

Strengthening the Halal Value Chain for Competitive Advantage: Evidence from Bionesia Organic Foods

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Abstract: This research attempts to find sources of competitive advantage in companies producing organic coconut derivative products, Bionesia Organic Foods, which is one of the largest coconut industries in Indonesia. By applying Porter's value chain model, researchers examined nine activities along the company's value chain. The development of interview techniques, observation, document analysis, content analysis, and literature study was done to acquire a comprehensive understanding of the company's business processes. Empirically, Bionesia gains its competitive advantage through the implementation and compliance with halal standards throughout the company's value chain and innovation in the development of organic coconut products which makes Bionesia superior in terms of costs.

1 INTRODUCTION

Competition is a term used to describe a business environment where companies compete to gain superiority over their competitors in terms of markets, customers, innovation, efficiency, and profitability. Success in a competitive context is often determined by a company's ability to create and maintain competitive advantages that differentiate them from competitors and enable them to achieve better results. In terms of how a company is expanding and becoming more profitable.

In order to create a competitive niche for a company in the industry, it needs to establish its competitive strategy. The objective of competitive strategy is to establish a sustainable and advantageous position to fight against the determining forces of industry competition (Porter, 1985). Competitive strategy is the plan and approach that a company employs to compete effectively, while competitive advantage is the result of successfully executing that strategy.

Companies can achieve competitive advantage by offering high-quality products or services at lower prices than their competitors (cost advantage), or by offering products or services that can be tailored to customer needs quickly and easily (responsive advantage) (Simatupang et al., 2018).

The primary tool for identifying and improving competitive advantage is value chain analysis. This tool examines how each activity in a company contributes to the overall value of its products or services by dissecting it into its core activities. By comprehending the value chain, companies can discover areas where they can boost efficiency, lower expenses, and set themselves apart from their rivals (Porter, 1985).

The halal industry is on the rise due to the increasing demand for halal products and services. According to the Global Islamic Economy Report, Muslims around the world spent an estimated USD2 trillion in 2021 on food, pharmaceuticals, cosmetics, fashion, travel, and media/recreation. The ethical consumption needs of Muslims, who follow Islamic dietary and lifestyle guidelines, have an impact on all these sectors. There is also evidence that non-Muslims are increasingly demanding halal products because they perceive them to be safer and more natural than their counterparts (Farouk et al., 2020).

There is a lack of research that connects Porter's value chain model with the halal concept. Halal Value Chain is usually synonymous with Halal Supply Chain. Even though these two concepts are interconnected, the supply chain is actually an important part of the value chain (Antonio et al., 2020).

Bionesia Organic Foods, a manufacturer of coconut-based products, is the focus of this research. For Bionesia, as a food ingredients producer, maintaining halal compliance in every pre-production, production, and post-production process is important because it relates to reputation and customer trust.

According to Mordor Intelligence, the coconut products market is predicted to be worth USD 4.51 billion in 2023 and USD 7.26 billion by 2028, rising at a CAGR of 9.98% during the forecast period (2023-2028). As a result of this expansion, the coconut goods business has become one of the most competitive in the world.

Plant-based dairy products are gaining popularity, particularly because of the COVID-19 pandemic's emphasis on the importance of a healthy diet and plant-based protein to enhance the immune system. Additionally, there is a growing demand for halal-certified and clean-label plant-based food and dairy alternatives.

2 LITERATURE

“Halal” is an Arabic term that means “permissible” or “in accordance with Islamic law”. In the context of food and drink, the term “Halal” refers to products that comply with the rules of sharia (Islamic law) and are considered legal and suitable for consumption by Muslims. In Indonesia, the institution authorized to provide halal product guarantees or legal certainty regarding the halalness of a product as proven by a halal certificate is called the Halal Product Guarantee Organizing Agency (BPJPH).

The concept of value chain was first introduced in *Competitive Advantage: Creating and Sustaining Superior Performance* by Michael Eugene Porter, an American academic. The value chain is a framework for analyzing how a company creates value for its customers by identifying the primary activities and support activities within the company (Figure 1.). Primary activities are activities that are directly involved in the physical creation of a product to after-sales assistance, while support activities enable primary activities to be carried out effectively by providing technology, procurement functions, human resource management, and firm infrastructure. Porter's value chain model has been a valuable tool for many companies for nearly four decades because it helps them discover the sources of their competitive advantage.

