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INCREASING THE COMPANY'S PROFITABILITY AND COST EFFICIENCY THROUGH THE IMPLEMENTATION OF ACTIVITY-BASED MANAGEMENT, VALUE CHAIN, AND PESTEL

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ABSTRAK

Tujuan penelitian ini menganalisis dan mengevaluasi apakah biaya yang dikeluarkan oleh perusahaan dapat memenuhi standar biaya yang telah ditetapkan dan bagaimana penerapannya dapat mengurangi dan menghilangkan semua aktivitas yang tidak bernilai tambah terhadap semua biaya, terutama aktivitas impor dan distribusi ke pelanggan yang mengakibatkan biaya, pengurangan yang meningkatkan keunggulan kompetitif dan memaksimalkan profitabilitas. Penelitian ini bersifat kualitatif deskriptif dalam bentuk studi kasus melalui perolehan data dari observasi, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa ada perbedaan biaya antara metode tradisional yang diterapkan oleh perusahaan dan biaya mencapai standar yang ditetapkan dengan Manajemen Berbasis Aktivitas. Selanjutnya, untuk memenangkan persaingan, perusahaan mengurangi aktivitas yang tidak bernilai tambah dalam proses impor dan pengiriman barang ke pelanggan dan menetapkan strategi PESTEL dalam menganalisis faktor penghambat keberhasilan persaingan pasar untuk menghasilkan strategi biaya rendah dalam meningkatkan profitabilitas.

Kata Kunci: Activity Based Management, PESTEL, value chain

ABSTRACT

The purpose of this research is to analyze and evaluate whether the costs incurred by the company can meet the established cost standards and how its implementation can reduce and eliminate all activities that are not value-added to all costs, especially import and distribution activities to customers, resulting in cost reductions that increase competitive advantage and maximize profitability. The analysis of this research is descriptive qualitative in the form of a case study through obtaining data from observation, interviews, and documentation. The findings show a cost difference between the traditional methods implemented by the company and the cost of reaching the standards set with Activity Based Management. Furthermore, the company reduces non-value-added activities in importing and shipping goods to customers to win the competition. It establishes a PESTEL strategy for analyzing the inhibiting factors of market competition.

Keywords: Activity Based Management, PESTEL, value chain

1. Introduction

The increasingly competitive business environment challenges companies to sustain their survival, requiring business people to plan strategies that align with the company's goals (Bontempo, 2022; Cepel et al., 2018). Nowadays, the potential development of the Medical Equipment industry in Indonesia is continuously growing. In 2020, it was proven that transactions of imported medical equipment reached 88%, while local production accounted for approximately 12% (Chakravarthi, 2013; Cheng et al., 2020; Ongkasuwan & Sookcharoen, 2018). Import transactions increased at the beginning of the Covid-19 pandemic when Indonesia faced difficulties in obtaining medical equipment due to lockdowns and restrictions on human and product mobility to reduce virus transmission (Ahn & Sarmiento, 2019; Nasution et al., 2020; Novikova et al., 2020). This had a significant growth impact on the increasing need for Medical Equipment in Indonesia.

Additionally, advancements in technology and digitalization make business competition tighter in 2022. Due to the growing demand for medical equipment, many new entrepreneurs are interested in importing products; thus, the level of competition for medical equipment products is also increasing. The increasing number of companies in the same field makes competition tighter, resulting in smaller/thinner company profit margins. If not addressed seriously, this situation can lead to worse conditions, such as the threat of bankruptcy (Cheng et al., 2020; Zhang & Rao, 2021).

In order to achieve the expected in the future, thorough planning is required. This encourages company management to work effectively and efficiently. One of the ways that is carried out is to make it cost-efficient (Torres-Martínez et al., 2019). Cost efficiency occurs when the costs incurred in the activity of producing products or services are costs that are necessary to produce the product or service. Thus, reducing the occurrence of waste means that the costs incurred do not exceed the budgeted costs. With reasonable cost control, the company's operational activities can run smoothly (Chang et al., 2022; Shamayleh et al., 2020).

Through Activity-based Management, the company can help companies provide a clear understanding of accurate product costs, increase productivity and effectiveness so that companies can eliminate inefficiencies, redundancies, bureaucracy, and waste in maximizing company profitability, even help companies in producing the right strategy, and of course increase competitiveness so that companies can survive and compete by improving the quality of their performance (Avdeeva et al., 2021; Gupta et al., 2021). This is in accordance with the research results that make Activity-based Management an instrument in managing company activities to increase the value (value) received to increase profits (Jusmani & Oktariansyah, 2021). In addition, other studies show that Activity-based Management companies obtain the first cost savings from reducing high-cost activities and the second from the performance targets achieved (Rosiawan et al., 2021).

PT ABC is a Medical Equipment distributor company currently experiencing declining profits due to price competition or margin reduction for each product, as many competitors are involved in importing and selling similar products. The Income statement for the last five years shows that the company's net profit after tax decreased in 2019 compared to 2017 and 2018. Even in 2020 and 2021, the company's net profit after tax was

lower than in 2017 and 2018. PT ABC's profit is significantly affected in terms of costs. PT ABC has a portion of costs of 7-14% of revenue. PT ABC is a Medical Equipment distributor company currently experiencing declining profits due to price competition or margin reduction for each product, as many competitors are involved in importing and selling similar products. The income statement for the last five years shows that the company's net profit after tax decreased in 2019 compared to 2017 and 2018. Even in 2020 and 2021, the company's net profit after tax was lower than in 2017 and 2018. PT ABC's profit is significantly affected in terms of costs. PT ABC has a portion of costs of 7-14% of revenue. Some of the causes of high costs come from the import process because companies make shipping and customer clearance based on each supplier without cooperation with third parties, such as forwarders and warehousing services; however, high exchange rates are also an obstacle.

Other research results also found that supply chain integration and digital supply chain influence business performance. In contrast, supply chain agility does not have a significant favorable influence on business performance (Muafi & Sulistio, 2022). Activity Management implementation has increased the efficiency of factory overhead costs without reducing product quality (Annisa & Agus Arief Santoso, 2023) in contrast to the results of other studies that the value chain has been considered a critical model for managing efficient value creation processes within organizations (Knez et al., 2021). Meanwhile, other research states that PESTEL analysis is critical to startup success. It proposes the use of PESTEL analysis as a tool to evaluate the business environment for startup organizations, emphasizing the most common challenges startups face in conducting a PESTEL assessment (Matovic, 2020; Planellas & Muni, 2019).

