

Barilla spa case study

Education



Barilla SpA (Barilla), is an Italian largest pasta manufacturer in the world manufacturer that sells pasta to retailers largely through third-party distributors. Barilla has been facing huge variability in demand which is straining the manufacturing and distribution network of the company. This fluctuation in demand, are forcing the CDCs to maintain a higher level of inventory. The proposed new system, Just-In-Time Distribution (JITD), is the solution suggested to resolve the demand fluctuation issues and lower costs.

This new process would move forecasting and shipment allocation responsibilities to Barilla rather than allowing each distributor/retailer place the order amounts separately. This approach has both internal and external complications as there is much resistance from both within the company and from the suppliers and distributors. Implementing the JITD is a good idea for a number of reasons.

This will streamline the information flow, reduce uncertainty in demand , reduce the lead time, and decrease both finished and raw material inventory, thus making the system efficient and reducing the overall cost. A good plan would be for Barilla to start by running a pilot test within its own depot then with 1 or 2 distributors and use the results of the test regarding the cost savings and improvement in supply chain efficiency to convince other distributors about how beneficiary will be to all by implementing JITD.

ISSUE IDENTIFICATION

Immediate issue:

The main issue in this case is the fluctuating demand imposed on Barilla's manufacturing and distribution system. Once this is brought under control,

many other problems will be solved. These following are some of the causes of this fluctuating demand that must be addressed:

- Demand fluctuations (Bullwhip effect)
- Cost of having to hold high inventory in order to meet distributor's order
Transportation cost
- Barilla's sales strategy relied heavily on the use of promotions
Long Lead time
- Customer service.
- Higher overall warehouse and transportation costs
- Sales Representatives Incentives based on the amount of the products that they sold to the distributors

ISSUE IDENTIFICATION & ROOT CAUSE

Demand fluctuations (Bullwhip effect)

As the 1980s progressed, Barilla has been facing huge variability in demand essentially affecting dry products, such extreme demand fluctuation strained the manufacturing and distribution network of the company (see Exhibit 12)

Cost of having to hold high inventory

This fluctuation in demand and the difficulty of the manufacturing process to deal with fast-track orders are forcing the CDCs to maintain a higher level of inventory in order to meet distributor's order. " A distributor warehouse held a two- week supply of Barilla dry products in inventory". (see Exhibit 13)

Reduce the number of Skus

Transportation cost

The greater number of trucks that it required in periods of high demand increased its Transportation costs. Barilla's sales strategy relied heavily on the use of promotions in the form of price, transportation and volume discounts

Long Lead time

Barilla supplied its distributors between 8 and 14 days after it received their orders, the average lead-time being 10 days. Customer service Barilla has no visibility when it comes to plan and forecast in order to meet the customer demand. Higher overall warehouse and transportation costs

The fluctuation demand may lead to overtime shifts in order to meet the demand, higher inventory of raw materials and frequent capacity adjustments, as well as higher transportation costs which all increase the overall cost of the product. Sales Representatives Incentives based on the amount of the products that they sold to the distributors. This was causing problems as the sales reps would try and push more products during the promotional period to get a bonus and were not able to sell as much during non-promotional periods.

ALTERNATIVES AND OPTION

The proposed new system, Just-In-Time Distribution (JITD), is one solution I suggest to resolve the demand fluctuation issues and lower costs. PROS:

1. Resolve the demand fluctuation that often lead to the bullwhip effect.
2. Offer additional service to the customer at no extra cost
3. Increase supply chain visibility and there by fewer stock outs

4. Reduce forecasting errors
5. Lower cost of capital tied up in inventory
6. Improve customer service
7. Improve the information flow,
8. Reduce the lead time
9. Decrease both finished and raw material inventory, thus making the system efficient and reducing the overall cost.

CONS:

1. Heavy Investment in information technology in order to implement the JITD program
2. The internal resistance to the JITD system comes from the production, sales and marketing divisions and the top management. The production division is concerned about the lack of a sophisticated forecasting system in order to properly use the data received from the distributors in an efficient way. The sales representatives are concerned about their compensation, they will lose their incentives, because the sale will be predictable or flat and their responsibilities will be minimized under the new mode of operation. The top management will be concerned about the added responsibility of predicting demand on Barilla without any guarantee of cost reduction.
3. The external resistance comes from distributors and retailers. They will be concerned about the loss of control in deciding their inventory levels. The JITD system gives more power to Barilla which may be looked on with doubt by some distributors who are not sure about the long term intentions of Barilla. These distributors expressed concerns

about becoming too tight to Barilla and fearful of losing control by giving Barilla the power to push products into their warehouse just so they Barilla can reduce its costs.

4. Difficulty to run trade promotions with JITD which may push the customer to switch to another brand.
5. Customer need to improve their equipment (computer, bar-code, scanner..)
6. Customer will have to share their sales data with Barilla on a daily basis in order to insure replenishment
7. Loss of control in deciding their inventory levels

RECOMMENDATIONS

1. Eliminate or reduce promotional discounts to customers because it leads to demand accumulation and a release during the promotion period.
2. Volume discounts to distributors should be reduced or eliminated for the same reasons highlighted above.
3. Barilla should also move to a new compensation for sales representatives, they should be rewarded on company performance not on their own. Their responsibilities and relationships should be closer to distributors and retailer in order to improve and insure Barilla's customers' satisfaction.
4. The distributors will have to be offered collaboration incentives in order to keep them on board

5. Keep the assessment period the same but stagger the end dates for these periods over sales representatives to smooth out demand fluctuations.

IMPLEMENTATION

How to effectively implement JITD at Barilla? And When?

1- Start by running a test pilot within its own depot then with few distributors and use the results to convince the internal and external resistance on how the new program will reduce dramatically their cost. and improve supply chain efficiency.

1. Collaborative Planning: Barilla and the distributors can work as a team and plan on different issues.
2. Manage the demand: Barilla should not only forecast demand but also should try to shape and influence it by marketing using surveys to determine the needs and expectations of the consumers and designing products to satisfy them.
3. Gather information from point of sale: This model has been successfully implemented in Wal-Mart's distribution system.

However, Barilla will have to improve its relationship with retailer and that will involve a costly investment as the retailer doesn't have the computer to communicate the information to Barilla.

MONITOR AND CONTROL

The JITD system has the potential to substantially reduce costs if it is implemented correctly. In order to do so, Barilla should begin implementing JITD within its own Depots and expand with pilot projects with the

Distributors. Therefore mentioned analysis discussed a variety of methods by which to make such implementation more viable than it was in the past.

However, such a list is in no way conclusive. Ideas such as reducing the number of SKUs and rearranging distribution channels should also be explored in the long term as they can also result in substantial cost savings.

Barilla should be able to monitor and control the partnership with its distributors by measuring their performance, these are the following list of inclusions that may be used for this purpose: