




ON COMPETITIVE STRATEGY FROM OEM TO OBM - A CASE STUDY ON A SEALING PARTS COMPANY IN TAIWAN



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ABSTRACT

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As the market becomes more globalized and the international situation continues to undergo complex changes, the income and profits of the OEM business are getting thinner and smaller. In such circumstances, many companies have initiated OBM business, causing fierce brand competition in the market. This study took a sealing parts company in Taiwan as the subject to explore how the company operates smoothly to maximize profits with both OEM and OBM business, determines the proper business strategy according to different customer groups and market segments, distributes customer orders and develops business strategy when OEM business conflicts with OBM business, so as to avoid customer complaints and reduce the risk of losing orders. This study first discussed the brand positioning of the subject company and brand competitions in the industry. Next, through qualitative interviews, it analyzed the market segmentation under the competition among international brands and the impacts of COVID-19 on the development of company strategy.

Contribution/ Originality: Cooperating with competitors is a realistic problem with contradictory conditions and is constantly faced during business operations. This study discussed and interpreted the research topic based on literature reviews and in-depth interviews with senior professional managers in the subject company, with the aim of providing a useful reference for companies of the same type to develop the most appropriate business strategies.

1. INTRODUCTION

Original Equipment Manufacturing (OEM) refers to business owners or manufacturers in developing countries that provide consumers with a transaction model for products as requested by the technical services and advice given by excellent teams of the companies in developed countries with leading industry and advanced technology based on the qualified authorization and requirements (Ohmae, 1989). During the development period of network and information from 1980 to 1990, Taiwan developed high-end technology including electronic components and wafer foundries through its strong R&D capability, innovation capability and cooperation with excellent teams, and it enjoyed a high reputation in the international electronics and information market. For example, the phrase “Made in Taiwan” (MIT) became a national brand for the international market at that time. Moreover, while actively expanding international brands and enhancing brand images, the Taiwan government also offered discounts to reduce the need for commercial loans for companies with self-owned brands to further promote the Development Plan on Taiwan’s Brands in 2007. Both for-profit and non-profit government units strived to promote and enhance Taiwan’s brands, as well as to provide a sound development environment for individual brands (Hu & Chen, 2012).

With the continuous efforts and innovations of the government and related organizations, Taiwan gradually transformed from the "OEM King" to an OBM manufacturer and established a professional image and original style in finance, R&D technology and product design. The evolutionary path from OEM to OBM (Original Brand Manufacturer, hereinafter referred to as OBM) was the result of mutual learning, self-absorption, self-innovation and self-breakthrough, and also an important process of accumulation and practice of R&D technologies.

OEM demonstrates that a company or contractor has the capability to manufacture, install and assemble products in accordance with the quality specifications, product specifications, R&D procedures and technology, or the designated parts and accessories, specified quantities and patterns, as required by the consumer, buyer or contract owner (Wang, Wang, & Wu, 2008). OEM is also known as commissioned manufacturing. In simple terms, such manufacturing could meet customer needs by equipment and a manufacturing site and could start production without technical professionals. OEM service originally referred to a modern and popular production mode where the purchasing party offers mechanical equipment and professional technology and the manufacturing party provides labor resources and production sites. Meanwhile, the purchasing party would be responsible for sales and the manufacturing party responsible for production. However, for most present OEM services, the purchasing party provides both brand and authorization, and the manufacturing party produces the products under a licensed brand name. OEM business is a necessary step under socialized mass production and large-scale cooperation, as well as one of the effective ways to allocate resources reasonably. OEM production has become an important pattern of modern industrial production. With accelerating economic globalization, OEM purchasers are more likely to select OEM suppliers within a broader range, especially in countries or regions where processing and manufacturing costs are relatively low. Based on the above characteristics, the OEM business seems to have low entry barriers and requires only money and manpower. In simple terms, it resembles the copying of others' technology, so the competition is increasingly fierce (MBALib, 2021). The past manufacturing industry in Taiwan was often constrained by limited land resources and rising labor costs. To shake off these restraints, some industry insiders started to think about the transformation to OBM. In this way, the manufacturing industry could be revived with its own R&D technology and professional production capacity, and could survive the fierce competition among the industry and global market. Besides R&D capability and design skills, the OBM business was able to establish exclusive brands and promote them in the market (Kuo & Lee, 2019). The original brand manufacturers thus designed and developed their own products and sold them to the customers under their own brands or trademarks. But as time changes, human demands and desires have continued to grow. In an era of information explosion, many traditional manufacturers in Taiwan have realized the gaps between them and those overseas, including the development of marketing and advertising by media, newspapers, magazines, the Internet or mutual learning. As new technology advanced, they no longer operated the business in the old thinking pattern, and instead, they learned from and imitated world-renowned brands and regarded them as the goal for competition. In an intensely competitive market, well-known brands are those industries or brands that everyone knows and that enjoy high brand value all over the world. These brands do not come out of nowhere and must have gone through a long and painful path (Wang et al., 2008). Based on the current status, most manufacturing industries or business decision-makers in Taiwan are rushing to cooperate with world-renowned manufacturers, no matter in supply or demand or upstream and downstream buyers or sellers. Through obtaining these cooperation opportunities, they hope to advertise their own products and illustrate their sales performance in order to demonstrate their strength. All industries expect a winner take all market pattern, but it is difficult to achieve in the actual industrial supply chain. For example, even though the company in this study is the largest oil seal manufacturer in Taiwan, it still encounters many barriers when cooperating with the major OEM customers in Europe and the United States, because these OEM customers only cooperate with the world's famous manufacturers to consolidate their leading position in the industry. The oil seal company in this study has experienced ups and downs on the way to establishing its own brand. Although it has operated in Taiwan for more than 40 years, it is still far behind those