This research differs from previous research. This study aims to increase the company's profitability and cost efficiency by implementing activity-based management, value chain, and pastel. The results of this study are expected to provide information as a basis for consideration in increasing companies' profitability and cost efficiency through the implementation of Activity-based Management, value chain, and PESTEL. The results of this study provide information as a basis for consideration in increasing companies' profitability and cost efficiency through the implementation of Activity-based Management, value chain, and PESTEL.

2. Literature Review and Research Framework

Activity-based management is used by management to evaluate the costs and values of process activities to identify opportunities for efficiency improvements. State that Activity-Based Management (ABM) manages resources and activities to improve product or service value for customers and increase company competition and profitability (Wanialisa, 2020). In a traditional costing system, the costs of services and products could be more accurate as overhead costs are allocated through cost centers or departments. On the other hand, activity-based costing is a cost technique in which products or services are assigned costs based on their consumption of resources caused by activities. It provides an effective tool for Activity-Based Management (ABM). The cost assignment is done on specific activities like planning, design, engineering, production, or despatch. After that, the activities in the value chain are associated with different products or services. The

implementation of ABMS facilitates proper decision-making by management and improves business processes in terms of effectiveness and efficiency (Menth et al., 2019; Sinha et al., 2020).

Value chain is a strategic analysis tool used to understand competitive advantage better, identify where customers can increase or decrease costs, and better understand the company's relationship with suppliers, customers, and other companies in the industry. Value Chain analysis can create a competitive advantage because the company can better understand competitive advantage and strategy by separating its operations based on activities. Value Chain is a valuation method in which a business is seen as a chain of activities that transforms inputs into outputs that are of value to customers (Hery, 2013). Existing value chain approach to factor the non-capital relationships contingent upon specific histories, ecologies, peoples, places, and practices. The narrow economic perspective of the value chain impedes appropriate responses to their unique attributes regarding social, ecological, and institutional interactions across multiple scales(Clay & Feeney, 2019; Luomaranta & Martinsuo, 2022; Mouzas & Bauer, 2022).

PESTEL analysis identifies factors beyond our control that affect a company's direction and actions, which in turn also affect its organizational structure and internal processes (Planellas & Muni, 2019). PESTEL analysis consists of factors that come from outside, namely, politics (politics), economy (economy), social (social), technology (technology), environment (environment), and law (legal). Each of PESTEL's components has the potential to influence a firm's more immediate industry and competitive environment, although some components are likely to have a more significant influence than others (Matovic, 2020). PESTEL analysis is why businesses use them and how to use them as part of a marketing audit (Oxford College of Marketing, 2020; Touch & Prospectus, 2016). The result is used to identify threats and weaknesses, strengths and opportunities, which can be considered or used in a SWOT analysis.

3. Research Method

The results of this study provide information as a basis for consideration in increasing companies' profitability and cost efficiency through the implementation of Activity-based Management, Value Chain, and PESTEL. This type of research is qualitative with a case study approach (Sugiyono, 2019). A qualitative approach using case studies is used to know more about the company's business management to achieve the standard cost set and the strategy of competitive advantage that is implemented in controlling costs through upstream and downstream activities. This research was conducted at PT. ABC (for reasons of ethical considerations, the company name has been withheld) is one of the companies in the field of medical device distribution—the source of data using primary and secondary data. Primary data comes from interviews, and secondary data comes from documentation and observation. The informants of this research are the General Manager (R1), Marketing Manager (R2), Finance And Accounting Manager (R3), Purchasing Manager (R4), And Logistics Manager (R5). Interviews were conducted one by one with the informants separately. The method of data analysis used in this research process is direct interpretation descriptively because it looks at one case, draws meaning from the case study, and puts it back together to make it more meaningful. The unit of analysis refers to the level of data

aggregation collected during the following data analysis stage. The division of analysis used in this research is single-unit business analysis. In this research, the object of study is the distributor of Medical Equipment, namely PT ABC. The researcher chose a third-party company because this industry is experiencing a decline in profits due to high operating costs and price competition with competitors (Cresswell, 2017).

