

DEVELOPMENT OF PERFORMANCE EVALUATION AND CONTROL MODELS FOR THE COMPANY'S PRODUCT SALES TO ACHIEVE COMPETITIVE ADVANTAGE

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ABSTRACT. *Processed foods for special medical purposes, are processed foods that are specifically processed or formulated for dietary management for people with certain diseases/disorders. In business terms, the products have large profit margins even though the sales volume of these products is relatively small compared to general dairy products. However, the existence of these products is important for business, namely as a complement to the portfolio of products and facilities to gain the confidence of medical personnel so as to increase the company's credibility, especially in research and scientific fields. However, there is still a gap between product sales and sales targets set by the company. Therefore, it is necessary to analyze what factors influence the sales products. The analysis was performed using the factor analysis method followed by the regression analysis method to build the gap model that occurred so that it can be used to simulate the model. This study produced a number of new variables, namely quality of products and services, supporting product positioning, product planning and promotion, and product exclusivity and formed a model understanding the sales health nutrition team on product internal support and product strategy.*

Keywords: Dietary management, Product sales, Model development, Factor analysis, Competitive advantage

1. Introduction. The first 1000 days, namely from the time the fetus is in the womb until the age of 2 years is a golden period of growth and development. Children are the hope of the nation's future, but unfortunately the current condition of nutritional problems is still a problem for many Indonesian children. The results of the 2018 Basic Health Research show that 17.7% of toddlers (under 5 years old) still experience nutritional

problems, namely 3.9% experiencing malnutrition and 13.8% experiencing malnutrition. Likewise with toddlers who are stunted (below standard height) which is around 30.8% and there are still other cases that require special attention. Toddlers with special needs need to be supported by medical nutrition which can be referred to as special medical needs products (SMNP). In business terms, SMNP products have a large profit margin even though the sales volume of these products is relatively small compared to dairy products in general. The small volume is due to users of SMNP products that are intended for patients with certain medical conditions. However, the existence of these products is important for the corporate business, namely as a complement to the product portfolio and a means to gain the trust of medical personnel so as to increase the company’s credibility, especially in the research and scientific fields. If medical personnel and the public have confidence in the company’s credibility and product quality, their trust will increase so that they are expected to use products from the same company for sustainability in helping to fulfill children’s nutrition.

The market potential for SMNP products still allows growth because the need for SMNP products is still quite large, for example, the need for products for babies who experience poor nutritional status and malnutrition. There is still potential for growth of PT. XYZ products, so analysis is needed to identify factors that can affect sales of SMNP products, so that significant factors can be identified and what needs to be improved to increase sales of AMN products. The analysis is carried out on the company’s internal processes through value chain analysis and product strategy [1].

When viewed from the trend of the last 5 years, sales of SMNP products belonging to PT. XYZ continue to increase but until 2018 it is still below the target set by the company. The sales growth of PT XYZ’s SMNP products from 2012 to 2018 can be seen from the graph of Figure 1.

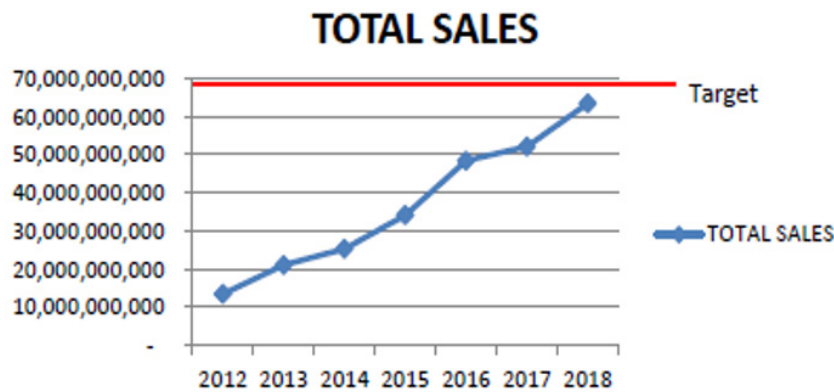


FIGURE 1. Chart of total sales of N products 2012-2018

Sales growth in 2018 was 21.7%; this value was still below the target given by the company, which was 30%. The high target is due to the small volume of PT. XYZ’s products. For this reason, in 2019 it is expected that there will be an increase in sales so that SMNP products can make a greater contribution to the business. The current condition of product sales of PT. XYZ has not met the sales target given by the company. Optimizing the company’s internal support becomes important because of the limitations in the marketing activities of this product. Therefore, it is necessary to further explore the factors that can affect the total sales of products from internal companies. By knowing the significant factors that can affect sales, then optimization of these factors can then be carried out and further exploration needs to be carried out to build the right strategy in increasing the competitive advantage of sustainable sales of SMNP products.

2. Literature Review.

2.1. **Level of strategy.** In general, strategic management is a series of activities made by the company leaders to make decisions that are fundamental and comprehensive, and how to implement them, implemented by all members in the organization to achieve goals. According to the level, it can be divided into 3 strategies, namely corporate level strategy, business level strategy, and functional level strategy [2].

