Case Notes

# Chapter 18: Master Scheduling And Material Requirements Planning

# Bringing Order to a Chaotic Restaurant

## Case Summary

*This case describes the consequences of poor material requirements planning for Amy Peters, the co-owner of Vistas, a restaurant in Stamford, Connecticut. Customers stopped patronizing Vista because they were dissatisfied with the unavailability of advertised entrees as the kitchen had run out of stock of many food ingredients early in the evening.*

Case Analysis *This case illustrates the importance of materials management in matching supply with demand to maintain a high level of customer satisfaction. It relates material management with the functions of a master schedule that disaggregates a sales and operations plan into a detailed material and resource plans of end items needed to be made to meet demand. Without material management, Amy Peters and her partner found that their restaurant ran out of food ingredients for their many specialty dishes to satisfy customer demand. As a result, patronage was down despite praises for their food quality and competitive prices.*

## Sample Answers to Case Questions

1. How would materials management allow Amy and her partner to better organize and coordinate deliveries and maintain critical stocks of food for service?

Materials management would allow Amy and her partner to better organize and coordinate deliveries and maintain critical stocks of food for service in that they have information on the (1) planning time frame; (2) anticipated demand for each menu item; (3) quantities of each end item needed; and (4) inventory on-hand. This information will allow them to plan for materials and capacity requirements.

2. Construct a hypothetical product structure tree and bill of materials file for a single restaurant dish (e.g., a turkey dinner, with mashed potatoes, green beans, and apple pie for dessert). How would a product structure tree help Amy and Vistas to stay in business?

Product structure tree for a turkey dinner:

Turkey Dinner

Entree

Side Items

Dessert

Mashed Potatoes

Green Beans

Apple Pie

Cranberry Sauce

Turkey Breast

Bill of materials for a turkey dinner:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Part Number | Description | Type | Quantity | Measure |
| #111-000 | Entree | BOM | 1 | Each |
| #211-111 | Turkey Breast | Item | 0.25 | lb |
| #212-111 | Cranberry Sauce | Item | 1 | Oz |
| #112-000 | Side Items | BOM |  | Each |
| #221-112 | Mashed Potatoes | Item | 0.5 | Cup |
| #222-112 | Green Beans | Item | 10 | 4” long pieces |
| #113-000 | Dessert | BOM | 1 | Each |
| #231-113 | Apple Pie | Item | 1 | Slice |

The product structure tree shows the food product hierarchy and the explosion into its items. The total requirements for an item such as apple pie can be easily planned after all food products in which it occurs have been planned and determined. This takes guesswork out of how many ingredients to order, reduces the chance of being not able to serve customers with the food they ordered and helps Amy to stay in business.