

Analyze and address
strengths and the
weaknesses business
essay



In the late 1980s, Spritzer Berhad was set-up in Taiping. It is number one bottled water brand in Malaysia. It was spending a multi-million ringgit in order to build 300 acres of environmental protection bottling facility and preserve tropical forest land away from contamination. Spritzer was focused on healthy lifestyle and green environment. It encouraged people after drinking water to twist the bottle for recycling. It also launched new twist pack. New twist pack is a lighter weight bottle and able saves recycling space. It also aids to reduce carbon emissions.

Spritzer has five subsidiaries that included in the manufacturing and distribution of natural mineral water, sparkling natural mineral water, distilled drinking water, non-carbonated fruit flavoured drink, carbonated fruit flavoured drink, functional drink, toothbrushes, preforms and packaging bottles. It also comprises seven water sources which are involved five of natural mineral water and two of drinking water. People can differentiate the water sources by the colour of bottle caps. Natural mineral waters are using colour caps and the white colour of bottle caps is drinking water.

All the bottle of packed mineral water produced by Spritzer is extracted from an aquifer in the tropical rainforest to guarantee the water quality is good. The water has healthy trace minerals are extracted from the aquifer. Spritzer's production lines are using the state-of-the-art bottling technologies. It has highly qualification professionals to operate the plant well. The professionals of Spritzer always measure and examine the water resources in order to prevent contaminated. Furthermore, the water resource also protect by Spritzer in order to ensure the best water quality.

Besides that, Spritzer provides the natural mineral waters that have healthy benefits. Their natural mineral water contains orthosilicic acid (OSA) which has many health benefits for us. These natural mineral waters can healthy our hair and anti-aging to let us look younger. It also can healthy our nails to avoid nail infection. Moreover, natural mineral waters can strengthen our bones and blocks absorption of aluminium to let us healthier. However, the drinking waters are no health benefits. It is because water source of drinking water is come out from the tap and that has a little bit of minerals.

Company's Production / Operation Processes & Facility Layout

Production / Operation Processes

Diagram of production processes flow (steps) & its descriptions

bottling

Washing

Filling

Capping

Labeling

Shrink Tunnel

Blower

Packaging

Warehousing

Spritzer extracts water source from 400 feet deep underground. This natural water that extract is unpolluted and rich in natural minerals after filtered through various kind of natural rock stratum. Whole production process of Spritzer is use state of the art technologies to bring the best quality natural mineral water.

The first step of production process is bottling process. Spritzer Chuan Sin Sdn. Bhd. make bottle by using PET (polyethylene terephthalate) material. The main purpose of PET material is it can recycle to reuse and reduce the cost. Spritzer using six steps in the process to produce PET bottle. First step is drying of PET, PET absorbs moisture from the atmosphere, this must be removed by a dehumidifying dying before processing, then proceed to PET pellets plasticizing which are compressed and melted by using rotating screw (KenPlas, n. d.). After plasticizing the PET, the process come to injection molding the PET perform. Next stage is to molten PET which injected into the injection cavity and cooled rapidly to form a preform. Preform is look like a test tube that has to form a bottle in which bottle is blown. Then proceed to PET preform heating. It needs to adjust suitable temperature to heat the preform to ensure the correct profile blowing. The temperature must adjust still hot enough to be stretch blown to form a bottle. The hot preform is stretched and blown into a bottle's shape blow mold in making PET container more tough and lightweight. Stretching applied from two directions at right angle, as in stretch blow molding, give biaxial orientation (KenPlas, n. d.). In the last stage, finished PET bottle is ejected from PET container ejector. After

going through the entire bottling step, the bottles are used to fill mineral water after filtering process.

After bottling process, it proceeds to washing and filling process. There have a washing machine in washing the bottle. The bottles must make sure that was rewashing clear and clean and can be filling the mineral water. In filling stage, mineral water is filled according to weight of mineral water. The machine will control filling of water into a limit in avoid the water leaking. Filling system is referred to gravimetric filler, when mineral is passed from ring bowl without any pressure, not same as carbonated water. It is simply by force of gravity.