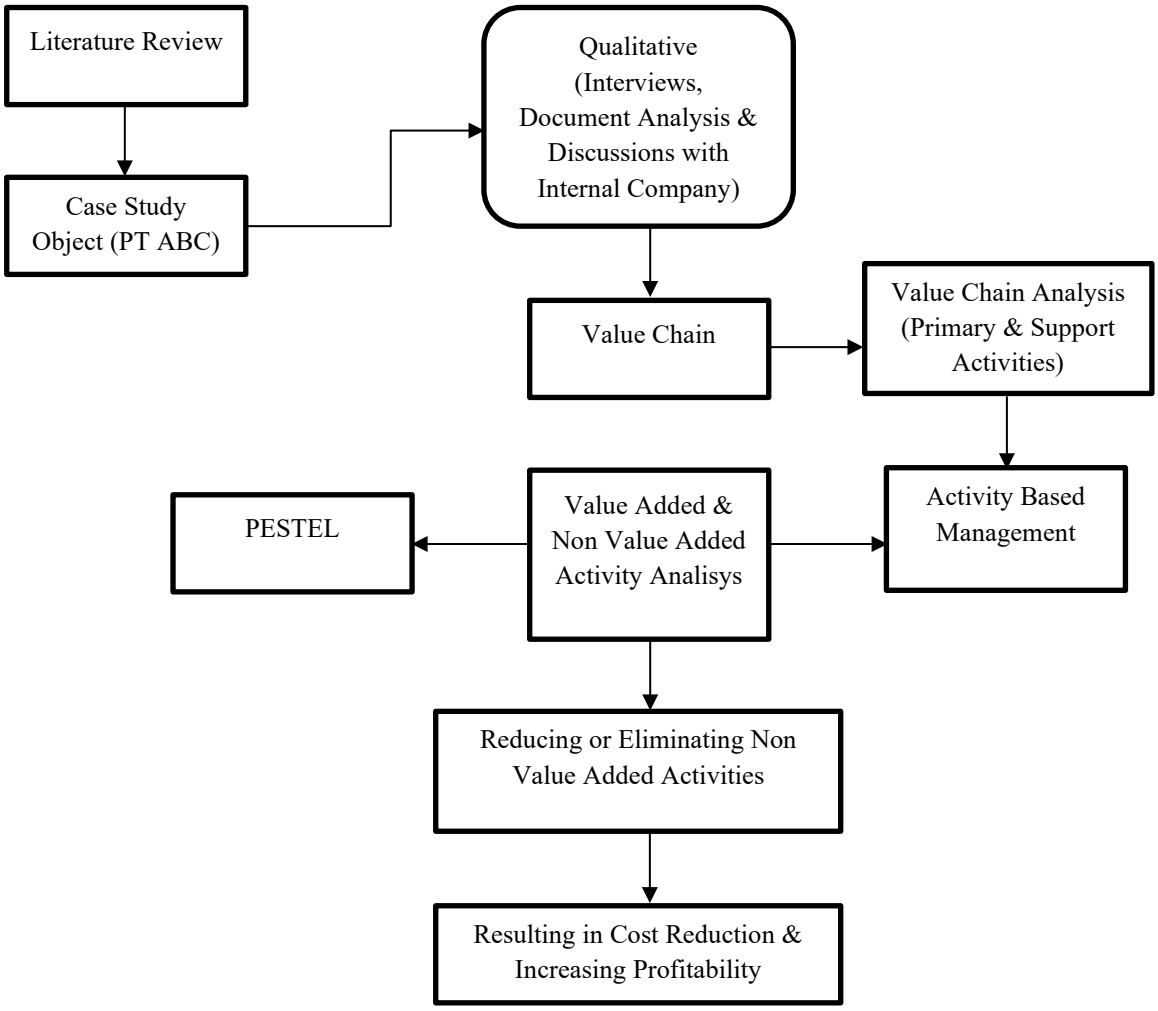

Figure 1. Reseach Framewok

4. Results and Discussion

PT. ABC is a business unit that imports and distributes medical equipment. PT. ABC was established in 1998 in Jakarta—the process of purchasing products from abroad for resale domestically. The import process has three stages: calculating import prices, opening L/C, and receiving or delivering products. Suppliers usually send an offer letter with a foreign exchange value (forex). Based on its offer letter, PT. ABC will calculate the import price by calculating all costs. At the same time, PT. ABC applies to opening an L/C at the Foreign Exchange Bank. After the suppliers receive the order letter and L/C, they will immediately prepare the product for export with the manufacturer and through the assistance of forwarding agents, insurance companies, and customs. The suppliers will also

hand the product to the shipping or aviation company for transport to Jakarta. They will forward the shipping documents to the issuing bank, then with the help of EMKL, PT. ABC settles customs duties and then completes the delivery order (DO) to the shipping/airline agent. After the shipping/flight agent receives the transportation charges and other costs, the product will be handed over to PT. ABC by providing a Bill of Lading (B/L) or Airway Bill (AWB) and Delivery Order (DO). In addition to using official channels, PT. ABC also frequently utilizes contracted shipping with wholesale services (Door to Door).

This stage relates to issuing products imported from the country of origin. Generally, products are purchased with CIF Jakarta conditions with LCL and FCL methods sent by sea routes. This activity involves the import division and EMKL (particle services for the production of products at ports). Clearance is a term often used in issuing imported products from ports, while the service cost of the product issuance process carried out by EMKL includes costs. After receiving a notification of product arrival from the shipping company, the Import Division will check the completeness of the original product documents. Then, make a PIB report (Product Import Notification), which will be used as a means of reporting incoming products to the Directorate General of Customs and Excise (DGCA) Tanjung Priok and the completeness of proof of payment of import duties, VAT, and PPh article 22. After the product arrives at Tanjung Priok port, the Import Division will ask for BC number 1.1. The product location identity number will also be attached to the PIB report, and the new PIB will be declared ready for transfer. At the same time, Delivery Order (DO) collection is also carried out at shipping companies listed in the Bill of Lading (B/L).

The DGCA will provide a response to the path, whether the red line, yellow line, or green line. Then, the original document is submitted to the DGCA, which will then be processed to obtain a Product Expenditure Approval Letter (SPPB). Based on the letter, the EMKL employees will make Tila (product production report) and PU closing report, as attachments, at the time of product removal from the terminal at the port. EMKL is responsible for shipping containers from Tanjung Priok port to PT. ABC. In this activity, PT. ABC is charged trucking fees. This process is created into one activity classified in the product clearance process. After the product arrives at the warehouse, the following process is to receive the product at the warehouse. At the time, the head of logistics checks directly on the condition of the container, whether the container is still in good condition or there is damage and change. Next, make a report using the existing form as proof of receipt of the container's arrival. This activity is carried out to avoid possible container repair costs.

After the checking process, the container is opened, and the product drop begins. There are imported products in the form of pallets, bulk, or isotanks, depending on the model of the imported product. The head of logistics and staff is in charge of inspecting each product received. The inspection standard is to match the accepted product model, the number of products received with the number of product data listed in the packing list, and check whether the product's packaging is still in good sealed condition or there is damage. Then, specifically for machine products, a function test will be carried out to ensure the product received is in accordance with the specifications.

Furthermore, products that have been received are stored in the warehouse at PT in accordance with storage rules (air temperature and location classification based on product classification). ABC products sold have two product turnover criteria: fast-moving and medium-moving. Product classification categorized as fast-moving criteria refers to short-stored products in the warehouse. Generally, only one or two days are in the warehouse because it has a high customer demand or is a product ordered by customers. In medium moving product classification, the medium moving criteria are products that have the possibility of being stored in the warehouse for more than 30 days because, besides the ordered product, they are also products for local stock.

Product categories marketed at PT. ABC are Non-Radiation Electromedical Medical Equipment, Non-Electromedical Sterile Equipment, Non-Electromedical Non-Sterile Equipment, and In Vitro Diagnostic Products. For each Electromedical product category, functional tests such as calibration are carried out by third-party institutions, such as Sukofindo, to obtain a certificate stating that the product is suitable for use and functioning properly. When the product has been tested for function, the products will be stored back in the warehouse and are ready for market. Every product marketed domestically must have a Distribution License from the Minister of Health in the form of AKL that has been approved and has met every condition set. The Legal division processes the Distribution License for new products and renewal Distribution Permits. To obtain a Distribution License from the Minister of Health, documents such as a Letter of Authority (LoA), ISO9001, ISO 13485, CE Certificate, FSC or CFS issued from FDA, DOC (Declaration of Conformity), EMC Test report, IEC 61010-1 are required where each document requires time and cost. The process for obtaining a new product distribution license is about 45 days, and for an extension, the distribution permit is about 20 days. With a Distribution Permit, the product can be circulated/marketed by the government.