world-famous manufacturers. This study took this company as the subject to explore its brand positioning and brand competitions in the industry and analyzed the market segmentation under the competition between its own brand and other, world-renowned brands. Through qualitative interviews, this study performed an in-depth analysis on the segmentation of the subject's brand in the global market while competing with world-famous oil seal companies.

2. LITERATURE REVIEW

2.1. *Introductions to the Subject Company and Oil Seal Industry*

The subject company was established in 1976 and was listed on stock market as the first professional sealing parts manufacturer in Taiwan in 2002. Today, it remains the largest sealing parts manufacturer in Taiwan. With its strong R&D and innovation capabilities, it delivers high-quality oil seals worldwide and has won a good reputation among customers at home and abroad. Now the company has subsidiaries in Iran, China, Thailand, Russia, India and Australia, respectively, and has established mutual cooperation with major oil seal manufacturers in Europe and the United States, with business covering more than 70 countries around the world. The company obtained ISO 9001/14001, ISO/TS 16949 and OHSAS 18001 certification in 2006 and 2008, respectively, and obtained IATF 16949 certification in 2017 and ISO 50001 certification in 2018. The oil seal industry has a history of more than 50 years in Taiwan, and there are currently about 400 oil seal companies operating in the region. At present, most middle-large size oil seal companies are located in central Taiwan, most of which provide OEM services for the European and American automotive transmission markets. An oil seal, as the name implies, is a mechanical element that seals oil and is widely used in engines. It has a long service life in different oils at high temperatures during the prevention of oil leakage. Most oil seals are round and made of metal parts with a rubber gasket installed inside, which may be made of either natural or synthetic rubber. Its main function is to protect the shaft and bearing from foreign matters such as oil, water, gas or dust, and to prevent liquid leaking from out from joint surfaces or rotating shafts. Due to the similar application environments, sealing parts with standard and customized specifications have been widely used in many fields. They are indispensable components for motors, electronics, aerospace equipment, and transportation vehicles (such as aircraft, ships, locomotives, bicycles and automobiles). According to the statistics, sales of oil seals for automobiles and locomotives account for more than half of the total output value in Taiwan, including those used in engines (crankshafts/camshafts), valves, gearboxes, steering gears, transmission shafts and wheel shafts (Dick, 2001; Hsu & Wang, 2008; Industrial Development Bureau Taiwan (R.O.C.), 2010). The subject company has more than 40 years of experience in manufacturing oil seals. It has a total of six factories, which are classified according to the components and parts for which the oil seals are assembled. An oil seal is mainly composed of an iron shell, rubber and spring. Meanwhile, the R&D team has developed a formula for mixing rubber that enables the rubber materials to be applied in various application scenarios. For example, the R&D team has developed several rubber materials with low-temperature resistance for a Russian customer to satisfy applications during the winter. The iron shell can be regarded as the framework of the sealing part. Its rigidity and material properties are very important. The company completed its sixth new factory in 2019 for iron shell processing, including sandblasting and filming. Moreover, it has updated its technology involved in the development of Industry 4.0 and has developed a series of automated workflows using robotic arms and unmanned vehicles to ensure quality and efficiency. In addition to sufficient raw materials, an important production part, namely, the mold, is also required. The company is able to design and develop various molds by itself. With its complete manufacturing workshops and advanced equipment, it has developed nearly 100,000 molds so far, and it has complete automatic storage racks for mold management and storage. However, not all raw materials are manufactured by the company itself. The iron shell and spring parts, for example, are provided by third-party manufacturers, thus generating upstream and downstream supplier relationships. These suppliers are qualified only after several rounds of audits and inspections, which is crucial for quality control and fulfills the commitment to

quality assurance for its customers. With its continuous efforts to improve the quality and manufacturing technology of its sealing products, the subject company has gained a position in the world's sealing market and has developed into a world-class sealing parts manufacturer. The overall team works with the company vision of creating a world-class factory with a world-class brand. The sealing parts are widely applied in automobiles, air hydraulics, industry and agriculture, construction industry, and mining industry, and cover all objects in daily life, from the necessities of related industries to the small parts that seem inconspicuous, such as large machine platforms, cars, trucks, machinery for agriculture and construction, coffee machines and washing machines. Sealing parts, as the name implies, are used to seal water, oil and gas in various application scenarios. If any internal oil or water leakage occurs, a vehicle may not be able to move, and shock absorbers may not be able to work as well. With its strong R&D team, the company designs and develops multi-lip seals to isolate mud, oil and dust for the high sludge and other harsh environments of the agricultural, construction and mining industries. Just as all organs are important to the human body, small sealing parts are also indispensable.

