

RUNNING HEAD: OPERATIONS MANAGEMENT AND RELATED CONCEPTS: A CASE STUDY OF A SOFT-DRINKS COMPANY

Operations Management and Related Concepts: A Case Study of a Soft-Drinks Company

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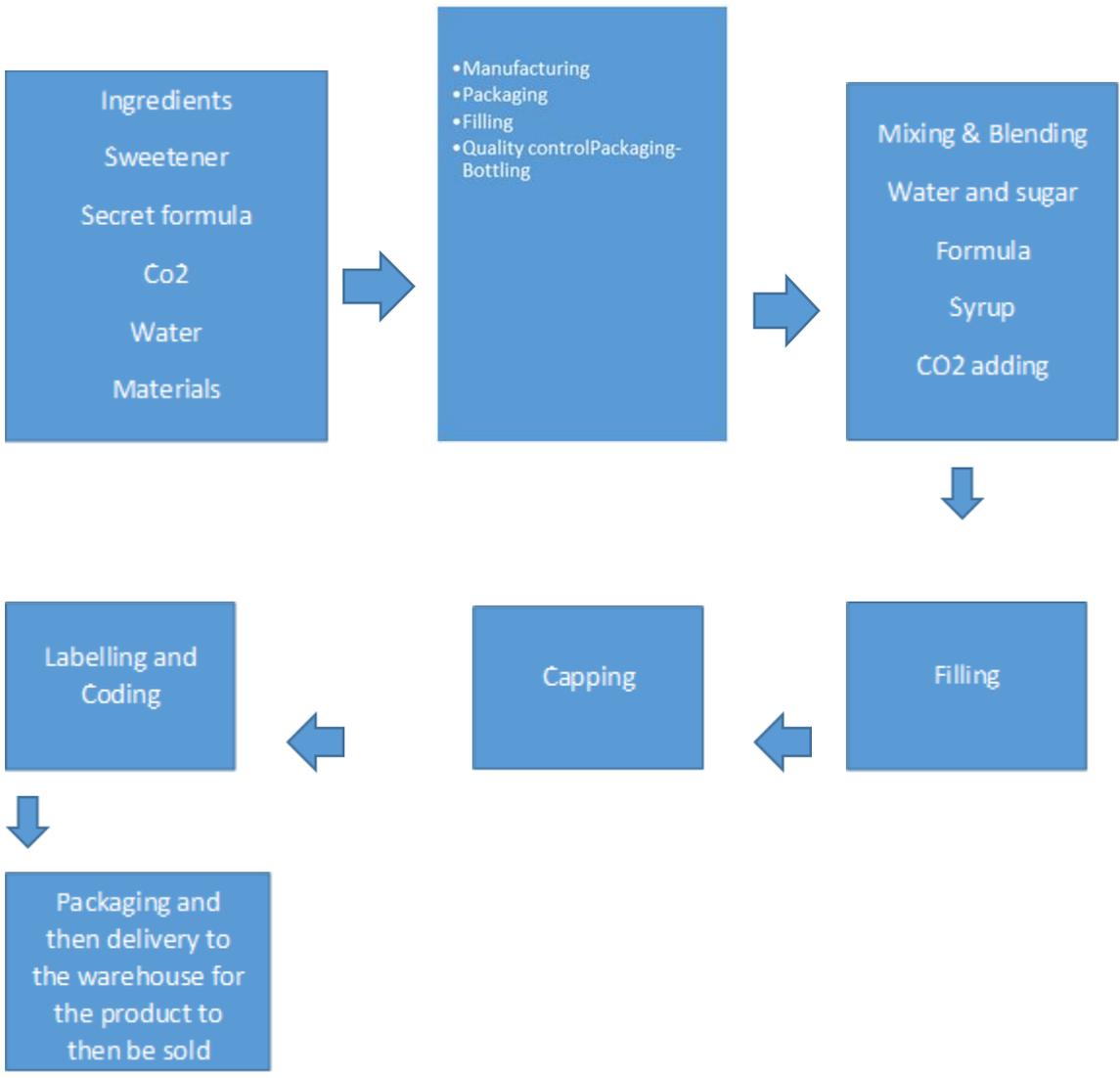
1.0 Abstract

