



## **BALLY AG: THE DOT PROJECT (B)**

Sitting in his office, Frank Thomas glanced once more through the proposals he had received from the consulting firms he had selected as candidates to collaborate on the DOT (Delivery on time) project. Although all four firms had done a good job in the two weeks since he had presented the project to them, Frank had a definite favourite. It was not just that he liked their approach to the project, but also the fact that during the personal interviews the consultants from this particular firm had created the best impression. There was, however, one aspect that this team would have to do some more work on if they wanted to be chosen for the assignment in the committee meeting to be held the coming Thursday: the management of stocks in the stores. Frank knew this was something the directors of Merchandising and Sales had been wrestling with for some time, and if they did not see any clear recommendations as to how this problem could be dealt with, they were unlikely to back the firm's proposal. Frank decided to call the partner of the firm to ask him to add a few pages to the proposal to cover this topic. But before doing that he wanted to get a clearer grasp of the key issues behind the concepts he had heard his colleagues on the committee use so often: open-to-buy, GMROI, store assortment plan, etc. What better way to do that than to read through some of the articles he had been keeping ever since he joined Bally?

### **Open-to-buy planning**

Open-to-buy (OTB) is without any doubt the approach most widely used by retailers all over the world for planning and monitoring the orders made by individual stores to the sales or merchandising headquarters. To implement this concept most companies have opted for specific purpose-designed systems such as Arthur Suite by JDA or Comeshare Retail. All

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Philip G. Moscoso and Professor Frederic Sabrià prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. December 2002.

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of these systems work along the much same lines: starting from the stock on hand at the start of the current period (week or month), on the one hand, the quantity of product (in value) that is expected to be sold is deducted, either at the regular price or at a markdown, and on the other hand, the quantity of product that is expected to be delivered to the store in the period, based on orders issued in earlier periods, is added. The result is an expected ending stock, which is then compared with the target stock. If the target stock is higher, then the store has an “open-to-buy”; in other words, it has “permission” to order an additional quantity of product from the central warehouse (**Exhibit 1**).

To Frank implementing an OTB process seemed a logical move; in fact, he wondered how they had been able to survive for so long without it. He thought that an OTB process would have certain fundamental advantages for Bally. It would allow them to match the orders from the stores to potential changes in sales, markdown policies, and other factors, so as to maintain reasonable levels of stock in the stores over the length of a season (a season consisting, in general, of 20-22 weeks of regular prices and 4-6 weeks of markdowns).

However, he expected the consultants to help him plan the implementation of an OTB process. Was there any point in launching an OTB while Bally’s logistics chain was still sub-optimal? What parts of Bally’s value chain would have to be running very smoothly for an OTB process to yield the desired results? What data would it require? Would a special system be required, or would the one they were about to introduce (SAP Retail) do? How should they organize the planning process at the level of individual departments? What risks were involved in introducing an OTB system?

### **Methods of stock planning in stores**

Frank knew very well that there were several different techniques for planning stock in stores, and that each had its plus points and its minus points. Up until now, Bally had confined itself to applying the simplest method of all, what is known as the “basic stock method”. The idea behind this technique is that stores should keep more stock than they expect to sell; in other words, they hold a safety stock, so as to be able to meet any unexpected surge in demand. In practice, however, this method had given unsatisfactory results. Owing to the difficulty of planning demand for so many different SKUs, the stores usually found themselves holding a safety stock of the products that were not selling well, with the result that they ended up having a stock turn of less than two, well below the industry average.

The other method Frank was familiar with was “weeks of supply”. In this system the stores basically had to produce a forecast of weekly sales and then hold sufficient stock to cover the demand of a certain number of weeks. Would this method work better for Bally?

It was obvious to Frank that the consultants would have to help them decide what method to use. He also expected them to help in defining quantitative targets for stock management. This time it would not be enough merely to take a few parameters from the industry statistics published each year in journals such as *Merchandising and Operating Results* by the National Retailing Federation (**Exhibit 2**). It was time to take a much closer look at the factors that determined the optimum stock level, and adjust the values of the system accordingly. To do this it was important to have a clear idea of the advantages and disadvantages associated with reducing stocks. They would also have to consider questions such as the frequency and the quantities for replenishment of stocks in stores.

No doubt an airport shop with limited space but high sales per square metre would need a different form of replenishment from other types of stores. Also, there was the difference between the replenishment patterns of seasonal and long-life products to be considered. Lastly, it was important to bear in mind that stocks, and therefore also the frequencies and quantities of replenishment, would have to be adjusted at regular intervals over the course of a season (the 21 + 5 weeks for which any given collection remained in the stores).

Once they had decided on an optimum level of stocks, they would have to see how best to set up an OTB planning system to ensure that those levels were maintained. More importantly, they would have to decide how to motivate the Sales Department. Frank thought that the sales staff's bonus pay should be tied to some kind of indicator such as the famous GMROI. Although maybe there was some other mechanism that would work just as well.

### **GMROI (Gross Margin Return on Investment)**

While, at group level, ROA (Return on Assets) is commonly used to evaluate the performance of a company, at the level of individual stores this is not the most appropriate indicator. For that reason, in the early 1970s the GMROI indicator was introduced. The great advantage of GMROI is that all its components are directly controllable by the people in charge of supplying the stores or in charge of sales (the Sales Department and, in Bally's case, the Merchandising Department). Furthermore, GMROI allows comparisons to be made between the performance of different kinds of products, say, shoes and bags.

Basically, GMROI measures the ratio of the value of the gross margin on sales to the value of the stock needed to achieve those sales. Accordingly, it can be calculated either at cost or at retail price. To calculate GMROI the following formula can be used:

$$\begin{aligned}\text{GMROI} &= \text{Gross margin percentage} \times \text{Sales-to-stock ratio} \\ &= (\text{Gross margin} / \text{Net sales}) \times (\text{Net sales} / \text{Average stock}) \\ &= \text{Gross margin} / \text{Average stock}\end{aligned}$$

Frank looked through some of the GMROI that appeared in one of the articles he had saved (**Exhibit 3**). What levels of GMROI would Bally have to achieve? Would the employees accept GMROI as an indicator?

### **Value of time**

However, the first thing Frank wanted to do in the 20 minutes he had left before the next meeting was due to start was calculate how much money Bally was losing in gross margin as a result of the delays in delivery of the products to the stores. If right now 50% of the products were arriving three weeks late, how much more money would the company earn if it were able to cut the delay to two, or even one, week. To get a ballpark figure, Frank decided to create a highly simplified model using data from a hypothetical store (**Exhibits 4 and 5**). Later he would ask the consultants to develop a more sophisticated model.

This reminded him that after the meeting he had to call the partner of the consulting firm and discuss with him some of the store supply issues they should add to their proposal.