2.2. OEM to OBM

OEM business refers to a customer-based contractual operation in which a manufacturer is designated to produce a certain type of product. The finished products, semi-finished products, accessories, R&D technology and product design are completed under customer brands and in accordance with specified product specifications, form specifications and material requirements. OEM is also called commissioned manufacturing, contract manufacturing, licensed manufacturing or manufacturing outsourcing (Heide & John, 1990; Hobday, 2001). Hobday (1995) pointed out that OEMs are often restricted or squeezed by customers with self-owned brands, and they often have no competitive advantages in the international market. Moreover, due to the various requirements from customers, they have to focus on manufacturing activities for a long period of time and are unable to create more added value in brand activities. OEMs both compete and cooperate with customers that have self-owned brands. Due to the differences in conditions and capabilities, they often learn from each other's strengths and successful cases to fill the gaps or reduce business risks. In this case, all OEM companies are both competitors and partners. Chen (2005) found that with long-term accumulated experience and a strong technical strength, many OEMs have tried to break through the constraints of value chains and have gradually extended their business to the end markets with their own brands. In the ever-changing and competitive market, every company continuously enhances their strengths to win a high reputation and achieve the best performance. Companies with self-owned brands can be found everywhere today, but how to establish and maintain brand value is still important. Companies design and develop self-owned brand products and then sell them to customers (Wang et al., 2008). A self-owned brand is a unique certification and a persistent, reliable and faithful commitment to customers, through it, customers can identify products, services or companies. It represents reliability and commitment of the company with a focus on the overall company or its second brand (Ward, Light, & Goldstine, 1999). When OEMs develop to a certain scale and can achieve considerable cost advantages, they may launch new brands to fill blank markets or secondary markets, or they may cooperate with downstream partners, such as distributors and retailers, to create their own brands and accelerate the pace of entering the marketplace (Arruñada & Vázquez, 2006). It is common for OEMs to gradually transform into OBMs, but the competition that comes with cooperation is different from traditional competition. When extending the business to the end market, OEMs have to consider the feedback and responses from business partners, so as to balance the partnership between competition and cooperation. OEMs face great challenges in brand marketing and operations when establishing their self-owned brands (Chu, 2009). The original upstream and downstream activities of the company are OEM partnerships with a clear definition of duties, in which resource utilization is highly complementary. The customers have strong capabilities in market negotiation, and the OEMs are not a threat to them. However, if OEMs develop their own brands and extend their business to the end market from the upstream industrial chain, the customers may become worried that their self-developed technologies will

be misused or stolen, or that the original market will be seized. In this case, they may take counteractions against OEMs with self-own brands. However, considering resource limitations, it is important to improve the added value of the company in the market so as to respond to rapid changes and demands in the market and the complex international environment. Therefore, when developing a business strategy, the company has to establish a strategic goal that is based on both competition and cooperation (Loebecke, Van Fenema, & Powell, 1999). Kotzab and Teller (2003) mentioned that competition and cooperation vaguely include both game theory and resource dependency, meaning that when two or more companies establish a cooperative relationship for expansion, they will also compete with each other to grasp the market. Zineldin (2004) also held that individual companies or enterprises can coordinate with each other to realize common business goals, but at the same time, they will also compete with each other to make profits. Morris, Koçak, and Ozer (2007) divided competition and cooperation relationships into two dimensions, namely, cooperative relationships for common interests and competitive relationships for competing interests, implying that companies will operate beyond the commitment to their partners when pursuing self-interests. Bigliardi, Dormio, and Galati (2011) also stated that horizontal strategic alliances are a type of cooperation that was often overlooked in the past, because companies considered their partners to be independent and single entities that would compete with them in the market.

3. METHODOLOGY

3.1. Case Study Method

The case study method was adopted to explore the business strategies of the subject company and to analyze its actual situation. Yin (2009) pointed out that the case study method is an experience-based investigation method that is used to intensively analyze current social phenomena and real life. This method is often applied when it was not easy to distinguish phenomena and social contexts. When the case study method is used to analyze unique events, many variables have to be taken into account. In this case, it is necessary to collect evidence from different sources. If the data results are consistent, a theoretical model can be established to guide future data collection and analysis. The case study method is an independent, in-depth, narrative and qualitative investigation that is used to analyze in detail the subject case and its similarities and differences with other cases. The case study method is often employed to analyze why the subject makes decisions, how it implements them afterwards and what subsequent research results will be generated. As a research strategy, the method is complete and comprehensive. In addition, it is also necessary to collect, arrange and design the case data into a series of logical and effective information. Thus, the case study method is not only a method of data collection to create a series of logical and effective information but also a complete research strategy (Frankfort-Nachmias & Nachmias, 1996).

