

# VALUE CHAIN STRATEGY ANALYSIS ON COMPETITIVE ADVANTAGE IMPROVEMENT IN HEALTHCARE INDUSTRY: CASE OF RUMAH SAKIT KHUSUS BEDAH CINTA KASIH TZU CHI

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## Abstract

*Cinta Kasih Tzu Chi Surgical Hospital or known as Rumah Sakit Khusus Bedah (RSKB) Cinta Kasih Tzu Chi is a hospital built based on humanism service. Referring to increasing of people awareness about the quality of health service and highly competitive on healthcare industry caused the hospital to improve its competitive advantage to get the market and handle the rivalry. Hence, the researcher had been motivated to conduct research the strategy of RSKB Cinta Kasih Tzu Chi with value chain activities approach supported with five forces porter and environmental analysis. Data collection methods are observation, interview, questionnaire, and literature review. The researcher arranged the result or response by method successive internal software to get the rating for each element of value chain activities. On primary activities of the value chain, it showed that implementation of post-service and point of service has been well applied and gave contribution in developing of competitive advantage, so do S2 on supporting activities. However, it requires improvement and development on pre-service for primary or collective structure and strategic resources for supporting activities.*

**Keywords:** *Competitive advantage, Healthcare industry, Strategy, Value chain,*

## INTRODUCTION

The implementation of the value chain strategy in the health service sector certainly follows the Value Chain Management process in the manufacturing industry. It is a strategy considered to build a competitive value for the health services sector and a superior level of community health generally as well. Value chain analysis of the hospital is a positive trend taken from the traditional sector into the manufacturing system operational health services. The integration of the value chain is a challenge for the healthcare industry to

be applied. However, it does not mean impossible to do, even though the healthcare industry is not the primary industries of the value chain strategy.

The trend of the value chain strategy which is being developed nowadays on healthcare industry has several problems in fulfilling the request, specifically on response time. Various issues caused difficulty to adopt the integrated system through value chain analysis approach on the healthcare industry are: development of technology, lack on predicting the number of patients and medicine or medical tools

needed, a lack of standardization, lack of capital and lack of training or education about the practice of integration of each element in the operational hospital.

Some environment or organization except the hospital is involved in the operational activities of the hospital itself as GPO (Group Purchase Organization). Furthermore, one of the additional causes is the limitation of data usage or information technology as well. A hospital is definitely may meet the problem of information technology development. However, if the hospital can apply some more strategy in supporting activities, especially the development of information technology, thus there will be an opportunity made a diversity of health services given to patients.

Hospitals find that there are several opportunities in improving their competitive positioning by noticing the integration of each element, one of the downstream value chain element, with high attention to service delivery timeliness medical services to the patients. Integration with the upstream value chain namely suppliers, it integrates to build a systematic relationship that can give additional value in the service delivery process to the patients. It is in line with McDonald and Srinivasan (2004) that innovation is carried out by the hospital is a fundamental key to improve adaptation of the hospital environment and competitive advantages.

RSKB Cinta Kasih Tzu Chi is the object of this research. It is a hospital founded by Buddha Tzu Chi Indonesia Foundation. The hospital is expected to provide excellent service to patients with the entire activity and adequate facilities. Hospital is classified as a service activity as the operation of the hospital including medical treatment, milling drug products and some other health services. Therefore to assess the performance of the hospital services have to be based on the aspects of the services provided by the RSKB Cinta Kasih Tzu Chi. The quality of service that would be well-formed from the whole series started from the activity of the fulfilment of the pre-service until the patients feel the value at the end, it is a form of getting medical treatment, more specific patient feel healing from their disease.

It is the same as another hospital, RSKB Cinta Kasih Tzu Chi owns several health services such as general poly, inpatient, HCU, Emergency Unit and so on. On the health unit, a hospital applies the value chain on their service to patients. After a decade RSKB Cinta Kasih Tzu Chi has been established, the hospital experienced significant development shown from the increasing number of the bed provided for patients as well as the number of employees and medical workers who have increased as well, this is indeed one of the impacts from the value chain applied by RSKB Cinta

Kasih Tzu Chi. It is not only profit oriented but also to serve a social function.