Next is capping processing. The bottle was capping after filling the mineral water. The process is to protect mineral water from contact with outside factors and to prevent spread out from the container.

Labeling is considered as one of important parts of entire process. Labeling on water bottles is a great way to promote company and provide detail information about the products. The information is applied on the wrapper and stick in the middle of bottle to ensure product quality such as of logo of Spritzer, ingredients of mineral water, date code, manufacturer's name by Chuan Sin Sdn. Bhd., the address is Lot 898, Jalan Reservoir, Off Jalan Air Kuning, 34000 Taiping, Perak, Malaysia and source of location with Jalan Reservoir, Off Jalan Air Kuning, 34000 Taiping, Perak, Malaysia, types of source is come from underground water and typical analysis, name of distribution which is Yee Lee Corporation Bhd. as well as award and qualification and approval number. After finished labeling, shrink tunnel is

working to make tightly of the label to prevent loose of it. Shrink tunnel heating the surface of label and then proceed to the blower machine in blowing away the wrap which is in hot. It can be help to strength the label.

Lastly come to packaging process. This packing process is use auto packer to pack 24 bottles of 600ml mineral water into one paper box and the box also contains information which attached on the boxes. Then, the bottles are being stored in the warehouse and workers will prepare for shipment and delivery to customers or retailers.

Analyze and address strengths and the weaknesses

As we know, Spritzer organized around product and machine utilization in repetitive or continuous process. There have several strengths found in Spritzer production processes.

Firstly, Spritzer can reduce the variable cost. Low variable cost occurs because of high equipment utilization. Since Spritzer is produced standardized products which the products are using machines to produce Spritzer products. By using machine technologies, Spritzer could also increase the efficiency and effectiveness to produce more products to run their business. Machine can reduce a lot of human error and every parts produced will be more systematic. Products will have a good quality produced by machine. Spritzer produce finished products according to the sequence of operation. That is mean raw material (mineral water, bottle, wrapper, paper box) use to processed through the first machine, second machine and so on until it goes through all the processes and ultimately

produced a finished product (bottle water). In short, large quantity of products would be produced without using high skilled of workers.

Secondly, production processes can help to reduced work-in-process inventories (Heizer & Render, 2011). Spritzer can reduce work-in-process when each of the machines has maintaining work overload (Shanthikumar & Stecke, 1986). It can maximize production rate even there are produce in large quantity of part in the system. Spritzer's production lines are completely automated and equipped with the state-of-the-art bottling technologies. They are using the automated machines to control the amount of quantity produced per day so that overproduction is less occurs over a time. Thus, it would be lower the process inventory. Work-in-process inventories requires storage space to store the excess products which determined the product demand is stable enough to justify high investment in specialized equipment. Appropriate in control quantity of products produced is important to overcome shortage supplies of goods and reduced inventory cost (Inman, n. d.).

Lastly, since Spritzer is toward on product-oriented, hence, they are high utilization on specialized equipment. They focus on produce the Spritzer's products by using the specialized purpose machines. Therefore, Spritzer hired operators or workers with less broadly skill to manage the operation system rather than hired labor with high-skilled level. Labor specialization cost can be reduced such as training time and cost.

Furthermore, there are several weakness found in production processes. One of the weaknesses is lack of flexibility in handling variety of product or

production rate (Heizer & Render, 2011). It is inflexible and cannot easily respond to required system especially change in product design (Inman, n. d.). Spritzer required different machine to work in sequence but only can produced one type of finished product (low variety). Overall, Spritzer has produced many varieties of bottle water products such as natural mineral water, sparkling natural mineral water, distilled drinking water, carbonated fruit flavoured drink, non-carbonated fruit flavoured drink, and functional drink. But each of different type of bottle products must have their own production process respectively and cannot produce together.

Besides that, Spritzer produces the bottle water products can cause to work stoppage at any point ties up the whole operation (Heizer & Render, 2011). If one of the machines within the production process is not function or damage, it would influence whole production process. The production rates will go down because it will take a longer time for waiting machine to be repaired and resume to completing the task than if the machine were function and highly utilized. This situation has come out some major problems such as late delivery to retailer or customers on time. Moreover, sometimes the machine still can function but the product come out are broken or low in quality which had been sent to customers. After they consumed it, they found some problem about the product and will take an action come to complain the company. Company will suffer loss at the same time. Each of the operators must frequently check all the machines to ensure that the machines are function smoothly.