3.2. Data Collection

According to Yin (2009) file records, documents, participant observations, direct observations, interviews and physical artifacts can be used as sources of evidence for the case study method. This study took one company as the subject to explore its competitive strategies in changing from OEM to OBM. The collected data included participant observations of the company and primary data from interviews with managers with different specialties. Data about the company from newspapers, magazines and official website were included as well.

3.3. Interviewees and Interview Guidelines

Miller and Crabtree (1992) divided the interview method into three different forms (structured, semi-structured and unstructured). The structured interview method is a research technique that can provide a more detailed understanding on decision-making activities. The semi-structured interview method is usually performed with groups or individuals based on the interview guidelines and does not specifically hide the research purpose. The unstructured interview method is like a leisurely conversation and is usually applied with specific intellectuals or

experts. The semi-structured interview method was adopted in this study. It first listed the questions and then adjusted or appropriately increased and decreased the questions according to the interview situation and sequence at the time. The consideration factors and characteristics of the selected interviewees included: (1) years of working in the company; (2) senior executives with decision-making power in marketing, sales and operations of the company; and (3) interviewees who had gone through organizational changes and operation reforms and were able to provide effective and practical information for the research topic. All interviews were recorded with the interviewees' agreement. Table 1 lists the basic information of the interviewees.

Table-1. Basic Information of the Interviewees.

Interviewee No.	Service Department	Title	Years of Working
Interviewee A	Sales Department	Vice President	29 years
Interviewee B	Marketing Department	Manager	17 years
			1. Worked as an executor in sales and marketing department of a renewable energy factory for 9 years
			2. Worked as a business manager of TFT-LCD vehicle for 3 years
			3. Worked in marketing department of the subject company for 5 years
Interviewee C	Sales Department	Section Chief	35 years

This study mainly focused on the factors impacting the competition strategy in the change from OEM to OBM. It first prepared lists of questions and then adjusted or appropriately increased and decreased the questions based on the interview situation in order to obtain results that were closer to the research topic of this study.

The suggestions and conclusions were given based on the interview questions, which were prepared based on observations of the existing OEM and OBM conditions, secondary data, background data and reference literature. The interview questions are listed below.

3.3.1. Interviewee: Vice President

- [1] What is the strategy for the company to develop its own brand?
- [2] Has COVID-19 had impacts on or caused modifications to the original strategy for brand development?
- [3] How does the company develop the marketing strategy for its self-owned brand?
- [4] What are the impacts of ISO, IATF and other certifications on management of the company brand?
- [5] What do you think is the difference in market segmentation between your OEM brands and the company brand?
- [6] What do you think is the strategy for the company brand to succeed in such a competitive market?
- [7] What are the competitive advantages of the company brand among existing customer channels, as compared with other OEM brands in the company?
- [8] How do you determine the market positioning when the company grasps the OEM market and competes with world-renowned manufacturers in the industry?
- [9] Has COVID-19 had an impact on the company?
- [10] What are the positive and negative impacts of COVID-19 on the company?
- [11] What are your expectations and suggestions for the company brand? Is there any information to be added?

3.3.2. Interviewee: Manager

- i. What is the strategy for the company to develop its own brand?
- ii. Has COVID-19 had an impact on or caused modifications to the original strategy for brand development?
- iii. How does the company develop the marketing strategy for its self-owned brand?

- iv. What are the impacts of ISO, IATF and other certifications on management of the company brand?
- v. What do you think is the difference in market segmentation between your OEM brands and the company brand?
- vi. What do you think is the strategy for the company brand to succeed in such a competitive market?
- vii. What are the competitive advantages of the company brand among existing customer channels, as compared with other OEM brands in the company?
- viii. How do you determine the market positioning when the company grasps the OEM market and competes with world-renowned manufacturers in the industry?
- ix. Has COVID-19 had an impact on the company?
- x. What are the positive and negative impacts of COVID-19 on the company?
- xi. What are your expectations and suggestions for the company brand? Is there any information to be added?

3.3.3. Interviewee: Section Chief

The strategy map and operation map are the dimensions and indicators of any company. The interviewee had worked in the company for 35 years and knew the development history of the company very well. He made further analysis on the strategy map and operation map and titled this analysis as *Strategy Map to Guide Operations with both OEM and OBM*.

3.4. Data Analysis

The semi-structured deep interview method was adopted in this study. The interview records were collected and analyzed in accordance with the following four steps:

- [1] Word-for-Word Files: The interview recordings were converted to text by word, and the interviewees were represented by English letters respectively.
- [2] Summary of Interviews and Encodings: A list of questions was prepared. After each interview, the interview records were classified to extract a summary of the topics. The interview contents and relevant data of each interviewee were then categorized to obtain the important words or sentences (that is, the word-for-word file was carefully read, studied and broken into smaller segments, such as sentences and paragraphs).
- [3] The factors of the competition strategy for the change from OEM to OBM were analyzed, and the interviewees' records were categorized based on the reference literature. The word-for-word file was then read carefully and repeatedly, and the contents were further classified and encoded to seek out the supports for the research topic of this study.
- [4] Data analysis was performed after all data were collected to explore the factors of the competition strategy for the change from OEM to OBM, after which cross-comparison analysis was carried out to form the conclusions and propose suggestions.

