Contemporary Accounting Case Studies

Vol. 1, No. 1, September 2022 Article 21

EVALUATION OF BUSINESS MODEL TRANSFORMATION: A CASE STUDY IN TRADING COMPANY PT. S

Sondang Eka Rahmawati
Master of Accounting Program, Faculty of Economics and Business, Universitas Indonesia
sondang.eka@ui.ac.id

Lindawati Gani
Master of Accounting Program, Faculty of Economics and Business, Universitas Indonesia
lgani@ui.ac.id

EVALUATION OF BUSINESS MODEL TRANSFORMATION: A CASE STUDY IN TRADING COMPANY PT. S

Sondang Eka Rahmawati [1]
Lindawati Gani [2]
Master of Accounting Program, Faculty of Economics and Business, Universitas Indonesia

ABSTRACT

PT. S has been in Indonesia's food colors and flavors trade for seventeen years. PT. S has not been performing well in recent years, even though Indonesia's food and beverage market is growing. The inefficient local operational and management activities forced its head office to change its strategy to survive and remain competitive in the industry. This study aims to evaluate the impact of change on the business model. A descriptive qualitative model with the case study method and a single unit for analysis were used. Data collection is done by observation, a document study, and interviews. Furthermore, the triangulation method was used to process the data, then analyzed through value chain analysis and strategic cost management. The analysis also focuses on activity-based cost management and customer profitability. The result shows that this business model successfully improves the company's financial performance, though several processes need further attention.

Keywords: activity-based management, business model, customer profitability analysis, strategic cost management, value chain analysis.

[1] First author's email: sondang.eka@ui.ac.id
[2] Second author's email: lgani@ui.ac.id

1. INTRODUCTION

Food and beverages are basic human needs that create a large and attractive market for Indonesia. In general, Indonesia is among the most populous countries globally, with a higher demand for food and beverages, making it an attractive market for investors. The country is divided into an archipelago with various natural resources, providing numerous opportunities for investors (Euromonitor, 2020). Since the food and beverage sector provides necessities of life, it is an industry that investors would attract. Subsequently, the industry is supported by other related value chain sectors, such as flavorings and food coloring, that improve taste and aesthetics.

Most food coloring and flavoring products are imported because Indonesia lacks the technology needed to produce them. Coloring and flavoring products require high safety and quality standards during production since they are used for food (food grade). Companies such as Christian Hansen, Roha, Kerry, and Indesso, are well-known manufacturers of quality food coloring and flavoring products. PT. S has been a major importer and trader of food coloring and flavorings products in Indonesia since 2004, acting as a subsidiary of a multi-corporate group with headquarters in the United States. Specifically, it imports these products from affiliated countries, such as America, China, Australia, and the Philippines, where they are produced. The company directly sells the products to its customers, assisted by two distributors for each category. However, the distributor only supports the company in making sales, especially when handling orders from small companies for easy administration (Respondent 1, 2021).

Although PT. S has been in Indonesia since 2004, but it has failed to attain its sales and operating income goals. The performance of the company falls below the head office's expectations. Therefore, management decided to change the business model for the Indonesian office. According to Christensen (2016), innovation for efficiency in the business units needs to happen over time to become more efficient and remain competitive. Respondent 1 mentions that this is the case with PT. S, the company needs to make changes to improve its financial and sales conditions.

The new business model is a sales model using distributors, where PT. S sales are routed through selected distributors. It only handles the importation procedure, though after the products arrive in Indonesia, the selected distributors ensure the products reach the consumers. This means that distributors will handle the cost and process of billing customers, minimizing the cost incurred by PT. S. The management expects distributors to cover a larger customer base, leading to improved financial performance. The new business model will also impact the company's overall restructuring, causing a change in value chain analysis, strategic cost management, and activity-based cost management.

Based on the background above, the formulation of the problem in this study is as follows: how to evaluate the implementation of the business model change strategy for the Indonesian office using a strategic cost management framework.

This study aims to determine the effectiveness of the new business model by using the theoretical framework of strategic cost management, including SWOT analysis, value chain analysis, financial analysis, and activity-based management. This study uses a study case model with single object PT. S in Jakarta. The descriptive qualitative method is used for the study. The study results show that the company's financial performance is better after the changes, but the business unit can improve some business processes.

The study discusses the four business model elements for PT. S by using the Johnson (2018) framework. Value chain analysis for the business model is then defined along with the SWOT analysis for the new business model to see the competitive advantage that the company has gained due to the changes. The study also discusses the financial outlook after the business model changes, the savings, and the company's performance in general. Based on the consideration, the research is limited to the internal condition only without competitors' outlook as the data limitation for competitors. It is expected that the study will improve the efficiency of the process for the business after the model changes.

