

## Determining cost reduction strategies in logistics

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**Abstract:** The researcher aims to study on To study the problem of rising product prices caused by product handling expenses; formulate strategies to solve the problem of rising product prices. By using the cost strategy, Cost Strategy and developing the company can compete and develop the business to grow sustainably. At present, the logistic cost-to-GDP ratio in 2021 has decreased. The Growth rates of GDP are higher than those of Logistic costs, partly owing to the improving Covid-19 situation leading to the recovery in tourism and related service sector. Then the researcher aims to study on To study the problem of rising product prices caused by product handling expenses; formulate strategies to solve the problem of rising product prices. The research tool was by designing opinion polls. Fishbone diagram Cause-and Effect Diagrams Sampling of manufacturing companies This has been prepared in the form of a Supplier Survey Form randomly sampling 20 companies between September 2022 to December 2023. which was created for research purposes The conceptual framework of the research was established to obtain the opinions of the manufacturers of the products. Study cost theory, formulate strategies by using Cost Strategy, and implement strategies by analyzing the decrease in transportation costs from September 2022 to December 2023 using the Supplier Survey Form. The results showed that the reason why the cost of logistics is higher comes from the rising oil crisis. As a result, the price of raw materials and transportation increased. and inefficient use of container space The researcher analyzed to find a solution to the problem by using a fishbone diagram and found that the problem could be solved in both ways. It can change the shipping route and how optimize the use of space in the container. It can reduce the cost of transporting goods and can meet the needs of customers in terms of product prices, which can increase competitiveness. and domestic and international market share, including safer and more standardized delivery during the Covid-19 situation.

**Keywords:** determining cost reduction, strategies, logistics

### 1. Background

At present, it is common to take the proportion of the logistics costs accounting for GDP as a key indicator to measure the efficiency and effectiveness of logistics. In most developed countries and regions, it has been controlled at around 10 % and even lower. But as for Thailand, a developing country, the modern logistics industry scale is still relatively small, and the added value in GDP is less than one-third of that in the developed countries, while the logistics cost is twice that of them. Presently, the mode of operation in most logistics enterprises remains in the extensive and primary stage, the concept of modern logistics has yet to take shape, and their service capacity, quality, and effectiveness are far behind the advanced ones.

Therefore, it is necessary to strengthen the logistics cost management and analyze and implement an effective strategy to reduce the logistics cost of the enterprises, reduce the overall logistics cost and improve the quality of logistics. Thailand is one of those six countries in the Greater Mekong Sub-region which is trying to strengthen its transportation linkages among other member countries, which is expected to improve cross-border transportation connectivity. The total Logistics Cost is 2,238.8 Billion increases in Bath by 18% as pictured.

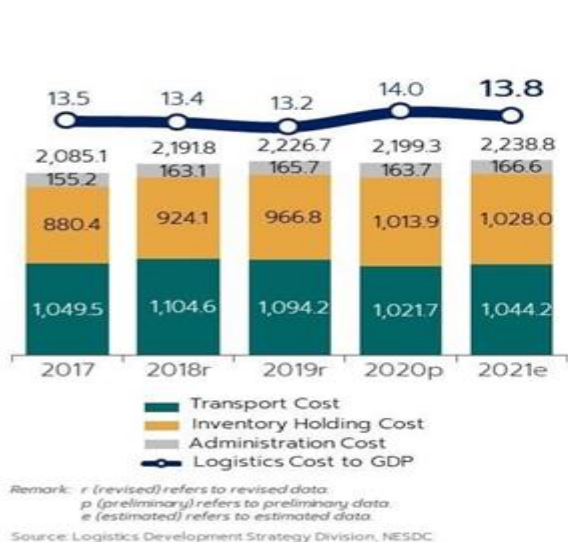


Figure 1. Logistics Cost to GDP at Current Price in Thailand Year 2022

Components to Examine When Developing a Logistics Strategy

When examining the four levels of logistics organization, all components of the operation should be examined to ascertain whether any potential cost benefits can be achieved. There are different component areas for each company but the list should at least include the following:

- Transportation:** Do the current transportation strategies help service levels?
- Outsourcing:** What outsourcing is used in the logistics function? Would a partnership with a third-party logistics company improve service levels?
- Logistics Systems:** Do the current logistics systems provide the level of data that is required to successfully implement a logistics strategy or are new systems required?
- Competitors:** Review what the competitors offer. Can changes to the company's customer service improve service levels?
- Information:** Is the information that drives the logistics organization real-time and accurate? If the data is inaccurate then the decisions that are made will be in error.
- Strategy Review:** Are the objectives of the logistics organization in line with company objectives and strategies? A successfully implemented logistics strategy is important for companies who are dedicated to keeping service levels at the highest levels possible despite changes that occur in the supply chain. The goal of any formal logistics or supply chain strategy is to make sure you and your company are delivering to your customers what they want. And delivering to them when they want it. And accomplish all of that by spending as little money as possible. (<https://www.quora.com/>)



Figure 2. Logistics Strategy Planning Triangle.