4. INTERVIEW RESULTS

4.1. Strategy and Advantage to Develop OEM and OBM Businesses for the Subject Company

After interviewing the senior supervisors, it was learned that the goal and purpose for changing from OEM to OBM was to keep the company profitable and growing. In the early stages, the company would start production as soon as it received an order, and it often did not understand the application scenarios in which the products were to be used. However, its growth was still restricted after a period of development, because it was busy with OEM manufacturing and was unclear about the demands of the end customers. Therefore, the subject company started to design different sealing parts for different application scenarios, and it began to establish its own brand around 2000. Up to now, the ratio of OEM to OBM has been up to 4:6 or 5:5, from 7:3 in the early days. Its development strategy could be divided into four steps. First, it provided differentiated products and services. Second, it

segmented the market so that it entered the market with the most competitive products. It did not use one single product to cater to all groups of customers; instead, it first classified the customers and selected the most advantageous products for this segment of the market. This strategy had a higher success rate than that used to capture the overall market. Third, as an OEM, it provided highly advanced and full-process technical services, which it thought was the biggest difference among its competitors. Fourth, it supported customers to create product value through product features and product performance, and it assisted them in solving different kinds of process problems, from product design to production. If customers were unfamiliar with a component, it would help them design the product and solve all potential problems until the product was assembled and could be sold in the market. The subject company operated with both OEM and OBM businesses and adopted a complete and successful strategy map to guide and support the overall business operation. This strategy map contained four dimensions, namely, the financial sector (which was the most important for company profit), customers, internal processes, and support units. The overall strategy map was based on providing full-process technical services for medium-sized OEMs and on being a preferred secondary supplier of large-sized OEMs. As a self-owned brand going to the global market, it opened an online shop to serve the after-sales market and satisfy its customers' real-time needs through maintaining a sufficient stockpile. Some tools were also used to target the strategy map, such as SPSS for strategic sales, Six Sigma (or six standard deviations) and Lean production.

For each dimension of the strategy, the entire company needed to be profitable, which was directly reflected by the financial sector, including the development of large-sized OEM customers and middle- and large-sized OEM customers. For the after-sales market development to promote self-owned brands, costs needed to be reduced and profits increased during the overall process. For customers, full-process technical services and efficient manufacturing processes were provided, and an online shop was opened to facilitate customers' real-time requirements, all of which supported the self-owned brand to enter the global market. Internal processes played an important role in the entire strategic map, and marketing and sales, R&D innovation and production processes were managed in accordance with laws and regulations. For example, to offer full-process technical services for OEM customers, and in order to serve as a preferred secondary supplier of large-sized OEM customers, SPSS, market research and innovation in transaction processes were accepted to facilitate market management. More importantly, for brand promotion, an international laboratory was established for R&D innovation and management, and an online shop was set up to promote the self-owned brand and provide convenient services. For the market operation, a full range of products with a sufficient stockpile was prepared, and management of the distributors, brand and marketing promotion were improved as well. For the brand and marketing promotion, a set of marketing frameworks and strategies was established, including market research and contact management. Market research was divided into overall research and market analysis, so as to explore potential markets and customers. Contact management covered access to the company's information. Customers could learn about the company by many approaches. First, they could browse the official website or visit its exhibition booth, which were both important contact points. They could also learn more by viewing marketing tools such as DMs, the company profile, product catalogs or external documents. Second, the company itself was an important contact point when customers came to pay a visit. The CIS design and visual design of the overall company were also important contact points. Smart hardware was used to create a navigation system for displaying the laboratory, and an iPad was employed to introduce laboratory equipment and generate or view reports from the laboratory equipment. The purpose of all this work was to enhance the company's brand promotion and increase its brand recognition. The company also strictly observed the laws and regulations of the region. For example, an environmental safety and health management system was established to ensure a healthy and safe working environment. Talent selection and retention related to the strategic map deserved attention as well. In addition, regarding information technology support, even though most companies are highly cautious about information security these days, there are still many fraudulent customers contacting companies to change the remittance accounts. To ensure information

security, internal training was strictly performed on the employees, and phishing letters were irregularly sent to test the employees' alertness. If employees were successfully tricked, they would be required to participate in internal training and re-education. All these were performed to improve the overall operations of both the OEM and OBM businesses. The company reviewed the strategic direction every year and made appropriate changes when necessary, which allowed the OBM business to develop smoothly together with the OEM business.