2.2. **Sales growth.** Sales growth is a reflection of the company's ability over time. The company successfully runs its strategy if the sales growth rate is higher. The formula for calculating the growth of sales per year can be calculated by dividing the difference in annual sales with previous year's sales divided by the sales of the previous year [3].

2.3. **Value chain analysis.** Michael Porter defines "Value Chains" as representations of activities that add value to a company, based on pricing strategies and structural costs [29]. The company's ability to understand internal capabilities and customer needs to support the success of competitive strategies. The function of value chain analysis is as an analytical tool to understand competitive advantage, identify things that can reduce prices, and help understanding related to the company's relationship with stakeholders (suppliers, customers, and other companies in the industry).

Value chain analysis consists of the following.

- 1) Primary activities consist of: Inbound logistics; Operation; Distribution/Outbound logistics; Sales and marketing; Service.
- 2) Supporting activities consist of: Development of R&D; Human Resource Management; General Administration.

3. Methodology.

3.1. **Competitive value and excellence chain analysis.** Value chain analysis can be used to formulate competitive strategies, understand sources of competitive advantage, identify and/or develop relationships and linkages to activities that create value. Competitive advantage is based on how values are created in implementing competitive strategies. Generic competition strategies consist of 3 parts, namely cost leadership, differentiation, and focus.

3.2. **Factor analysis method.** Factor analysis is a statistical analysis tool that is used to reduce the factors that influence a variable into just a set of indicators, without losing meaningful information. Measuring instruments that can be used to measure adequacy are as follows.

- 1) Kaiser-Meyer Olkin (KMO), among the existing variables, the correlation matrix setting is done by determining the Barlett test of sphericity value, which functions to determine the significant correlation between variables, and for the adequacy sampling test, KMO can be used.
- 2) In a set of variables that are formed, factor extraction techniques can be carried out to produce one or more factors.
- 3) The varimax rotation method is used for the iteration process so that it becomes a matrix that is simpler and easier to understand.
- 4) Form the name of the new factors based on the variables that have been determined.
- 5) For further analysis, a factor score is required.

3.3. **Research instrument.** To evaluate the company internal support, the result of this factor analysis can be used by the first determining what concept or theory to use, then looking for the factors contained in the theory used, determining the indicator associated with the defined factors and searching the literature for further construction can be built as in Table 1.

TABLE 1. Research instrument construction

Factor	Indicator	Reference
Inbound logistic	Process order	[4]
Operation	Product quality standard	[5]
	Product quality	[6]
Outbound logistic	Distribution product	[7]
	Transportation	[8]
	Inventory	[9]
	Warehousing	[10]
Marketing and sales	Sales forces effort	[11]
	Advertising & promotion	[12]
	Market research & planning	[13]
Service	Distributor support	[14]
	Complaint	[15]
	Aftersales service	[16]
Research & development	R&D innovation	[17]
	Database (consumer)	[18]
Human resource development	Training and development	[19]
	Knowledge based, skills and core competencies	[20]
	Hiring & recruitment	[21]
General administration	Management information system	[22]
Consumer target	Strategic alliances, collaboration with strategic partner	[23]
	Special consumer	[24]
Superiority product	Product attribute	[25]
	Product perception	[26]
	Price	[27]
	Product innovation	[28]

4. Result and Discussion.

4.1. **Respondent demographics.** Distribution of questionnaires was spread using Google Forms. It is because respondents are scattered in various regions of Indonesia. The questionnaire was given to the sales/health nutrition team where the team had product responsibilities and related to product sales. Results of questionnaires obtained 100 respondents who filled out the questionnaire. Respondents from the sales division were 31 and 69 from the health nutrition division.

4.2. **Reliability test.** Cronbach's alpha requirements are > 0.7 . The results obtained in the calculation of the reliability test of 25 factors are 0.865 so that the results meet the testing requirements.

4.3. **Validity test.** The requirement to test the validity of the factor analysis method is the KMO value > 0.5 and Barlett's test requirements is < 0.001 . The results of the testing of 25 factors for the KMO test = 0.732 while the Barlett's test results = 0.000 so that the results of KMO and Barlett's testing meet the testing requirements.

4.4. Factor analysis result. The results of data processing obtained the relationship between the dependent and independent variables as follows:

$$Y = 7.270 + 0.386X_1 + 0.259X_2 + 0.095X_3 - 0.004X_4$$

with the following conditions:

$$-5.311 \leq X_1 \leq 2.568$$

$$-2.064 \leq X_2 \leq 2.989$$

$$-2.795 \leq X_3 \leq 2.565$$

$$-2.109 \leq X_4 \leq 2.989$$

Description:

Y = Understanding the sales/health nutrition team on product internal support and product strategy

X₁ = Quality of products and services

X₂ = Supporting product positioning

X₃ = Product planning and promotion

X₄ = Product exclusivity

It can be concluded as follows.