Sip-Drink is an American multinational company. It manufactures, bottles and markets soft nonalcoholic drinks everywhere around the globe. It is the biggest manufacture and distributor of soft nonalcoholic beverages. The products are sold to more than 200 countries and the biggest consumption is in the United States. The company focuses on carbonated soft drinks but also produces fruit juice and purified water. After the company produces these drinks they sell to canning and bottling operations that package the product. The company also owns some of the bottling and canning operations. The company then distributes the products to the consumers. The products are packaged in cans and bottles that contain the trademark of the company. After packaging the products are sold to retailers who distribute them to consumers from all over the world. There are times when the products are taken straight to wholesalers. For this write up we will be focusing on the whole operation of the company. We will start by the manufacturing, bottling, distributing and the marketing of the products.

Process

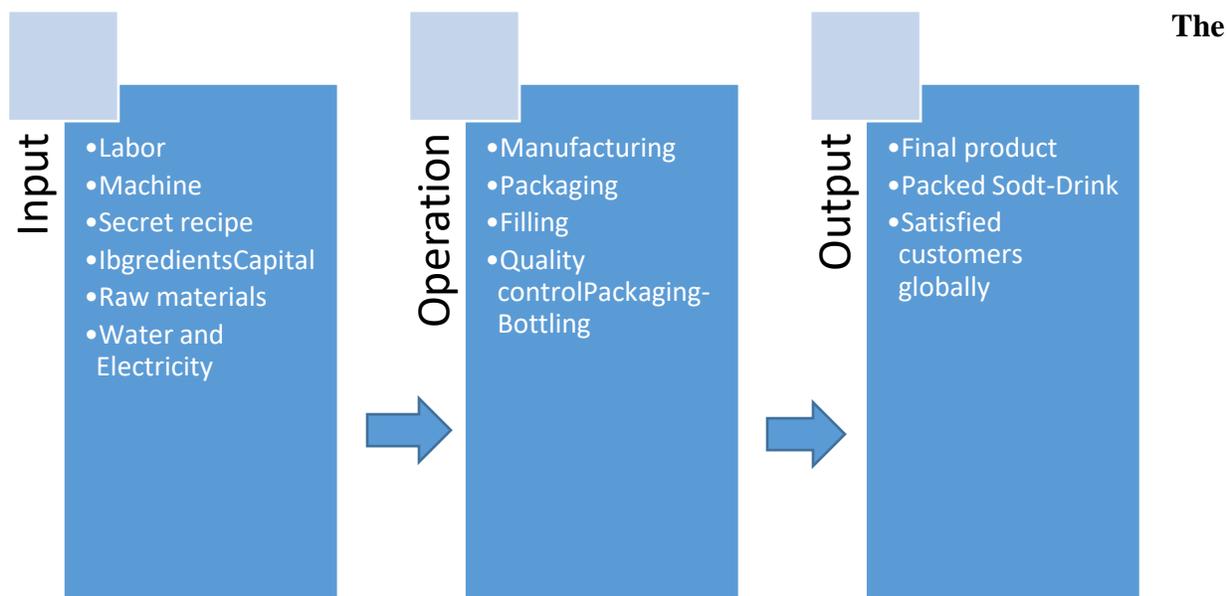
The transformation process involves alteration, transportation, storage, and inspection. The products has to go through these transformation process. Firstly the ingredients are taken to the factory where the process begins. Small pieces of resin are then converted into forms of bottle. The preform are then shaped into different bottles of different sizes by blowing the preform into the size that is required. The bottles are then filled with the different varieties of drinks. The label is then added accordingly as the bottle is being sealed. The bottles have to be encoded to identify every bottle and determine where they will be transported to. The bottles are the grouped in crates and cases. The crates are packed together and taken to the warehouses where the distributors will collect them and distributed to the external customers from all around the world.