All product marketing activities, both offline and online, are carried out by PT. ABC annually. For offline marketing activities, PT. ABC joins the exhibition of Medical Equipment products abroad and domestically with at least three exhibitions. In addition, PT. ABC is canvassing various regions to expand the market. For marketing activities online, PT. ABC collaborates with several artists and influencers, advertising through social media and e-commerce every month. The last activity in the classification is the process of delivering products. Product delivery is divided into two parts: the Jabodetak area uses PT-owned transportation and the ABC, while outside Jabodetak areas, it uses expeditions determined by customers. The arrangement of the delivery schedule is determined according to the schedule and customer needs based on the road letter created by the sales division. For all shipments in the Jabodetak area, all gasoline, parking, toll, and vehicle service costs are borne by PT. ABC and for out-of-town shipments, the shipping costs from the expedition to the destination address are borne by the buyer, while for gasoline, parking, and employee costs from the PT warehouse. PT ABC to the expedition requested by the buyer. ABC.

According to the concept of Activity-based Management, activities that do not increase in value will be eliminated at this cost. Moreover, activities that do not produce added value are divided into two categories. First, the activities cannot be eliminated, which means the activities have no effect on added value for the company. However, these

activities are needed in production, even though they provide little value. Second, activities that can be eliminated, which means the activities have a significant impact on added value for the company and must be eliminated. In order to classify this activity into value-added or non-value-added activities, it is by the theories that explain if value-added activities are activities that simultaneously meet the following three conditions: namely, the activity produces a change, the changes must be achieved by something other than previous activities, and the activity enables other activities to be carried out. The following are PT ABC's activity costs, as shown in Table 1:

Table 1. Activity Identification *Value Added* and *Non-Value Added*

Part	Activity List		Non Value Added			
		VA	Elimination	Reduction	Selection	Sharing
Imported goods	Pay ocean freight	√				
	Submit the original document to the forwarder	√				
	Create CFS origins	√				
	Provide mechanic charges	√				
	Provides origin handling	√				
	Manage warehouses			√		
	Doing export clearance			√		
	Perform import handling			√		
	Provide agencies			√		
	Create Form E		√			
Customer Clearance	Create PIP	√				
	Manage handling processes			√		
	Arrange trucking and storage at the port			√		
	Provide all import documents			√		
	Provide surveyors		√			
	Removing goods from the port and arranging delivery to the warehouse			√		
Goods Receipt and Inspection	Receive goods from clearance staff based on the packing list	√				
	Conduct inspections on the number of goods, model of goods, AKL of goods,	√				
	Inspect goods one by one according to the number of items received on the packing list			√		
	Submit the inspected goods to the service center	√				
The process of testing the function /calibration of goods	Perform function tests according to the number of units of goods received	√				
	Submitting goods that have been tested and fit for sale to the warehouse	√				
	Make a calibration certificate for goods that have been tested and are not fit for sale to the import department	√				
Goods Storage Process	Receive goods that have been checked and carried out function tests	√				

Part	Activity List	VA	Non Value Added			
			Elimination	Reduction	Selection	Sharing
	Organize goods according to the defined category of Medical Devices	√				
	Arrange cars to transport goods to warehouse locations according to the category of goods				√	
Distribution Permit Registration Process (Legality)	Registering distribution permits (AKL) for each model of goods requested by the import section	√				
	Create a free certificate of sale (CFS) using a sworn translator		√			
Goods Marketing Process	Doing service and canvassing every month both inside and outside the city	√				
	Promotion through social media and influencers	√				
Goods Delivery Process	Provide goods according to travel documents and invoices	√				
	Carry out quality control of the goods to be sent	√				
	Submit the goods to the service center for function testing		√			
	Wrapping the goods to be sent	√				
	Doing pallet packing on the goods to be sent					√
	Sending goods to customer locations					
	Sending goods to the expedition location requested by the customer for areas outside the city	√				

Source: Processed data (2023)

Table 1 shows added and non-value-added activities for PT ABC's production process activities. Activity value-added elimination or reduction of activity cannot be carried out because it is a primary activity that, if reduced or eliminated, will affect customer satisfaction and slow down the company's operational processes. Sending Products to Expedition Locations requested by Customers for Outer City Areas is an added value activity because this activity is carried out so that customers can receive products immediately. This activity occurs because of the customer's request to use the expedition that the customer chooses. Based on the information from the sales manager, customers use the Expedition because they have worked with it during expedition time, and the service and shipping from the Expedition expedition customers are excellent. These quotes are taken from interviews with Marketing And Sales Managers (R2):

> "The customer's reason for using the expedition is because of the problem of a long cooperative relationship and the service from the expedition used by the customer is very good, including the on time delivery time" - Marketing and Sales Manager.

This activity is closely related to the logistics value chain. The obstacle to reducing costs in the logistics value chain is the existence of product delivery activities with expeditions requested by customers. This activity became a problem for the logistics team because additional resources were needed to make deliveries to different locations, making delivery activities longer and requiring additional fuel. This is inconsistent with the ABM concept,

which states that companies should strive to eliminate non-value-added and non-essential portions of value-added activities (Hansen, 2018). Based on interviews conducted with the General Manager (R1), the issue of using third-party expeditions has been received and is in the analysis stage for reuse. Excerpts from the interview were taken from the General Manager.

> "PT ABC had previously used expeditions from PT Total and Indah Cargo, but it did not run smoothly because from sales there were many complaints regarding the delivery schedule by third party expeditions not according to the customer's schedule, besides that many customers had collaborated with other expeditions so that they did not agreed to participate in shipping through a third party expedition used by PT ABC" – General Manager.