2. LITERATURE REVIEW

2.1. STRATEGY AND BUSINESS MODEL

Osterwalder & Pigneur (2010) defined a business model as a map or plan that guides an organization's operations. Other scholars believe that a business model is a conceptualized system of main activities, including entrepreneurial activities (Zott & Amit, 2013). According to Mark Johnson (2018), the business model consists of four complementary factors creating and generating value. These include customer value proposition, profit formula, key resources, and key processes, forming the building block for any type of business model for a business. Customer value proposition and profit formula are determinants of company value, while key resources and processes describe how the company delivers that value to the customer.

2.2. SWOT Analysis

A SWOT analysis addresses internal and external aspects of an organization. The internal component covers strengths-resources, skills, and other advantages an organization possesses. It also involves weaknesses, which are the limitations or deficiencies within the organization that can hinder its performance. In contrast, external aspects cover opportunities and threats available now or in the future for the organization. The opportunities include favorable events, while threats are detrimental events or situations facing the organization.

Blocher et al. (2019) explained the SWOT analysis as a systematic procedure to identify its success factors by analyzing its internal strengths and weaknesses and the external opportunities and threats. The company’s core competencies and skills help identify areas of competitive advantage that management can exploit. Furthermore, these core competencies can help formulate the company's overall strategy. On the other hand, weakness denotes a lack of important skills or competencies relative to the company's resources against the competition.

Management can identify strengths and weaknesses by looking inside the company (internal company) for specific resources, such as product lines, management, research and development, company operations, marketing, and company strategy. Opportunities and threats can be identified by analyzing the industry and competitors’ aspects, including barriers to entry, intense competition, pressure from substitute products, consumers’ bargaining power, and suppliers' bargaining power.

SWOT analysis is important for channeling strategic analysis direction because it focuses on the strengths, weaknesses, opportunities, and threats that affect its success. The final stage in SWOT analysis involves identifying companies' quantitative measures for critical success factors (CSFs). In general, the CSF represents the company's critical process as it provides value to customers- value proposition.

2.3. Value Chain Analysis

Michael Porter (1985) established that a value chain is a series of interrelated value creation activities that convert basic raw materials, material sources, or component suppliers to end-use products or services ready for consumption. The analysis entails coordinating each part of the value chain to enhance customer satisfaction, especially cost efficiency, quality, and delivery. A company with an efficient value chain process will have a competitive edge by attracting a large pool of customers.

The value chain is divided into two activities: main and supporting activities. The main activities involve several processes, such as the physical movement of raw materials and finished products and the production process of finished goods or services. Furthermore, it entails marketing, sales, and services supporting the production of finished products and encompasses input logistics, operations, outbound logistics, and services. The supporting activities include procurement, technology development, human resource management, and the company infrastructure.

The value of chain activities provides input in each stage and processing, it adds value to the output before delivery to the customer as a final product. Management should utilize the main and supporting activities to meet or exceed consumers' expectations, thus contributing to the company’s competitive advantage. By focusing on these nine activities, management will determine how each value affects costs and revenues. According to Porter (1985), an organization could develop a sustainable competitive advantage through a low-cost or differentiation strategy.

The value chain concept was first introduced by Michael Porter (1985), using Porter's theory of competitive advantage. According to the theory, the chain represents a series of interrelated value-added activities, indicating that competitive advantage and value chain are interconnected. The management can use value chain analysis (VCA) as a diagnostic tool to support continuous improvement as goods move from one production stage to the next. Moreover, Taylor (2005) explained VCA as a multidimensional assessment of value chain performance, encompassing examining product flow, information flow, and chain control management. Pearce and Robinson (2009) sought to understand how a business can create value for its customers by examining the contribution of each value activity within the business. Shank and Govindarajan (1992) also commented on value chain analysis, showing that it is a tool for understanding the process of creating value in a product. In general, the value chain results from activities from purchasing raw materials to products reaching customers and after-sales service. Therefore, organizations or business people use its analysis to create value for their customers and improve competitive advantage.

2.4. Financial Analysis

According to Gibson (2013), the financial analysis consists of quantitative and qualitative aspects in measuring the relative economic position between companies and industries. Analysis can be done in many ways, depending on the type of company or industry and the user's specific needs. Financial statements vary by company size and between industries. Financial analysis is an assessment process whose final results can be relative to the data presented. These techniques include ratio analysis, analysis of common measures, studies of differences in components of financial statements across industries, reviews of descriptive material, and comparison of results with other types of data.

2.5. Activity-Based Costing & Activity-Based Management

Blocher et al. (2019) defined activity-based costing (ABC) as a costing approach method assigning resource costs to products or services based on the activities or improvements on the object. The development of ABC systems involves three stages, including (1) identification of cost activity sources and related activities, (2) assigning resource costs based on activity, and (3) assigning activity costs to cost objects.

