

ANALYSIS STRATEGY OF SUPPLY CHAIN AT THIRD PARTY LOGISTICS WAREHOUSE FOR DISTRIBUTION PROCESS

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ABSTRACT

Research objective is to determine the strategy supply chain that focuses on storage and distribution, as the company acts as a third party logistics, using SWOT Analysis. Through tabulation IFAS and EFAS later to view the results using the Analysis Diagram 4-K that it produces results IFAS (score 0.79) and EFAS (score -0.31) which produces Supporting Strategies Turn-around. So, the overall total could be seen from the Matrix Internal external is from Internal yield of 3.91 points and 2.46 of external. It means, the company can focus on stability, and the latter using SWOT Matrix (TOWS) to see the position of company that can take one of several possible strategies and company getting WO (weakness and opportunity). Its means, the company should be able to reduce weaknesses in the company in order to take advantage of opportunities that could advance the company.

Keyword: Strategy, Supply Chain, Distribution process, Third Party Logistics.

INTRODUCTION

Innovation in logistics become more interesting and dynamic with increasing demand of service ordering goods. Local, either international logistics companies, have integrated with other logistics services such as *cargo agent, freight forwarding, courier service, custom broker* and so on. Innovation and strategy for logistics today must be emphasized based on information system. Warehousing have always integrated on the Supply Chain Management, as the system controlling the supply chain of any goods originating from producer who want to send to the store or retail require a warehouse as a place of storage of the goods.

Having warehousing 3PL system (Third Party Logistics) has functional very

much at all in serving the Customers who are Business to Business to increase the effectiveness of work and stressed that the cost of expenses and time needed is not too much. Otherwise, 3PL also have function as warehouse integration services to serve the customers who requires added value for their shipment or cargo. In logistics business competition today, companies should prepare appropriate strategies and see where it stands in the competition, so in dealing with service to customers continues to run well and keep their loyalty. PT. Agility International is one of 3PL logistics company that located in Halim Perdanakusuma, east Jakarta. This company focuses on logistics contracts to improve the effective completion so as to emphasize the production cost of their clients.

LITERATURE REVIEW

Every organization always strives to maintain the balance of internal and external factors in order to continue to take advantage of business opportunities and can effectively face challenges and threats to the organization. Therefore, organization leaders usually prepare a strategic planning based on process analysis and evaluate and formulate the strategic planning that will be run by the company. Strategic planning is organization's process of defining its strategy or direction and making decisions of allocating its resources to pursue this strategy. It may also extend to control mechanisms for guiding the implementation of this strategy.

Strategic planning is useful for companies to quickly anticipate changes in internal and external conditions, taking into account in detail the conditions of consumers, distributors, and competitors as well as other factors. Research Group at the University of Tennessee has defined Supply Chain as the systematic strategic coordination of the traditional business functions within a particular company and across business within the supply chain for the purposes for improving the long-term performance of the individual companies and the supply chain as a whole (Mentzer, 2004). Parallel to the growth in the importance of distribution and logistics has been the growth in the number of associated names and different definitions that are used.

Some of the different names that have been applied to distribution and logistics include: physical distribution; logistics; business logistics; materials management; procurement and supply; product flow; marketing logistics; supply chain management; demand chain management; and there are several more (Rushton, Croucher and Baker, 2006). As well as this, logistics is concerned with *physical* and *information* flows and storage from raw

material through to the final distribution of the finished product. Thus, supply and materials management represent the storage and flow into and through the production process, while distribution represents the storage and flows from the final production point through to the customer or end user.

Major emphasis is now placed on the importance of information as well as physical flows and storage, and an additional and very relevant factor is that of reverse logistics - the flow of used products and returnable packaging back through the system. Third-party logistics providers typically specialize in integrated operations, warehousing and transportation services which can be scaled and customized to customers' needs based on market conditions such as the demands and delivery service requirements for their products and materials. Often, these services go beyond logistics and include value-added services related to the production or procurement of goods, i.e., services that integrate parts of the supply chain. Inventory and warehousing/storage are factors that can not be separated from logistics and 3PL activities. All organizations keep inventory.