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2.0 The existing process



2.1 Customers

The customers are people around the world who drink a soft drink. There are around 20 million customers from all over the world. The company exists to satisfy all the needs of its customers. The customers are people all races, sex and from young to old. Majority of the consumers are young people but even the old partake of the drink. There are 5 varieties of drinks that are produced to satisfy the different needs of the customers. The different varieties have a distinct flavour and taste. From the research that has been conducted it shows that the middle class are the biggest consumers of the organization's product. The low and high-class consumer at a moderate level. The biggest consumers and thus the main target is the middle class from around the world. Some people require diet drinks with little or no sugar and the organization endeavours to satisfy their needs. The company also targets kids who are customers that require fruit juices.

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The internal customers are those who are part of the company's management and administration.

The distributors are among the internal customers of Soft-Drinks. These customer get the services of distributing the products to the external customers. Bottlers are other internal customers who are contracted by the company to bottle the products before distribution. There are many managers among the company who conduct the day to day management of the company. The product variety include: Coke (250ml, 330ml, 500ml, 1.5l, 2.25l), Diet Coke, Coke Zero, Sprite, Sprite Zero, Fanta, Fanta Apple, Fanta Citrus, Fanta Grape, Kinley, Rani Float (250ml), and Rani Pulpy (350ml)

2.2 Order winning factors

Order winners are the competitive advantages that Soft-Drinks has that attracts the customers to choose it over their competitors. Order qualifiers are the competitive advantages that Soft-Drinks has to establish and show to be a viable competitor in the business. (Banchuen, Sadler, & Shee, 2017)

The first order winning factor is that the company has a large portfolio of product varieties. There are very many varieties that the company produces. 20 of the company's brand are worth billion dollars and each generates a large revenue. The company has the advantage of adjusting products to fit the demand. This makes the company to be more flexible in their production. Flexibility is one of the performance objective and Soft-Drink has specialized in having multiple varieties making the company more flexible in its production.

Lately, there has been a demand for products with no sugar for the sake of people who are on diet. The Company produces diet drinks with no sugar and thus can capture the market that competitors can't. The company produces healthy beverages. The large array of brands and products is a huge advantage over the competitors. The quality of the product seems to be what the customers like most. All the varieties of drinks are of high quality thus attracting customers to choose it over the

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competitors. Soft-Drink produces the best quality of beverages around the world making it favorite to customers worldwide. The competitors produce few varieties and thus find it difficult to satisfy the customers.

The company is dependable when it comes to charging the prices for the beverages. The prices are average and affordable making it friendly to the pockets of the customers. The costs is an important performance objective. The costs of the products are a winning factor for Soft-Drink. The cost are average depending on the amount sol in the bottle. The variation on the costs is dependent on the quantity of the beverages by the company. The customers although sometimes complain on the quantity of the products that are packaged. The company only packages 300 ml and 500ml of beverage and there is a demand for more variation on the product quantity in the bottle.

2.3 Order qualifying factors

The major advantage that Soft-Drink has over the competitors is its presence internationally. The company has laid a foundation over the years and it is known worldwide. There are customers from every corner of the globe. Soft-Drink has a presence in all the continents and this is an advantage over the other nonalcoholic beverage producers. This is a major order winning factor. The company's logo and the image are known in over 200 countries. The brand image and awareness is massive and it is well known as a quality producing company. Many people recognize the company.

Secondly, the company has a large distributing network. The distribution network makes the distribution to be more flexible than that of the competitors. It is the largest supply and distribution networks in the whole world. It is easier for them to distribute their product despite having a larger ground to cover. The competitors have problems in the distribution and marketing and Soft-Drink has the advantage over them. The company manufactures the beverages and sells to bottling

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partners of the company who will package, merchandise and distribute the product to the customers all over the world. The distribution speed up the process of taking the products to where the customers are. The company is dependable when it comes to delivering the products. The distribution network works consistently over a long reasonable period making it dependable. The company has a great relationship with its customers making it easier to distribute the product. The company has a great relationship with its suppliers making it easier to supply the product.

