Coca cola supply chain analysis

The Coca-Cola Company is selected for this project because it has one of the largest supply chain systems in the world. The Coca-Cola Company is a beverage retailer, manufacturer and marketer of non-alcoholic beverage concentrates and syrups. Coca-Cola currently offers more than 500 brands in over 200 countries or territories and serves 1. 6 billion servings each day. [1]The company is best known for its flagship product Coca-Cola. The Coca-Cola Company headquartered in Atlanta, Georgia is the world's largest beverage company. Along with Coca-Cola, recognized as the world's most valuable brand, the Company markets four of the world's top five nonalcoholic sparkling brands, including Diet Coke, Fanta and Sprite, and a wide range of other beverages, including diet and light beverages, waters, juices and juice drinks, teas, coffees, energy and sports drinks. Coca-Cola is the best-selling soft drink in most countries. The Middle East is one of the only regions in the world where Coca-Cola is not the number one soda drink.

SUPPLY CHAIN GRAPHIC

The generic supply chain graphic of the beverage industry is generally the same as any other industry with manufacturers, distributors, retailers and end consumers playing their respective roles. We will further delve into Coca-Cola's customized and somewhat complex supply chain model in the proceeding diagrams.

SUPPLY CHAIN MANAGEMENT

Due to the vast nature of the company's operations and its several product lines spread throughout the world, we shall restrict the scope of this project towards the most important brand produced by the company, its flagship brand Coca-Cola. This section will entail a brief overview of the company's supply chain.

The Coca-Cola Company follows a unique supply chain management system where the company only produces syrup concentrate which is then sold to various bottlers throughout the world who hold an exclusive territory. The Coca-Cola Company owns its anchor bottler in North America by the name of Coca-Cola Refreshments. Other Coca-Cola bottlers, who hold territorially exclusive contracts with the company, produce the finished product in cans and bottles from the concentrate in combination with filtered water and sweeteners. The bottlers then sell, distribute and merchandise the resulting Coca-Cola product to retail stores, vending machines, restaurants and food service distributors.

The Supply Chain of the company is divided into different levels. This report will mainly be focusing on the downstream activities of the product which entails partnerships with different bottlers, distributors and channels used to reach different retailers.

Upstream Activities

Upstream activities are limited to the manufacturing of the concentrate only. The actual formula Coca-Cola uses to manufacture the syrup is a very tightly held trade secret so there is little information regarding the exact ingredients and thus little information on the costs of their supplies. The original copy of the formula is held in SunTrust Bank's main vault in Atlanta. The company's 2009 income statement revealed that the cost of goods sold was in excess of $10M[2]and the operating margin was around 25%. Sugar (sucrose or high-fructose corn syrup depending on country of origin) may be the largest known ingredient used in the manufacturing of the syrup and the company uses several systems to track the daily variation in the global price of this ingredient. Some of the systems that the company uses will be discussed later in the report. In addition to sugar, some of the other ingredients used in the manufacturing of the syrup are Carbonated water, sucrose, high-fructose corn syrup, caffeine, phosphoric acid v. Caramel (E150d) and Natural flavorings.[3]Coca-Cola has different supplier partnerships to procure these ingredients and these partnerships are out of the scope of this project.

Downstream Activities

The downstream activities of The Coca-Cola Company focuses on the franchised distribution system where The Coca-Cola Company only produces syrup concentrate which is then sold to various bottlers throughout the world who hold an exclusive territory. Apart from owning its anchor bottler in North America (Coca-Cola Refreshments), it has minority shares in some of its largest franchises, like Coca-Cola Enterprises, Coca-Cola Amatil, Coca-Cola Hellenic Bottling Company (CCHBC) and Coca-Cola FEMSA, but fully independent bottlers produce almost half of the volume sold in the world. Independent bottlers are allowed to sweeten the drink according to local tastes. The Coca-Cola Company develops products, produces related marketing and advertising programs, and sells syrup concentrate to independent bottlers.

Due to the commoditized nature of its products, Coca-Cola Company follows an intensive distributing system whereby it partners up with local bottlers operating in different countries and territories. Most of these bottlers have exclusive rights to distribution to their predefined geographic areas. The Coca-Cola Company sets up the basic guidelines to do business in terms of operational procedures, customer relationship management and query management and these bottlers have some degree of freedom to develop other SOPs relating to delivery, fleet management and developing credit lines.

To simplify the entire Supply Chain Management of the Coca-Cola Company, let's review a small channel flow process which will help us in developing a better understanding of how Coca-Cola Company's supply chain works.

The Coca-Cola Company headquartered in Atlanta manufactures the syrup and sells it to one of its bottling partners like Coca-Cola Enterprises (CCE) which is responsible for selling the product in North America and Canada. Coca-Cola Enterprises combines the product concentrate with other ingredients to manufacture and package the beverage and then markets its products to retail customers and consumers.

The Coca-Cola Export Corporation (TCCEC) is the entity responsible for selling the concentrate to other bottlers around the globe. TCCEC along with its regional offices located throughout the globe establishes partnerships with local bottlers who manufacture the beverage using the syrup provided by Coca-Cola Company and then distribute it to their respective markets.

One notable exception to this general relationship between TCCC and bottlers is fountain syrups in the United States, where TCCC bypasses bottlers and is responsible for the manufacture and sale of fountain syrups directly to authorized fountain wholesalers and some fountain retailers.

Operations

In this section, we will describe the bottling operations used by different bottlers in manufacturing and then distributing the Coca-Cola brand in their respective markets. The Coca-Cola Company establishes the basic guidelines of operations for all of its bottling partners and suppliers so most of the operations are standardized and there is a certain degree of centralization to most of their strategic decisions.