"Inventory" includes company's raw materials, work in process, supplies used in operations, and finished goods (Muller, 2003). Inventory is a large and costly investment. Better management of corporate inventories can improve cash flow and return on investment. Nevertheless, most companies (retailers, wholesalers, and manufacturers) suffer through periodic inventory rituals, that are crash-inventory-reduction programs instituted every year or so. However, the lack of comprehensive understanding of inventory management techniques and trade-offs often causes customer service levels to drop, so the programs are abandoned (Lambert, Stock, Ellram, 1998).

RESEARCH METHOD

Field data collection used observation, questionnaires and interviews to obtain primary data. In addition, secondary data were obtained through literature study. The research location was at PT Agility International warehouse at Jalan Halim Perdanakusuma, East Jakarta. Furthermore, the analysis method of the study used the type of SWOT analysis. This business planning analysis is quite popular besides several other analytical techniques such as PEST (Political, Economic, Social, Technological), STEER (Socio-cultural, Technological, Economic, Ecological, Regulatory), Porter's Five Forces Framework, etcetera.

The SWOT analysis is useful as an appropriate tool for discovering the problems from the different four sides; by applying the SWOT analysis, it is expected that the firm Strength will be able to take advantage of the opportunities as well as formulate ways to overcome potential weaknesses of the organization to prevent gain. Furthermore, the strengths and weaknesses of the organization can be further escalated and improved to deal

with threats to the existence and profitability of the company.

RESULTS AND DISCUSSION

SWOT is a strategic planning method used to evaluate strenghts, weaknesses, opportunities, and threats in a business or enterprise project. This technique was composed by Albert Humphrey who led a research project at Stanford University in the 1960s through the 1970s using data from Fortune 500 companies. The essence of SWOT analysis is to assess the internal side of the company in the form of strengths and weaknesses of the organization and to assess the external side of the company by looking at opportunies and threats.

After analyzing all the factors, the next thing to do is how to maximize strengths and to cover the weaknesses in order to take advantage of opportunities and to counteract all potential threats. Following is SWOT analysis approach through three stages of analysis: 1) the data collection phase; 2) the analysis stage; and 3) decision-making stage.

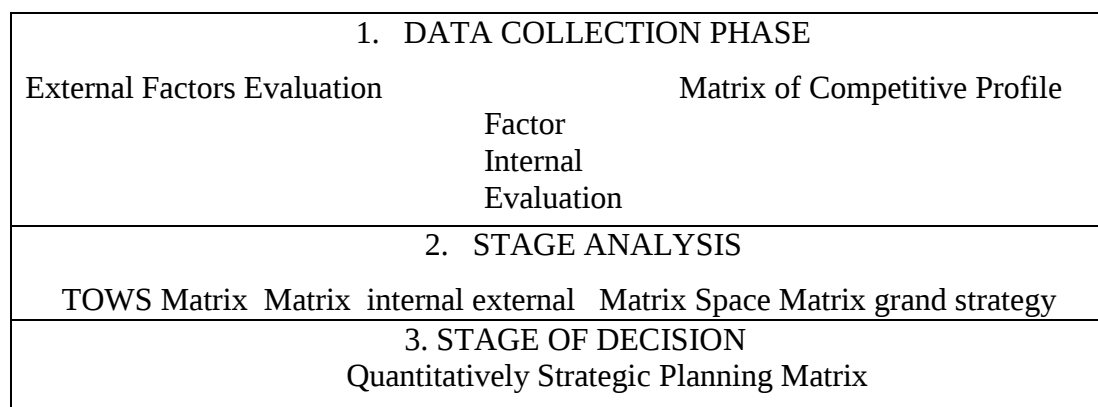


Figure 1 SWOT Three Stages Analysis

SWOT analysis compares internal factors such as the strength and weaknesses and external factors such as opportunities and threats. The stages of activities are: 1) determine the list of IFE and EFE; 2) looking

for data scope strengths or weaknesses (IFE) of the organizations surveyed while looking for opportunities or threats scope of the data (EFE) of the environment and the environment outside the organization.

