# Boeing australia case study

Parts of the World, Australia

# Executive Summary

Barilla is operating in a very old-fashioned distribution system that needs to be changed. Implementing this new JITD will increase efficiency across the supply chain. The system will reduce manufacturing costs, increase supply chain visibility, increase distributors' dependence on Barilla, establish better relationship with distributors, reduce inventory level and most importantly improve manufacturing planning and forecasting using objective data. This JITD will see Barilla's supply chain synchronized from manufacturing to end - users.

Strategically, the best decision for Barilla is to implement the JITD program. This will allow for greater capability and flexibility to respond to inputs from end-consumers. In the JITD system, each distributor would provide Barilla with data from products that they shipped to retailers in previous days as well as current stock levels for each Barilla SKU. This data would then be used to make forecasting and replenishment decisions. The will result in a smoother running operating system and excellent customer service.

To prove the credibility of JITD and win over apprehensive customers the involvement of top management will be employed. Within the next six months Maggali and top management team will analyze daily shipment data of the distribution chain. Next a database of historical and present demand patterns of distributors will be created and shipments will be simulated with JITD in place. This system will reduce stock out rates and inventory levels while increasing service levels. Next, experiments will be run at the Pedrignano depot and then the Milano depot.

This will establish the credibility of JITD and win over distributors and retailers who are apprehensive in buying into this new system. Approximately ten top managers, from customer service managers to vice presidents, logistics, purchasing, sales and marketing and informationtechnologymanagers will be involved in the decision making, implementation and monitoring of this new system. This will prove credibility of JITD and convince customers that change is inevitable and in this this case the benefits will be mutual.

## Issues

Deciding whether or not the Just In Time Distribution (JITD) model should be implemented into Barilla" s operations. Barilla is suffering from escalating operational inefficiencies. The company is being burdened by demand fluctuations in its manufacturing and distribution systems. Also, this large weekly variation in distributors orders is increasing overhead costs. Trying to convince internal and external customers of the benefits of JITD Barilla's customers are unwilling to give up authority to place orders as they please.

The lack of faith in Barilla's inventory management also made some customers reluctant in giving detailed sales data so that Barilla could improve its forecasting demands. Customers perceived this JITD move as a quest by Barilla to transfer power to themselves. Internal customers are also resistant to this change as they as they view this concept to be infeasible and or dangerous. Environmental and Root Cause Analysis There is a growing burden that demand fluctuations are imposing on the company's manufacturing and distribution system.

Vitali has suggested for years that the company implement this innovative JITD which is modeled off JIT manufacturing. Vitali proposed that rather than follow the practice of delivering products to Barilla’s distributors on the basis of whatever orders distributors placed with the company, Barilla’s own logistics organization would instead specify delivery quantities that would more effectively meet end users’ needs and would also more evenly distribute the workload on Barilla’s manufacturing and logistics. This was heavily resisted both internally and externally.

External people are saying that Barilla wants power over its distributors and wants to manage their inventory for them. On the other hand, the internal sales and marketing people thinks this JITD is unworkable and will reduce their workload so they see it as a threat and as a result they are putting up a resistance. The variability in demand is as a result of lack of forecasting systems or sophisticated analytical tools at the distributors end. Orders for Barilla’s dry products swing from week to week and such extreme demand strains Barilla’s manufacturing and logistics operations.

For example, the specific sequence of pasta production necessitated by the tight heat and humidity specifications in the tunnel kiln made it difficult to quickly produce a particular pasta that had been sold out due to unexpectedly high demand. In addition, holding sufficient finished goods inventories to meet distributors order requirements was extremely expensive when weekly demand fluctuated so much and was so difficult to forecast. Advertising and trade promotions are also intensifying the resistance to implementing this JITD.

Distributors have become accustomed to price discounts through volume orders, promotional activities and transportation. Barilla’s sales strategy relied on the use of trade promotions to push products into the grocery distribution network. Distributors looks forward to these promotions and also sales people within Barilla looks forward to giving distributors discounts in this very old-fashioned distribution system. Alternatives and/or Options Implementing the JITD system would prove beneficial to the company and its overall supply chain management.

Benefits of this JITD would be reduced manufacturing costs and inventory levels, better relationship with distributors due to increased supply chain visibility and distributor’s dependence on Barilla and overall improvement in manufacturing planning using objective data collected. For sales people this would be a selling tool rather than a threat to sales. Distributors will also see an improved fill rate to retail stores, additional service from Barilla without any extra cost and reduced inventory holding costs.

Disadvantages to these are lack of infrastructure to handle JITD, risks of inability to adjust shipments quickly to stock-outs, cost benefits uncertainties, unconvinced distributors and reduction in responsibilities for Sales Representatives. Recommendation It is recommended that Barilla implement this JITD system in its supply chain. The system will provide customers with additional service at no extra cost. It will also improve Barilla’s visibility with the trade and make distributors more dependent on the company.

This dependence or vendor management inventory (VMI) system will improve relationships between Barilla and distributors. More important, is

the information regarding the supply at the distributors' warehouses would provide the company with objective data that would allow for improvement in planning procedures and forecasting. In addition, distributors will not only improve their fill rates to retail stores but reduce their inventory holding costs. Sales and marketing people will realize that this JITD will be a selling tool rather than a threat to sales.

This in the long run improves overall performance in operations. Implementation Maggiali needs to look at JITD as not only a logistics program but as a company wide effort and get top management from both sides involved in decision -making and teamwork. With top management on board, the first implementation will be done at Barilla's largest DO (organized distributor) the Cortese. Within the next six months Maggali and top management team will analyze daily shipment data of the distribution chain.

Next a database of historical and present demand patterns of distributors will be created and shipments will be simulated with JITD in place. This system will reduce stock out rates and inventory levels while increasing service levels. Next, experiments will be run at the Pedrignano depot and then the Milano depot. This will establish the credibility of JITD and win over distributors and retailers who are apprehensive in buying into this new system. An information system will also be implemented to communicate with all customers.

SKUs will be barcoded so that they are easily identifiable; that is Barilla's code and distributor/customer codes. Using this coding system, the company will be able to receive information through any code and also reduce the impact of internal changes in products on DO systems. Barilla's forecasting

systems will be under improvement so that the company can make good use of information received. Monitor and Control There has to be credibility of this new venture in order to convince customers both internally and externally to sign on.

In order to reap success in any new initiative top management have to be involved. A team of approximately ten top managers including managing directors, marketing and sales managers, logistics managers, purchasing managers, vice presidents and information technology managers will monitor the implementation of this new initiative, JITD. Each day customers will send information to Barilla using EDI (electronic data exchange) systems. This information will include; customer codes, previous day's stock-outs, previous days sales and advance orders for future retailer promotions.

This will help Barilla to improve internal operations for the company and customers alike, now that Barilla will be responsible for determining quantities and delivery schedules. This will see a reduction in inventory levels, distribution costs, manufacturing costs, improved responsiveness to distributors demands. Overall efficiencies in the company's operations will be evident in every link of the supply chain. Monitoring and control will be an ongoing process to minimize inefficiencies in operations.