The company has a massive financial capacity. It has millions of dollars to spend in manufacturing and distribution. This makes the company better than its competitors. The current market capital of the company is 182.9 billion dollars. The financial strength enables the company to easily expand and capture more market. Other companies face financial challenges and it is difficult to expand. Financial strength is also useful in research and development. The company can research on how to improve its products because it has the financial capabilities to do so.

The company has a large number of employees. The human resource is a huge advantage as it can produce to the demanded amount. The human resource is backed with latest technologies which help in marketing and production. The company opened a university that educates the employees and trains them on how to be more productive. The large number of human resource makes production to be faster. Speed is an important performance objective and Soft-drink has managed to master this. Their work force with the assistance of technology can produce products with high speed. The more the production the more the demands are met. The company has invested in career management and development. The employees can work properly and produce the required quality of drinks. The competitors of the company find it difficult to acquire human resource and technology to compete with the company.

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2.4 Process types

In manufacturing, the company uses a continuous production flow (CPF). (Houdion, P., Secim, 1980) The products continuously are manufactures. The process is automated and programmed to produce the best quality. **Continuous flow is defined as the process the materials, either dry bulk or fluids that are being processed are continuously in motion, undergoing chemical reactions or subject to mechanical or heat treatment.** The continuous production flow involves from the first stage of production to another while being monitored carefully. (Steen & Ashurst, 2007) Each stage introduces a certain ingredient to the whole product. The stages differ because of the varieties of drink produced. The ingredients are added at a similar amount to ensure uniformity and the same standard for every production. (Houdion, P., Secim, 1980) Continuous production flow is the best method for Soft-Drinks because it produces large scale amount. (Amienyo, Gujba, Stichnothe, & Azapagic, 2013) The pre-product is usually in constant motion undergoing the different reaction stages and ingredients added at different stages. The use of technology and machined is important to produce a uniform standard of product.

The company also uses the stock process because it produces large amounts and has to satisfy the needs and demands of the customers. It produces products in large amount and stocks it for the demand. Made to stock type o ordering system helps as it provides faster services to the customers. The many customers will not be forced to wait for production as there will already be stocked products ready for consumption. The company usually sets a certain amount that is calculated to satisfy the customers over three years and produces stock to sufficiently cater for the setup period over time. The MTS type of ordering system reduces the costs since distribution is in large scale thus reducing cost. (Koijen, Lustig, & Van Nieuwerburgh, 2017) Usually, customers order the beverages in a bulk amount when the distribution is through B2B operation. (Houdion, P., Secim,

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1980) The MTS method involves a process where a standard product line is ordered by the producer and not the customer and thus the products are distributed to satisfy the demands of the customers.

2.5 Operation strategy of the process.

2.5.1 Differentiation strategy

The company uses a differentiation strategy to make them unique and different from the competitors. (Dickson & Ginter, 1987) The company uses differentiation strategy to make them unique to their customers thus attracting the customers because of the special services and products compared to others. Customers usually prefer different products that are not similar to the rest. This strategy has made the company's customers loyal and always stick to the product. Differentiation is in all stages starting from bottling where the company has its unique style of bottle. The strategy helps in creating brand awareness as customers will be able to easily identify the product just by seeing the bottle. The bottle shape is special and can be identified all over the world to represent the company. The company also labels its product using a differentiation strategy whereby its label is different from the competitors. (Bambang Baroto, Bin Abdullah, & Wan, 2012) The labelling is in a unique font and design. The company has advanced machinery and plants to manufacture top-notch products. The company differentiates itself by partnering with the different countries organizations and partnerships to associate with the customers. There are very many events sponsored by the company to create a better image than the competitors. The company has the plant bottle strategy that is eco-friendly and this is different from other beverage producing companies. The communities and public thus see the company as unique and caring of the environment.

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2.6 Problems faced by the company.

Health agencies have over the years accused the Soft-Drink's drinks of causing health problems.

