



Strategies For Improving Goods Transport Efficiency (Case Study PT. Bhandha Ghara Reksa, Persero)

Putu Diva Ariesthana Sadri¹, Putu Ayu Govika Krisna Dewi² and AA Bagus Oka Krishna Surya³

Abstract

Indonesia's Logistic Performance Index based on World Bank data in 2018 was ranked 46th out of 160 countries. Rating indicated logistics activities in Indonesia are not efficient and effective when viewed from the seven indicators. This research was conducted considering the importance of increasing the efficiency of the transportation of goods both in terms of speed of service time, travel costs, and the safety of the goods being transported to improve services to the community. This research is expected to contribute to the creation of efficiency in the transportation of goods. The economy and people's purchasing power in areas that are quite far apart from sources of production are increasing. The distribution of selling prices and people's purchasing power can be evenly distributed from Sabang to Merauke. Researchers investigate a case at PT. BGR Persero by using the interview method and SWOT analysis. The results of the study found that PT. BGR Persero is on the right track. The results of the SWOT analysis show the position of PT. BGR is in quadrant 1 (one). The strategy that is effectively implemented is an aggressive strategy, conducted by maintaining good conditions and expanding other types of businesses such as transporting dangerous goods and leasing warehouse assets.

Keywords : Logistic Performance Index; efficiency; freight forwarding; SWOT Analysis.

1. Introduction

The *e-Commerce* sector experienced growth during the pandemic which directly provided the opportunity for local logistics service providers to reap the benefits, from data from the Directorate General of Land Transportation, sales of the *e-Commerce* sector increased 26% from the monthly average in 2019, daily transactions increased from an average of 3.1 million to 4.8 million which occurred in various *marketplaces*. In addition to social restrictions, the increase in *e-commerce sales* is also caused by *smartphone and internet* penetration factors that continue to increase with the support of the demographic bonus of Indonesia's young, technology-savvy population so that adjustments to new technologies such as online-based sales and virtual payments are easy to adopt (Alvin et al. 2021).

Seeing the external conditions/environment of logistics services in Indonesia during the Covid-19 pandemic which provided new challenges and opportunities, it is necessary to evaluate a strategy for goods transportation service companies in Indonesia to be able to formulate appropriate and efficient goods transportation strategies in order to compete consistently and continuously. growing in the logistics service industry. Apart from Jakarta, Bali Province is one of the regions in Indonesia that has potential for logistics/goods transportation activities. This is because Bali is a producing area for arts crafts whose products are quite in demand by exporters/importers. There are several goods transportation/logistics service companies that operate and compete in the Bali area, both state-owned, regional or individual companies. All companies providing goods transportation services in the province of Bali are faced with pandemic conditions which have prompted companies to adjust their strategies so that they



can survive in the declining conditions of the Indonesian economy but still with opportunities to increase *e-commerce*.

This research was conducted to formulate a strategy for the transportation of goods for SOEs in the Logistics sector in Bali Province, especially Denpasar City. The research uses SWOT analysis which is the right matching tool in determining the company's freight transportation strategy.

1) SWOT Analysis, Strategy and Master Strategy Matrix

SWOT analysis is the identification of various factors systematically to formulate corporate strategy. SWOT analysis is a strategic planning framework used in the evaluation of organizations, plans, projects or business activities and acts as an important tool for situation analysis that helps managers identify organizational and environmental factors (Dergisi, 2017). SWOT analysis has two dimensions, namely internal and external dimensions. Strengths and weaknesses are internal factors and organizational attributes, opportunities and threats are external factors and environmental attributes. The SWOT analysis is usually drawn up in a four-quadrant box which allows for a summary of the analysis from the four parts. the summary is organized according to four section headings.

SWOT analysis combines SWOT elements into a matrix and then identifies each aspect. The strategy is formulated based on the four SWOT quadrants according to their respective aspects. The SWOT matrix consists of four types of strategies, namely:

- a) The SO strategy uses internal strengths to take advantage of opportunities.
- b) WO strategies that improve internal weaknesses by taking advantage of external opportunities.
- c) ST strategy utilizes internal strengths to suppress external threats.
- d) WT strategy is a defensive tactic by minimizing internal weaknesses to overcome external threats.

The definition of strategy according to Chandler in Rangkuti (2014: 4) is the long-term goal of a company, as well as the utilization and allocation of all important resources to achieve these goals. Company goals can be achieved with careful strategic planning. Strategic planning is a process of analyzing, formulating and evaluating strategies (Rangkuti, 2014: 2). Its activities include careful monitoring of competition, regulations, inflation rates, business cycles, consumer wants and expectations, as well as other factors that can identify opportunities and threats. The company's strategy is developed to create a competitive advantage.

