



Strategy Analysis of Multi-Source Business Model in Cement Shipping for Domestic Market Needs

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Abstract. This study aims to analyze the strategy of the multi-source system business model in the cement delivery process via bulk carrier vessels at PT. Semen Indonesia Tbk. This study uses a qualitative descriptive method to analyze the strategy of the multi-source business model in cement delivery via bulk carrier vessels to meet domestic market needs. Data were obtained through interviews with the management and operational staff of PT. Semen Indonesia (Persero) Tbk, direct observation of the delivery process, and study of documents related to the company's logistics. The research location includes the company's head office and distribution facilities. The analysis was conducted using a thematic and SWOT approach to identify patterns, challenges, and opportunities in implementing this strategy. The results of this analysis indicate that PT Semen Indonesia (Persero) Tbk leverages its strengths and opportunities through a multi-source strategy, advanced logistics technology, and efficient distribution to maintain its position as an industry leader. Challenges such as large investments and intense competition are overcome by diversifying supply, strengthening human resources, and strategic collaboration. Innovation and efficiency enable the company to expand its market share and support sustainable national development.

Keywords: Business Strategy, Distribution Channels, Market Share.

1 Introduction

In the era of rapidly developing globalization, market dynamics have undergone significant changes. Many new products have emerged with increasingly shorter life cycles, while customer demand continues to increase. This condition encourages companies to prioritize the allocation of funds for managing logistics systems. In particular, great attention is directed to the process of distributing goods, from production in the factory until the goods reach the hands of customers. This strategy is an important step to meet the needs of the rapidly growing market. Thus, companies are required to optimize efficiency and effectiveness in their supply chains. Improving the quality of logistics, including delivery speed, stock management, and customer satisfaction, is a key factor in competing amidst increasingly tight global market competition. Without a reliable logistics system, companies risk losing competitiveness and customer loyalty.

One sector that is experiencing significant growth in the global market today is the cement industry. As a strategic commodity, cement plays an important role, especially

in Indonesia which continues to be active in development efforts. The need for cement is unavoidable, especially considering the government's plan to increase infrastructure development in the next few years. With this plan, the cement industry is expected to be able to prepare itself for potential cement shortages in order to meet customer demand in the future. In this context, the distribution process plays a very crucial role in ensuring the availability of cement and preventing shortages in meeting customer needs.

Indonesia, as one of the countries in Southeast Asia, has great potential to improve the national economy through international trade. Progress in international trade has also driven the growth of increasingly competitive and competitive businesses. This condition forces companies to design effective strategies to maintain their market share. One of the steps often taken by companies is to carry out export activities, namely selling products abroad. Export is one way for companies to compete globally.

One of Indonesia's mainstay export products is cement. PT Semen Indonesia Tbk, a multinational company owned by a state-owned company, is the largest exporter after acquiring Thang Long Cement Vietnam. This company not only serves domestic sales but also exports to various countries. However, competition in the cement industry is increasingly intense with the emergence of new producers who are also entering the export market. Therefore, the right marketing strategy is needed to win the competition and increase export volume in the global market.

PT Semen Indonesia (Persero) Tbk. (hereinafter referred to as SIG) is one of the leading cement producers in Indonesia. SIG has a wide distribution network, not only covering Indonesia but also reaching Southeast Asia, as shown in Figure 1.1. The company operates several integrated cement plants spread across Indonesia and Vietnam. Domestically, these facilities are located in Indarung West Sumatera, Pangkep South Sulawesi, Tuban East Java Rembang Central Java and Narogong West Java . Domestic operations are supported by a network of buffer warehouses and packing plant management located in strategic locations throughout Indonesia. In addition, product distribution is also strengthened by the presence of 200 national distributors, making SIG a major player in the domestic and regional cement industry [7].