This has been a major setback for the company. Consumers have been advised to avoid partaking the drinks because of the harm it purportedly has. Health agencies have accused the products to have high sugar content. (Kregiel, 2015) Obesity, diabetes and osteoporosis are among the diseases associated with the drinks of the company. This has tarnished the brand and image of the company.

Many customers avoid purchasing the drinks and the company is forced to convince the customers that the drinks are safe to partake. Sales of carbonated soft drinks slid for the tenth straight year in 2014. Soft-drinks registered a decline in the sales for ten years in a row according to the statistics in 2014. (Greenwood et al., 2014) Some countries have requested the stoppage of selling products from the company. This is the major problem facing Soft-Drinks because the more the resistance by customers the more likely the company faces decline. Healthy drinks and energy drinks have substituted the carbonated drinks in the market. There has been an enormous decrease in the sales of carbonated drinks all over the world. Due to the unhealthy prospects of the products, the company faces high taxation in many countries. This reduces the consumption of the product around the world.

Soft-Drinks has faced competitors from the growing number of nonalcoholic drinks producers. The competitors have taken some of the consumers and there is an increase in competition. The emerging-market performance was one of the major problems facing the company according to research done in 2015. (Pezzotti et al., 2017)The competitors have grown all over the world creating competition even in areas where the company was dominant and lacked competition 5 years ago. The competitors looked at the weakness of the company. They thus products with more ounces in the bottle. "Pepsi-Cola hits the spot. Twelve full ounces, that's a lot. Twice as much for

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a nickel, too. Pepsi-Cola is the drink for you.” (The 1939 radio jingle that greatly increased Pepsi’s sales.) The quantity of the products by competitors is more than that of Soft-Drinks with the same prices. As the years went by, the market share of Soft-Drinks was eroded. (Piorkowski & McClements, 2014) Pepsi overtook Soft-Drinks in supermarket sales.

There have been calls by environmentalist that Soft-Drinks plastic bottles are causing harm to the environment. (Boberg, Granby, Svingen, & Vinggaard, 2018) The company has been advised to stop packaging in environmentally harmful bottles. The company produces millions of products that are packaged in plastic bottles. These bottles are hardly recycled or reused causing degradation of the environment all over the world. The plastic bottles have been known to be very convenient because it is easy to carry around the glass bottles. The company has faced problems as the public has even gone to court to try and stop them from selling products in plastic bottles. The company has even lost customers who are concerned with the conservation of the environment. The competitors also package their products in glass bottles and few packages in glass bottles, therefore, having an upper hand in the eyes of environmentalists. Greenpeace censured the company in its report in 2017 for using plastic bottles. (De Frond et al., 2019)

3.0 Analysis

3.1 Product design

3.1.1 Competitiveness theory

Competitiveness theory is an important device. (Ghemawat, 2002) Competitiveness theory involves knowing what the weaknesses of your competitors and coming up with strategies to improve on the weakness to outsmart them. Competitiveness theory is all about improving on what your competitors are doing to be better than them. TRIZ involves principles of creativity and identifying and codifying these principles in order to use them to adopt a more creative process.

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The competitors are using tactics to outsmart the company and the company should try to outsmart the competitors. (Shapiro, 1989). The company should look at what the competitors are doing and try and tweak the same. Looking at the weakest link of the competitors and focus on that. The company should introduce environmentally friendly packages. One of the problems is the growing competitors who are growing and taking customers from the company. The competitors are producing healthier drinks and packaging products in environmentally-friendly packages. The competitors have also diversified their portfolio into food markets and other markets. The diversifying has given the competitors the upper hand over Soft-Drinks.

3.1.2 Theory of innovative problem solving (TRIZ)

Theory of innovative problem solving (TRIZ) is important for enabling the company to embrace new promising ventures. (Stratton & Mann, 2003) **TRIZ is the Russian acronym for the "Theory of Inventive Problem Solving,"** **TRIZ is about coming up with innovative ideas and creations.** The main problem is that the company has maintained its old products. The old products are unhealthy and the modern world has moved into healthier drinks. The energy drinks sector is promising and diet drinks are now famous. The new products including energy drinks are innovative since they are in high demand. Apart from being in high demand, they are also healthier than the other carbonated drinks. The company has been accused of selling unhealthy products and it will be a smart move to venture into a healthier product to get back the lost consumers. Energy drinks are also favourite among the younger generation and it will be feasible to adjust to the market. The company should also focus on diet drinks. These diet drinks have similar tastes but are considered to be healthier thus good for the customers.

