

Barilla spa case analysis

Business



Barilla SpA (A) Case Analysis Teona Omiadze, Nino Tskhvariashvili, Mari Zaridze School of Economics, Business and Administration of the University of Georgia Instructor: Natia Zedgenidze Tbilisi 2011 Table of Contents

Executive Summary.....	3
Introduction.....	
. 4 Problem Description.....	5
External and Internal Resistances to JITD program.....	9
Solution.....	
.. 11 Recommendations to the solution	
.....12 Other	
recommendations.....	
. 5 Customer response to the solution.....	
16 Conclusion.....	21

Executive Summary Barilla SpA, an Italian pasta manufacturer is experiencing problems in manufacturing and distribution systems caused by fluctuations in demand.

To eliminate these difficulties Giorgio Maggiali, the Chief of Barilla's Logistics Department, has been trying to implement the Just-In-Time-Distribution, further referred as JITD, system proposed by his predecessor Brando Vitali. JITD can be called a remake of popular "Just-In-Time" manufacturing concept. Although Maggiali has been trying to convince his consumers that the JITD would definitely work, he has not made much progress. The program was met with significant resistance by the distributors and Barilla's own

Sales and Marketing organizations. Now Maggiali is looking for possible solutions of the problem.

In the following analysis we will provide recommendations, which will help Barilla to successfully implement the JITD system and thus decrease its costs, increase efficiencies and its profits. Introduction Barilla SpA was founded in 1975 by Pietro Barilla. From a small shop in Palma, Italy, it became a large, vertically integrated corporation with mills, plants and factories located throughout the Italy. Barilla's success highly depended on its' quality of product and innovative marketing programs, which created strong brand name. The company was sold to Grace Inc. in 1971, because the building of a huge plant in Perdignano drove the owners " deeply into debt".

Grace brought additional capital investment and professional management practice into the company. In 1979, Grace sold the plant back to Pietro Barilla. During the 80s Barilla had an annual growth rate of over 21%. In 1990 Barilla was making 35% of all pasta sold in Italy and 22% sold in Europe. It held significant shares in pasta and bakery-products markets in northern and southern Italy. By this period Barilla distributed dry products including pasta and some of the bakery products, such as cookies, biscuits, etc.

and fresh products including fresh pasta and bread. Barilla had a carefully chosen production schedule that minimized the changeover costs and maximized the quality of the product. Barilla's plants were also specialized by the type of pasta they produced according to the composition of the

pasta. Barilla distributed its product through three types of retail outlets: small independent shops, supermarket chains and independent supermarkets. Small independent shops were serviced by Barilla-run depots which stored approximately 35% of dry products. The rest 65% was shipped to Barilla's Central Distribution Centers (CDCs) from which 90% was shipped to Grande Distribuzione serving Chain Supermarkets and Distribuzione Organizzata serving Independent Supermarkets.

The rest 10% was shipped to Barilla-run depots. Barilla-run depots also provided less than truck-load quantities to Chain and Independent Supermarkets. Barilla used trade promotions to push the products through the supply chain. It divided each year into 10 to 12 "canness" periods, with price discounts ranging from 1.4% to 10%; volume discounts consisted of carton discounts and the transportation discounts consisted of free shipping to the distributors.

The company also designed special promotional programs, which meant that Barilla's distributor could "buy as much product as it desired". Barilla also offered various volume discounts. Most distributors checked their inventory and ordered on a weekly basis. Nearly all of them had computer-supported systems, but few enjoyed the benefits of sophisticated forecasting systems or analytical tools. Barilla's Sales Representatives spent about 90% of their time working at the store level at the Distribuzione Organizzata, whereas Grande Distribuzione was rarely visited.

Sales Representatives also received incentives, which were based on achieving sales targets set for each "canness" period. So their incentives

depended highly on the quantity ordered by the distributor. Problem

Description As it was already mentioned, in 1988, the Barilla's Logistics Director, Brando Vitalli addressed the company's problems in manufacturing and distributions systems and proposed an idea that would fix all the problems caused by fluctuating demand and radically changed the process of ordering and delivering. This idea was later supported by Giorgio Maggiali, the Chief of Barilla's Logistics Department, who was trying to implement the Just-in-Time-Distribution (JITD), taken from ' Just-in-Time' manufacturing concept. The purpose of JITD system was reaching operating efficiency.