Based on an interview with the Purchasing Manager (R4), one of the details of the activities carried out is in the section custom clearance as the following quotation from the source of the Purchasing Manager:

> "For product release, PT ABC usually uses field staff who take care of clearance, both from preparing documents to going into the field. For the clearance process, usually the clearance staff will reimburse costs with proof of manual invoices. The aim of PT ABC is to use its own clearance staff so that the process of releasing products from the port is faster than PPJK and avoids storage costs. And in terms of efficiency, of course it doesn't work, because the fees reimbursed by clearance staff with PPJK costs are always the same, apart from that there is a monthly salary for clearance staff that must be paid by PT ABC" – Purchasing Manager.

This activity is an activity in the value chain supplier; it takes activity import handling clearance at PT ABC, as a result of the high frequency of imports that are carried out to make activity custom clearance from high customs duties where this activity is not a value-added activity because another strategy can replace it. Moreover, this is the point of the problem of how the activity processes custom clearance is low to reduce costs. ABM increases company profitability by identifying and selecting improvement opportunities and using more accurate information to make better decisions (Hansen, 2018). By using ABM, PT ABC can improve the value chain to reduce this activity by changing the strategy in managing activities.

Based on Activity-based Management (ABM), non-value-added activities must be reduced or eliminated. Table 2 shows the top summary non-value added activity.

Table 2. Activity Analysis *Non Value Added* PT ABC

	Activity List	NVA		Consideration
		Elimination	Reduction	
1	Provide vehicles to transport products to warehouse locations according to product categories		√	Activities that consume time and resources to move products from one warehouse to another. This activity also has no effect on quality and customer satisfaction.

2	Submit products to departments service center to perform a function test	√		Activities that consume time and resources are doubled.
3	Dopacking pallet		√	Repeat activity due to condition correction (state-correction) where the product is already atpacking usewrapping.
4	Sending products to the expedition location requested by the customer for areas outside the city		√	Activities can be replaced with expedition services.
5	Do service and canvasing		√	Every city already hassales to do marketing and promotion (canvasing)
6	Create Form E	√	√	Form e activity can be reduced by charging the supplier
7	Create PIB (Product Import Notification)		√	Activities that consume time and resources where activities can be carried out by third parties (PPJK).
8	Manage surveyor documents through the Sucofindo institution			Activities can be replaced with surveyor exemption certificates.
9	Do import handling clearance at customs		√	Activities that consume time and resources where activities can be transferred to third party services (PPJK).
10	Make Letter of Agreement (LOA) danCertificate of Free Sales (CFS)		√	This activity can be eliminated as long as it does not prevent the distribution permit registered with the Minister of Health being rejected.Dokumen certificate of free sales not required by the Minister of Health.

Source: Processed data (2023)

To eliminate non-value-added activities in the operational process at PT ABC, an effort must be made to find and eliminate the problem's root cause. If the efforts made are only limited to solving the problem, then it will be temporary and even has the potential to cause other non-value-added activities. Based on the observations of researchers in the field, which is supported by the literature regarding Activity Based Management, the researchers found that the root cause of the problem that triggers non-value-added activities in the procurement process to the product delivery process to customers is due to a poor management system. This is reflected in the different warehouse locations, the high activity of product procurement (product imports) without being accompanied by forecasting of stock requirements, and the ability to use existing resources. The analysis could not be carried out for other performance indicators due to limited data, so the research was conducted only on activities carried out by PT ABC. However, according to the literature regarding activity-based management, improving value-added activities and eliminating non-value-added activities can help companies reduce costs and maximize profitability. On activity value added, some activities can be re-optimized or have gaps to improve, and if optimized, it can reduce costs. The following are the value-added activities in which elements or properties of nonvalue-added activities occur because of the

constraints and obstacles that arise from value chain problems at PT ABC. These activities are increasing and causing high operational costs due to problems in the value chain. Elements of activities non-value added This can be done by eliminating activities that provide little or no value to customers, can reduce resource use, and can provide opportunities for companies to focus only on activities that can increase customer satisfaction and profitability (Blocher, 2019).

For value-added activity costs, reductions can be made so that costs that can be reduced or eliminated are only activity costs that are not value-added. More details can be seen in Table 3 below. Based on Table 3. above, activity costs to regulate warehouses can be reduced by IDR 107,113,424 using a warehouse owned by PT ABC in Guangzhou, China. Because the warehouse belongs to PT ABC itself, PT ABC only needs to pay for warehouse electricity, forklifts, new employees in China, around 3 people to take care of the goods warehouse, and other administration, which will later be received by the supplier and then handed over to the forwarder selected by PT. ABC for delivery to Indonesia. So, forwarder services are no longer needed to take care of export clearance, import handling, and preparation agencies. These activities can be carried out by 3 employees who have been recruited in China. Efficient total cost for export clearance Rp. 167,534,656, import handling Rp. 240,223,424 and agency provision activities Rp. 59,534,656. As for the activity of making form E, it can be omitted where it should have been provided directly by the supplier and is not the responsibility of PT ABC.

On customer clearance, there is an activity set handling process, trucking, and storage at the port along with the provision of documents for releasing goods to removing goods from the port and arranging the delivery to the warehouse; costs can be reduced by working directly with the PPJK. The company can reduce the number of employees in the clearance section by 4 personnel and replace these activities with the PPJK. So the cost efficiency generated from the handling process IDR 31,867,500, trucking and storage IDR 101,704,500, document providing activities IDR 9,885,000, and activities removing goods from the port and arranging goods shipments IDR 19,687,500. Moreover, the activity of providing surveyors can be eliminated by applying for a surveyor's release certificate to the sucofindo institution. By having this certificate, PPJK can issue goods without paying surveyor fees in accordance with PERMENDAG regulation No. 10 of 2018.

For the receipt and inspection of goods, there are inspection activities of goods one by one in accordance with the number of goods received packing list; these activities can be reduced or eliminated by conducting a sample of the goods received, besides every item that will be sent to the customer will be inspected by the quality control department. By reducing these activities, the company can reduce the number of employees in the goods inspection section, and it is estimated that the cost efficiency obtained is IDR 17,550,000. Likewise, for arranging cars to transport goods to warehouse locations according to the category, costs can be reduced by creating communication and coordination between the purchasing and logistics divisions. The company can make cost efficiencies of IDR 35,100,000 for these activities; for the activity to create certificates free of sale, those using sworn translators can be eliminated because, without the certificate, the company's distribution permit can still be issued.