In the subject company, the OEM business and OBM business had no conflicts and co-existed together. Under the management of two different teams, the two business modes enjoyed their individual advantages to target different customer groups and markets. The main difference of the OBM business is its differentiated services and products. For example, as its largest competitors, company N and group F are unable to provide more flexible products and services. However, the subject company focuses on full-process technical services that are specially required by some small- and medium-sized OEM customer groups. It is difficult for the large manufacturers to do so, as most of them target at large OEM customer groups. There are also differences in terms of price. The OEM products usually have long sales channels, but the OBM products are relatively competitive. Moreover, the OBM business could better understand customer demands. In the OEM business, information is kept in secret, and the manufacturers do not know the application scenarios in which the products are to be used, and they do not know the end customers. In other words, it is difficult for the OEM business to understand the true demands of the customers. Also, the OEM customers do not just look for one OEM factory, and the suppliers are unable to change the purchasing decisions of these OEM customers. Therefore, they are usually more concerned about the price, and they would consider purchasing from some smaller factories. The subject company accredited that its advantages were its advanced technical services, relatively wide product lines and relatively strong production capacities. Furthermore, it was able to provide one-stop services, including mold development, product design and development, and product production. Besides product design and production on the front end, improvements on the back end were gradually completed. For example, Six Sigma practices and mechanical automation were introduced, including mechanical arms for production, QC, online CCD, and automatic full inspection machines. The separation between OBM and OEM is because the OBM business needs to better understand the customers' application scenarios, while the OEM business is only responsible for manufacturing. In simple words, the OEM business only needs to ensure the products are manufactured in accordance with the drawings, tolerances and operating standards, as the sales activities are completed by the customers. In this case, the OEM business has little right to make decisions. On the contrary, the OBM business is closer to the customers and the market. The OEM business focuses more on reputation and word-of-mouth. After all, being an OEM or contract manufacturer implies that the products would be delivered under a brand that has been recognized by the end consumers. Therefore, it is crucial for the OEM business to manage the quality, performance and researches on the industry environment. To extend its OEM business, the subject company put great efforts into satisfying their medium-sized OEM customers and serving as a preferred secondary supplier of large-sized OEM customers. For example, it established a strong R&D team to analyze the application scenarios required by its customers. When a customer sent samples for development, the engineer team would analyze the application scenarios and designs of the sealing parts, and also performed DFSS to satisfy customer demands. Moreover, an international laboratory was built, and the test equipment was verified according to national standards to further guarantee the product quality. All the above measures generated additional investment costs which ordinary small companies could not afford; however, the subject company was strong enough to win international OEM customers.

4.2. Competitive Advantages and Positioning of the Subject Company and International Manufacturers

Relevant international certifications are necessary to compete with international companies. For example, ISO is an international standard for system quality. International certifications are generally required for all exported products. As the industry leader and the only listed company to produce sealing parts in Taiwan, the subject

company strictly implemented internal audits and internal control, and it attached great importance to related certifications and audits, including basic certifications, such as ISO and IATF 16949, and many other international certifications, such as ISO 450001 (Occupational Health & Safety Management Systems), ISO 50001 (Energy Management Systems), REACH and RoHS, as well as regulations for mineral conflicts and anti-terrorism as required by the United States and related regulations on shipping containers, manufacturing procedures and security. All these are the responsibilities of a listed company and are improved or updated according to national and international standards to maintain company advantages. However, the company also encountered many obstacles while promoting its self-owned brands in the international market, including distance, language and cultural barriers. To overcome these problems, it had to think carefully about forming the correct strategy and cooperating with distributors or establishing subsidiaries that could keep up with the changes. The subject company made outstanding achievements in the Korean market and promoted its business pattern to distributors represented in other countries, fully demonstrating its strengths to compete with the international manufacturers.

In addition to the above competition conditions, the subject company provided more flexible products or services, as compared with large-sized sealing parts companies. For example, its largest competitors, company N, company T and group F, were inflexible about providing products and services. In one case, a customer decided to transfer an order from company T to the subject company after company T failed to answer the end customer on time in regards to after-sale support for technical issues. After they turned to the subject company for help, an engineer spent two months on testing to find the cause of the oil leakage and successfully solved the problem. This active response won the customer's trust and allowed the company to obtain the order at last. It showed that although company T was able to help the customer solve the problem, because this customer was not on company T's priority list, it had to cope with delays, thus causing customer complaints. However, the subject company targeted small- and medium-sized OEM customers, which allowed it to respond quickly and provide flexible services to win potential customers over. The subject company focused on small- and medium-sized OEM customers, because most of the large OEM customers had an annual contract or had long-term partnerships with their existing suppliers. Thus, it was quite difficult to obtain orders from large-sized OEM customers. The subject company clearly defined its target customers as those medium-sized OEM customers, so this type of customers could be regarded as a major client. Moreover, it was more flexible about providing customized technical services. For big companies, because most of their orders came from large-sized OEM customers, they were unable to take care of all these small- and medium-sized OEM customers. All these were achieved step by step. The subject company considered that as they won more and more small- and medium-sized OEM customers, it would become easier for them to win orders from large-sized OEM customers, which was also consistent with their strategy direction of satisfying small- and medium-sized OEM customers and serving as a preferred secondary supplier of large-sized OEM customers. Such positioning and strategy were the results of team brainstorming and efforts to adapt to market changes. For example, the company was re-organized in 2017, including departments from SBU1 to SBU5, which covered various application scenarios such as engines, gearboxes, steering gears, axles, A/C compressors and stepper motors in automobiles, and motors, reducers, washing machines, pumps, wind generators and robot arms. Based on the application scenarios, the sales department of the subject company explored the target OEM customers, while the marketing department assisted the sales department in finding potential customers and contacts. Because the customers were spread around the world, the butterfly effect was formed once any market or case succeeded. When the company became a qualified supplier, it gained more opportunities to win new projects. The well-known large factories usually had weak bargaining capacities and were unable to satisfy those small- and medium-sized OEM customers who also required technical services. These were how the subject company determined the positioning, competition strategy and advantages.