Another problem of Spritzer is lack of skilled workers to handle the machine.

The whole process would not finish on time in case if one of the machines is <https://assignbuster.com/analyze-and-address-strengths-and-the-weaknesses-business-essay/>

not functioning and having problem. So if workers are lack of technical skills and the machine is no function simultaneously, there will be no one capable to fix the machine and could affect the whole production process.

Facility Layout

Diagram of facility layout and its descriptions

Factory Layout of Chuan Sin Sdn. Bhd.

The first is the company main office. This is where most of the key department such as Administrator Human Resource, Marketing and Sales, Export, Information and Technology, Logistic, Finance, Purchasing, and Managing Direct office are located. The administrator office is further divide into key building where all the head of department and key personnel will be located.

Plant A is the place where mineral water and drinking water are bottled.

Plant A is only specialized in producing none carbonated or non-coloured drinks such as mineral water and drinking water. This factory produced water bottle such as the prominent Spritzer and Cactus and other private label water bottle such as Tesco and Jusco. The processes taken place in this plant are performing, filtering, capping, quality assurance, and packaging. The plant not only produces the drinking water but there are warehousing and logistic take place simultaneously as the water are bottled.

Plant B is the plant where carbonated and flavored drinks are bottled.

Product such a POP, tingle and Spritzer + FIBRE are produced. This plant have the same facility as plant A where it share the same facility,

warehousing and logistic take place simultaneously as the bottle are produced.

The last part of the facility is the preform plant. Preform refer to a special plastic that are formed into the desire tube shape before it will be formed into the specific bottle ranging from 350ml to 6 liters bottle. Polyethylene terephthalate or PET as known to many, is the main molecular product that make the preform. Each PET is placed into a module with different size and strength to produce the specific preform. This preform will be blown with air and it will become a bottle.

Analyze and address the strengths and the weaknesses

First of all, the strength of the layout is the factory located in a suburban area and it is surrounded by forest. The water reservoir is located beside the factory can provide a strong strategic place for its core operation. As the mineral water is harvested from the ground, natural filtration is important in order to keep the important minerals and unwanted pollutant away. The reservoir which located besides the factory is the source of water which flow or absorbed by the ground. This water usually contains high concentration of minerals. Not only that this will allow the company to lower down cost of operation in terms of buying fresh water from vendor. It will able the company to differentiate themselves from the competitor in terms quality and price leader. The strategic location is important for the company because they want the water source to be free from pollutant as much as possible so that they could maintain the quality of the water as natural as possible.

Other than that the weakness of the layout is the unilateral design of the factory. This design is a flaw of the factory. This design will possibly halt the future growth of the company. There is no space for expansion if the company wanted to expand the production facility. For example, Plant B is merging between the Head Office and Plant A, this will be difficult for the expansion program for Plant B as it is there is no room for it to expand. This same goes to the Plant A which is the core facility of Chuan Sin Sdn. Bhd. where it is the only place to produce the prominent mineral water in this country.

The layout of the factory will prone to problems. The Plant A and Plant B should not be located side by side to avoid miscommunication and handling issue. During our tour, there is no indicator stating the location of plant A and plant B. This could bring disaster to the new employed logistic people who might be confused with the plant and hence it would deliver a wrong packaging to the wrong client. Besides that, the head office should be located further from the manufacturing plant. This will provide better productivity between the administrator and the manufacturing employee.

Study Area's Literature Review & Contributions

Supply chain management can be defined as many ways. According to Ellram, Lambert and Stock (2001), supply chain management is a supply chain is the alignment of firms that bring products or services to market (Ellram, Lambert & Stock, 2001). Applying green concept into the supply chain management, green supply chain management can be defined as supply chain activities such as reducing sources or waste and resources of consumption (Zhong, 2006).