3.1.3 Theory of Constraints

The Theory of Constraints is a methodology for identifying the most important limiting factor (i.e. constraint) that stands in the way of achieving a goal and then systematically improving that

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constraint until it is no longer the limiting factor. (Nahavandi, Parsaei, & Montazeri, 2011)

Theories of constraint involve looking at what holds back the company and avoiding it. (Nahavandi, Parsaei, & Montazeri, 2011) The company should avoid selling unhealthy products and packaging products with environmental unfriendly packages. The environmentally unfriendly bottles are what stands in the way of the company's success. The company should improve on its bottling as it is a limiting factor

4.0 Recommendations and implementation details.

The company should introduce new, healthier products. Since some many critics and agencies don't recommend high sugar content products it is necessary to diversify the portfolio. The company should produce more diet drinks and healthy fruit juice. There is a large market of these types of rinks and the company will benefit. The introduction of new products will enable the company to harvest in those areas that are flourishing. The company should also start producing energy drinks which are in high demand and considered healthier than beverages which have high sugar content. The competitors have diversified into these areas and the company should follow the same to compete effectively. The younger generation is demanding energy drinks and the older generation want healthy products. The company should embrace new strategies to adjust their products to fit the market. The company should be in touch with the consumers to know exactly what they want and start producing what is demanded. The company should focus on cans and glass bottles in packaging the product. The plastic bottles are considered to be dangerous to the environment and thus it will be a disadvantage in the marketing of the product.

Soft-Drinks can focus on their supply chain system to compete with their major competitors. The business is entirely dependent on the supply chain. The company should focus on this area to outshine its competitors. The company has a well-established supply chain and they can be able to

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supply their products to different countries easily and capture the markets where the competitors have not yet captured. The company should focus on those areas that they can be dominant than the competitors. The supply chain should also focus on countries with the largest consumption and not focus on countries where the market is no promising. The company can come up with advanced systems of distribution to be able to outsmart their competitors. The company should expand into developing countries with humid temperatures.

These countries consume large amounts of soft drinks. There are also many products from the company that are not supplied and distributed in developing countries. These products will have a large market in developing countries. The company can implement these recommendations to be creating a good healthy image of themselves. The company can start funding and advertising healthy lifestyles. By encouraging a healthy lifestyle the company will create an image that supports a healthy lifestyle. The company should also focus on diet beverages with zero sugar. These products are healthier and are well known across the world so it will not be difficult to market them.

4.1 Benefits and feasibility test

The problem is worth solving because without action the company will lose a large part of its market. The diet drinks are appealing to the public and customers because they are healthier than soft drinks. The diet and healthier varieties of products are feasible because they have the quality of a normal soft drink and they are not different from normal products. The healthier products will have lower taxation and even older people will purchase the products. The company will capture back the lost customers who stopped purchasing the beverages because of health concerns. There is also a large demand for diet and fruit drinks. Energy drinks are in high demand among the youth

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and by diversifying to energy drinks the company will have a large market. There are millions of customers who will purchase energy drinks.

The company has the money and financial capabilities of diversifying to energy drinks. By diversifying, the company will make profits from the sale of diet drinks and energy drinks. At this time and age, there is a high demand for energy drinks. Since the company has a well-established brand it will be easier to sell the energy drink and the returns will be sufficient to meet the costs. The amount of money required for this venture is feasible because the return is promising. The company is also rich and it will be able to sustain and get the resources to diversify into energy drinks. The money that was to be used to produce nonalcoholic beverages should be substituted to energy drinks. The financial performance of the company is promising and they will manage to diversify. The company will benefit by entering into the healthier drinks market.

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