Fig. 1. Distribution Map of PT. Semen Indonesia Tbk

The wide distribution area coverage owned by PT Semen Indonesia (Persero) Tbk. (SIG) results in the distribution cost burden that must be borne by the company being quite significant. Based on the data presented in Table 1.1, distribution costs contribute up to 15% of the total cost of revenue. This figure shows that the distribution sector requires special attention in its management. Effective distribution management is very important considering the characteristics of cement as a commodity with a relatively small profit margin but has a very large sales volume. If the distribution process is not managed efficiently, the impact can reduce the company's overall profitability. Therefore, optimization in the distribution sector is key to ensuring that the company's operations run efficiently and are able to maximize the profits obtained [8].

Table 1. Cost of Revenue of PT. Semen Indonesia Tbk

Cost of Goods Sold	2024 (Million Rupiah)	%	2023 (Million Rupiah)	%
Fuel	3,335,417	21.7	3,401,501	25.1
Electricity	2,530,080	16.4	1,876,500	13.8
Distribution	2,422,649	15.7	2,120,327	15.6
Packaging	867,790	5.6	818,338	6.0
Labor	1,372,373	8.9	1,398,625	10.3
Maintenance	1,365,447	8.9	1,285,212	9.5
Other Fabrication	3,494,675	22.7	2,656,644	19.6
Total	15,388,431	100	13,557,147	100

PT Semen Indonesia (Persero) Tbk. (SIG) has several methods in distributing cement from the integrated plant. The distribution process includes direct delivery to the market in the form of bulk cement or cement bags, delivery through grinding plants located outside the integrated plant, and utilization of packing plants spread across various regions in Indonesia. Of the various methods, the strategy of utilizing packing plants is the main priority because it can significantly reduce transportation

costs. In its implementation, cement is first sent in bulk form to the packing plant, then packaged to meet market needs [7]. This strategy is not only efficient in terms of cost, but also increases flexibility in distribution.

The packing plant optimization strategy is carried out by implementing an intercompany-sales (ICS) system which aims to ensure that SIG as the parent company can achieve maximum profit. Through this strategy, subsidiaries under SIG can conduct bulk cement transactions between them. For example, Semen Gresik's packing plant can receive supplies from Semen Tonasa, or vice versa. The implementation of the ICS strategy requires strong synergy between SIG's subsidiaries. One alternative to creating this synergy is to change SIG's role into a company responsible for cement sales and distribution activities, while its subsidiaries focus on being cement producers.

Determining the right number of ship fleets in order to optimize the packing plant is very important to ensure that shipping costs can be optimized. Determining the ideal number of ship fleets is not an easy task, because cement distribution by sea involves a fairly complex system. This complexity arises due to the uncertainty and variability in the distribution system. Some of the uncertainties involved include ship travel time, port time, and demand levels at each packing plant. Given the uncertain system conditions, the most appropriate method to overcome this problem is discrete simulation. This method can accommodate the various complexities and uncertainties that exist in the SIG distribution system, allowing for more accurate calculations for ship fleet management.

2 Literature review

2.1 Strategy

In terms of language, strategy comes from the word strategic which means according to strategy or plan and strategy which means the science of strategy. Meanwhile, according to the term strategy is a careful plan to know the activities to achieve specific goals. So that way, strategy is an action that is continuous, experiencing improvement and carried out according to the perspective of what consumers want and expect in the future. In a business context, strategy is carefully planned steps to achieve competitive advantage and achieve the company's long-term goals. Strategy involves decision making based on a thorough analysis of the company's internal and external environment, available resources, opportunities, and challenges faced.

According to Sukristono in Umar [11] said that strategy is a process of determining the plans of top leaders that focus on the long-term goals of the organization, accompanied by the preparation of a way or effort on how to achieve these goals. Strategy focuses more on estimates and anticipation of what might happen rather than just responding to what has happened. In facing the speed of market innovation and changes in consumer patterns, it is important to have core competencies that are the company's main competitiveness. Strategy will direct the company to create added value for customers and maintain a superior position in a changing business environment.

As also stated by Rachmat [10] that Strategy is a potential action that guides top management and many company resources to realize it. Strategy also affects the life of the organization in the long term, at least for five years. Strategy not only has an impact in the short term, but also affects the life of the organization in the long term, at least the next five years. Therefore, strategy is oriented towards the future. Strategy also has consequences that are multifunctional or multidivisional, meaning that strategy must consider various aspects and areas within the company.