<https://assignbuster.com/analyze-and-address-strengths-and-the-weaknesses-business-essay/>

Areas Activities Developed to Implement Green Supply Chain Management

Green Supply Chain Management (GSCM) as an incorporation of environment-friendly initiatives into every aspect of supply chain activities encompassing sourcing, product design and development, manufacturing, transportation, packaging, storage, retrieval, disposal, and post-sales services including end-of-product life management (Hokey & IIsuk, 2012).

There are some areas developed into key activities to implementing GSCM:

- (1) policy of the company related to business ethics and corporate-social responsibility, environment policy and audits, and government regulation.
- (2) Synthesis that portrays a broad picture about green supply chain management.
- (3) Purchasing focus on the environmental issues that can affect the environment like sound pollution of the machine.
- (4) Manufacturing concern about the product design is environmental-friendly and reduce environment pollution. Besides the key activities, green logistics deal with the environment factors like transportation, inventory, warehousing, packaging and facility location decision. Moreover, reverse logistic will improve the efficiency to handle the recycled or returned product and manage waste of disposal. Spritzer is a mineral water producer, their factory are operate on approximately 300 acres of tropical forest in Taiping, Perak to away from potential pollution and safeguarding their natural water sources to ensuring the high quality of their product. Moreover, Spritzer concern about the green supply chain management for their company. For the purpose to reduce their waste and consumption of resources, they reduce the packaging and lightweight for their product to eliminate extra resource used in the product. Spritzer is using the material of producing the <https://assignbuster.com/analyze-and-address-strengths-and-the-weaknesses-business-essay/>

bottle which is 100% recyclable for packaging in order to reduce the pollution of environment to implement the social responsibility of the company and the production and the materials used to produce are following the government regulation.

Internal Environment Management

Comparing green supply chain management practice among internal environment management, green purchasing, customer cooperation with environment considerations and eco-design, internal environment management can lead the organization to success with high level than other similar practice. Without first addressing their own environmental management practices, it is hard to extend these environment practices to suppliers and customer (Hujita & Hashimoto et al., 2010). If a company can implement internal environment management in high level, the company will enjoy these competitive advantages in term of financial performance that can reduce the environmental costs such as material purchasing cost. Besides that, operation performance improvement such as increasing amount of good delivered on time, decreasing inventory levels and increased product line (Hujita & Hashimoto et al., 2010). Furthermore, the activities of internal environment management can be classify into commitment of green supply chain management from senior managers; support for green supply chain management from mid-level managers; cross-functional cooperation for environmental improvements; total quality environmental management; ISO 14001 certification; environmental compliance and auditing programs and environmental management systems. In contrast, there have many barriers to implement internal environment practice like lack of sustainable

green supply chain management practices in organizations vision and mission, lack of corporate leadership and support, lack of government support, lack of knowledge and experience, shortage of resources and etc. (Balasubramanian, 2012).

As a result, Spritzer has performed high level of internal environmental management among their competitors and this creates the competitive advantage to Spritzer. From our interview to the official management team, we know Spritzer's employees have high level of commitment between each other and they can get support from managers when the employees facing problem. Spritzer had improved their efficiency of production and delivery accuracy by having high level of commitment between employees. For example, employees in the company can seek for help if they are facing any problem and these employees or managers willing to help and giving support to them that can increase the commitment between employees lead to high performance. Besides that, Spritzer was successes to adopt in implement internal environmental practice. Spritzer is concern about the quality of the water because its product will affect the consumer's health. Therefore, they put a lot of effort for quality management in their production process in order to ensure the quality of the water produce is high. Besides that, the workers who are monitoring the production process are trained before performance the job that he/she is expertise on the monitoring performance of the production process.