1) Quality of products and services factor is positive with a coefficient of 0.386 which means that the quality of products and services increases, and the sales/health nutrition team will increasingly understand that the company has provided good support for product sales. A one point increase in product quality and service factors will increase the understanding of the sales/health nutrition team by 0.386 assuming the value of other factors is constant. The value is considered significant if the significance value is < 0.05 . The results of the calculation for the significance value are 0.001 where $0.001 < 0.05$ so that the factor has a significant effect.

2) Supporting product positioning factor is positive with a coefficient of 0.259, which means that the value of the product positioning support increases, the sales/health nutrition team will be more aware of the company's support for product sales. Where there is an increase of one point towards the supporting factors of product positioning, the understanding of the sales/health nutrition team will increase by 0.259 assuming the value of other factors is constant. The calculation results for significance values are 0.031 where $0.031 < 0.05$ so that the factors have a significant effect.

3) Product planning and promotion factor is positive with a coefficient of 0.095 meaning that the better the planning and communication of products, the sales team will increasingly understand that the company has provided good support for product sales. With an increase of one point towards product planning and communication factors, the understanding of the sales team will increase by 0.095 assuming the value of other factors is constant. The calculation results for significance values are 0.031 where $0.031 < 0.05$ so that the factors have a significant effect.

4) The product exclusivity factor is negative with coefficient of -0.004 , which means that the product's exclusivity decreases, and it will increase the understanding of the sales team towards the company's support for product sales. Where there is a decrease of one point towards the product perception factor, the understanding of the sales/health nutrition team will increase by 0.004 assuming the value of other factors is constant. The results of the significance calculation are 0.976 where $0.976 > 0.05$ so that the factor does not have a significant influence.

From the simulation of the calculation of the model in Table 2, it is known that before this research was known the value of the understanding of the sales/health nutrition team towards internal support was 7.270. However, if the company pays attention to four new factors, the understanding of the sales/health nutrition team will increase to 9.268 while if the company does not pay attention to these four factors, the value of the understanding of

TABLE 2. Simulation results of the sales/health nutrition team understanding

Condition	Constant	X_1	X_2	X_3	X_4	Y
Currently	7.270	0	0	0	0	7.270
Expected	7.270	2.568	2.989	2.565	-2.109	9.268
Un-expected	7.270	-5.311	-2.064	-2.795	2.989	4.388

the sales/health nutrition team will decrease to 4.388. To get the maximum understanding value of the sales/health nutrition team, which is 9.268, the company must increase factor X_1 to 2.568, factor X_2 to 2.989, factor X_3 to 2.565, and factor X_4 to -2.109.

5. Conclusion.

5.1. Quality of products and services. Company needs to increase the factor X_1 , namely quality of products and services to reach the maximum value of 2.568. The steps that can be taken are related to product quality, namely conducting research and development activities. Another step is to improve the ability of the sales/health nutrition team to have better selling capabilities, pay attention to aftersales service because it can be an important point in service, and companies also need to explore alliance strategies to develop the market. An increase in indicators that influence quality of products and services can add to the companies internal support points for product sales.

5.2. Supporting product positioning. The factor X_2 gives a positive value. To increase factor X_2 , which is the supporting product positioning, the company needs to increase factor X_2 to reach a maximum value of 2.989. The steps that can be taken by the company to increase factor X_2 are

- 1) trying to suppress the price by doing production locally,
- 2) increasing core competencies so that they can support competitive advantage, and one of them is product innovation,
- 3) appropriate recruitment process so that information scientific can be delivered accurately,
- 4) paying attention to the order process so that the ordered product is in accordance with the needs,
- 5) paying attention to the consumer database because it can be used to develop long-term marketing.

5.3. Product planning and promotion. From the simulation results, it is found that the company needs to increase the X_3 factor, namely product planning and promotion to reach a maximum value of 2.565. Steps that can be taken are

- 1) optimizing the results of marketing research for information retrieval that will help capture market share,
- 2) pay attention to inventory planning and warehouse management,
- 3) maintaining product attributes and marketing activities in the form of sponsorship of health personnel research and symposiums,
- 4) product detailing that is able to show indications and scientific data,
- 5) establishing wider cooperation with health facilities.

5.4. Product exclusivity. From the simulation results, it is found that factor X_4 , which is the product exclusivity, is negative, which means that the perception of the product is more exclusive, so that the company's support for product sales is declining. This is because products that have exclusive perceptions are only used by certain consumers so that sales volume becomes smaller. The steps that can be taken by the company to reduce product exclusivity are

- 1) expanding the network to increase product sales,
- 2) further review related to the selection of transportation modes so as to reduce shipping costs.

Based on the simulation results of the understanding of the sales/health nutrition team, it was found that the company could increase the sales team's understanding of the company's internal support to reach 9.268. If the company does not pay attention to these four factors, the understanding of the sales team can drop to 4.388. Therefore, companies need to take important steps so that each factor can reach its optimum value.

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