2.2 Supply Chain

Supply chains have various definitions that reflect their complexity, ranging from simple concepts to deeper understandings. La Londe and Masters [5] describe supply chains as a collection of companies connected in the process of moving materials from one party to another. Meanwhile, Christopher [1] explains supply chains with a broader focus, namely as a network of organizations involved in upstream and downstream relationships through activities that create value, either in the form of final products or services provided to customers. Based on this understanding, supply chains can be formulated as a system involving three or more entities, both organizations and individuals, who directly play a role in managing the flow of materials, services, finances, and information from the initial source to the end customer.

This definition includes integrated processes, from raw material procurement, production, distribution, to delivery of final products to consumers. In this context, the supply chain is not only limited to the physical flow of goods, but also involves information coordination, management of inter-entity relationships, and regulation of financial flows to ensure efficiency and added value at each stage. Thus, the supply chain becomes an important element in creating competitive advantage, especially in a dynamic business environment that is oriented towards customer satisfaction.

2.3 Business Process

According to Davenport [2], a business process is defined as a series of structured and measurable activities, designed to produce certain outputs aimed at certain customers. These activities are arranged in a clear sequence, have a defined start and end point, and are carried out within a specific time and place. Based on this understanding, Hammers and Champy [3] expanded the definition of a business process by calling it a set of activities that utilize one or more inputs to produce outputs that have added value or benefits for customers. Business processes, thus, include various interrelated activities to achieve certain goals by optimizing existing resources, so that they can provide significant and relevant results according to customer needs.

Business processes are supported by seven main components that interact with each other, namely outcome (result or output), customer (customer), actor (process actor), object (object that is the focus of the process), event (incident), activity (activity), and decision point (decision-making point). The relationship between these components is established through connections that integrate each element in the process series. In a business process, certain events trigger various activities and

decisions that involve actors to work on certain objects. This process aims to produce an output that can be positive or negative. The results of this process provide added value that is aimed at customers as the final recipients. Customers also play a role as actors in the entire process, showing that they are not only the recipients of the results but also an integral part of the business process itself. The combination of these components creates a systematic workflow that is oriented towards achieving specific goals.

2.4 Market Share

Market share can be defined as the portion of the market controlled by a company or the percentage of the company's sales to the total sales of its main competitors at a certain time and place. If a company has a market share of 35% for a particular product, this means that out of the total sales of 1000 units of similar products in a certain period, the company can generate sales of 350 units through its product. Market share can change over time due to changes in consumer tastes or shifts in consumer interest from one product to another [6].

Changes in market share can be influenced by a variety of factors, including marketing strategies, product innovations, and responses to market dynamics. In addition, external factors such as changes in industry trends, economic conditions, or technological developments can also contribute to these changes. In managing market share, companies must understand customer needs and wants well and monitor competitor activities. Effective marketing strategies, product quality improvements, or competitive pricing can help strengthen or increase a company's market share.

To maintain or increase market share, companies also need to focus on brand building and customer trust. Product quality, good customer service, and positive interactions with brands can create consumer loyalty. Digital marketing and social media strategies can also be effective tools for communicating with customers and building stronger relationships. In addition, monitoring industry trends and adapting to changes in consumer behavior can provide a competitive advantage. A deep understanding of consumer preferences, as well as the speed of responding to market trends, can help companies take appropriate strategic steps.

2.5 SWOT Analysis

SWOT analysis is a strategic planning method that divides factors into two categories: internal factors and external factors. Internal factors, which originate from within the company, include strengths to assess the positive aspects of the company and weaknesses to evaluate areas that need improvement. Meanwhile, external factors, which originate from outside the company, include opportunities and threats, which help in understanding the environment that affects the company. SWOT analysis allows systematic identification of various factors to formulate service strategies, with a focus on maximizing opportunities, minimizing weaknesses, and handling threats, by comparing internal and external factors of the company.