Reverse Logistic in Green Supply Chain Management

Reverse logistic is a term for manufacturing new products and remanufacturing used products that is returned from the market for future <https://assignbuster.com/analyze-and-address-strengths-and-the-weaknesses-business-essay/>

reuse (Alshamrani, 2012). Reverse logistic is a key element with regard to the increasingly stringent regulatory pressures across Europe on the end of life products and product take back schemes (Victor et al., 2012). Reverse logistic can category into green supply chain management that the purpose of reverse logistic is reuse and remanufacture the products return from the market. Reverse logistic focused around economic benefits but participants recognized the potential positive relationship between reductions in costs and improvements in environmental performance and customer satisfaction (Beron et al., 2010). Moreover, Process-based integration strategies search for “operational excellence” through innovative processes for recycling, reuse, refurbishing and remanufacturing; manufacturing processes for energy efficiency and lean production; and business processes for quality improvement and waste elimination (Cronin et al., 2011).

Reverse logistic is one of the supply chain management used by Spritzer to implement its supply chain going green. For example, Spritzer has a good relationship with its retailers that Spritzer able to get order from them and Spritzer also provide agreement to these retailers they can return the products back to the Spritzer if any damaged. Spritzer will reuse or remanufacture the damaged items for future use or other purpose like sponsor to other's party. Besides that, Spritzer also implements the recycle programs cooperate with retailers, stakeholders, recycling companies and the community recycling for charity (CRC) to collect these unwanted bottles after consumed and disposes it by return or sells to Spritzer to reproduce or reuse the dispose items for future use. Moreover, this contribution helps Spritzer to create awareness of the society and improve the reputation of the

company that Spritzer producing environmental-friendly products and help to reduce the pollution of the environment. For example, Spritzer had implemented some campaign like “ Drink Spritzer Twist to Recycle” campaign to encourage people recycles the bottle after consumed.

Green Marketing

Green marketing has been defined as linking green marketing to identifying and satisfying green customers, and promoting environmentally-friendly products. For example, Banyte et al. (2010), define it as “ determining the need to know the new, so called green, consumer and to adapt marketing decisions to the focus on ascertaining the expectations and satisfying the needs of such a consumer” (Banyte, Brazioniene, & Gadeikiene, 2010). Along the line of green customers, some researchers investigated the importance of using branding techniques to introduce green products to green markets (Muntean & Stremlan, 2010). They were found that most customers cannot easily identify greener products (other than clean products) although they would be in favor of greener products, and that most existing marketing strategies are not particularly relevant or engaging (Tureac et al., 2010).

Marketing is to determine the requirements of the customer and integrate into supply chain at the beginning state of the product that designing state of the product that designing the product or at the end of the supply chain through promotion like advertising to the market. This section proposes a theoretical hub-and-spoke integration model which integrates green marketing into sustainable supply chain management from multiple perspectives, namely the 6Ps – products, promotion, planning, process, people and project. For example, on the product spoke, green marketing <https://assignbuster.com/analyze-and-address-strengths-and-the-weaknesses-business-essay/>

communicates the requirements of green products, based on the understanding of green customers' needs, to the sustainable supply chain management (Kasturiratne, Liu & Moizer, 2012).

Companies with product-based integration strategies had environmentally focused products (Smirnova et al., 2011). They were proud of their supply chain capabilities to produce the products and their sensitivity in detecting customers' demand. These companies were eager to deliver innovative products that could match the green customer's expectations.

The bottled water industry is divided into two segments: the mineral and drinking water segment. Spritzer, which is involved in bottling both mineral and drinking water, there is a huge difference between both types of water that are widely available today. Mineral water of Spritzer is sourced underground and is a product of natural rain water after years of being filtered through layers of the earth and absorbing the various minerals on the way. While drinking water is simply tap water without minerals, boiled and/or filtered and then packaged out. Spritzer sources its mineral water from five Health Ministry approved points 400 feet underground at its plant in Taiping with current capacity usage of 180 million liters of water per year. The water from the sources is located on 300 acres in Taiping. Because of the vast lush idle green ecosystem where we source Spritzer mineral water from, it can be sure the water is pollution-free and of pristine quality (Chuah, 2013). Besides that, Spritzer launched the innovative product that the bottle can be recycling which fulfill the green customer expectations.

A second important factor to bridge the supply side and demand side is through promotion, in which communication plays a central role (Ozanne & LeCren, 2011). Strategies mostly used by the companies were: clear product labeling providing information on environmentally-related statistics and product disposal instructions; advertising green products in a justifiable, self-explanatory and clear way.