The main idea of JITD was that instead of letting the distributors determine the quantity and delivery schedules, Barilla's own logistics would be responsible for doing this. Barilla would look at all the distributor's shipment data and send only that quantity what was needed at the store. JITD would look at the shipping decisions made by distributors every day, as well as the current stock level for each Barilla SKU and combine this information to make stock replenishment decision based on Barilla's own forecasts. It took Maggiali 2 years of attempt, meeting with significant resistance both internally and externally, which will be discussed later. The idea of JITD was originated in response to the whole range of problems that Barilla SpA faced aiming to finding solutions to them. The main problem that Barilla faced as said above was the fluctuating demand.

And this is attributable to the following causes: One of the core causes of the fluctuating demand might be the possible excessive use of trade promotions, Barilla used to push product into the grocery distribution network. Barilla offered various incentives and discounts to distributors during 10-12 trade

<https://assignbuster.com/barilla-spa-case-analysis/>

promotion periods, that Barilla divided each year. The buyers expected frequent trade promotions and filled up the inventory during this promotion periods to benefit from the discount price. Sales representatives also pushed more products during the promotional period to get bonus, as their compensation was tied to the amount of products sold to distributors and they were not selling as much during non-promotional periods. As a result the demand would go up when the discount price was offered and down when this period expired. What's more, distributors' power to order different quantities as they considered needed caused more fluctuations.

Thus, wide variation in demand made demand forecasting very difficult. Poor forecasting systems and inefficient analytical tools also worsened the condition. Bad forecasting was caused and at the same time resulted from the demand fluctuation. Barilla could not make forecasts because majority of distributors did not have forecasting systems to determine order quantities and this resulted in inaccurate forecasts and thus, problems with order scheduling. Since orders could not be scheduled accurately it resulted in high level of stockouts for Barilla and for distributors. Poor communication between the supply chain members also contributed to this problem.

The parties were unable to react quickly to peaks in demand as they did not know what the demand would be and as a result higher level of inventory was maintained. Besides poor communication, large number of SKUs can also be named as Supply Chain management problem. Barilla's dry products were offered in 800 different packaged stock keeping units (SKUs) which causes complexity as it is difficult to handle with so much lines. The core cause of bad forecasting is not having accurate sales information, Barilla

<https://assignbuster.com/barilla-spa-case-analysis/>

does not have an information which products are more demanded by end-consumers to keep producing that particular ones and reduce costs caused by product diversity. Barilla's manufacturing and logistics operations also suffered by fluctuating demand and bad forecasting, as Barilla had specific sequence of pasta production and specifications that kept costs low and product quality high.

So, if particular pasta had been sold out due to the unexpected demand, it would be hard for Barilla to quickly produce that type of pasta owing to the inflexible manufacturing system. Thus, when Barilla's manufacturing system was not able to switch quickly between production of pasta to satisfy the unstable demand, it had to keep its inventory higher. Long lead times (10 days on average) is another problem that makes it difficult to meet demand fluctuations, thus causing some delays in deliveries and low replenishment rate. Because company cannot schedule orders ahead and since demand cannot be met, this results in poor service quality. Demand fluctuations, poor scheduling, poor supply chain management, inflexible manufacturing, long lead times, low replenishment rate and need for reducing stockouts resulted in keeping additional inventory to satisfy the fluctuating demand. High inventory level in its turn resulted in high inventory holding costs for both sides.

As a result of demand fluctuation, Barilla's production costs increased due to inflexible manufacturing that made it difficult to make switching in pasta production when particular type of pasta was out of stock. Since it was difficult for Barilla to make order schedules, it might have been difficult to schedule its own resources like labor, machinery that is tied to production so

<https://assignbuster.com/barilla-spa-case-analysis/>

internal cost might have been another cost for the company. And it might have had high transportation costs in peak demands, as it had to transport more goods in promotion periods. Here is the fish bone depicting actual problem: Methods: Poor Forecasting Poor order scheduling Production method SKUs Manpower: Sales Reps Machinery: Inflexible manufacturing System Materials: All this would definitely provide a wide range of benefits. First of all JITD would help to forecast demand accurately and thus reduce both, manufacturer's and distributor's inventory levels as well as avoid stockouts.

Secondly, JITD would reduce Barilla's own distribution and manufacturing costs and provide better planning for their manufacturing system due to improved scheduling. Thirdly, it would provide the forecasting systems and analytical tools, which the distributors seem to lack. JITD would also strengthen the relationship and guarantee communication and mutual commitment between the supply chain participants. In addition to these, JITD would be even more beneficial to distributors as they are offered an additional service with no extra cost. Even though JITD was viewed as solution to all these problems and given the advantages above, it faced external and internal resistances, that slowed down the implementation of JITD and little progress has been made since the idea was presented.