The RSKB Cinta Kasih Tzu Chi requires analysis of the value chain in viewing the entire effectiveness and efficiency of service through a series of activities in the process of the pre-service, point of services or post-service. Which services can give more value in the hospital development and which services caused more cost that does not significantly gives

## **LITERATURE REVIEW**

### **Strategy**

Wheelen and Hunger (2012) stated that the company strategy is a comprehensive plan on the steps of the company to achieve the vision. Therefore, the strategy would increase the competitive advantages owned by the company and reduced the limitation to compete with other competitors. Mulyadi (2001) expressed the strategy is the pattern of the selected action by the company to achieve the desired vision, through the steps or mission. With the action pattern, the company will adjust its actions in accordance strategy. If the company implements a low cost that is carried out by pressing every company's expense, then the price offered to the market can attract the buyer's attention. The results obtained from the strategy are mostly competitive advantages based on the offer price is cheaper than the competitor. According to Donnelly (1984), it must include

additional value to improve service to the patients. The hospital has been applying the value chain strategy, yet no evaluation or measurement for it. From the background above, the problem formulation in this research as follows: how about RSKB Cinta Kasih Tzu Chi's strategy based on value chain aspect; how about a rating of value chain element on RSKB Cinta Kasih Tzu Chi; and what the competitive advantages that can be focused by the hospital.

all elements that can clarify the structure strategy specifically. It is necessary to provide a whole description and systematic to all community members that strategy will be carried out in line with the strategy formulation. Besides, the strategy arranged has target and limitation that communities may evaluate it, whether it is applied adequately or inadequately in the community, aside from several factors.

### **The concept of Value and Competitive Advantages**

Value is a nominal that customers pay for goods or services desired and provided by the company. The value measurement by the company is a number of the results obtained from the sales or total income. It is evident that from the product price multiplied by the unit sold. Each generic strategies is intended to create the value that exceeds the costs arising from the whole of the activities in the delivery of

products or services. Jacob (2006) stated that value is every activity that can improve the function and the market value of products or services and in line with the business condition. There is a requirement to enhance the value of every business process carried out by the company. According to Porter (1985), the value added cost shall be used in analyzing the company's competitive position since the company deliberately involves the costs to realize the premium price through a different strategy. It means the value occurred from the entire activity may determine the competitive position of a company. Hence, the value occurred can manage the corporate sustainability to face competition in the market.

Barney and Clark (2007) based on the aspects of Resource-Based Value, to observe and identify the factors that may affect the company in the form of the competitive advantage by identifying the company resources. The competitive advantage is needed to survive in the middle of the market and facing competition which is increasing performance improvement with various aspects. The competitive advantages may be taken through some marketing actions as well that can take advantage of the internet. Thus, it is going to attract customer and decide to make purchases. Marketing actions will increase the competitive advantages and can develop business. Sularto (2012) stated that the development of existing business should be offset by

competitiveness through advertising with the technology or internet to facilitate the processing of information and influence buyer decision.

### **Value Chain**

Porter (1985) stated that an entity is a collection of elements or activities to design, produce, market, deliver and support a product or service. Each activity or elements become a unity into the value chain. The company value chain and the performance from each activity is a reflection of the company's history, company's strategy and implementation which is specified by the company and the activities affected the economic aspects of the company. According to Hansen and Mowen (2000) value chain analysis is the strategic analysis tools used to explore and describe the competitive advantages, it is intended to identify customer value to increase, the strategy to reduce costs that occurs over the activities and also to know further about the relationship between the customers, suppliers and other companies in the industry.

Porter divides business activity into two parts; there are the main activities and supporting activities. The main activities related to the operations of the company that are transforming inputs into outputs and delivery. In addition, he proposed that value chain analysis as a combination between the whole nine operating and supporting activities made added value commonly for

the company. In line with the Kindangen and Bahtiar (2013), these support activities tend to incorporate the entire main activities across all the primary activities which are varied and diverse, and useful as well to divide primary activities into a series of value chains. The value chain is useful to explore how much-added value for a series of activities conducted by the company in delivering the goods or services to consumers by further. The main focus in the value chain is benefits which may be added to consumers, the linked process of each other that may deliver value and demand affected the inflow was made before.