The *Grand Strategy Matrix* is one of the popular tools used for the formulation of alternative strategies. This matrix is able to place the company under study in one of the four quadrants in the matrix. The general form of the master strategy matrix consists of two dimensions, namely competitive position and market growth, and four quadrants with each quadrant having its own alternative strategy.

2. Research Method

Assessment Matrix of each element (Strengths, Weaknesses, Opportunities, and Threats) can be made based on the results of the sorting. The targets for filling out the questionnaire/interview form are stakeholders of State-Owned Enterprises (BUMN) engaged in logistics/transportation of goods in the Denpasar area and its surroundings as shown in table 1. company leadership, operations, warehouse and finance.

The primary data collection method is carried out in two ways, namely by going directly to



several stakeholders in BUMN and by using google forms/sheets (distributed via email/whatsapps/other social media). analysis/processing of research data.

This research data processing method uses the SWOT analysis method where there are 4 main factors that will be discussed, namely:

- S : Strength : Strength
- W : Weaknesses: Weaknesses
- O : Opportunity : Opportunity
- T : Treat : Challenge

Strength aspects *are* factors or elements that are completely within management constraints (internal and can be controlled). *Strengths* are factors of internal advantage that should be controlled to be able to be utilized optimally for the benefit of the organization, so that it has a positive impact on the members and stakeholders of the organization in this case the Bali Police. *Weaknesses* are negative factors that exist within the organization either caused by internal conditions or due to the impact of external influences, and cannot be overcome by the organization's management.

Opportunity (opportunity) is an opportunity that is open for an organization to develop its business or activities, which, when associated with the " *demand-supply* " rule, is an opportunity for " *demand*" or a very large need when compared to " *supply* " or limited fulfillment. *Threat* is a condition or potential that can directly or indirectly threaten the continuity of the organization's existence, either due to things within the organization or outside the organization. The example of the SWOT element assessment matrix can be seen in the following table:

Table 1.
Example of SWOT Analysis Assessment Matrix

No	Description	Weight	Rating	Mark
		a	b	(axb)
				c
1	Element of strength	.....	1 - 5	
2	Elements of weakness	.....	1 - 5	
3	The element of opportunity	.....	1 - 5	
4	Threat element	.....	1 - 5	
Total		1		

Rating Description (Column b):

- 1 = very bad
- 2 = bad
- 3 = Good Enough
- 4 = good
- 5 = very good



Table 2.
Recapitulation of Calculation Results for Each Element of Strengths, Weaknesses, Opportunities, and Threats

NO	Description	Mark
I	Internal factors	
	a. Strength b. Weakness	
II	External Factors	
	a. Opportunity b. Threat	

Strengths – Weaknesses = Positive

Opportunity – Threat = Positive

3. Results and Discussion (Main Heading of the Analysis)

a) Results

The results of the validity and reliability of the questionnaire are as follows:

Table 3.
Validity and Reliability Test Results to -1

Test Components Validity & Reliability	1	2	3	4	etc	28	29	30
Rxy	0.07425	0.2099 5	- 0.05419	0.7490 7	.....	0.7180 5	0.5768 7	0.7273 2
t count	0.19699	0.5681 4	- 0.14359	2,9915 1	.....	2.7296 4	1.8685 1	2.8033 6
t table (5%)	1.83311	1.8331 2	1.83311	1.8331 1	.....	1.8331 1	1.8331 1	1.8331 1
Validity Description Valid Quantity	invalid 24	invalid	invalid	Valid	.....	Valid	valid	valid
variance	0.77778 31.8055	0.7777 8	1	0.5277 8	.....	1.3611 1	1.0277 8	0.9444 5
Variant Quantity Total var	6 340.5							30
Reliability	0.937853393							

Source: Results of data processing



Table 4.