According to Blocher et al. (2019), activity-based cost management (ABM) is the management of resources and activities related to the products or services to make them more valuable to customers, increasing their competitiveness and profitability. ABM uses ABC as its main source of information, focusing on the efficiency and effectiveness of business processes and activities. Through ABM, management can identify cost reduction strategies and increase value for customers, thereby increasing the company’s competitiveness.

ABM is classified into two categories, specifically operational and strategic. Operational ABM optimizes the company's operational activities through asset utilization and lowering costs. It is focused on the efficient execution of the right course of action for enhanced profits. ABM employs various techniques, including activity analysis, business process improvement, total quality management (TQM), and performance measurement. Also, strategic ABM focuses on selecting appropriate company operations, eliminating non-essential activities, and selling to profitable customers. The application can provide management with process design, customer profitability analysis, and value chain analysis to alter activity demand and increase profitability through activity efficiency.

2.6. Customer Profitability Analysis

Blocher et al. (2019) established that customer profitability analysis is a process of identifying customer service activities and cost drivers and establishing the profitability of each individual or group of customers. Excellent knowledge of customer profitability can help companies increase overall profits, thus becoming competitive. This knowledge can be acquired through cost analysis as the company serves customers.

3. Research Methods

This study used a case study with a descriptive qualitative research method. In general, this method examines the condition of natural objects, with the researcher as a key instrument. The object of the study was the evaluation of changes in the business model at PT. S. The data was collected through observation, a document study, and interviews.

The interviews method were semi-structured, meaning they were prepared in advance with the main seeking answers from respondents. Five respondents were interviewed for the primary data needed for the study. The respondents are the former general manager of the company, sales manager, quality and regulatory manager, supply chain manager, and finance controller (details of the respondents refer to appendix 1). Due to the pandemic situation, all the interviews are done by video call (zoom) and telephone.

Furthermore, the triangulation method was used to qualitatively test the data validity through various data collection methods (Denzin, 1978). After establishing data validity, the next stage was reduction, display, and verification. Data analysis in qualitative research involves data collection, reduction, and verification (Miles & Huber, 1994). The analysis process involves data description based on the observations and interviews concerning changes in the business model and the evaluation results. The analysis also relies on the theoretical framework for displaying and analyzing the results. The final step in data analysis is compiling conclusions and recommendations.

4. Organization Profile

PT. S is a subsidiary of a multi-corporate group with headquarters in the United States. The S Group is divided into three main business segments: the Flavors

Group, the Coloring Group, and the Asia Pacific Group. The Indonesian office in Southeast Asia is part of the Asia Pacific group. The Asia Pacific Group is headquartered in Singapore and has several manufacturing locations spread across China, India, New Zealand, Australia, and the Philippines (PT. S Annual Report, 2020).

Each of these business units spread across several countries is a profit center and is interrelated through inter-affiliate trading activities (Intra/intergroup activity). Indonesia's branch office or business unit was established in 2004 to import and distribute flavors, fragrances (essential oils), and food coloring. The company's primary market segment includes savories, dairy products, bakeries, and beverages. Main flavoring products include dairy boost (additional flavor for dairy products), protex (hydrolyzed protein), yogurt flavor, and almond flavor. (PT. S annual report, 2020).

The Indonesian office has had its ups and downs since its presence in Indonesia and has undergone several management changes. Since 2018 concentrated only on the food coloring and flavor business. PT S's primary product categories include synthetic dyes (tartrazine, quinoline, carmoisine, ponceau, erythrosine) and natural dyes (carmine, beet red, caramel, blue-pea flower, carbon black). (Respondent 1, 2021).

5. RESULT AND DISCUSSION

The study was conducted by obtaining information from respondents who were key persons in the company (manager's level). The interviews define the company's business model elements according to Johnson (2018), namely customer value proposition, profit formula, key resources, and key process.

Based on the interviews, those components are:

1. Customer value proposition

Through interviews with several respondents, PT. S's customer value proposition is as follows.

- Leveraging its leading position in the coloring market (focus on coloring products).
- Prioritizing customer needs for faster results (for example, creating a color or flavor combination to meet customer specifications or customizing a customer's product to create a new flavor or color).

- Exceeding customer expectations, enhancing their satisfaction with the product and the commercial team, such as combined colors and flavor products in one solution.
- Reliability, where customers express confidence in the product quality because of increased product knowledge and product regulation in Indonesia.

2. Profit formula

The PT. S's profit formula employs the concept of a margin model, where the product's selling price factors the expected volume and cost structure. When calculating the actual margin, accountants are factored in the margin percentage for distributors.