The Porter's value chain analysis found by Michael Porter (1985) is a model analyzed the entire company activities to assess the competitive advantages that owned by the company. The company activity is classified into two categories, namely main activities and supporting activities. Main activities consist of Inbound Logistics, Operations, Outbound logistics, Marketing, and Service. Meanwhile, there are Procurement, Technology Development, Human Resources Management, and Firm Infrastructure in supporting activities to support the main activities

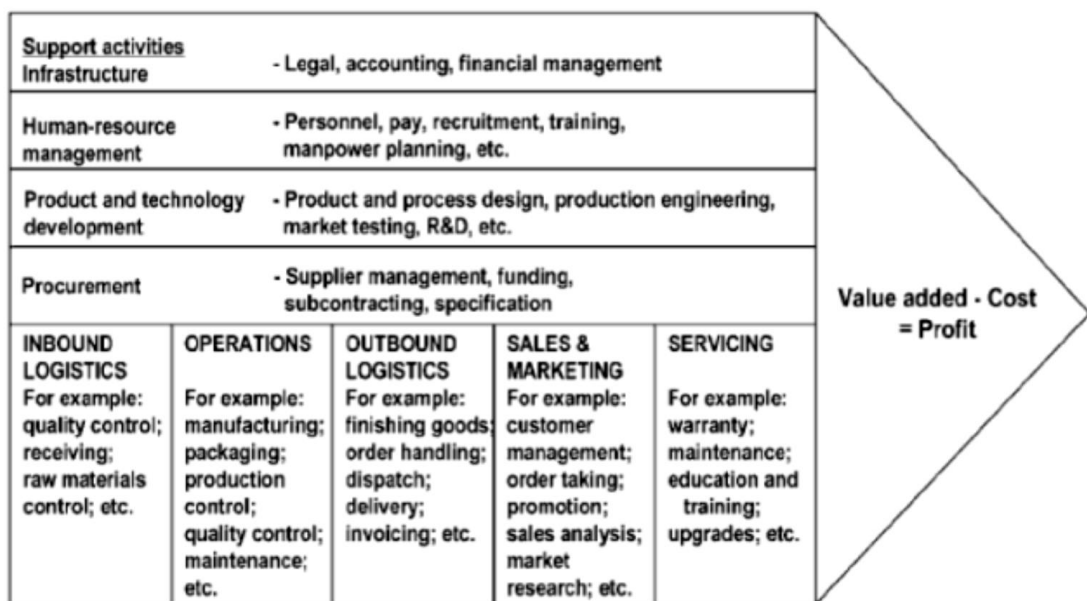


Figure 1: Value Chain

Source: Michael Porter (1985)

### Value Chain in the Healthcare Industry

Porter (1996) defined the value as the profit or cost for patients and internal

activity or other important activities to produce value for patients. The value for patients is the level of health produced per

costs incurred in outcome comparison. Swayne et al. (2006) stated that value chain analysis on healthcare industry aims to increase the competitive advantages of the hospital based on the above internal environment analysis in hospital. Limitation in value chain analysis adaptation on healthcare industry is the coordination of the entire parties which involved, the spread of the strategic alliance information, information exchange, company trust, and strategy through value chain analysis approach to delivering maximum value added for customers with the lowest total cost (Burns et al., 2012).

The value chain in the healthcare industry focuses on the service activity to patients. Porter (1985) formulated the value chain in the healthcare industry for main

activities include delivery services activity. The main activity in the healthcare is industry namely pre-service, point-of-service, and after-service activity. The service delivery activity is the activity regarded the operational hospital. Meanwhile, the support activities of the value chain in healthcare industry are organizational culture, organizational structure and human resource. The supporting activity is fundamental resources support the main activity. Hence, a final value obtained by patients can be improved. The value chain in the healthcare industry is a hospital conceptual strategy. Hence, the value of the competitive advantages can be analyzed carefully, and the development of each element on activity can be focused.