Results of the Recap of the Validity Test and the Reliability Test of the Questionnaire

No Statement	Rxy	t count	t table (5%)	Information
1	0.074	0.197	1,833	invalid
2	0.210	0.568	1,833	invalid
3	-0.054	-0.144	1,833	invalid
4	0.749	2,992	1,833	valid
5	0.597	1,967	1,833	valid
6	0.638	2,190	1,833	valid
7	0.248	0.679	1,833	invalid
8	0.786	3,366	1,833	valid
9	0.748	2,978	1,833	valid
10	0.663	2,344	1,833	valid
11	0.589	1,930	1,833	valid
12	0.694	2,548	1,833	valid
13	0.785	3,356	1,833	valid
14	0.795	3,468	1,833	valid
15	0.603	2,001	1,833	valid
16	0.835	4,009	1,833	valid
17	0.727	2.805	1,833	valid
18	0.542	1,706	1,833	invalid
19	0.753	3.028	1,833	valid
20	0.784	3,336	1,833	valid
21	0.702	2,606	1,833	valid
22	0.786	3,366	1,833	valid
23	-0.095	-0.253	1,833	invalid
24	0.643	2,219	1,833	valid
25	0.809	3,642	1,833	valid
26	0.630	2,147	1,833	valid
27	0.750	3,002	1,833	valid
28	0.718	2,730	1,833	valid
29	0.577	1,869	1,833	valid
30	0.727	2,803	1,833	valid

Source: Results of data processing

Based on the results of the recap of the validity test and the reliability test of the questionnaire above, it can be concluded that there are 6 items that are invalid, namely statements number 1, 2, 3, 7, 18, and 23. Therefore, the 6 items must be eliminated in the process. subsequent data processing.

For the reliability test with a value of 0.94 based on the category of the reliability coefficient, it is classified as having very high reliability, which is between the value of 0.80 < 1.00.

After eliminating invalid statement items, the research team again conducted data mining with the following results:



Table 5.
Validity and Reliability Test Results and Data Recap of Survey Results

No Question	Rxy	t count	t table (5%)	Information	RATING
1	0.735264	2.870139	1.833113	valid	3
2	0.616689	2.072653	1.833113	valid	4
3	0.656089	2.300098	1.833113	valid	3
4	0.838233	4.066940	1.833113	valid	4
5	0.721306	2.755344	1.833113	valid	3
6	0.648672	2.255023	1.833113	valid	4
7	0.626420	2.126213	1.833113	valid	3
8	0.693433	2,546282	1.833113	valid	4
9	0.741416	2.923199	1.833113	valid	4
10	0.783991	3.341400	1.833113	valid	4
11	0.597122	1.969502	1.833113	valid	4
12	0.866053	4.583161	1.833113	valid	4
13	0.706506	2.641263	1.833113	valid	3
14	0.783991	3.341400	1.833113	valid	4
15	0.787559	3.381291	1.833113	valid	4
16	0.717034	2.721650	1.833113	valid	3
17	0.838233	4.066940	1.833113	valid	4
18	0.603528	2.002635	1.833113	valid	4
19	0.861713	4.493293	1.833113	valid	3
20	0.637595	2.189746	1.833113	valid	3
21	0.790309	3,412656	1.833113	valid	4
22	0.709666	2.665004	1.833113	valid	4
23	0.706506	1.843113	1.833113	valid	4
24	0.707041	2.645256	1.833113	valid	4

Source: Data Processing Results

After getting valid data results, the data processing process continued by discussing the weighting of each item of the IFAS and EFAS statements in accordance with the conditions of PT. The real BGR.

In this phase, the research team did not distribute questionnaires, but carried it out using discussion and interview methods with experienced experts from PT. BGR. The weighting results for each statement item can be seen in table 6 and table 7.

Table 6.
Internal Strategic Factor Weighting

NO	STATEMENT	WEIGHT
STRENGTH		
1	Delivery on time according to the estimate / SOP	0.1
2	Items arrived at their destination in good condition	0.16
3	Guarantee the safety and security of the goods sent	0.1
4	Medium-sized transport vehicle	0.03
5	Oversized transport vehicle	0.03



6	Variations in the type of vehicle for each transport vehicle size (small, medium, and large)	0.1
7	Packaging	0.03
8	Liability Insurance	0.03
WEAKNESS		
9	Driver turn over rate	0.03
10	Turn over rate for non-driver employees	0.03
11	Less Competitive Freight Rates	0.2
12	Fleet Readiness (Rental System)	0.16
TOTAL IFAS		1

(Source: results of data processing)

Table 7.
External Strategic Factors

NO	STATEMENT	WEIGHT
OPPORTUNITY		
13	Service area expansion	0.03
14	Ownership of a Special Transport Permit	0.12
15	Customs (Taxes / Customs)	0.03
16	Warehouse Ownership (Warehouse)	0.1
THREAT (CHALLENGE)		
17	Cargo Insurance	0.1
18	Competence of non-driver operational personnel	0.24
19	Packaging Suitability	0.03
20	Fleet Condition (Means of Transportation)	0.03
21	Line/Route of goods transport	0.16
22	Warehousing	0.03
23	Purchasing	0.03
24	Loading and Unloading	0.1
TOTAL EFAS		1

(Source: results of data processing)

The results of the field survey above will be re-synthesized and become the basis for making an SFAS (Strategic Factor Analysis Summary) table which will contain a maximum of 10-12 factors from the overall criteria, namely Strengths, Weaknesses, Opportunities and Threats from the 24 factors obtained previously. Twenty-four factors are considered too many by management to formulate an effective strategy. The resulting SFAS summarizes the external and internal strategic factors of PT. BGR in one form that contains the most important factors and also provides the basis for the formulation of a *grand strategy* so as to obtain the expected research results and be able to provide meaningful input on the level of effectiveness and efficiency of the company's services/business processes, in this case PT. BGR Persero.