3. Key Resources

One of the key resources at PT. S is human resources. The company's employees include a commercial team (sales and marketing), technical team, product quality and halal regulations, customer service, product planning, and finance to help carry out operational processes. These processes range from product orders to sales invoice administration to billing and making payments. The distributor is also another key resource since they represent PT. S to the customers.

4. Key Process

PT. S divides its key processes into two categories, specifically revenue generation and billing. Revenue or sales generation is the first key process done by the commercial team (sales, marketing, and technical) since they can create orders for distributors to present to customers before the desired deadline. The Supply Chain team assisted forwarders and Customs Service Management Entrepreneurs (PPJK) carry out orders for the company's benefit.

The second key process starts from outbound activities to the customer billing process to the billing process done by the finance department. The company initiated changes in its business model to improve performance. After establishing the company's latest business model, a SWOT analysis was conducted to determine whether the company's strategy is on target.

SWOT analysis

After interpreting the business model elements from the respondents' interviews, then the SWOT analysis is determined as follows:

Strength : PT. S has a technological advantage in developing its product, especially food coloring. Additionally, Indonesia is currently trending towards natural food coloring, thus advantageous to PT. S because it offers various natural coloring products. Another PT. S strength is the availability of a technical team in Indonesia capable of translating custom products desired by customers.

Weaknesses: PT. S is a subsidiary of a multi-corporation, distributing its products across the world. The company has to import these products, meaning it will cater to the cost of ordering, purchasing, and shipping, making the final product's price sometimes a bit high from the customer's perspective. Though PT. S's products are of high quality, but consumers in Indonesia are still concerned about cost factors and prices of goods and services in the market. Since PT. S products are sometimes from non-Asian continents; they are somewhat more expensive than their competitors.

Opportunities: The Indonesian food and beverage market provides an array of opportunities for PT. S. The country is the fourth most populated globally, providing PT. S with the vast market for selling its products. Most of its coloring and flavors are concentrated in Java, though food and beverage manufacturers are also available in other areas. Additionally, the Food and Drug Supervisory Agency regulations favor natural coloring, providing additional opportunities.

Threats: One major threat faced by PT. S is intense competition in the food and beverage market. Companies from India and China have heavily invested in Indonesia, providing competitive prices in the market. PT. S faces a huge task in maintaining its customers because the food and beverage industry is price sensitive. The company finds it challenging to keep its prices lower since it does not have a local manufacturer and the product composition is 100% imported from various affiliated countries. Apart from the customer's import price, the waiting period can also negatively impact the decision-making process.

Value Chain Analysis

Value chain analysis uses strategic cost management by considering efforts between set values (Porter, 1985). It enables PT. S to determine the strategic advantages and disadvantages of its activities. By analyzing internal and external components, the company can attain a competitive advantage.

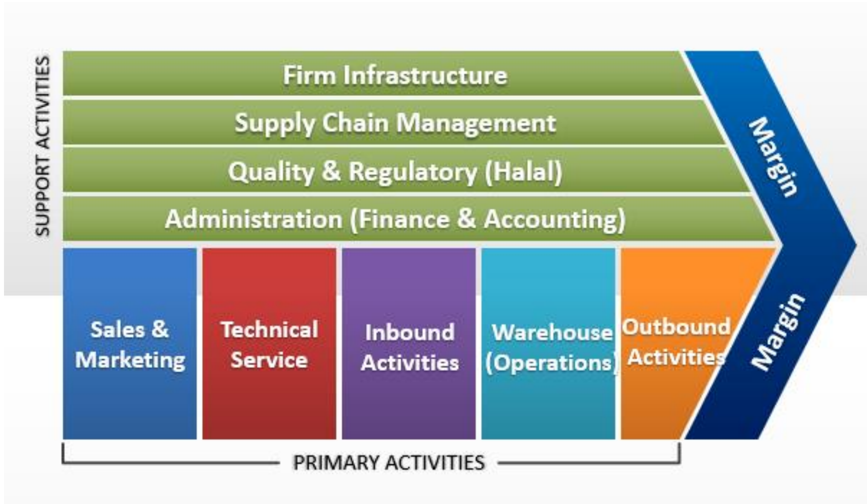

Figure 1: Initial Model of PT. S Value Chain

Source: PT. S (2020), processed data.

Figure 1 shows that the main chains eliminated or changed are storage operations (warehouse) and delivery to customers (outbound logistics).

The process flow before the products land at the distributor's hand is as follows.