In a halal context, value chain analysis can incorporate halal considerations into these two types

of activities. The Halal Value Chain (HVC) is a comprehensive system that ensures that Islamic law is adhered to while producing, distributing, and marketing halal products. This includes careful consideration of the ingredients used, processing methods employed, and the packaging materials selected. The goal is to ensure that the final product is clean and halal, and meets the needs of Muslim consumers (Subianto, 2018).

Primary Activities:

1. Inbound logistics in the context of the halal value chain refers to the steps and processes involved in managing the supply of raw materials or product components used in the production of halal goods or food. This is part of the halal value chain that focuses on the initial stages of production or supply of ingredients that will be used in halal products. The process in halal inbound logistics includes selecting suppliers who comply with halal principles in the production and supply of raw materials; separation and protection of raw materials from contamination with non-halal materials during the shipping process and storage in the warehouse; halal certification and labeling; audit and supervision of their raw material suppliers to ensure compliance with halal standards (Tieman, 2015, 2020a).
2. Production or operations in a halal context refers to all processes and activities involved in manufacturing, processing, and providing products in accordance with halal principles. This includes meeting strict cleanliness and sanitation standards in production facilities; and strict monitoring and control in the production process, including maintenance of equipment, machinery, assembly, packaging. Companies must ensure that there is no cross-contamination between halal and non-halal ingredients in the production process (Tieman & Darun, 2020).
3. Outbound logistics in a halal context refers to activities related to collecting, storing and distributing products by ensuring that the products remain in accordance with halal principles during storage and travel to the market or to customers. Logistics is an important part of the halal supply chain (Tieman & Ghazali, 2014).
4. Marketing and sales are related to providing a means by which customers can buy products. In the halal context, halal marketing not only ensures that products meet halal standards but also meet the expectations of Muslim consumers. Activities related to halal marketing and sales, namely

advertising policies, promotions and selecting marketing channels that are in accordance with Islamic ethics and principles (Tieman, 2020b).

5. Service refers to activities related to providing services to increase or maintain product value. These activities include customer support, complaint handling, and problem solving in accordance with halal principles. Companies can also provide information about products and how to use them in accordance with Islamic principles (Windasari et al., 2023).

Support Activities:

1. Procurement refers to the function of purchasing input, not purchasing input. Procurement in the halal context relates to activities such as qualifying suppliers to comply with halal standards; and strict auditing and monitoring of suppliers and the entire supply chain to ensure that halal requirements are adhered to (Shari et al., 2022; Zakaria et al., 2020).
2. Technology development refers to a series of activities that can be broadly grouped into efforts to improve products and processes. Technology is embedded in the entire value chain. Technological change can create a competitive advantage if it leads to differentiation or reduced costs (Porter, 1985). In the halal industry, technology development also includes the use of technology to track the source, processing, and distribution of products (halal traceability). It also includes the development of software and tools for managing halal compliance (Dilla & Fathurohman, 2021).
3. Human Resource Management in a halal context is an approach to human resource management that

focuses on managing aspects related to halal principles in Islam. Halal HRM includes activities such as selecting individuals with good Islamic character and ethics; fair reward and compensation policies; providing support for work-life balance that allows employees to carry out their religious obligations; working conditions in accordance with Islamic principles; improvement of relevant skills (Gharbi et al., 2022).

4. Corporate infrastructure refers to a set of activities, such as planning, accounting and finance, legal, and quality management. Infrastructure supports the entire value chain and can be a source of strong competitive advantage (Porter, 1985). In the halal context, infrastructure refers to the establishment of an ethical framework and governance structure that prioritizes halal compliance. These activities include adherence to ethical business practices, appointment of a halal supervisor, or establishment of an oversight committee responsible for ensuring halal integrity.

3 METODOLOGY

The research used a qualitative approach involving in-depth data collection to understand halal value chain practices at Bionesia Organic Foods. Interview techniques, observation, document analysis, content analysis, and literature study were developed to identify sources of the company's competitive advantage.