Furthermore 3) determining IFAS

(Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary); 4) synthesis Factors IFAS and EFAS; 5) determining 4-K Diagram; 6) Internal-External Matrix (IE Matrix); and 7) SWOT Strategy Formulation.

This research used quantitative and qualitative data. The research population consisted of 40 company personnel in PT Agility International warehouse in Halim Perdanakusuma with some of them taken as the sample of this research through interview technique and questionnaire. Before performing an internal analysis, it is necessary to first analyze the external factors of the company. The external data of environment can be obtained by: 1) market analysis; 2) analysis of competitors; 3) supplier analysis; 4) analysis of government; and 5) analysis of specific interest groups, include mass media, and so on. While, internal data of the company, such as: 1) financial statements (balance sheet, profit and loss, cash-flow, and financing structure); 2) report of the activities of human resources (number of employees, education, expertise, experience, salary, turnover); 3) sales and marketing report; and 4) operations and supply chain activity report, etc.

EFAS is the conclusion of the analysis of external factors that affect the sustainability of the company, To make the matrix External Strategies (EFAS) is done with some steps as follows: 1) arrange in a column A (5 to 10 opportunities and threats); 2) give weight of each factor in column B, ranging from 1.0 (very important) to 0.0 (not important). These factors could gave an impact on the strategic factors potentially; 3) calculate the rating (in column C) for each factor to give a scale ranging from 4 (outstanding) to 1 (poor) based on the influence of these factors to the company. Ratings for opportunity factors are positive. Rating for factors that provide the greatest opportunity, while the value of 1 for the factor that gives the smallest chance. The

threat rating is the opposite, if the value is rated the largest 1, and the smallest threat is rated 4; 4) multiply the weight of the column B with a rating in column C, to obtain a weighting factor in column D. The result is a weighted score for each factor whose value ranged from 4.0 (outstanding) up to 1.0 (poor); 5) use column E to comments or notes; dan 6) total score weighting (column E), to obtain a total score weighting for the company. The total value of this shows how certain companies react to external strategic factors. Total scores can be used to compare the company with other companies in the same industry. Using quantitative methods, such as extrapolation, brainstorming, statistical modeling, or operations research, and so on, are encouraged to make predictions and assumptions sharply.

IFAS is the conclusion of the analysis of internal factors that affect the sustainability of the company, Similar to EFAS analysis can be done through the preparation of the matrix with the following steps: 1) determine factors into strengths and weaknesses in a column A; 2) give weight of each of these factors on a scale from 1.0 (most important) to 0.0 (not important), based on the influence of these factors to the company strategically (all weights are number may not exceed a total score of 1.00); 3) calculate the rating (in column C) for each factor to give a scale ranging from 4 (outstanding) to 1 (poor), based on the influence of these factors on the condition of the company. Variable that is positive (all variables are categorized strength) is assigned values ranging up +4 (huge opportunities) to +1 (less opportunity), compares with the other companies which averages or with major competitors. Weaknesses calculate as negative factors if the weakness is rated as the greatest weakness given a value of 1, and the smallest weakness is rated 4; 4) multiply the weight of the column B with a rating in column C, to obtain a weighting factor in column D. The result is a weighted score for each factor whose value

ranged from 4.0 (outstanding) up to 1.0 (poor); 5) use column E to comments or notes; dan 6) total the score in column D to obtain a weighted score for the company. The total value of this shows how certain companies react to internal strategic factors. Total scores can be used to compare the company with other companies in the same industry.

Furthermore, before strategic planning is developed top management needs to analyze the relationship between corporate management functions by studying corporate's structure, corporate's culture, and corporate's resources. The structure of the company can be known easily from the organizational structure of the company that describes the advantages and disadvantages and potentials of the

company. In addition top management must consider the corporate culture so that it will be in line with the strategic planning that is prepared, in order to get support from the employees. Support for the achievement of corporate objectives is also related to the resources of the company, which includes not only assets, human resources and facilities, but also the concepts and technical procedures commonly used by the company.