<b>Service Delivery</b>	<b>Pre-Service</b>	<b>The point-of-Service</b>	<b>After-Service</b>	<b>Add value</b>
	Market/Marketing Research Target market Service offered the branding Pricing System Distribution/logistics Promotion	Clinical operations a. Quality b. Process Innovation Marketing A. Variability Satisficati on	Follow up a. Clinical b. Marketing Billing Follow on a. Clinical b. Marketing	
<b>Support Activities</b>	<b>Organizational Culture</b> (Shared Assumptions, Shared Values, Behavioral Norms)			<b>Add value</b>
	<b>Organizational Structure</b> (Function and division)			
	<b>Strategic Resources</b> (Financial, Human, Information, Technology)			

Figure 2: Hospital Value Chain

### **The Porter's Five Forces Analysis**

There is a general analysis applied in analyzing the adopted strategy using a competitive approach based, namely Porter's Competitive Model. There is a general analysis applied in analyzing the adopted strategy using a competitive approach based, namely Porter's Competitive Model. Nowadays, the use of five forces Porter's Model involves the sustainability of environment process that can determine the competitive advantages of the company. Porter's Five forces Model as follows: 1) Competitive rivalry; 2) Bargaining power of suppliers; 3) Bargaining power of customers; 4) Threat of new entrants, and 5) Threat of substitute products or services. Hill and Jones (2007) stated that the strength of each five forces is the existence of proportional representation between the price and profit margin when weakness made as opportunities and the competitive advantages of the company is allowed as a threat. Therefore, the five forces describe the overall of a condition in the industry where the company response is a real strategy to anticipate every competitor movement on the tight competition

### **RESEARCH METHOD**

The object of this research is RSKB Cinta Kasih Tzu Ch strategy, an element of value chain activities. As the aim is to analyze the main activities of the value chain applied and evaluated the value chain of

supporting activities, the population is all patients and employees RSKB Cinta Kasih Tzu Chi. Samples on this research use the method purposive sampling with the number of respondents is 40 patients and 40 employees taken randomly. According to Sugiyono (2011, 91), the size of the sample worthy in research is between 30 until 500. Data collecting method are interview, observation, questionnaire, and literature study. The instrument or the variables are in line with the measurement or value chain indicator as follow the Service delivery activity (Primary activities). The indicators are the quality of services (SERVQUAL) from Parasuraman (tangible, empathy, responsiveness, assurance, reliability), to examine the phase of the service delivery activity at the hospital, such as pre-service, the point-of-service, and after-service, and supporting activities, such as organizational culture, organizational structure, and human resource as well.

On the elements of organizational culture, the researcher applies Robbins' indicator (1994), namely, personal initiative attitude, risk tolerance, direction, integration, management support, identity control, reward system, tolerance to conflict and patterns of communication. Meanwhile, on the elements of organizational structure, the researcher applied Robbins' indicator (2006), namely work specialization, departmentalization, the chain of command, the control range, centralization and

decentralization, are arranged. On the elements of the strategic resources, the researcher traced several elements, such as

Cronbach's Alpha	N of items
,976	23

information technology, financial and human resources.

The researcher used Porter's Five Forces model and SWOT analysis in describing a qualitative explanation about hospital to determine the strategy optimization and data processing questioner by Method Successive Interval program with Likert Scale Summated Ratings (LSR) to make ranks from elements of the main activities and support activities that can describe value chain in order to give contributions to the competitive advantage in a hospital. The researcher took a questionnaire test, namely validity and reliability test to examine the validity and reliability of the questionnaire answers.

Cronbach's Alpha	N of items
,944	26

Table 1.  
Positive Statement Scale  
Source: Sugiyono (2007)

## RESULTS AND DISCUSSION

Based on the calculation of 40 respondents response (patients) on the primary activities of the value chain at RSKB Cinta Kasih Tzu Chi, that three of instrument research through 23 statements or the indicator value exceeds from the tabler, it is 0,3120. Then the instrument research strategy based on the value chain said valid.

Results of the calculation of the output SPSS reliability tests showed that the Cronbach's alpha value above 0.8. Therefore, this instrument can be stated very reliably.