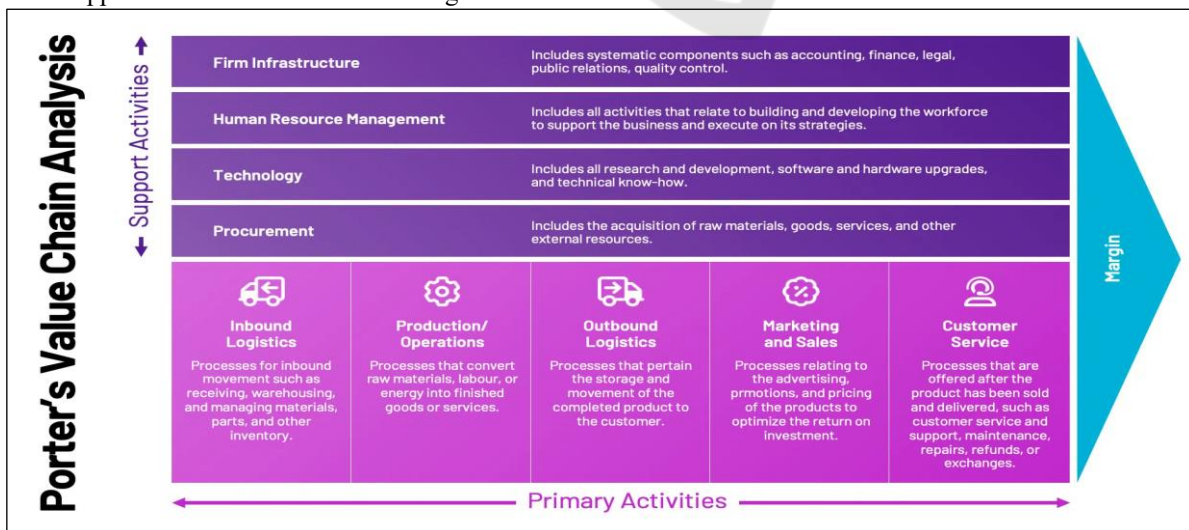


Figure 1: Porter's Value Chain Model.

4 RESULTS AND DISCUSSIONS

The research results and discussions in this section are separated by the nine activities that were analyzed.

4.1 Inbound Logistics

The halal inbound logistics process is a series of stages that include the management and inspection of raw materials and supporting materials entering the company so that they meet Islamic halal standards.

Bionesia ensures that the selected supplier can provide raw materials or supporting materials that meet halal requirements by considering the supplier's reputation, supplier compliance with halal standards, as well as halal documents and certificates.

Raw materials are sent from organic coconut plantations in Jambi and Riau, and the average time required to arrive at the facility is 1-2 days. Meanwhile, auxiliary materials and packaging are sent from Jakarta with an average time of 5 days. The main bottlenecks that companies face in the inbound logistics process are obstacles in sea transportation and Free Trade Zone (FTZ) port status, which require more complex documents. To optimize the inbound logistics process, the raw materials ordered must be adjusted to the sales forecast.

When raw materials arrive at the company's facilities, the receiving department will carry out physical inspections, and tests and check documents related to halal to ensure that the materials meet halal standards.

By ensuring halal status in the inbound logistics process, Bionesia can maintain a consistent and sustainable supply of raw materials, which is very important for maintaining production continuity. This sustainability of supply can be a competitive advantage because the company can fulfill customer demand well and on time (Khan & Rattanawiboonsom, 2019; So et al., 2006).

4.2 Production

With facilities located in a modern industrial area, Bionesia produces high-quality coconut milk, coconut water, low-fat and high-fat desiccated coconut, virgin coconut oil (VCO), coconut chips, and coconut flour.

To optimize the production schedule, Bionesia adjusts the production schedule to the inventory held in the warehouse (inventory control). Meanwhile, to meet compliance with halal standards, the company prepares a production plan that includes cleanliness

and sanitation of production equipment and facilities so that they are free from contamination that does not comply with halal standards. Training on halal standards and the importance of complying with established procedures is also provided to employees involved in the production process.

Complying with halal standards can help companies avoid potential legal problems and financial losses, as well as create a competitive advantage by reducing risks (Fauzi & Mujaddid, 2023).

4.3 Outbound Logistics

Bionesia partners with logistics companies to send products to the domestic market (Jakarta) which takes an average of 3 weeks and the global market (US) which takes an average of 1 month. To prevent contamination from non-halal products, physical separation in storage warehouses, different vehicles, even different distribution times is necessary.