RESULTS AND DISCUSION

The simple implications of SWOT analysis are described in the following four quadrant positions.

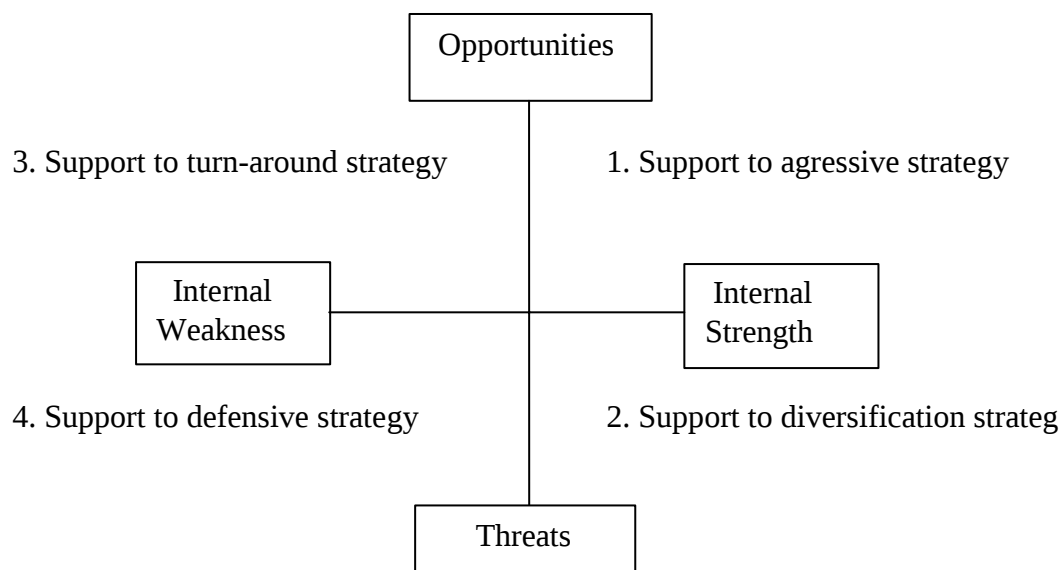


Figure 2 Four Quadrant Positions

Quadrant I: Company has a very favorable situation to take advantage of the available opportunities. The strategy should be used in this position is the growth oriented strategy.

Quadrant II: Although has many threats, company still strong, as well they should take long term opportunities with diversification

strategy.

Quadrant III: Company has a very huge opportunities but they face obstacles or weaknesses also. The focus of the company's strategy in this quadrant is to minimize the weaknesses to challenge market beter.

Quadrant IV: Company in very

disadvantage conditions, either has threats and internal weaknesses organisation seriously.

EFAS (External Factor Analysis Strategy) based on the SWOT analysis of PT Agility International consists of: Opportunities. Economic growth, especially in the logistics and transportation sectors, according to research from the Frost dan Sullivan Institute. Which rapidly increased by 12.5%, is an opportunity that needs to be utilized. In addition, the development of technology and information system will support the development of logistics business and 3PL that can facilitate the flow of goods information exchange to be more effective and efficient. The government of Indonesia's policy of prioritizing development in 12 economic sectors, one of which is the logistics sector, is also an opportunity. Threats.

Poor infrastructure causing high logistic cost. Infrastructure restrictive so that less support the competitiveness of the

logistics sector. In terms of the efficiency of customs administration, Indonesia is ranked 75, while in terms of the transparency of customs administration is rated 94 out of 121 countries assessed. As a result, about 25% of container takes 10 days to get clearance. The new rules related to pre-shipment inspection for certain commodities and restrictions on only 5 ports, is expected to add to the cost of logistics. If considered from the point of supply chain management infrastructure threat that many time throw this could affect the company resulting effectiveness weakness in the distribution. Expatriate (tenaga kerja asing) give provides benefits for the exchange of information and knowledge for Indonesian local workers, but on the other hand can pose a threat to the existence of these local workers. Competition in 3PL businesses increasingly tight is a threat that should be anticipated as well. These external factors are then summarized in the following table.