Table 3. Cost of PT ABC after elimination

Activity	Non-Value Added Fees	Cost After Elimination	Difference in Savings
I. Import of Goods			
1 Manage warehouses	396.716.384	289.602.960	107.113.424
2 Doing export clearance	620.498.726	452.964.070	167.534.656
3 Perform import handling	889.716.384	649.492.960	240.223.424
4 Provide agencies	220.498.726	160.964.070	59.534.656
5 Create Form E	525.000.000		525.000.000
II. Customer Clearance			
1 Manage handling processes	212.450.000	180.582.500	31.867.500
2 Arrange trucking and storage at the port	678.030.000	576.325.500	101.704.500
3 Provide all documents	65.900.000	56.015.000	9.885.000
4 Provide surveyors	120.000.000		120.000.000
5 Removing goods from the port and arranging delivery to the warehouse	131.250.000	111.562.500	19.687.500
III. Goods Receipt			
1 Inspect goods one by one according to the number of items received on the packing list	65.000.000	47.450.000	17.550.000
IV. Goods Storage Process			
1 Arrange cars to transport goods to warehouse locations according to the category of goods	130.000.000	94.900.000	35.100.000
V. Distribution permit registration process (Legality)			
1 Create a free certificate of sale (CFS) using a sworn translator	112.500.000		112.500.000
VI. Goods Delivery Process			
1 Submit the goods to the service center for function testing	65.000.000		65.000.000
2 Doing pallet packing on the goods to be sent	98.560.000	49.280.000	49.280.000
3 Sending goods to customer locations in the Jakarta, Bogor, Depok, Tangerang and Bekasi areas	985.979.000	492.989.500	492.989.500
4 Sending goods to the expedition location requested by the customer for areas outside the city	602.340.000	439.708.200	162.631.800
Total	**5.919.439.220**	**3.601.837.261**	**2.317.601.959**

Source: Processed data (2023)

Moreover, for the process of sending goods, there is an activity of handing over goods to the department service center to do a function test; the activity can be eliminated because of the activity double activity, and a function test has been carried out at the time of receipt of goods so that the cost efficiency is IDR 65,000,000. For activities to pack pallets of goods to be sent can be shared with customers because the company already uses standard packaging using wrapping, so the cost efficiency is IDR 49,280,000. Meanwhile, packing pallets are provided based on customer requests, and pallet costs are borne by the customer. The activity costs of sending goods to customer locations in the Jakarta, Bogor, Depok, Tangerang, and Bekasi areas can be reduced by using expedition services for shipping in the Bogor, Depok, Tangerang, and Bekasi areas and for activities sending goods to the expedition locations requested by customers for areas outside the city can be shared costs with customers so that the company saves Rp. 492,989,500. Shipping costs for the items ordered are usually borne by the buyer and shared with customers so that cost efficiency can be carried out to increase profitability. Due to these activities, the company succeeded in carrying out cost efficiencies of IDR 162,631,800. Therefore, the use of

Activity-based Management caused a reduction in costs at PT ABC originating from activities that had no value added, Rp. 2,3171,601,959 of the total cost at the previous PT ABC Rp. 20,642,937,100 to Rp. 18,325,335,141 or 11%. For this reason, efforts are needed from management to eliminate non-value-added activities so that company efficiency, in this case, operational cost efficiency, can be achieved.

Value chain analysis is a strategic analysis tool used to understand competitive advantage better, identify where customer value can be increased or costs decreased, and better understand a company's relationships with suppliers, customers, and other companies in the industry. The following is a value chain map at PT ABC shown in Figure 2:

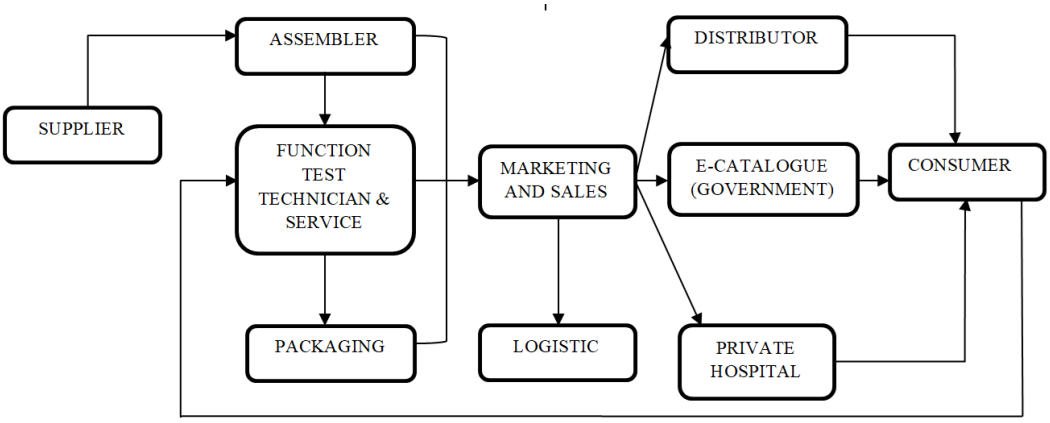

Figure 2. PT ABC Value Chain Map

Based on the value chain map presented in Figure 2, Suppliers are the main actors of the value chain as providers of all products marketed by PT ABC. Moreover, currently, PT ABC sells more than 300 types of products imported from 75 suppliers from countries such as China, Taiwan, Korea, Turkey, the USA, Japan, Germany, Poland, Italy, Belgium, Finland, Switzerland, and France. All suppliers have cooperative relationships and contracts written in the Letter of Agreement (LOA). Minimum order quantity (MOQ) requirements are PT ABC's most significant product procurement obstacle. Currently, PT ABC uses its brand to be marketed in Indonesia; the authors call it brand A. Based on interviews and internal discussions conducted with PT ABC, 70% of products marketed use brand A to strengthen the company's brand. Because PT ABC markets products with its brand, PT ABC must meet the MOQ when ordering products from suppliers. Using brand A requires that PT ABC must meet a minimum order quantity from suppliers because suppliers will produce products according to the product design and brand on the product panel, create user manuals and product packaging for brands registered with the distribution permit (AKL) that have been issued, by the Minister of Health. The company also worries that there will be expired products if the number of products purchased is too large. The company is most concerned about cash flow rotation, which is stuck in stock because all products imported from suppliers use cash payments. These conditions were found according to interviews with the General Manager of PT ABC (R1):

> "The General Manager always asks the purchasing department to be careful when placing orders with suppliers; all product orders must be confirmed to the sales department whether the amount to be ordered is sufficient to meet stock requirements for three months or to meet six months' needs to keep the warehouse condition not full, stock does not accumulate in warehouses, stock does not expire and cashflow is not stuck in stock. The company cannot meet the minimum quantity order requirements because of these considerations, which makes the company place product orders according to needs and forecasting from sales even though the number of products ordered does not reach the target quantity expected by the supplier" – General Manager.