The key indicator used by Bionesia to measure effectiveness in the outbound logistics process is customer satisfaction. Bionesia benefits from customer satisfaction by increasing customer retention and loyalty. Companies can create competitive advantages through a strong customer base because high customer retention can reduce customer acquisition costs and increase sustainable profitability (Pei et al., 2020; Sultoni & Sudarmiatin, 2021).

4.4 Marketing and Sales

Bionesia prioritizes marketing strategies that reflect halal values and principles. Customers can locate clear halal labels on all products as well as halal certification on the company's official website. Bionesia also ensures that advertising and promotion policies do not violate Islamic values and ethics.

Products that communicate Islamic principles have strong differentiation advantages. This differentiation advantage can help Bionesia compete in a competitive market (Joudeh et al., 2022; Sarkum & Syamsuri, 2021).

4.5 Service

Activities that involve providing services to enhance and maintain product value. Apart from providing services related to sales, Bionesia also provides factory tour services. Factory tours provide customers, business partners, or the general public

with the opportunity to see how their products are made and processed.

This can create a competitive advantage for the company by increasing customer trust and providing a better understanding of the latest products, technology, and innovations in the industry, as well as improving the company's image and reputation as an organization that is transparent, trustworthy and committed to product quality and halal.

Some companies use factory tours as a tourist attraction. Bionesia can take advantage of this opportunity to generate additional income and help in promoting brands and products (Lee, 2015, 2016).

4.6 Procurement

Halal procurement is a procurement approach that ensures that the raw materials, products, or services purchased and used meet halal standards.

Apart from the availability of goods and competitive prices, Bionesia also audits and selects suppliers that meet quality requirements, laws, and halal standards. This helps Bionesia build a strong supply chain, which can increase operational efficiency and reduce risks in the supply chain (Shari et al., 2022).

The SAP system (System Application and Product in Data Processing) helps Bionesia increase effectiveness and efficiency in procurement activities.

4.7 Technology Development

Technology development is one of the keys to creating a competitive advantage for Bionesia. The company budgets around 20% of operating costs for research and development. The company collaborates with a tech provider from Singapore to support technology development and collaboration with educational institutions (IPB University) to standardize production processes.

The technology developed is used to automate the production process. This technology allows Bionesia to increase operational efficiency, reduce production costs, and produce products that are more competitive in price.

Bionesia also develops technology that can help companies become more efficient in their use of energy and natural resources. This can create a competitive advantage as companies can meet increasing market demands for sustainability and environmental responsibility.

The transfer of knowledge and research findings into the production process is also carried out through a weekly 'Food Safety Talk' culture.

In a highly competitive business world, companies that invest in technology development and can make good use of that technology have the potential to create sustainable competitive advantages. The ability to innovate, respond quickly, and better understand market changes can be a powerful differentiator in the marketplace (Dymitrowski & Mielcarek, 2021; Tilabi et al., 2019).

4.8 Human Resource Management

Human Resource Management practices can create competitive advantages for companies (Pham, 2020). Bionesia realizes that to maintain the company's best talents is by creating a comfortable work environment, following applicable laws and regulations regarding the implementation of fair and competitive policies, and providing rewards to employees.

Bionesia not only pays attention to the welfare and safety of workers, but also highly appreciates the hard work of farmers. The company has its own agricultural department and educates farmers about organic farming.

Skilled farmers can reduce production costs and increase agricultural yields, this practice allows Bionesia to obtain raw materials that comply with the required quality and halal standards, thereby increasing the company's competitive advantage.

4.9 Firm Infrastructure

The infrastructure owned by the company has a significant influence on the company's competitive advantages (Kibebe M'mbwanga & Anyieni, 2022). As a producer of coconut-based products, Bionesia operates in the modern industrial area "Bintan Inti Industrial Estate" with a land area of 4,000 hectares. Bintan Inti is the first industrial zone to receive Halal certification in the Riau Islands and the first marine industrial zone in Indonesia.

As an area manager, BIIE provides support to all tenants by providing buildings, electricity, air, and waste disposal systems. Bionesia has a production information system (SAP) and is currently developing an information system that focuses on payroll based on performance.

5 CONCLUSIONS

Compliance with halal principles throughout the value chain, as well as innovation in the development of organic coconut products that differentiate

Bionesia from its competitors, provides a competitive advantage for Bionesia.

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