External and Internal Resistances to JITD program First of all, it seems that JITD program does not provide enough benefits for the distributors for them to give up their authority to place orders and run their business as they wish. Maggiali talks about the distributor's reaction: " They weren't even interested in talking about it" and as he says, the manager of one of Barilla's

<https://assignbuster.com/barilla-spa-case-analysis/>

distributors summed up a lot of responses in just few words, saying: “Managing stock is my job; I don’t need you to see my warehouse or my figures. ” These words point to another problem created by JITD, that is, JITD program would provide Barilla with the detailed sales and shipment data about the distributors, which in its turn would make the distributors too dependent on Barilla and diminish all the secrecy of the corporate information. In addition to this, the JITD would also make it hard to run trade promotions. As the quantity of the shipment would be determined by Barilla and would be independent from the buyer, the distributors would probably get volume discounts less often than they did.

The distributors would also be unable to buy as much product as they want during the trade promotion periods. Trade promotion periods also provided incentives for Barilla’s sales representatives working with distributor. Due to the new program they would also lose their incentives, which were provided based on achieving sales targets set for each canvas period. This is one of the issues of internal resistance among other that Vitalli faced while introducing the idea of JITD. Now we continue with discussing the internal conflicts raised by the implementation of JITD system. To start with, Barilla’s marketing and sales department were not happy about the fact that their responsibilities, as sales representatives would be diminished.

They also considered the program as very risky and not beneficial for the company. They feared to lose their functions and become less important for the company. After implementing JITD system sales representatives would not e responsible for selling products to the distributors and would lose all their incentives provided during the canvass periods. Moreover, marketing

<https://assignbuster.com/barilla-spa-case-analysis/>

department argued that sales levels would flatten and there was a risk of not being able to adjust their shipments sufficiently quickly to changes in selling patterns or increased promotions and that the pasta industry distributors were not ready for a complicated process of information sharing. In addition to that, some of the marketing personnel provided quite convincing arguments against the program.

For example, one of the staff members says that in case space is freed up in the distributor's warehouse, while Barilla's inventories decrease, there is a risk that the distributors would fill this space up with competitor's product. This is particularly true, because if space is freed and Barilla's forecasts do not fill up this space and plus their inventory is low, the distributor will order some other product instead of waiting for Barilla to fill the stock and eventually Barilla's sales might decrease. More arguments included possible stock out in case of disruption of supply process and finally Barillas sales and marketing representatives were not sure of cost benefits. We consider that the main causes of such high resistance from Barilla's Sales and Marketing department was due to the possible job cuts in case of implementation of JITD, Sales representatives losing the significant portion of their incentives and finally, the fear that their jobs would not be needed any more. Finally, the JITD program will also require the distributor and the manufacture to communicate every day and this cannot be achieved without considerable investment in technology given the old-fashioned structure of distribution channel and the fact that most of the grocers are not equipped with the technology necessary to provide needed information every day. Solution We consider JITD system will work as it will provide a lot of benefits to the entire

supply chain and it's quite feasible in the environment in which Barilla operated in 1990.

The JITD will provide the distributors and Barilla with reliable forecasts, which in its turn will reduce costs associated with inventory, transportation and manufacturing and none of them will be forced to have excessive inventory levels or stockouts. Recommendations to the solution After stating our solution, we present some of the recommendations that can help overcome the difficulties created by the fluctuating demand and poor visibility through the supply chain. First of all, the most important thing for Barilla is to convince its own Sales and Marketing Department and other opponents of JITD system inside the company that the program will be successful. Without full support from the whole company, Maggiali can be sure that he cannot convince his consumers. We propose that Barilla shall focus on several ideas presented below: As it had already been mentioned, sales representatives feared that their responsibilities would be diminished and they will lose their jobs. Maggiali must offer them to participate in all stages of the JITD program.

This way they will feel that the company still needs them and their opinion and jobs are important to Barilla. The company should assure the sales representatives that they will not lose their jobs. Despite the fact that they will not be doing exactly the same work as they did while following the traditional system, they can still contribute to the company doing some other jobs assigned to them by Logistics or Marketing department and help out in forecasting. In addition to this Barilla will still need them to keep close relationships with the distributors and there will always be a need for

<https://assignbuster.com/barilla-spa-case-analysis/>

someone to work at the store level. Sales representatives also opposed JITD, because of them losing their incentives provided by trade promotion system. As with the JITD implementation, this kind of trade promotion cannot be held, Barilla should introduce a new incentive and motivation system.

We offer Barilla to introduce a profit-sharing system. Profit-sharing is a system that provides some portion of any profits for distribution to other employees. In this way, the incentives of the sales representatives will be dependent on the welfare of the whole company and not just their own accomplishments. And plus this will strengthen their motivation to work in the best interests of the organization as well as their own. Secondly, Barilla should convince their customers to be as much collaborative as possible.

