goods inspection activity aims to ensure the quality of the product meets the standards. In the event of defective product it is necessary to rework the process. The rework process takes a long time and leads to storage of raw material reserves so it is a waste. Management can negotiate with tailors to provide good quality stitching results. If the management already has sewing machines and tailor power, the Management can apply Total Quality Control (TQC) and Zero Defect Manufacturing to improve employee's ability to control product quality so that at every stage of their work they can produce products that meet the quality standard and autonomies as unit control defects that do not allow defective units to flow to the next process.
5. Order preparation activity is one of the important activities undertaken for TWINS Hijab home industry because in this activity TWINS Hijab need secondary packing every incoming order so that ready to be sent to customer. This activity can be reduced in time if TWINS Hijab management implements 5 R.so all equipment for primary packing and secondary packing is neat and easy to pick up.

4 Conclusion

From the results of MCE calculation, it is known that the production process of TWINS Hijab home industry is still not optimal because it still contains non-value adding activities causing waste of time and resource use so that production process becomes inefficient. The results of the MCE analysis can be used by TWINS Hijab management to manage activities that have no added value. These non-value-added activity management strategies include, among others, the implementation of Just-In-Time Manufacturing. Planning and purchase activities of raw materials can be reduced through the application of JIT purchasing, finished goods inspection and reworking activities reduced through the application of TQC and Zero Defect Manufacturing, transport activities or the movement of goods in the case of production processes can be re-analyzed through business development by looking at feasibility studies investment, and preparation activities both production process and preparation of goods delivery can be reduced by applying 5 R, so as to save time, effort, and cost so as to increase efficiency in production process.

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