Table 3 EFAS Table of PT Agility International

Opportunities	Weight	Rating	Wheighted
The development of information systems and technology	0,11	3	0,33
Placement of the right goods for the effectiveness distribution	0,09	3	0,27
Economics and Logistics growth	0,11	3	0,33
MEAs is a big opportunity for Logistics Service Provider	0,11	3	0,33
Training to improve the quality of the employees in the company	0,12	3	0,36
Sub Total Opportunity	0,54		1,62
Threats			
Lack of infrastructure made high cost of logistics Indonesia	0,09	2	0,18
Expatriate logistics experts	0,11	2	0,22
Competitors in the 3PL business	0,09	2	0,18
Logistic costs	0,09	2	0,18
Handling customers complaints	0,07	1	0,07
Sub Total Threat	0,45		0,83
Total Score	0,99		2,45

External factors the development of information systems and technology score is 0,33. Come up from its weighting 0,11 and its rating is 3. Based on the result of the processing of primary data obtained weighting of 0,09 and a rating 3, scores placement of the right goods for the effectiveness distribution is 0,27, and so on. Our research result PT Agility International's strengths include networking and experience, PT Agility International was founded in 1979 in Kuwait.

The company focused on the logistics contract or 3PL (third party logistics) busines that handling finished goods from storage and distribution center to retail, manages

variously products such as health products, foodstuffs, machinery spare parts, office tools and clothing. Brand image of a good company is also marked the election of this company as a winner *The Best 3PL in Supply Chain Asia Logistics Award 2010-2012*. The location and layout of a warehouse that is superior to the distribution of products effectively and efficiently, in addition to competent human resources in the field is a factor of this company's strength as well. The weakness of the company in line with our interviews and questionnaires, including: high storage costs due to over stock or over load, resulting in accumulation of goods that cause goods to double handling and the addition of

labor costs. While the loading and unloading facilities are also limited to other weakness factors. This constraint can extend operating

hours so that the impact on operating cost inefficiency.

Table 4 IFAS Table of PT Agility International

Strengths	Weight	Rating	Weighted score
PT. Agility International located in East Jakarta	0,12	3	0,36
Placement of the right goods for the effectiveness of the distribution flow	0,12	3	0,36
Brand Image of PT. Agility International	0,12	3	0,36
Human resources able to compete in the warehouse handling	0,11	3	0,33
Appropriate product service customer desires and expectations	0,13	3	0,39
Sub Total Strength	0,60		1,80
Weaknesses			
High cost because over stock	0,09	2	0,18
Frequent occurrence of overload goods so that the goods do not have a place	0,06	2	0,12
Facilities were limited to the process of loading and unloading	0,07	2	0,14
Operational long- time causes low productivity	0,92	1	0,92
Not inventory accuracy between systems and physical	0,75	1	0,75
Sub Total Weakness	1,89		2,11
Total Score	2,49		3,91

Based on the result of the processing of primary data obtained weighting 0,12 and its rating 3. So the weighted scores obtained to Agility located in east Jakarta is 0,36. Weighted score of factor of Placement of the right goods for the effectiveness to distribution is 0,36 and so on.