4.3. Impacts of COVID-19 on the Company's Development Strategy

The brand strategy was developed to cover a long-term period, and COVID-19 was just an accidental event. However, the impacts of this accidental event were comprehensive. The subject company regarded COVID-19 as not having a significant impact on the brand strategy but as having a large impact on the entire production line and orders. After the outbreak of COVID-19 in early 2020, the economy and market changed dramatically. The subject company had to adapt to serious imbalances between supply and demand in a short period of time. During the first to third quarters of 2020, the sharp drop in market demand reduced orders. Even when orders were completed, some customers decided to delay the shipments due to the sharp drop in demand. However, as COVID-19 gradually dissipated from the fourth quarter of 2020, the market started recovering and the number of orders soared, causing production needs to overload the capacity. Unfortunately, most orders were delayed because the raw materials were in short supply and the company was unable to complete production in time. The supply chain and the production line were associated with each other. When demand increased but raw materials were in short supply, the cost and product prices started to increase, which obviously affected the manufacturers and the customers. COVID-19 also created a new way of working. With advanced technology, people were able to work at home to prevent COVID-19 infections. For example, sales staff usually went out to visit customers in the past, but due to COVID-19, they had to contact customers using remote video conferences. This impacted business development, because it caused different results compared with face-to-face communication.

The subject company also analyzed the impacts of COVID-19 on its business operations. The first impact was the labor shortage. Due to COVID-19, the entry and exit of oversea workers was not as fast and convenient as before. The subject company hired many oversea workers. Before entering the factory, they first had to be isolated, and they could not work until they had completed their training. Such actions had a large time cost and caused a shortage of labor in the short term. With increasing orders, the labor shortage severely impacted the production progress. The second impact was the change in customers' ordering habits. Due to COVID-19, it was difficult to make forecasts about purchase quantities. The customers sometimes had no orders but at other times would place a large order. Such sudden changes made it difficult for the company to readjust the production schedule accordingly. The third impact was the unstable COVID-19 situation itself. With this uncertain psychological factor, the supply and demand of many raw materials were imbalanced. Rubber, for example, can be made into surgical gloves. As COVID-19 spread, such medical supplies were in great demand. In this case, the rubber price was pushed up because many manufacturers in the medical industry also came and competed for the raw materials, which had a great impact on the production of rubber products. The fourth impact was the complex international situation. The U.S. dollar weakened after the United States adopted a series of monetary and fiscal policies to boost the economy. The subject company suffered from huge exchange losses, because it traded in U.S. dollars most of the time. The last impact was the slowdown in business expansion. Due to COVID-19, sales staff were unable to visit their overseas customers, which had a large impact on business development. Although meetings could be performed through remote video conferences, the results were far from satisfactory. It was expected that this negative impact would decrease only when the COVID-19 pandemic ended.

As mentioned above, COVID-19 had numerous negative impacts on the company. However, according to the senior executives, the company also accumulated some experience during the process of fighting the epidemic, which was regarded as a positive impact. For example, to support and facilitate its international business, two video conference rooms with sound equipment were established, and more sales staff learned how to interact with customers and discuss ongoing projects in front of a screen. In fact, the entire business mode was innovated and transferred amid COVID-19. For example, many people changed their shopping habits in order to avoid crowds (such as shopping online, asking for delivery services, and searching online shopping platforms). A new life and new consumption patterns were born, which also created numerous job opportunities.