Spritzer use green color as the labeling to differentiate their product with other competitor. Through green labeling, Spritzer can easily let customer know that their company is provide green environmental products through the green labeling. The most important information about green benefits should be as specific as possible so that customers can evaluate its truthfulness and reasonableness. Spritzer should reflect the green benefits in the product's prices and offers, so that customers know exactly what they are paying for. Spritzer provides clear information at the labeling which states how to dispose the bottle after finish off.

Companies employing planning-based integration tend to have long-term ambition in and commitment to sustainable businesses (Violeta & Gheorghe, 2009). In this dimension, large companies have clearer visions and plans. Strategies included: setting clear environmental and social measures and including the measures company's business performance and budgeting for long-term capability development (such as people and technologies) requirements.

Since Spritzer financials had reported consistent growth in net profit and dividend payout ratio on the back of double digit percentage growth in

revenue from financial year 2008 to 2012 (Daniel, 2013). Net assets per share have grown from 93 cent back in 2008 to RM1. 21 as at November 30, 2012 while its basic earnings per share for the nine months to end-November last year stood at 6. 34 cent which is almost double the previous year's equivalent period (Daniel, 2013). Spritzer's dividend payout ratio has also risen from 25% in 2008 to 37% in 2012 as noted in its annual report (Daniel, 2013). In 2013, Spritzer hopes that they can reach better performance and result than the last year 2012. Spritzer future plan is to export their product to overseas and become part of the market share in global. By the way, Spritzer also plan to improve their existing technology and improve their employee skill, they believe that it may lead to increase their productivity. Spritzer also implement green environmental knowledge to their employee for motivate them to be more responsibility on the environment and hope in the future they can taking good care of natural and came out more creative idea contribute to company.

Organizations dominant of project-based integration are large companies which play a leading role in their industries. They use the environmental and community projects as a marketing communication tool to convey their environmental and social stance to their target audience (Leonidou & Hultman, 2011). Strategies provide included: setting up new environmental projects to raise the company's green reputation and investing in community projects to attract more green consumers.

Spritzer also providing education and knowledge to enable communities to understand their environment ensures a measure of self-sufficiency. Spritzer actively educates communities about the importance of water quality
<https://assignbuster.com/analyze-and-address-strengths-and-the-weaknesses-business-essay/>

through participation in the events such as the Smart Kids Education Fair, Expo Cintai Malaysia, Singapore Food Fair, MATRADE Exhibition Trade Fair and Expo Perdagangan Buatan Malaysia. Spritzer also acts as a sponsorships for the 16th Spritzer Basketball Cup which held in Kota Kinabalu, Larut Matang and Selama. Besides that, it also provided for the Taiping Open Badminton Championships, the Maybank Golf Open, Badminton Open Spritzer Cup held in Taiping, Malaysia. Spritzer also involves in the community sporting events such as the Ipoh Star Walk, Penang Walk and Jacob Walk of Life all received Spritzer sponsorships. The highlight of their sporting sponsorship activities for the year under review was their contribution to Olympic Malaysia. Spritzer was accorded the official mineral water sponsor for the Malaysia Olympic team. The main purpose of the sponsorship is to create brand awareness and build the green company reputation. The project purpose is to create green environmental friendly and gain more support from green consumer. Besides that, it also advertises their product through the project and reduces the usage of advertising in other media.

Green Management Perspective

A business should face up to environmental issue and create competitive advantages through green initiatives. There are four continuous stages of the environmental awareness of a firm's which are proactive, constructive, receptive and reactive (Newman & Hanna, 1995). In accordance with these classifications, a firm should predict and evaluate situations in order to decide the amount of resources to invest in green management of the firm. Then, the firm would form a strategic green attitude in developing green

supply chain management strategies. There are four types of green management perspective. They are proactive innovation, active integration, receptive learning and reactive response.

First of all, the characteristic of the proactive innovation is to increase the capabilities of the firm green management in order to become part of the firm's corporate strategy. Other than that, this perspective also strengthens green management performance through innovation. If Spritzer is in the view of proactive innovation, they should consider about green management while plann