11. THE MARKETING/MANUFACTURING INTERFACE: STRATEGIC ISSUES

UDAY S. KARMARKAR and MILIND M. LELE

ABSTRACT
Most firms separate the marketing and manufacturing functions into distinct organizational groups without fully considering the interactions and conflicts between the two functions. These interactions can have very significant costs for the firm, if they are not recognized. We discuss situations in which strategy and policy in the two areas are not synchronized. They include issues such as capacity decisions, inventory deployment and location in manufacturing; and price-promotion policy, forecasting and market intelligence in marketing. These topics are discussed in the context of case examples, which illustrate problems that can arise when interactions are not recognized.

1. INTRODUCTION
In most manufacturing firms, the marketing (advertising, pricing, sales and distribution) and manufacturing functions are organizationally separate. There are several underlying reasons for this separation. One has to do with the desire to achieve economies of scale with centralized manufacturing in few locations, while marketing and sales, by their very nature, are likely to be more concerned with the geographical distribution of customers. Another might be that manufacturing is typically associated with cost minimization, while marketing is concerned with revenue maximization. Certainly, it is true that rather different skills and different knowledge bases are required for the two areas, and the organizational forms, incentives and procedures are likely to be very different. At any rate, the end result is a functional separation, which despite the reasons adduced may lead to certain systematic problems.
A typical approach to separation of the functions is to designate the manufacturing function as a cost center, required to produce the required output at minimum cost. Marketing, on the other hand, might be required to maximize revenue net of marketing and sales expenses. Marketing thus sets prices and advertising policy; the market determines the quantities demanded and manufacturing produces the quantities demanded at minimum unit cost. On the face of it, this appears to be a reasonable decomposition of the goal of profit maximization. However, there are interactions between manufacturing and marketing that are not taken into account in such a decomposition, which results in conflicts between the functions due to inconsistent objectives or externalities imposed by one function on the other.

In the following, we focus on examples of such interactions. These examples are drawn from experience with several case studies including:

• A manufacturer of laboratory and medical products, sold worldwide through distributors,
• A fine chemicals manufacturer with direct and catalog sales,
• A manufacturer of electronic equipment sold internationally, directly and through distributors and
• A consumer products company with dedicated wholesalers.

We first discuss the effect of annual promotional cycles on the demand that is placed on manufacturing. We then describe the effect of capacity and location decisions in manufacturing on responsiveness to marketing situations. Finally, some aspects of forecasting and market intelligence on inventory costs are discussed.

2. THE PROMOTIONAL ROLLER-COASTER

In many companies, price promotions are instituted on a cyclical basis every year. For example, promotional drives may be instituted on a quarterly basis, which have the result of driving up sales at the end of each quarter. In many cases, it appears that these promotions primarily have the effect of shifting demand from one week to another to create artificial seasonality. The effect on manufacturing is to create a seasonal demand pattern that leads to a varying load on capacity. One result is a need to hold seasonal inventory accumulations, which are built up in periods of low demand and then drawn down in periods of high demand, while leaving production levels fairly constant. If the seasonal variations become large enough, there may even be reason to add capacity, which starts to be driven to some extent by the seasonal peaks. Alternatively, instead of adding hard capacity (i.e., equipment), there may be a need to add labor capacity at peak demand levels or at least to incur overtime.

The reasons for these promotions are varied. A simple one is that sales quotas are reviewed on a quarterly basis and that as the end of the quarter approaches, any shortfall starts to become visible. This leads to a push to make the sales to meet the quota. On occasion, the push may arise because of quarterly internal reporting requirements. One company division that manufactures testing equipment sold through distributors is required to make quarterly reports to corporate headquarters. Due to the way in