1. The sales department processes and send offers to customers while managing product prices and lead times. During this phase, the sales team coordinates with the technical team to customize products to suit certain specifications desired by customers. They also arrange for new products and projects and ensure product availability to meet the desired customer schedule. Additionally, the sales department coordinates with the customer service department to ensure that customer orders have been recorded into the system for further processing.

2. The Supply Chain Department receives the product orders and prepares them for affiliates. It also arranges forwarder selection, pick-up schedules, and product delivery from affiliates to Indonesian ports. Furthermore, it ensures the company’s schedule aligns with the customer's waiting time.

3. The Quality & Regulatory Department ensures that product specifications and documents are completed as requested by the customer. The documents often include halal product requirements documents and others products specification. The Quality & Regulatory Department also handles and follows up on customer complaints and coordinates replacing products that fail not to fulfill customer specifications and product returns to affiliates.

4. The customer service department handles the customer's order and coordinates with the supply chain to ensure the product arrives on time and is sent to the warehouse. It also coordinates with the warehouse to arrange the delivery of the goods to the customer with dully-filled supporting documents. After sending out the delivery note, the customer sales department will also issue a sales invoice and all relevant documents to the finance department for the billing process.
5. The finance department monitors the entire process since it authorizes pre-approval processes, from ordering to tax invoices and billing issuance. The finance controller will monitor daily sales reports to match the sales forecast for reporting to management. The finance department is responsible for the billing process.

PT. S's new business model eliminates storage (warehouse) operation; therefore, they are directly sent to the customer's warehouse after the product arrives in Indonesia. Good coordination between all parties (company-distributor-transporter) is required to ensure the success of the entire process to reduce a customer's waiting time.

The advantage of the new model is that no product is stored at PT. S (target for zero inventory level). Nevertheless, the customer waiting period necessitates that the company has some inventory in its ledger. The inventory is entrusted to the selected distributor, who agrees with the rental house for inventory storage and adjustment. The distributors also took over communicating with customers, filling their complaints, and billing them.

By the end of 2019, the company was expected to align itself to the new business model, thus affecting its employee composition. Due to the change, it laid off eight workers and hopes to increase its sales by cooperating with the distributor as the sales team shifted its focus on business and product development. The value chain also focuses on managing the primary activities, such as technical, supply chain, and sales & marketing. Furthermore, the objective of this focus is to improve the company’s competitive advantage, thus providing satisfactory results for management and shareholders.

The restructuring has enabled the company to focus its operations on product development processes and technical and inbound processes as part of the value chain prioritized by management as the primary activities. The elimination of outbound, internal processes through third-party warehouses has enhanced efficiency within the company.

The sales and technical teams in the value chain are considered primary activities by PT. S, hence they were maintained during restructuring to improve the performance of the Indonesian office without sacrificing too many employees.

The interview respondents indicated that after a change in the business model, the operational process seemed more efficient during the ordering process to affiliates, bidding processes, and product inbound transportation. These functions were also facilitated by the distributors' implementation of a consolidation order system, as the SCM managers mentioned through the interviews:

"Yes, the process now is more efficient because we could compile all the orders together and send them to distributors in bulk, even though sometimes there are challenges due to different shelf life."

The transition has met some challenges, including the Covid-19 pandemic affecting transportation schedules, administration problems with customers' complaints, and difficulties delivering following the customer's request. However, the consolidation system is considered effective in helping the operation. The distributor seems to have an excellent relationship with customers. Still, there is an AR collection problem for one distributor initially appointed as the primary distributor, leading to a contract termination between the company and the distributor. The number of distributors remaining is two for each coloring and flavoring segment.

Financial Analysis

The company intends to implement the new business model in the third quarter of 2019 and to jump to full operation by the end of the third quarter of 2020. The result at the beginning of 2021 has shown great potential, with sales figures meeting the projected value of 2020. Though Covid-19 came with several restrictions on business activities, it did not have a major negative impact, with sales increasing instead of reducing. Sales performance trends after the restructuring are shown in the following figure. The trends show increment after the new business implementation (figure 2, page 14).

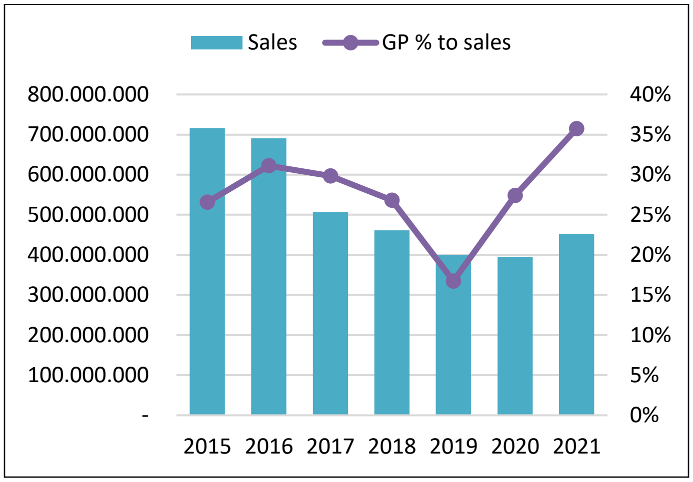

Figure 2 Sales Trends

Source: PT. S (2020), processed data.