CONCLUSION

Referring the calculation of IFAS and EFAS obtained weights, rating, and also score weighted, the values for the x-axis we get are internal factors (strengths and weaknesses), and the y-axis (opportunities

and threats). To locate the position of the company, then we use the following formula: Horizontal axis (X) = Total Sub Strength – Total Sub Weakness = 1,80 – 2,11

= - 0,31, while Variance axis (Y) = Total Sub opportunities – Total Sub Threat = 1,62 – 0,83 = 0,79

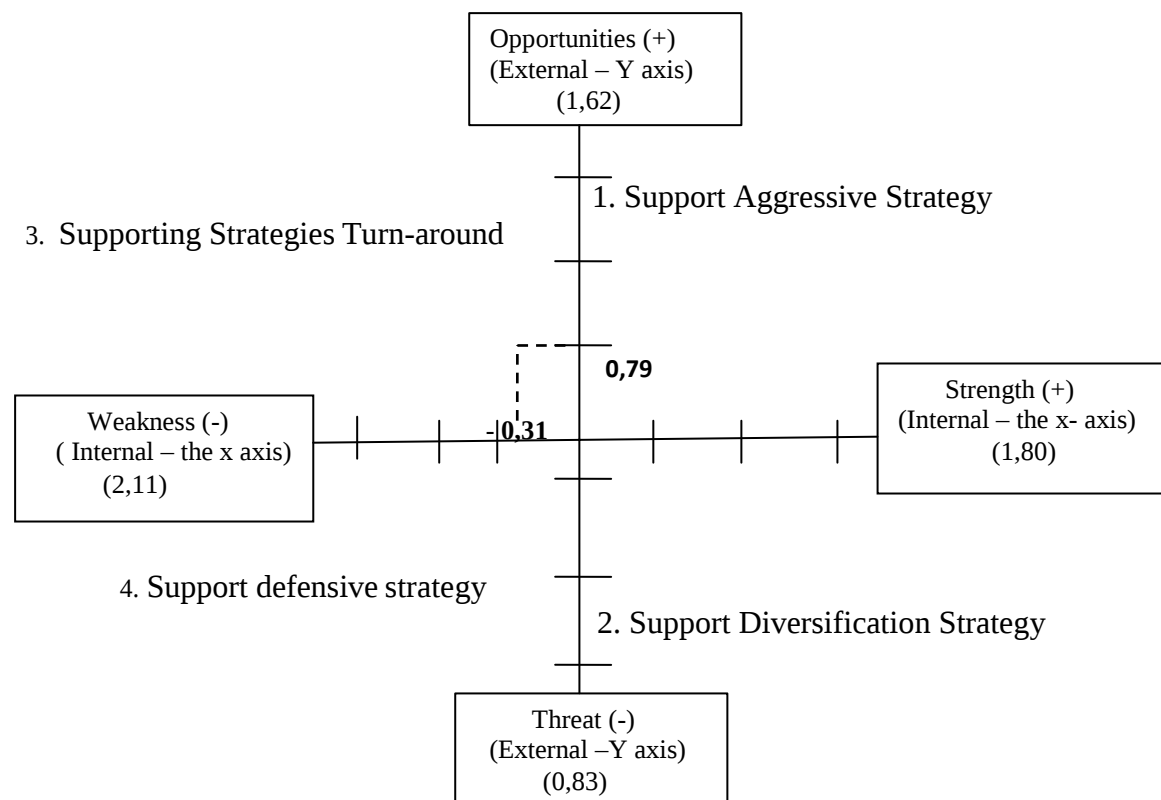


Figure 3 The 4-K SWOT

Then the value of x and y axis is placed in the 4-K SWOT diagram that shows the company position in the quadrant 3. On this quadrant the company faces a huge opportunity, but on the other hand the company has some internal weaknesses. The strategy that can be applied by company is turn-around. Further analysis with Internal External matrix method and TOWS matrix or SWOT matrix shows that PT Agility International's internal condition is not very strong.

Some of the weaknesses of the company are in the field of Human resources, machine, method and material. This condition

is indicated by 4-K diagram SWOT and IE-Matrix result with score -0.31 and 0.79. Therefore, the WO strategy applied by the company is expected to be able to suppress the organizational deficiencies in order to exploit the opportunities that exist. This is balanced with the implementation of corporate strategy designs in the field of sales and marketing, operations, human resources development, and also the financial and general administration of the company. The intense competition in the 3PL business requires the development of human resources through training and development policies, so that the company's logistics contracts can

well fulfill every B2B either B2C transaction.

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