

Barilla operations case



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Barilla Case _____

_____ Overview of Barilla Barilla appears to be in a commodity industry, suggesting flat demand. Barilla positions themselves as the branded, premium, dry pasta. Their order qualifiers are consistency and quality, and their order winners are brand recognition and variety in shapes. In fact their product line is extensive – 800 products. However, Barilla faces demand fluctuations that strain their supply chain operations and making it difficult to anticipate product demand.

Barilla proposes a Just in Time Delivery system to help improve margins. Our overall recommendation is that a JITD delivery system is premature, and instead we recommend building a new information management system to resolve the information bottleneck between customer and the manufacturer and align incentives at each stage in the supply chain to reduce inventories. Only then can a JITD delivery system be properly evaluated. The Impact of Fluctuating Demand on Operations

Fluctuating customer demand results in higher inventory for distributors who carry a cross-section of product lines, as demand among product lines fluctuates in unpredictable ways. Certain lines will stock out, while other inventory will merely sit. Thus the sitting inventory creates higher carrying costs. Unanticipated demand will result in higher stock without sufficient information to forecast demand. This is a mismatch in inventory allocation, and a information-transmission issue.

Since the manufacturer cannot anticipate which lines will be in greatest demand, lead time is increased, as the manufacturer cannot tailor

production to the increased demand until determining which line to produce. These lead times essentially result in a whip-lash effect, in which the factories over-react to stock outs. This results in higher inventory and higher costs. These higher inventory costs contribute to the lower margins and stock outs impair Barilla's brand equity as a premium brand – a premium brand should not have empty shelf space. The causes of the fluctuating demand

The underlying causes include customer demand, customer price sensitivity, some seasonality, the manner and duration of the promotions, the lack of sufficient information to anticipate demand, and the fragmented information stream from small shops. Customer demand is not well recorded. Though pasta volume tends to be steady other than some seasonality, demand among varieties is uncertain, and this flows up the supply chain.

Furthermore, the extensive product offerings make it difficult to determine if certain lines are purchased as a substitute for others.

One aspect of this uncertainty is the fragmented information stream that results from the many small shops, each conducting inventory at different times, with few incentives to pass information upstream except when they decide to place a new order. This lack of real-time info about customer demand other than periodic orders is a large barrier to accurate forecasting. The promotion structure may be exacerbating the demand problems. We do not know the windows of promotions, but narrow promotion windows should increase ability to forecast demand, suggesting that they do not use promotions that are narrow enough to predict demand.

Internal and External Barriers to Implementation of JITD First of all, there is an information bottleneck just past the customer, and the information relating to amount and timing of demand does not flow directly up the Supply Chain. Instead Shops, Distributors and Barilla's Factories are forced to use existing orders to inform their supply decisions. Barilla's Long lead time 10 days combined with distributors reviewing inventory levels once a week, does not allow orders to catch up with the demand. This will make the accurate forecasting that Barilla needs to perform JITD very difficult.

Distributors distrust giving Barilla info. Barilla has inadequately explained the potential costs savings that could result from reducing inventory. Distributors also fear that they will lose the volume discounts they currently receive if the JITD system results in smaller batches. Externally there are concerns that greater dependence on Barilla due to a smaller inventory would place them at risk of supply chain interruption. Our recommendations to deal with the barriers to implementation Barilla could vertically integrate, buying the distributors, and centralizing shipment information.

Alternatively, we think that incentives could be aligned better to promote the free flow of information up the supply chain and reassure distributors regarding discounts. To reassure distributors, we would recommend basing discounts not on individual shipment size, but monthly volume, so that they would, on average, receive the same discounts under JITD. Also, Barilla should use promotions with short terms to create set periodic demand for promoted products. Rewards should be established as incentives to distributors and retailers to better document sales volume. This could invest in electronic barcode readers and tracking technology.

Similarly, Distributors should be educated about the specific gains that they could realize by assisting Barilla to produce more efficiently, including improved margins and reduced lead times. With accurate delivery, retailers only need to maintain minimum amount of inventory and thus reduce the inventory management cost. Good incentives will produce good information. Accordingly, we recommend, building a new information management system that better gauges distributor and retailer statistics to provide accurate customer demand. Only when demand can be forecast can a JITD system's efficiency be properly evaluated.