The summary of performance since the implementation also shows positive signs in 2021 for sales, gross margin and operating profit. Numbers are shown in table 1.

Table 1 Financial Performance

Remarks	2020		2021 (Forecast)	
	Budget	Prior Year	Budget	Prior Year
Sales	-8%	-2%	6%	6%
Gross Margin	-7%	27%	27%	32%
Operating Profit	18%	147%	51%	50%

Source: PT. S (2020), processed data.

According to the financial data in table 1, the company has a positive trend compared to the previous year. Sales during 2020 showed a negative trend compared to the projected and previous year's values, though the operating profit is positive. Additionally, the change in the business model in 2021, the sales trend, gross margin, and operating profit showed positive results compared to the target budget and the previous year's values.

The new business model eliminated the value chain of outbound activities, thus causing organizational restructuring and laying off several employees. Through the changes, it is targeted that there will be no inventory recording on the company's ledger in the future. Therefore, it is expected that starting from 2020, the inventory level will decrease slowly towards zero-level inventory. Inventory costs that reduce can be the cost of capital for the company to be used in other investments. In general, inventory costs have several components, such as storage/carrying costs, inventory handling costs, cost of capital, insurance, etc. These cost components have changed due to changes in the company's business model. The cost of inventory capital, if not used, can be used as investment capital for the company by using the concept of cost of capital (CAPM). The estimated cost of inventory capital of PT. S is calculated using the difference between the book value of inventories in 2020 and 2019. This difference in the value of inventories is an assumption of the value of inventories in the balance sheet if it does not change its business model.

The inventory book recorded in 2020 was 33,429,372,630, while the inventory in 2019 was 56,227,887,395 so the difference in the decrease in inventory recorded was 22,798,514,765. The risk-free interest rate uses a deposit rate of 3.51% (Bank Indonesia, 2021). The market interest rate is 6.56% (bigbrotherinvestment, 2021), and the beta value is 1 (assumption). The difference between market and risk-free interest rates (Rm) is 3.05%. The cost of inventory capital can be calculated using the CAPM model as follows:

$$Rs = Rf + \beta \, x \, (Rm - Rf) \tag{1}$$

Remarks:
Rs = cost of equity
Rf = risk-free rate
β = beta
Rm – Rf = market risk premium

After calculating the data according to formula (1), the value of Rs is 1,495,582,569. This value describes the opportunity cost of inventory capital costs using the CAPM approach. Changes in the business model by changing some of the company's value chains can provide investment opportunities from the reduced cost of inventory capital. The impact of reduced inventory savings from changes in business models, including inventory capital costs, warehouse costs, and restructuring, can be seen in Table 2 on page 16.

The change also contributed to a 23,56% cost savings from the total projected sales value in 2021. The data on cost savings are shown in table 2 (page 16).

Table 2 Cost Savings from Restructuring and Changes in Business Model (IDR 000)

Remarks	***2020 (actual)***	***2021 (estimate)***	***Saving***
	Before	***After***	
Cost of Capital			
Opportunity cost of inventory			1.495.583
Inbound activities cost			
Import fees	11.830.000	8.705.000	3.125.000
Outbound activities cost			
Storage fees	5.260.000	890.000	4.370.000
Transportation etc	3.815.000	1.470.000	2.345.000
Sales & General Admin			
Wages	21.670.000	12.775.000	8.895.000
Others	1.050.000	-	1.050.000
TOTAL			**21.280.583**
% to Sales			**23,56%**

Source: PT. S, (2020), processed data.

Table 2 shows the savings made by the company's operations due to the cost of inventory, inbound, outbound, and SGA activities. This resulted from restructuring and changes in the business model at PT. S. Table 2 shows annual savings due to the loss of some assets, inbound and outbound activities, such as the efficiency of the ordering process from affiliates by consolidating orders. Reduced transportation costs also caused savings, and warehouse costs were eliminated as third parties took temporary storage before the products were sent to customers. Additionally, costs were saved on salaries since some personnel was laid off.

Product Profitability

Since 2018 PT. S has focused its sales segment on flavoring and coloring products, with several superior products, thus contributing to its profit margin. The company has had a product mix, but it has not evenly distributed profit between each product. The summary of product profitability by each product segment is shown in table 3 (page 17).