Table 2. Reliability Statistics - Primary Activities  
Source: Obtained primary data (2016)

Based on the calculation of 40 respondents response (patients) on the primary activities of the value chain at RSKB Cinta Kasih Tzu Chi, that three of instrument research through 26 statements or the indicator value exceeds from the tabler, it is 0,3120. Then the instrument research strategy based on the value chain said valid. Results of the calculation of the output SPSS reliability tests showed that the Cronbach's alpha value above 0.8. Therefore, this instrument can be stated very reliably. Based on the results of the analysis and discussion, then the researcher formulated a summary as follows:

Table 3. Reliability Statistics - Supporting Activities  
Source: Obtained primary data (2016)

The criteria	Score
Strongly Disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly agree	5

### The Five Forces Analysis

Based on business competition analysis with Porter's Five Forces, it is evident that the business competition in healthcare industry especially in Cengkareng, West Jakarta is exceedingly



tight, as there are some other competitive hospitals around. Although they have different special service, recently, from one decade ago, there is establish some new competitors that can threaten the market of RSKB Cinta Kasih Tzu Chi. The bargaining power of customer offers an expanding patients management scope who is initially for Tzu Chi's patients merely, but still serves public patients and permanent patients from Tzu Chi Foundation. The bargaining power of supplier also high enough with the domination of multiple suppliers to put its products in RSKB Cinta Kasih Tzu Chi with a competitive price offer.

#### **Internal and External Environment Analysis (SWOT)**

From the internal and external environment analysis, there are some strengths and weaknesses identified in RSKB Cinta Kasih Tzu Chi. The strengths are their professional healthcare management and independent marketing channel, while the weakness is there is no down payment for inpatient care. Besides, it is not supported by some healthcare facilities, such as choosing inpatient care class, specialists polyclinic with less complete tools and lack of parking lot. The RSKB Cinta Kasih Tzu Chi have the opportunity to improve their competitive advantage in the competition as well. The hospital even have many cooperation partners, government regulation regarding

the BPJS, Badan Penyelenggara Jaminan Sosial (Social Insurance Administration Organization) supported people to be treated easier, and increasing of people awareness about health services quality.

Although some threats that may affect the sustainability of business process of RSKB Cinta Kasih Tzu Chi, there are many replacement products or other alternative such as 24 hours clinic, puskesmas, Pusat Kesehatan Masyarakat (community health care), and technology development in the medical field as well. From the optimization strategy based on SWOT, it is evident that the best strategy is the combination of Strength and Opportunities (SO). It maximizes the most strength of competitive advantages, such as independent marketing channel in improving the opportunity, such as cooperating with a business partner.

#### **The strategy analysis based on value chain activities**

The description of rating from value chain implementation strategy as follows: 1) the primary activities element ranking based on the patients' perception from the highest to the lowest value is P3 (post-service elements) about 34,38%, P2 (Point of service) about 33,34%, and PI (Pre-service) about 32,38%; 2) the supporting activities element ranking based on the employees' perception from the highest value to the lowest value is S2 (Organizational Structure)

about 34,86%, S3 (Strategic Resources) of 32,81%, and S1 (Organization Culture) about 32,33%.

#### CONCLUSION AND SUGGESTION

The conclusion is as follows: the management strategy applied by RSKB Cinta Kasih Tzu Chi is value chain activities on their independent marketing channel (DAAI TV). It is to provide specific information about the hospital in catching some wider potential patients and advancing health services based on the humanist and the Hospital Integrated Information System (HIIS) in the follow-up or recovery actions.

Rating of value chain activities of RSKB Cinta Kasih Tzu Chi on the primary activities from highest value to lowest value is post-service, point-of-service, and pre-service element. Meanwhile, the rating on supporting activities from the highest to the lowest value are organizational structure, human resource and organizational culture.

Based on the results of value chain activities rating, the competitive advantages that can be focused by RSKB Cinta Kasih Tzu Chi is humanist-based service, while the responsiveness on discharge process with providing additional services such as home care. RSKB Cinta Kasih Tzu Chi also has organizational structure control which can improve the clinical supervision and operations, and reporting procedures system in work environment to increase time response to the patients.

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