5. DISCUSSION AND CONCLUSIONS

5.1. Research Findings and Conclusions

Most manufacturers start out with OEM business. According to previous case studies and literature, the OEM business previously had low requirements for technology, and early OEMs acted as copycats. At that time, there were very few barriers to the OEM business. Companies could run OEM businesses as long as they had suitable hardware equipment, workshops and sufficient capital. However, OEM businesses were usually restricted by customer contracts, production procedures and design requirements. Moreover, it was difficult for OEMs to operate the business due to their own actual situations. In other words, OEMs were less flexible and obtained smaller profits, because they had to operate the business in accordance with the required specifications (with little space to reduce costs). With the advancement of various industries, more companies started to transfer from OEM to OBM to explore their own customers and develop their own technologies and products. In spite of the rising cost, they became more flexible in production and development, and they were less restricted than the OEMs. With their self-owned brands, they could create a sustainable business. The subject company operated both OEM and OBM businesses, and it successfully made profits through growing the two business modes. It was a successful company that deserved imitation. On the front end, the company had a complete marketing team with clear roles and responsibilities. The four SD departments were established for the service and growth of existing customers. Moreover, based on different application scenarios, five SBU departments were established in 2017 to strengthen the company's organizational capacity and increase business performance. Their main responsibilities were to explore the existing market and find new markets. According to the interview results in section 4, the subject company had a clear position for its self-owned brand in the international market, and it understood the market segmentation and strategy. With a strong cohesive force and complete internal training, all employees were moving steadily towards the target. The great progress and outstanding performance, from ten years ago until today, were proof of the company's successful goals and strategies. The subject company had been established for more than 45 years. As described in section 4, the company introduced Six Sigma practices, Lean production, automatic production equipment and full inspection machines to standardize production procedures and improve product quality, which they had never expected in the past few decades. Continuously upgrading its own equipment and optimizing the manufacturing process were also strategies for the company to maintain a sustainable operation.

In the subject company, the OEM business and OBM business had no conflicts and successfully co-existed with each other. This study performed STP analysis on the OEM brand and OBM brand of the subject company.

5.1.1. STP Analysis of the OEM Brand

- [1] S (Segmenting-Market Segmentation): The subject company classified its OEM customers as two types. One included large car manufacturers, such as BMW, Nissan and Toyota, and large industrial manufacturers, such as washing machine factories, motor factories and wind power plants, while the other type included Tier 1 and Tier 2 medium- and large-sized manufacturers.
- [2] T (Targeting-Target Market Selection): The subject company targeted large- and medium-sized Tier 1 and Tier 2 OEM customers whose sealing parts were applied in automobile parts, such as engines, gearboxes and steering gears. The industry, such as in the rotating shafts of washing machines and wind generators, is also the subject company's target market.
- [3] P (Positioning-Market Positioning): The subject company stood out from other competitors due to its rich resources, strong support teams, experienced and professional R&D team, full-process technical services, national laboratory and efficient manufacturing capabilities. It targeted large- and medium-sized OEM customers and aimed to become a preferred secondary supplier of large-sized OEM customers.

5.1.2. STP Analysis of the OBM Brand

- [1] S (Segmenting-Market Segmentation): The subject company classified its customer groups as those preferring lower prices, those requiring high-quality products and complete technical services and those requiring a wide range of the products with sufficient stockpiles, fast delivery and small demands.
- [2] T (Targeting-Target Market Selection): The subject company clearly defined its customer groups as those who required high-quality products, complete technical services, a full range of products with sufficient stockpiles, fast delivery and small demands. With its complete equipment and excellent teams, it stood out from other competitors to increase its brand's visibility, and it was able to enter the market or enhance its brand awareness in the countries of the targeted customer groups.
- [3] P (Positioning-Market Positioning): The customers, which the large-sized and world-famous companies would not take on and the small-sized companies were unable to capture, were the brand positioning of the subject company.

5.2. Suggestions

For sealing parts, the iron shell is regarded as the framework and is an important component that greatly affects the sealing effect and the supporting force of the entire seal. It is suggested that the subject company consider having a discussion with their existing iron shell supplier to establish a strategic alliance regarding stricter management on quality, production procedures, staff training and delivery dates. For the iron shell supplier, the subject company could be one of their potential customers. After all, it is the largest and the only listed sealing parts manufacturer in Taiwan, and has a huge demand for iron shells. Such a strategic alliance should comply with the company's operation strategy and helps to unify internal processes and control points. According to the interviews, COVID-19 caused an imbalance between supply and demand; orders increased sharply, but delivery dates were delayed. For the iron shells required by the subject company, the delivery times were unmanageable and depended on the schedule of the iron shell supplier. Because the iron shell supplier received orders from customers all over the world, it was unable to flexibly distribute a particular production line for the subject company. Therefore, it is suggested that the subject company establish a strategic alliance with its existing iron shell supplier to smooth and accelerate production. As the largest and the only listed company producing sealing parts in Taiwan, the subject company could be regarded as a leading sealing parts manufacturer in Taiwan. Its sealing parts have been widely used in various fields, including automobiles, industry, agriculture, construction, mining and air compressor oil. Its products are in demand not only by industries in Taiwan but by various industries all over the world. It is suggested that the subject company propose establishing a national sealing parts team, just like the establishment of A Team for bicycles or the national face mask team for COVID-19 in Taiwan. Through government-assisted resources, the national sealing parts team could enter the world market and expand the sealing parts industry in Taiwan. For example, with government assistance, the national face mask team got together with mask-related manufacturers to efficiently and quickly produce face masks and export them overseas. Similar to the national face mask team, a national sealing parts team could also promote the development of the sealing parts industry in Taiwan. Moreover, sealing parts in Taiwan are cheaper but have the same quality as those from European and American manufacturers. Such a national team could provide a boost for the sealing parts industry in Taiwan to enter the international market. Therefore, it is suggested that the subject company propose the establishment of a national sealing parts team.

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