This will be for the welfare of everyone. It will cancel out the difficulties in communication between the supply chain members and provide the environment of mutual trust and commitment needed for long-term partnerships in the supply chain. To do this Barilla must run experiments with JITD in its own depots which supply the small independent shops and some of the supermarkets as well. In case of success, Barilla and the customers will save a lot of money due to the decreased inventory levels and effectively managed demand. This, in its turn, will provide significant profits for the entire supply chain.

Barilla can show these numbers to its customers and convince them that the system will work for them too. The next customers Barilla should target can be the distributors in and outside the Italy. Barilla has a 22% market share in Europe. As Maggali has already tried to convince the distributors in Italy, he

might try to do the same with the foreigners. Perhaps they could be more understanding and willing to participate in JITD program. To gain more trust from its customers, Barilla should be more close to them.

Their relationship must be as open and transparent as possible, just like as if they were one company, not just a supplier and buyer working together. If Barilla tells the distributors everything of its plans about the JITD, shows them their forecasts and involves the management of the distributors in the JITD system planning and implementation, the customers will have more trust in what their supplier is doing and that Barilla is acting not only for its own wellbeing, but for their too. To convince the distributors, Barilla can also show the distributors that the traditional method of the distribution is no more effective. The company can prove this by presenting the numbers provided in exhibit 13 showing the significant stockouts or excessive inventory levels. Here are some of the numbers from the exhibit: * In week 1 the inventory level at Cortese DC was approximately 1150 quintals, while the sales were lower than 350 quintals. This shows that Cortese DC was holding excessive inventory at the additional cost.

* In week 31 the inventory level at Cortese DC was approximately 200 quintals, while the sales were above 300. This shows that Cortese DC experienced a significant stockout during this week. Despite all the promises to the distributors, that Barilla's representatives may make, the distributors also need to be convinced in legal terms. We offer that Barilla signs a contract with distributors, including the points about the non-divulgence of the corporate information. In case of breaking these points, Barilla will have to pay a significant penalty to the distributor.

<https://assignbuster.com/barilla-spa-case-analysis/>

In this way, Barilla will convince the customers that they should not fear showing their numbers to Barilla's forecasting department and gain more trust from their side. Barilla should also show the customers that they won't lose their incentives. Instead of trade promotions held during the canvas periods, Barilla can determine the quantities of the products above which, the buyer can enjoy free shipments, volume discounts and other incentives. These margins, of course, should be agreed with the distributors in the first place. Barilla might also consider it efficient to increase the incentives for the buyers. For example, instead of 1.

% discount for semolina pasta, it can offer a 2%; instead of offering 2% to 3% discount for shipments in full truck-load quantities, it can offer 2% to 4%. Thirdly, Barilla should try to influence its own demand by various marketing programs and advertising. In this way, it'll be a lot easier to run explicit and reliable forecasts. Barilla must also improve its forecasting techniques and show the distributors that their forecasting department is equipped with all the modern, sophisticated technology as well as highly trained professionals. Failure in this case means the failure of the whole JITD.

Fourthly, Barilla should invest in improving retailers' technology, which will provide the point-of-sale data to the distributors, who in their turn will give Barilla reliable information about the demand and help to forecast it efficiently. Barilla shall also address the problem of large SKUs. Based on the sales information provided from the improved technology, Barilla shall decide on most demanded product and reduce its product assortment, maybe dispose some SKUs and have more concentrated selection. This way production costs will decrease, Barilla will get better managed lines and

<https://assignbuster.com/barilla-spa-case-analysis/>

inventory and it will be easier to deal with orders. Reduced complexity in terms of product variety will enable better Supply Chain Management. Other recommendations In addition to our recommendations, we propose that Barilla does the following: * One possible opportunity of reducing the bullwhip effect in the supply chain is to use Drop Shipping technique.

Drop shipping means shipping directly from the supplier to the end customer rather than from the seller. In this case we consider retailer as the end customer. Using this technique Barilla can delivery some portion of its products directly to the retailers' warehouses. According to the exhibit 5, Barilla has 25 plants located throughout the Italy. Barilla can ship to the retailers located near these plants instead of first placing the product in the Central Distribution Centre and then reshipping it to the buyer. For example, Barilla has 6 plants producing pasta.

On the exhibit 5 these plants are numbered as 1, 2, 3, 4, 5 and 7. If Barilla could try to ship some of its products directly from, for example, plant 2 to the nearby located stores, this would save the transportation costs, reduce lead times and inventory levels and costs for holding the product. Barilla may also consider it useful to open new warehouses near those distributors who serve the biggest supermarkets. In this way Barilla will ship directly from its warehouse to the distributor, not placing its product first in the CDC. This will reduce the shipping costs and inventory holding costs. Customer Response to the solution Until now, we were analyzing the situation from the supplier point of view.