Table 3 Profitability by Product Segment

Segmen	% sales		GP Contribution	
	2020	2021	2020	2021
Colour	73%	74%	77%	75%
Flavour	27%	26%	23%	25%
Colour				
Synthetic	48%	45%	52%	41%
Natural	52%	55%	48%	59%

Source: PT. S (2020), processed data.

Table 3 indicates that PT. S has several superior products, with its coloring products taking up the largest sales composition. The table shows that more than 70% of sales originate from coloring products. However, the table also that natural dyes are beginning to take portions of the food coloring market. One factor influencing the rise in the natural dye is the regulations (BPOM) on ingredients used in food and beverage products requiring natural coloring. The regulatory trend project that 2020 and 2021 sales will be dominated by natural colours, but according to the interviews, the company still maintains the sales for the flavour segment due to the high quantity (sales number) affecting the sales number in the monthly target, as quotes below:

"Company still maintain several commodity products due to the sales number still high (big quantities) eventhough the margin is not too good".

PT. S should focus on excellence as it implements changes in the business model and highlights its strong value chain model. Therefore, the company should prioritize the development of natural coloring products to meet the regulation and current trends. This can help in replacing less profitable flavoring products with coloring ones.

In general, the company's financial performance after the business model changes seems to be improving and shows a positive trend. The data showed positive sales data compared to the previous year's budget and performance, increasing 6%. Positive gross profit margin compared to budget (27%) and last year's performance (32%), operating profit also shows a positive trend compared to last year's budget and performance (50%). Based on the results of interviews throughout 2021, there is also an increase in sales of natural dye products. However, some areas still can be improved, such as the product mix and AR collection SOP development to avoid the collection problems.

Cost Management Analysis

Activity cost management (activity-based management) is defined by CAM-I (Consortium for Advanced Manufacturing-International) as a discipline focusing on managing business activities to promote the company's goal and increase the value given to the customers. ABM uses ABC as its primary data source to conduct cost driver analysis, activity analysis, and performance measurement.

The company's sales and administration cost activities (SGA) are divided into four categories of cost centers: SCM (inbound & outbound activity) costs, sales department, research and development department (R&D – technical team), and administration department (such as supply chain and quality & regulatory personnel costs).

The ABM approach helps the company examine the efficiency of a cost analysis of the company's main activities. It also facilitates a review of each department's process and establishes how to maximize its competitive advantage. The ABM's cost classification is expected to enable the company to manage its main and supporting activities, thus improving business performance and operational processes, reducing costs and deciding on the optimal product mix.

6. Conclusion and Suggestions

This study aims to evaluate the effectiveness of the transformation of business model changes. The evaluation is carried out using a strategic cost management framework. Based on the results of the interviews and analysis of data under the strategic management framework from the evaluation of the business model change of PT. S can be concluded as follows:

- The company's competitive advantages from the SWOT analysis include the latest technology in coloring products, various natural coloring products, a local technical team that customizes customer products, and coloring technology coupled with flavoring in one solution. The weaknesses comprise long lead times due to direct imports from non-Asian countries, such as America and Europe. Hence, PT. S has presented several opportunities in Indonesia since the market is enormous. The adoption of distributors also presents another opportunity for additional markets because the products are expected to be evenly distributed to all areas of Indonesia (currently only covering Java island). The company's major threat is a product from competitors uniformly distributed across the country and cheaper.

- The change in the business model also altered the company's value chain. Specifically, it brought distributors responsible for third-party storage operations (warehouse operations) and customer deliveries (outbound logistics). The management transfers risk to distributors required to run internal storage operations. By eliminating these two value chains, the company adds value to its competitive advantage since the products ordered by customers can be available on time at competitive market prices. Moreover, it focuses on the value chain's primary activities-technical, product activities, supply chain (inbound activities), sales, and marketing, which follows the theory of value chain analysis from Porter (1985).
- The company's financial performance showed an improvement in revenue, gross margin, and operating income trends. The operating costs significantly decreased from the previous business model values. The financial performance also showed operational cost savings due to eliminating several value chain activities, such as warehouse storage, product import, and transport costs. The product profitability mix is not evenly distributed because some products are still less profitable but are maintained because the quantity is significant. The cost management activities are categorized into four centers: SCM, sales, technical, and administrative. The cost activity decreased after the change in the business model, with the activity for the admin department being dominant.

The analysis was only carried out on a single unit PT. S in Jakarta. The study's limitation was that the analysis did not include competitor analysis due to the data constraint. Additionally, the main focus was on evaluating changes in the business model using a strategic cost management framework. Therefore, future studies should be complemented by addressing these issues.