Based on the weights in table 5.6 and table 5.7 , the research team and resource persons again



tried to re-synthesize the existing IFAS and EFAS and put them into table 5.8 and table 5.9 Analysis of IFAS and EFAS.

Table 8.
IFAS . Calculation Results

No	Description	Weight		Mark
		A	B	(axb) C
Strength				
1	Delivery on time according to the estimate / SOP	0.1	4	0.4
2	Items arrived at their destination in good condition	0.16	5	0.8
3	Guarantee the safety and security of the goods sent	0.1	4	0.4
4	Variations in the type of vehicle for each transport vehicle size (small, medium, and large)	0.1	4	0.4
Total Strength		2		
Weaknesses				
5	Less competitive freight rates	0.22	4	0.88
6	Fleet Rental System	0.32	2	0.64
Total Weakness		1.52		
TOTAL WEIGHT S - W		1.00		

Source: Results of data processing

Table 9.
EFAS . Calculation Results

No	Description	Weight		Mark
		A	B	(axb) C
Opportunity				
1	Possession of a special transport permit	0.3	5	1.5
2	Multiple Warehouse Ownership	0.2	4	0.8
Total Opportunity		2.3		
Threats				
3	Competence of non-driver operational personnel	0.3	4	1.2
4	Line/Route of goods transport	0.1	3	0.3
5	Loading and Unloading	0.1	2	0.2
Total Threat		1.70		



TOTAL WEIGHT O - T	1.00
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Source: Results of data processing

From the IFAS and EFAS tables above, the research team plotted the Cartesian diagram according to Figure 1.

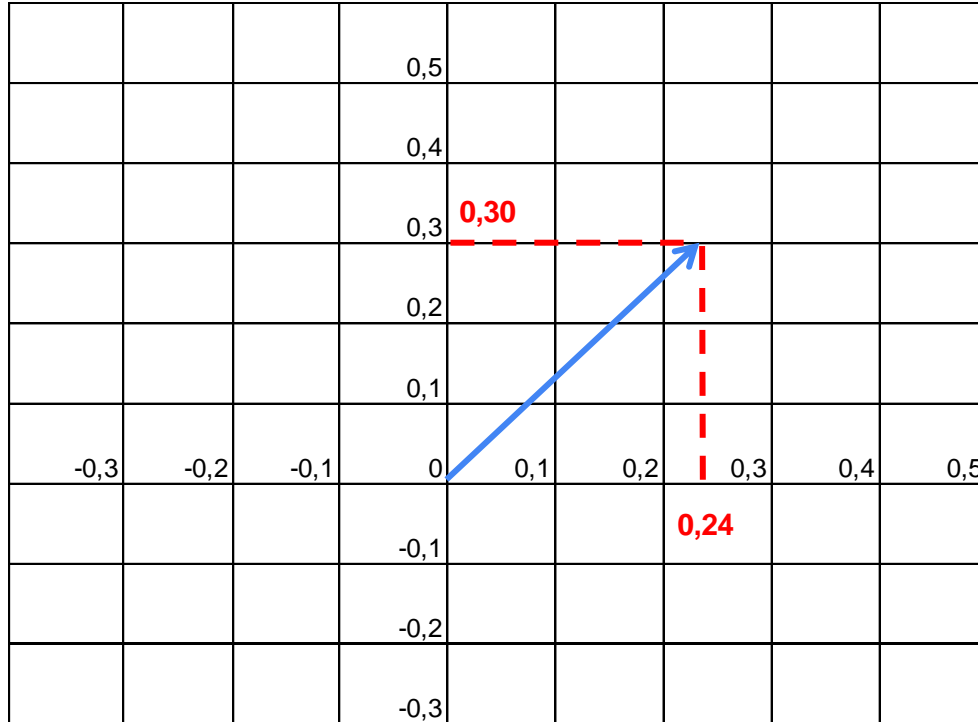


Figure 1. Plotting of IFAS and EFAS PT. BGR

Table IFAS (SW) interprets the X-axis and Table EFAS (OT) interprets the Y-axis.