SWOT analysis is a systematic method for identifying various factors that are relevant in formulating a company's service strategy. This approach is based on logic

that aims to maximize the opportunities available to the company, while also minimizing internal weaknesses and anticipating threats from the external environment. By comparing internal factors, such as the company's strengths and weaknesses, with external factors, such as opportunities and threats coming from the business environment, SWOT analysis helps in identifying the company's relative position in the market and forming the right strategy. Through a deep understanding of internal strengths and weaknesses, as well as external opportunities and threats, companies can optimize growth potential and minimize risks faced in a dynamic business environment [4].

SWOT analysis can be practically understood as a strategic planning method for a company, which aims to evaluate each element of the factor and allows the company to know the overall picture of the condition of a company. The process in SWOT analysis is carried out to determine the specific objectives of the business or project being run, and to identify the two factors. The effectiveness and suitability of a business strategy requires an adjustment between the company's internal strengths and the company's external strengths so that it can win the competition [9].

3 Research methods

This study uses a qualitative descriptive method to analyze the strategy of a multi-source system business model in the cement delivery process via bulk carrier vessels to meet domestic market needs. Data were collected through in-depth interviews with the management and operational staff of PT. Semen Indonesia (Persero) Tbk, direct observation of the delivery process, and document studies related to the company's logistics and distribution policies. The research location was focused on the head office and distribution facilities of PT. Semen Indonesia (Persero) Tbk, to gain a comprehensive understanding of the implementation of the multi-source strategy. Data analysis was carried out using a thematic approach to identify patterns, challenges, and opportunities that arise in the implementation of this strategy using the SWOT analysis method.

4 Results and Discussion

4.1 Internal Environmental Analysis

PT Semen Indonesia (Persero) Tbk, as one of the largest cement producers in Indonesia, has adopted a multi-source system business model strategy to increase efficiency in the cement delivery process via bulk carrier vessels to meet the growing needs of the domestic market. This strategy allows the company to utilize various resources, both from its own factories and from a network of production partners spread across strategic locations. This approach provides flexibility in managing production and distribution capacity, so that it can meet market demand more quickly and efficiently. The multi-source system also helps the company reduce dependence on a particular source, which can minimize the risk of supply disruptions due to external factors such as logistical disruptions, weather, or other operational constraints.

The cement shipping process using bulk carrier vessels is an integral part of this strategy, as it allows the company to transport large volumes at a lower cost compared to other shipping methods. The location of the port close to the main market is one of the main strengths utilized in this strategy, supporting distribution efficiency while accelerating delivery times to consumers. In addition, PT Semen Indonesia also uses advanced technology in its logistics management, such as real-time tracking and inventory management systems, to ensure that shipments run smoothly and on schedule.

However, the implementation of this strategy also faces internal challenges, such as the need for large investments in logistics infrastructure, vessel management, and increasing human resource competencies in supporting complex operations. Another challenge is maintaining the uniformity of cement quality delivered from various sources to meet the high standards that have become the company's hallmark. To that end, PT Semen Indonesia continues to evaluate and innovate in its business model, including strengthening coordination between business units, maximizing the use of digital technology in logistics management, and increasing cooperation with strategic partners. With this strategy, the company is expected to optimize cement delivery via bulk carrier vessels and maintain its position as a market leader in the domestic cement industry.

4.2 External Environmental Analysis

In analyzing the external environment related to the multi-source system business model strategy in the cement delivery process via bulk carrier vessels to meet the domestic market needs of PT Semen Indonesia (Persero) Tbk, there are several important factors that influence the success of its implementation. The main factor is the condition of the domestic market which continues to grow, driven by the growth of infrastructure and construction in Indonesia. The government consistently encourages national strategic projects such as the construction of toll roads, ports, and other public facilities, which directly increase the demand for cement. This creates a great opportunity for PT Semen Indonesia to expand its distribution reach and increase its market share. In addition, the government's policy regarding inter-island connectivity supports the efficiency of cement distribution through bulk carrier-based shipping, which can reach remote areas more economically.