Based on the statement from the General Manager, the company does not dare to take risks if it has to order products according to the MOQ. By meeting the MOQ, the company will not only get a lower purchase price, but the supplier will also provide free custom design on the packaging so that the product can be ready for sale without the need to buy packaging from local suppliers, and there is no need for a re-packaging process at PT ABC's warehouse. The larger the quantity ordered, the more PT ABC can save on shipping costs. The finance and accounting manager stated that the minimum fee billed by the forwarder is 2 cm (container combination unit). If the number of products shipped is below 2 cm, the fees charged will remain the same as the standard 2 cm. Following are the statements of the sources from the Manager of Finance and Accounting (R3):

> "The bill on the invoice stated that the total product sent by the forwarder was only 0.88 cbm. However, the total fee billed to the finance department is 2 cbm, so the company actually loses out on paying costs that the purchasing department should be able to buy products that total 2cbm" – Finance and Accounting Manager.

The situation at PT ABC is that the purchasing department often purchases several products below the suppliers' minimum quantity order (MQO) standard. This happens because the purchasing department must maintain sales and stock needs. This is in accordance with interview excerpts taken from Logistics Manager (R5) sources:

> "Product needs in the field are difficult to predict by sales; if it is always ordered in accordance with the MQO from the supplier, it is feared that the sales will not be able to sell the stock that has been ordered, and the stock will accumulate in the warehouse and cash flow will be problematic, besides that it will have an impact on expired products which will be the responsibility of the sales team – Logistics Manager.

Based on this statement, the primary key to companies' ability to order goods according to the minimum order quantity is in the sales section. The ability of sales to market products in accordance with the forecasting given and sales targets achieved can help companies to get low prices for products; companies can reduce import frequency to save on shipping costs where products can be sent in full containers to save on forwarder costs and the custom clearance process. Of course, this is a concern for PT ABC how to

purchase goods to reach MQO standards to save product purchase prices, packaging costs, and packaging processes to product shipping costs.

It can be seen that PT ABC's business processes start from procuring products from suppliers (imports), and because not all products imported by PT ABC are direct products that are ready for sale, a rafting process is needed. return product. This rafting process fulfills products in kit units, while imported products are in unit form with different suppliers. Products that are assembled will enter the function test stage by the technician section (service center); in this flow, all products will be tested for the feasibility of use so that users can use the product. Products that are fit for the function will then be packed and ready to be marketed by the department sales. The marketing and sales department can market products to distributors and the government (Hospitals, Clinics, Labs, and Health Services) through e-catalogs, Hospitals, and Private clinics. Moreover, products that customers have ordered will be sent by the logistics department. For after-sales service, PT ABC provides 24-hour service so that damaged products and technical services can be provided immediately. This is the value chain that PT ABC has carried out in business processes and competing with competitors. To see how the implementation chain can help PT ABC win the competition, the following presents the analysis results of PT ABC's value chain actors consisting of Suppliers, Assemblers, Technicians, Marketing and Sales, Logistics, Distributors, and Consumers.

PESTEL's external environmental factors that may affect PT. The ABCs are essential to the success of company management. It involves demand and supply conditions of conditions where there is high demand but supply is low, inflation rates, currency exchange rates, economic growth, and interest rate tightening (Wang et al., 2022; Watari et al., 2022). The domestic and foreign medical equipment markets are at a challenging stage. An unstable economy makes the market sluggish due to rising inflation rates that make operational costs and selling prices of medical equipment more expensive. This is a dilemma by PT. ABC because if it increases the selling price, buyers in pharmacies and hospitals who take products at PT. ABC will reduce the amount of demand or even shift to "second-class" products by companies that offer lower prices with substandard NESCO products such as "Sakura," which is usually cheaper and more affordable; the price is about 20-30% lower than the medical equipment sold by PT. ABC. However, if it does not increase the price, of course, PT. ABC will make a small profit. Medical equipment distributors are also charged with high Import Goods Notification (PIB), which amounts to 20%-30%. As a result, companies must have capital of at least 120%-130% to finance orders from e-catalogs. In addition, many health facilities (Government Hospitals) are still in arrears with payments due to BPJS or Central funds that have yet to be disbursed (use of post-payment). The risks that medical device distributors must bear are very inhumane.

The number of medical equipment orders through e-catalog and imported product orders is known to be five times greater than domestic medical equipment orders, about 2.9 trillion. PT ABC is a medical device distributor company that takes health products through imports. In 2023 and beyond, the government is fully committed to raising the Proudly Made in Indonesia to encourage accelerating the development of the domestic medical device (Alkes) industry. The government believes domestic producers can meet domestic demand (Rahayu, 2022).

According to data from the Ministry of Health, 358 types of medical equipment produced domestically and 79 types of medical devices have been able to replace imported products for national needs, including electrocardiograms, orthopedic implants, nebulizers, and oximeters. This proves that domestic medical equipment manufacturers can meet the needs of the domestic market and replace imported products. The Minister of Economy began formulating policies for medical devices through three stages: the research phase, registration, production, distribution, and sales phase. Among them are regulations that support domestic medical devices, purchases through e-catalog, local content requirements (TKDN) of medical devices, the development of raw materials for medical devices, knowledge transfer, and technology transfer. To maximize the absorption domestically, the government began to collaborate with policy support from relevant Ministries/Institutions in implementing the import substitution program, including the implementation of the Domestic Component Level (P3DN) firmly and consistently. This program is a concrete step by the government in supporting the national economy and making Indonesia a resilient and independent country without importing medical devices. If this progresses successfully, companies that import medical device products will be shifted in sales with distributor companies that supply domestic products and are fully supported by the government.

