Barilla manufacturing case study

Supply Chain Coordination Describe Burial's manufacturing and distribution operations. Manufacturing: Barilla has 25 plants, including large flour mills, pasta plants, and fresh bread, as well as plants producing specialty products. Raw materials, in the manufacturing process, were transformed to packaged pasta on fully-automated 120 meter long production lines. The plants were specialized by the type of pasta they would produce, with the primary distinction based on the composition of the pasta, e. G.

Rye or fresh pasta, pasta with or without eggs and spinach. Also, even within the same family of pasta products, individual products were assigned to plants based on the size and shape of the pasta. The manufacturing process at Barilla was very precise, and required tight heat and humidity specifications In the pasta dry process, so as to keep the changeover cost low and quality high. Distribution: Barilla divided its products into " dry" and " fresh" product categories and maintained a different distribution system for the two categories.

The dry products category includes dry pasta and longer shelf-life bakery products, whereas, the fresh products étagère Includes fresh pasta products (with 21 -day shelf life) and fresh bread (with one-day shelf life). Barilla had two central dilutions centers (CDC) to which the products shipped from the plants.

The fresh products were then purchased from these Cad's by independent agents who then channeled the products through 70 regional warehouses located throughout Italy.

From the Cad's approximately 65% of the dry products went to the supermarkets, 70% of these (65% of dry products) went to super market chains, whereas, the remaining 30% went to independent super markets. The remaining 35% of dry products were distributed from the Cad's to Burial's internally owned regional warehouses, which then distributed them to small independent shops – Signora Maria Shops.

Dry products destined for supermarket chains were distributed from the CDC to the chain's own distribution organization, known as Grander Deleteriousness (GO). While those destined for independent supermarkets were distributed from the CDC to a distributor known as Distributions Reorganization (DO), which acted as a centralized buying organization for a large number of independent supermarkets. The CDC held a month's inventory for dry products, and 3 days for fresh products.

The GO, DO and the Internally owned regional warehouses (for Signora Maria shops) held a two-week supply Tort Barbell's array products I en Toweling Teller (Hogue 1) snows an Illustration of Burial's distribution system for dry products: Figure 1: Barilla Distribution Network for Dry Products What is the problem faced by Barilla? What do you think are the factors causing this problem? Burial's pasta supply chain suffers from classic bullwhip-effect problem. It has been experiencing large amounts of variability in demand resulting in operational inefficiency and increased manufacturing, inventory, and distribution costs.

The underlying factors of the fluctuating demand include Burial's sales strategy relying heavily on the use of promotions in the form of price,

transportation and volume discounts; sales representatives being rewarded based on the amount of product sold to distributors, which led to sales representatives trying to push product to the distributors during promotions, decreasing the ability to accurately forecast sales; he distributors having full control over their orders leading to gaming behaviors; and the lack of a computer forecasting system at the distributor level.

Describe the solution proposed by Brandon Vital. Why do you think this would help alleviate the problem? Brandon Vital suggested the implementation of a Just-Len-Time Distribution OUTDO) strategy, which is essentially the Vendor Management Inventory (VIM) strategy.

Barilla will be in charge of the channel between the CDC and the distributor and decide on the timing and size of shipments to its distributors.

Thus, unlike traditional supply Haines in which distributors place orders and manufacturers try to satisfy these orders as much as possible, in CITED Barilla own logistics organization would specify the appropriate delivery quantities – those that will more effectively meet the end customer's needs yet would also more evenly distribute the workload on Burial's manufacturing and logistics system. If implemented, Barilla can make better delivery decisions and improve its demand forecasts, be more effective in meeting end- customers needs, and more evenly distribute the workload on its manufacturing and egoistic systems.

Also, the inventory levels at CDC will also be reduced. What conflicts or barriers internal to Barilla does the CITED program create? What causes these conflicts? How should Giorgio Magical deal with these internal

conflicts? The main resistance internal to Barilla was from the sales and marketing functions, which Barilla, until now, has relied upon for its success. The sales representatives feared reduction in both their responsibilities and bonuses due to a flatted sales level.

The marketing people also feared a reduction in responsibilities as trade remissions would be difficult to run with a CITED strategy.

There were also concerns about inability to adjust shipments quickly to stock outs, lack of infrastructure to Enola Jell I D, vague cost Detentes, Ana Increased competitor Snell space at distributors. I think Magical should demonstrate that CITED benefits not Just Barilla, but also the distributors. He should run experiments at one or more distributor sites and prove his case. Also, Magical should encourage the marketing and sales people to look at the overall benefit to the supply chain.

By getting the top management involved, by effectively advocating the benefits for the entire supply chain, and by removing the obstacles of sales incentives and reduced responsibility, Magical can effectively deal with this problem and get CITED implemented.

How do you think a typical Barilla customer would respond to CITED? Why? How would you convince the customer that the CITED program was worth trying? If you are not able to sway the customer, what alternatives would you suggest to combat some of the difficulties that Burial's operating system faces?

I think a typical Barilla customer, if explained to properly, should be able to empowered the benefits associated with CITED for the entire supply chain. I would convince the customer by mentioning the benefits of the CITED in removing the bullwhip effect. I would point out the fact that they would actually be reducing their costs significantly because Barilla would be responsible for monitoring and replenishing their inventories when levels are low. Moreover, the reduced inventory levels would also save them the cost for both inventories and space.

If however, I am not able to convince the customers, I will try other modes, in my viability, to effectively respond to the fluctuating demand.

For this purposes, I would either reduce the varieties of products being offered which will reduce the need to have so many different inventories and SKU for both customers and Barilla. I could also try implementing the Just-Len-Time (lean production) approach for Barilla manufacturing processes – processes which are internal and Barilla has full control Barilla Dry Product Factories CDC Internally Owned Regional Warehouse Super Market Chains Independent Supermarkets Signora 65% 35% Marl snoops