On the other hand, external challenges also cannot be ignored. Competition in the domestic cement industry is getting tighter with the presence of new producers, both domestic and foreign, offering competitive prices. This requires PT Semen Indonesia to improve operational efficiency and strengthen price competitiveness. In addition, fluctuations in logistics costs, such as increases in fuel prices and port rates, are external factors that can affect the profitability of shipping using bulk carrier vessels. Regulatory factors are also an important concern, given the potential for changes in policies related to carbon emissions or stricter shipping regulations, which could impact this business model.

From a technology and innovation perspective, great opportunities are open through the integration of information technology in a multi-source system. The use of this technology allows companies to manage shipments in a more organized and responsive manner to market dynamics. Another challenge is ensuring customer

satisfaction through timely delivery and product quality that is maintained during the distribution process. By considering the dynamics of the external environment, a multi-source strategy in the shipping process via bulk carrier vessels can be a competitive advantage if supported by the right adaptation to existing opportunities and threats.

4.3 SWOT Matrix

Based on the analysis of the internal and external environment at PT. Semen Indonesia Tbk, then through the SWOT matrix four strategies can be compiled, including:

1) SO Strategy (Strengths-Opportunities)

PT Semen Indonesia can utilize its core strengths such as extensive distribution networks, strategic factory locations, and the use of advanced technology in logistics management to optimize opportunities from increasing domestic market demand due to national infrastructure development. With a multi-source system, the company can ensure a stable and fast supply of cement to strategic areas, including remote areas that are now targets for inter-island connectivity. In addition, the integration of information technology that has been used can support efficient distribution management to take advantage of market growth and strengthen the company's position as a leader in the cement industry in Indonesia.

2) ST Strategy (Strengths-Threats)

To face threats such as increasing industry competition and fluctuations in logistics costs, PT Semen Indonesia can maximize operational efficiency supported by a strategic distribution network and advanced logistics technology. By focusing on optimizing the shipping process using bulk carrier vessels, the company can reduce distribution costs, which is a competitive advantage over competitors. In addition, strong financial fundamentals allow PT Semen Indonesia to make continuous investments in infrastructure and innovation to overcome external threats such as regulatory changes and rising fuel prices.

3) WO (Weaknesses-Opportunities) Strategy

Facing weaknesses such as large investment requirements and the complexity of maintaining quality standards from various sources, PT Semen Indonesia can take advantage of opportunities from government support for infrastructure development. The company can establish strategic partnerships with the government and logistics industry players to share the investment burden and improve operational competency. In addition, the application of advanced technologies such as real-time tracking and data analysis can help overcome challenges in maintaining uniform cement quality and delivery efficiency.

4) WT Strategy (Weaknesses-Threats)

To address weaknesses and threats simultaneously, PT Semen Indonesia can adopt a risk mitigation approach by increasing the flexibility of the multi-source system and diversifying supply to reduce dependence on a single source. Developing HR training programs to improve competency in managing complex operations is also key in facing regulatory threats and price competition. With a combination of internal strengthening and external collaboration, the company can minimize the negative impact of the challenges faced, while maintaining business sustainability.

5 Conclusion

Based on the results of the internal and external environmental analysis and the SWOT matrix, it can be concluded that PT Semen Indonesia (Persero) Tbk has successfully utilized its strengths and opportunities to maintain its position as the leader of the cement industry in Indonesia. The multi-source system business model strategy implemented, supported by advanced logistics technology and a wide distribution network, allows the company to manage cement shipments via bulk carrier vessels efficiently, reaching the domestic market which continues to grow due to national infrastructure development. The use of real-time tracking technology and digital-based inventory management are important elements in ensuring smooth distribution, meeting market demand quickly, and maintaining product quality.

However, the company also faces challenges such as the need for large investments, maintaining quality standards from various sources, and facing increasingly tight competition from other cement producers. By implementing risk mitigation strategies through supply diversification, strengthening human resources, and strategic collaboration, PT Semen Indonesia can overcome various external threats such as fluctuations in logistics costs, regulatory changes, and increasing fuel prices. In addition, optimizing operational processes and adapting to domestic market dynamics allows the company to increase its competitiveness. Through a combination of innovation, efficiency, and collaboration, PT Semen Indonesia is expected to be able to maintain the sustainability of its business, expand market share, and continue to contribute to supporting national development.

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