Calculation formula :

$$\begin{aligned} \text{X Axis} &: (\text{Total Strength} - \text{Total Weakness}) / 2 \\ &: (2 - 1.52) / 2 = 0.24 \end{aligned}$$

$$\begin{aligned} \text{Y Axis} &: (\text{Total Opportunity} - \text{Total Treath}) / 2 \\ &: (2,3 - 1.7) / 2 = 0.30 \end{aligned}$$

It can be seen that a suitable strategy is applied to PT. BGR is in quadrant 1.

b) Discussion

The results of the SWOT analysis conducted by the research team previously formulated PT BGR's corporate strategy with a quantitative approach mechanism by finding strategic fit between external opportunities and internal strengths in addition to paying attention to external threats and internal weaknesses in order to identify superior resources that owned by the company as a core capability that strategically makes PT.BGR different from other similar companies based on the company's position on the Cartesian SWOT diagram

Quadrant position obtained that PT.BGR is located in quadrant I which indicates that the suitable strategy is an aggressive strategy by expanding to take other transportation services outside of its core business, namely fertilizer, for example medical waste transportation services which are supported in terms of strength factors, where PT .BGR has a guarantee of safety and timeliness which indicates PT.BGR has a maturity of SOP in terms of shipping goods



which is an important factor in handling dangerous goods such as medical waste, in addition to the opportunity PT BGR already has a special goods transport permit which indicates that PT. BGR has prepared resources, both facilities and infrastructure in handling special items such as medical waste.

PT. BGR also has the opportunity to become the ruler in the warehousing sector *because* it has several large warehouses and are located in quite strategic places. The development of facilities and maintenance of the warehouse owned can be maximized to support the existence of PT. BGR as one of the logistics service companies in Indonesia. Expansion can be done by leasing warehouse assets owned to other parties or companies within a certain period of time.

4. Closing

a) Conclusion

There are several conclusions from the implementation of the research, namely PT. In general, BGR Persero during the Covid-19 Pandemic was not significantly affected but instead experienced an increase in services (income), especially from the agricultural goods delivery sector such as fertilizers, pest control materials, and so on. State-Owned Enterprises engaged in the transportation and warehousing (Logistics) service sector, not only PT. BGR Persero, specifically in the areas of Bali and NTB, there are several SOEs that have similar services. Apart from fellow SOEs, several main competitors of PT. BGR Persero comes from the private sector which has a better level of service flexibility and regulations than PT. BGR Persero.

PT. BGR Persero has great potential in monopolizing the logistics business sector in the warehousing sector *because* it has assets in the form of storage warehouses with a large enough volume compared to similar competing companies from fellow BUMN and private companies, this potential needs to be explored further to make PT. BGR Persero is the number one logistics service provider in the warehousing sector in Bali and NTB. PT. BGR needs to develop a strategy in managing sudden demand for transportation, considering that the company does not have its own transportation equipment/dominantly rents from a third party.

The results of the identification and analysis of internal and external factors placed PT. BGR is in quadrant one, namely the implementation of an aggressive strategy (growth). PT. BGR is already on the right track to continue to grow, a strategy that has been implemented by PT. BGR has been able to bring PT. BGR is able to compete with other logistics service companies. The real implementation that can be done with this aggressive strategy is to continue to develop or expand the strengths owned by PT. BGR includes delivering goods other than the agricultural sector such as dangerous goods. As well as maximizing the assets owned, namely warehouses (warehouse) by leasing to other parties other than logistics service companies. Creating new innovations and breakthroughs in the world of warehousing management, considering the warehouse assets owned by PT. BGR Persero is much larger and larger in volume compared to other competing companies. One of them is by implementing a smart warehouse management system (warehousing modernization) both in terms of receiving, storing, retrieving and collecting data on stock items in the warehouse which can be monitored by consumers/customers live/directly. This will certainly increase the trust and convenience of consumers/customers in using the services of PT. BGR Persero.

PT. BGR Persero should embrace competitors both from fellow SOEs and the private sector to make an agreement on the lower limit tariff and upper limit tariff as well as the minimum service provided to consumers/customers. The goal is to be able to create healthy competition



among companies engaged in logistics services (transportation of goods and warehousing). PT. BGR should also conduct a survey on the satisfaction of service users / services provided to maintain or even improve the company's performance in order to stay on the right track. One method that can be used is the IPA method as commonly used in public transport surveys, for example Trans Sarbagita (Wedagama, 2015)

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