Now, it's time to place ourselves in the role of the customers and determine what our response would be to JITD from the customer point of view. Apart from the other issues mentioned above, the JITD treats customers as an input. Since exactly the customers are the cause of the problem Barilla faces, and at the same time a solution to the problem. Lack of customer demand information can be listed as a problem cause, which results in stockouts or over supplied goods, i. e.

large number of supplies in-stock. Customer's dissatisfaction in terms of the service provided by Barilla, even though Barilla does not provide service directly and it is the distributor who serves individual customers under the Barilla's name customers refer to Barilla in terms of their dissatisfaction and it is exactly the Barilla's disadvantage as being unable to manage customer demand. Since Barilla's lead time for delivering orders, taking 10 calendar days on average, is quite long time resulting in low order fulfillment rate and needs a head planning which puts Barilla in another problem due to their bad demand forecasting which hampers product delivery on time and thus customer dissatisfaction due to Barilla's poor service quality level goes to the end-consumer not buying the product of their choice. Suppose, they wanted to buy Barilla Macaroni, as they buy it usually in the supermarket where they usually shop, Barilla Macaroni is out of stock. In this case the end-customer is dissatisfied, has to make a decision between other alternatives, and finally chooses the competitor's product or not buying it at all. Next time this end-customer will think twice whether to enter this supermarket or decide it straight away to not to enter that supermarket and go in another one and do all his shopping there.

To say it shortly, supermarket loses a customer and the lost customer is everything, the same as a dissatisfied customer who might tell a friend that that shop did not have the product he/she was looking for and that another customer will decide to shop elsewhere preferring to make all the purchases at one place. As a solution, customer is the source of information which is the most valuable point in JITD system and for Barilla itself, as the latter is what Barilla fails in. Actually, the focus of Barilla's new system is on customer demand rather than distribution orders. Once we have discussed Barilla's customers as both as a cause and a solution now we can respond to the stated question. As one of Barilla's customers we would say YES and accept the JITD program.

For the following reasons:

- * Retailers like distributors face the problem of carrying too much inventory. They do not have enough room in their stores or warehouses. This fact is due to the fact that Barilla cannot schedule orders as it does not know the demand information and to avoid stockouts put pressure on retailers to carry this much inventory in stock.
- * They also have the shelf-space problem, each company usually offers huge variety of product assortment, take Barilla – it offers 800 different SKUs and retailers shall fit them in, which actually is impossible;
- * Stockouts due to problems with order scheduling; Dissatisfaction due to poor service quality, low order replenishment rate, not on-time deliveries leading to end-consumer dissatisfaction and outcomes said above and thus lost end-consumers;
- * High inventory holding costs, that affects negatively on profitability;
- * Lower retailer margins;
- * Long lead times, which drives to not on-time deliveries that is in turn attributable to demand fluctuations about which Company is

unaware and bad planning causing late deliveries. * Unmet demands; Chart #1 illustrates the reasons as a chain reaction. Chart #1 Poor service delivery = customer dissatisfaction Looking at the chart, we can see the baseline for all the problem cause appears to be the lack of information, so JITD drives its stakeholders for information centralization to manage its supply chain and we, as a customer realize that all the members of the supply chain will benefit from information sharing agree to exchange our sales information and receive all the benefits: * Barilla offers providing exactly the quantity that is needed based on the sales information no more no less thus this will avoid holding too much inventory; * Since stock will be delivered upon the customer demand, inventory levels will be reduced and warehouse space will be freed; * Lower inventory decreases holding costs; * Bullwhip Effect will be smoothened as demand forecasting will be improved, inventories will be positioned better and cost will be reduced throughout the supply chain; * Order replenishments will be improved for the higher rate; * No stockouts; * Demand will be met by demand forecasting; * Service will be improved by quick responses; Chart #2 illustrates the chain reaction that follows the improvement of information sharing.

Chart #2 All in all, information sharing makes all parties better off. Since Barilla operates efficiently and its service improves, we as customers will benefit from the good service and we will have efficiency in our operations, no delays and good service to our own customers, plus no lost customers, low costs and profits. Conclusion We consider that by following the recommendations provided above Barilla can implement the JITD system successfully. Barilla's demand will become more steady and the visibility

though the supply chain will be improved. As a result Barilla distribution costs, inventory levels and manufacturing costs will be reduced too.

JITD will also benefit the distributors and reduce their inventory levels as well as increase their profits.