Technological developments, including PT, continue to increase and significantly influence the pharmaceutical industry. ABC. One of the revolutionary technologies that began to be widely used in the pharmaceutical industry is the Internet of Things (IoT). The implementation of IoT technology will make PT. ABC cannot be outdone, and quality assurance is getting better. Besides IoT, the development of finance technology is booming in Indonesia. Financial technology/Fintech is the result of a combination of financial services with technology that finally changes the conventional model to moderate, which initially must be face-to-face and carry a certain amount of cash. Thus, it can make remote transactions by making payments that can be made in seconds. New technologies, standards, and regulations are constantly being introduced to the medical equipment market. Working with doctors, medical experts, engineers, regulators and technology suppliers must be rapid and extensive. Medical Equipment distributors can also suffer losses when these changes cause problems delaying the distribution of goods to the market for new products.

Competition in the business world has become increasingly fierce, and companies must have a vision and mission that must be maintained so that customers and company partners remain loyal (Ghemawat, 2002; Giantari et al., 2022; Williams et al., 2022). Especially in the competition in the field of medical instruments distributors, companies that lack a name will gradually be left behind by the fierce competition in fighting for the hearts of the heads of medical companies and hospital heads who have full authority in purchasing medical equipment. The medical device industry has very high standards and quality; unfortunately, many large companies monopolize the competition for the procurement of medical equipment so that small companies/distributors do not get profits which will have a negative impact on the sustainability of these companies (Martimyanova, 2022; Peters, 2022). Therefore, clear information is required to work

partners and the public about the existence of medical device companies/distributors with high quality and standards in implementing the products offered.

PT. ABC is one of the many medical equipment companies/distributors in Jakarta. Established in 2018, this company operates under the NESCO Group. As a medical equipment company/distributor that has been established for about 5 years, with many competitors in the same field, both in Jakarta and surrounding areas, especially in JABODETABEK, it will impact decreasing the turnover of PT. ABC. In a B2B concept, companies will only be able to survive by relying on partners who already know and understand the company's concept concept. Moreover, in the JABODETABEK area, there are many monopolistic practices in the procurement of medical devices, such as the monopoly case carried out by Bekasi Hospital with PT Ina Farma, which was proven to be conspiring with the sole distributor of the Hamilton Medical brand ventilator. Still, in its ruling, the Indonesian Business Competition Supervisory Commission (KPPU) only sanctioned PT Ina Farma not to supply medical equipment at Bekasi City Hospital for a year. Still, it can supply medical equipment to other hospitals.

Many regulations and policies are recorded in the Law and Decree of the Minister of Health that need to be complied with by Pharmaceutical Business Facilities (PBF). However, there are still regulations that need to be issued officially and clearly by the government, namely regulations related to the sale of medical equipment through online media (Bourassa et al., 2022; Lee et al., 2017; Nelyumna et al., 2022). The nature of this regulation needs to be clarified for PBF, including PT. ABC is hampered to add new customers and facilitate sales, especially customers outside Jakarta. Besides illegal medical equipment, the rampant sale of counterfeit medical equipment has recently become an issue that has disturbed the Indonesian people. The medical equipment industry must also comply with regulations and standards issued by the government (Bhalaji et al., 2022; Cheng et al., 2020). This includes Good Ways of distributing Medical Devices, Food and Drug Administration, International Organization for Standardization, and other local or international mandate certifications. Manufacturers and distributors must comply with this regulation because it can be risky for malpractice to handle hospital patient problems.

Here are some alternative strategies that PT ABC can apply in dealing with external factors that can affect the company's internal as follows: companies can take advantage of existing opportunities by increasing the quality and quantity of sales force calls and bundling supporting products to overcome or reduce threats from other companies engaging in monopolistic practices, the company can conduct joint visits to critical customers, recruit sales force members from competitors, and provide retraining to operators, companies can focus on improving the competence of after-market employees so that service is faster and more precise, and collaborate with educational hospitals, and consider strategies that minimize the effects of weaknesses owned by the company and overcome or avoid threats that come from outside the company by focusing on providing excellent service to existing customers.

5. Conclusions, Implications and Limitations

Based on the research results of the application analysis activity-based management and value chain in PT ABC, the conclusion that can be drawn is that by using the

application of ABM, PT ABC has the opportunity to achieve standard cost ideal or determined through an analysis of activities that occur in the process of product procurement to delivery of products to customers. This is because there are still activities that are not added value (non-value added activity) what happened to the activity inbound logistics, outbound logistics, marketing and sales, procurement, and general administration. Eliminating and reducing non-value-added activities can generate savings that reduce the company's operational costs. However, unfortunately, the value of the savings cannot be calculated at this time due to data access limitations. Activities that are not added value that can be reduced are in the form of providing vehicles to transport goods to warehouse locations according to the category of goods packing pallet, sending goods to the expedition location requested by the customer for areas outside the city, carrying out service and canvasing, making Form E, making PIB (Notification of Goods Import), carrying out import handling clearance in customs and make letter of Agreement (LOA) danCertificate of Free Sales (CFS). The research results on business practice imply that this study shows the application of ABM and value Chain able to become a tool for companies to achieve standard cost ideals as well as establish and strive for continuous improvement through analysis of value-added and non-value-added activities and implementation value chain with emphasis and refinement on value chain activities that can be achieved at a much lower cost than competitors can match on an ongoing basis. In addition, there are still gaps for improvement in business processes, especially in the logistics and procurement sections. Non-value-added activities occur because PT ABC has eight buildings with different warehouse locations. With the warehouse location being one, activities that consume additional time and resources can be avoided. After an analysis of the external environment using PESTEL analysis, it can be observed that PT ABC, in running its business, has followed the applicable regulations in accordance with political, economic, social, technological, environmental, and legal factors. This is carried out to achieve the company's goals and business continuity.

Moreover, to achieve cost efficiency, PT ABC must focus on managing activities through the implementation of Activity-based Management (ABM) so that information can be obtained about which activities are classified as value-added or non-value-added so that the inefficient use of resources by non-value-added activities can be reduced, eliminated, or selected. This research still has limitations because not all sections were interviewed due to limited research time, so activity analysis could not be carried out per division in PT ABC. Another limitation is that this study cannot measure the costs incurred from non-value-added activities and how much the potential cost savings will result if these non-value-added activities can be eliminated or reduced in frequency.

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