Each bottling partner services the assigned geographical area through a head office which controls most of the operations and it serves as the hub for different entities in the supply chain. The bottler's head office is working in close collaboration with a regional office which is under the direct supervision of The Coca-Cola Export Corporation. The bottler's head office links the production plant with different distribution and sales centers and multiple trade zones together to form a complete supply chain.

After receiving the concentrate from The Coca-Cola Company (Atlanta) through one of the regional offices under the supervision of The Coca-Cola Export Corporation, the bottler ships it to one of its manufacturing facilities. The facility produces the final drink by mixing the syrup with filtered water and sweeteners, and then carbonating it before putting it in cans and bottles, which the bottlers then sell and distribute to retail stores, vending machines, restaurants and food service distributors. The bottling production plant has its own supply chain which mainly consists of two types of items.

General Items

Key Ticket Items

Sugar

Empty bottles (Procured on contractual basis from different vendors)

Crowns

Caps

Crates.

The production information including forecasting measures, the capacity management, multiple vendor management and other sales figures are kept at the production plant as well as the head office.

Enterprise Resource Management Software used by the Coca-Cola Company

Coca-Cola Company uses proprietary software known as BASES and some specific modules of SAP to manage all their operations in the world. This software performs the functions of the entire ERP for the company and its worldwide operations. Information related to geographical sales, per capita consumption trends, response from new product introduction, sales forecasting, seasonal variations, customer relationship management data, fleet management data and all other related information is managed using this software. All entities affiliated with or doing business with the Coca-Cola Company use this software to communicate with the company. All query management and customer problems are handled using this software.

A process depiction of the sales module of this software is described as under as an example to further facilitate the understanding of the sales process at Coca-Cola’s bottling partners.

Distribution:

From the production plant, the beverages (in the form of cans or bottles) are shipped to distribution and sales centers using the bottlers’ own fleet of commercial vehicles.

The distribution centers are responsible for storing and managing the inventory comprising of different SKU and dispatching them off to the market to different retailers. The distribution and sales centers have multiple predefined zones and sub divisions of areas to capture all the retailers and contact points in the market. Generally this distribution and sales centers have the following departments.

Sales and Dispatch.

Customer Service and Query Management.

Logistics Dept. or Fleet Management.

Storage or Warehousing.

IT Dept.

Each distribution center is responsible for the implementing the “ push strategy” in the supply chain. Each zone in the distribution channel has a zone head who is responsible for the performance of his zone and to increase the per capita consumption of his zone. Each zone is further divided into different routes and each route has different territories assigned to each vehicle. In addition to the Coca-Cola beverage, the bottlers also provide other complementary merchandise as an incentive to key accounts like free chillers and coolers for beverages, pop materials and relaxed credit lines. The bottlers execute several competitive strategies to maximize sales like inter-zone competitions and give generous incentives to top performers. The sales data from each zone is calculated on a regular basis and it helps to form sales reports which in turn help develop short term quarterly sales strategies and forecasts by the regional office and also helps The Coca-Cola Export Company identify market gaps for new product development and other business development strategies.

The distribution and sales centers are in close contact with the retailers through the zone managers who give them constant feedback about the changing market trends and to help them become more responsive to the needs of the end consumers and their purchase patters. The retailers can place orders with their respective zone managers or they can call the distribution and sales centers if they require addition stock. A procedural illustration of the payment process from the retailers is shown below as it appears in the BASES software of the Coca-Cola Bottlers.

Demand forecasting is important for Coca-Cola. Therefore, the company uses quarterly sales data to forecast future fluctuations in demands and identify future variations. Since the Coca-Cola beverage is a highly commoditized product there are no such end consumer segments. However, there are different retailer segments within the supply chain based on their level of operations and consumption figures. The retailers (like Wal-mart, Kroger and other restaurants chains) have been assigned specific Marketing Development professionals or ASMs to avoid any inconvenience and minimize lead times.

Channel Flows

Following are the channel flows that occur throughout the supply chain from the manufacturing plants to the distributors to retailer and thus the final consumers.

Manufacturer

Distributor

Retailer

Consumer

Financing

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Financing

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Financing

Financing

Risking

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Risking

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Risking

Risking

Negotiation

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Negotiation

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Negotiation

Negotiation

Physical Possession

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Physical possession

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Physical possession

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Physical possession

Ownership

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Ownership

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Ordering

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Information

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Information

Financing, Risking physical possession and ownership transfer at each step of the chain. Order taking and payment travels backwards from consumer who demands the product from the retailer who places an order at the distributor. Information travels both ways where the Company disseminates information about the product to each entity in the supply chain and needs information in the form of feedback from the end consumer.

Service Outputs

The following are the service outputs that The Coca-Cola Company provides throughout its supply chain.

Integration and Conclusion

The Coca-Cola Company has one of the largest supply chain management systems in the world and due to its volume there are certain problems and improvement areas that need to be rectified. TCCC is taking necessary steps to constantly improve its ever growing supply chain by partnering with different suppliers and bottlers. Several integration efforts are under way to maximize TCCC supply chain efficiency. TCCC made considerable changes to their supply chain in 2004 by combining its three business units in North America in an attempt to consolidate them into one more efficiently integrated unit[4]. An evidence of TCCC’s continued efforts can be seen by their 2006 decision when TCCC decided to bypass most of its bottling partners and to deliver its products directly to Wal-Mart to reduce lead times[5]. By making this change and delivering directly to the warehouses, TCCC changed a 100 year old operational practice.

Another recommendation that TCCC could use is that it could try and create some transparency in its bottling partners. Requiring transparency from its bottling partners could remove domain conflict problems that arise when one bottler tries to sell its merchandise it another bottler’s territory to meet its sales quotas (this problem has been seen in Coca-Cola’s Asia Pacific market).