Additionally, the following changes and suggestions in the business model are necessary:

- Strengthen the product position of natural coloring products in the Indonesian market along with the regulation momentum and expand the distributor's distribution sales area.
- Develop a standard operating procedure for AR collection. With sales volumes relying on distributors and no bank guarantees, distributors' default risks can be high, hence the need to periodically carry out receivable collection procedures and credit terms reviews.

- The company should regularly review product mix, focusing on superior products that generate positive margins. The company should also implement activity-based cost allocation, such as distributing the general cost evenly to all cost centers.
- Provide training on the development of new products and the latest technology (update product training) to the sales and marketing teams of distributors regularly.
- Focus on long-term strategy with the value proposition company. The company should focus on product differentiation in the natural color and develop a new project or color technology with the local technical team support.

REFERENCES

Amit, Raphael, and Christoph Zott. (2012). "Creating Value through Business Model Innovation." *MIT Sloan Management Review* 53(3). https://sloanreview.mit.edu/article/creating-value-through-business-model-innovation/ (July 18, 2021).

Bank Indonesia. (2021). *BI 7-Day Reverse Repo Rate*. bi.go.id. https://www.bi.go.id/id/publikasi/ruang-media/news release/Pages/sp_2333221.aspx

Bigbrothersinvestment.com. (2021). *daftar risk premium berdasarkan negara*. bigbrotherinvestment.com. www.bigbrothersinvestment.com

Blocher, Edward J., David E. Stout, Paul E. Juras, and Steven Smith. (2019). Eighth Edition *Cost Management: A Strategic Emphasis*. Eighth Edition. New York: McGraw-Hill Education.

Christensen, C. M., Bartman, T., & Bever, D. van. (2016). The Hard Truth About Business Model Innovation. MITSloan Management Review, 58(1), 1–12.

Denzin, and Norman K. (1978). The Research Act: A Theoretical Introduction to Sociological Methods. Second Edition. United States of America: McGraw-Hill Book Company.

Euromonitor. (2020). *Macroeconomic Outlook Report: Indonesia PESTLE Insights*.

Gibson, C. H. (2013). Financial Reporting & Analysis Using Financial Accounting Information: Vol. Thirteenth Edition (Thirteenth). Cengage Learning. www.cengage.com/highered

Johnson, Mark W. (2018). "Reinvent Your Business Model: How to Seize the White Space for Transformative Growth." In Harvard Business School Press Books.

Miles, Matthew B., and A. Michael Huberman. (1994). Second Edition *Qualitative Data Analysis an Expanded Sourcebook*. Second Edition. California: SAGE Publications, Inc.

Osterwalder, Alexander, Yves Pigneur, Alan Smith, and The Movement. (2010). 30 Booksgooglecom *Bussiness Model Generation*.

Pearce II, John A., and Jr., Richard B. Robinson. (2009). *Strategic Management*. Third Edition. McGraw Hill Education.

Porter Michael, E. (1985). "Competitive Advantage: Creating and Sustaining Superior Performance." *The Free*.

PT. S (2020). *Laporan Tahunan 2020*. Jakarta, Indonesia.

Shank, J, and V Govindarajan. (1992). "Strategic Cost Management: The Value Chain Perspective." *Journal of Management Accounting Research* 4(Fall).

Sugiyono. (2015). Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D *Metode Penelitian Dan Pengembangan Pendekatan Kualitatif, Kuantitatif, Dan R&D*.

Taylor, David H. (2005). "Value Chain Analysis: An Approach to Supply Chain Improvement in Agri-Food Chains." *International Journal of Physical Distribution and Logistics Management* 35(10).

Wahyuni, Sari. (2016). "Qualitative Research Method: Theory and Practice." In *Jakarta: Salemba Empat*.

Yin Robert K. (2016). Second Edition *Qualitative Research from Start to Finish*. Second Edition. New York: The Guilford Press.

Zikmund, William G, Jon C Carr, Mitch Griffi, and Barbara Fuller-jacobsen. (2010). "Business Research Methods." *South-Western, Cengage Learning* 8(1).

APPENDIX

Appendix 1. Respondent Data

Respondent	Tenure	Position	Interview Mode	Interview Duration	Topics
R1	2 years	Former GM	Video Call	30 minutes	Competitive advantage, strategy and his insight for the Indonesia business unit.
R2	5 years	Sales Manager	Video Call	45 minutes	Sales strategy, competitive advantage and distributors collaboration.
R3	4 years	Quality & Regulatory Manager	Video Call	30 minutes	Process before and after, insight after the changes.
R4	2 years	Supply Chain Manager	Video Call	45 minutes	Outbound inbound process, insight strategy.
R5	4 years	Finance Controller	Video Call	60 minutes	Financial outlook before and after changes, competitive and business strategy.