Therefore, various effective tools must be used in analyzing strategies to reduce logistic costs. The " FISHBONE DIAGRAM " fishbone diagram was drawn by a manufacturing team to try to understand the source of periodic iron contamination. The team used the six generic headings to prompt ideas. Layers of branches show thorough thinking about the causes of the problem.

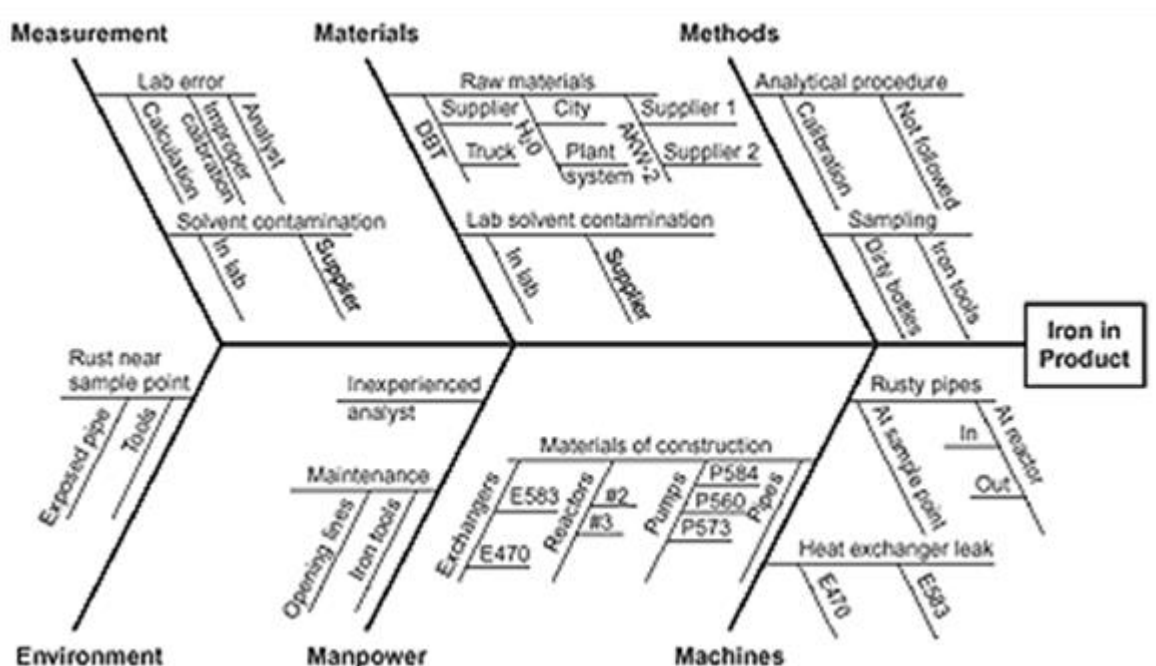


Figure 3. Fishbone Diagram Example.

## 2. Methods

Determining cost reduction strategies in logistics to consider the following factors. The research tool was by designing opinion polls. Fishbone diagram Cause-and Effect Diagrams Sampling of manufacturing companies This has been prepared in the form of a Supplier Survey Form randomly sampling 20 companies between September 2022 to December 2023. which was created for research purposes The conceptual framework of the research was established to obtain the opinions of the manufacturers of the products. Study cost theory, formulate strategies by using Cost Strategy, and implement strategies by analyzing the decrease in transportation costs from September 2022 to December 2023 using the Supplier Survey Form.

## 3. Results

The results showed that the reason why the cost of logistics is higher comes from the rising oil crisis. As a result, the price of raw materials and transportation increased. and inefficient use of container space The researcher analyzed to find a solution to the problem by using a fishbone diagram and found that the problem could be solved in both ways. It can change the shipping route and how optimize the use of space in the container. It can reduce the cost of transporting goods and can meet the needs of customers in terms of product prices, which can increase competitiveness. and domestic and international market share, including safer and more standardized delivery during the Covid-19 situation.

## 4. Discussion

The results were discovered in this study.

1. It can change the shipping route and how optimize the use of space in the container.
2. It can reduce the cost of transporting goods and can meet the needs of customers in terms of product prices, which can increase competitiveness. and domestic and international market share.

3. The including safer and more standardized delivery during the Covid-19 situation.

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