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Product Costing at Fine Foods: Is It a Symptom or the Problem?

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Kay Smith is frustrated. The manager of Strategic Marketing Unit Two (SMU2) for Fine Foods, Inc., a provider of branded high quality food products, Smith is unhappy with what she perceives to be unfair and inappropriate product costing for her unit, especially for what Fine Foods considers to be special orders. Smith's education, experience, and expertise as a food scientist and process engineer have earned her considerable respect at Fine Foods, but she has limited accounting knowledge. This lack of accounting knowledge has inhibited her ability to express and demonstrate her concerns, which she views as serious. Believing she is a fast learner with proper guidance, Smith has hired you, a recent accounting graduate, to develop a draft memorandum, a slide presentation, and a glossary of terms to help her make her case more forcefully to management.

Fine Foods, Inc.

Fine Foods, Inc., which has its roots in the upper Midwest United States, produces a wide range of food products in a competitive industry. Almost all its products are sold under the Fine 'n' Fast brand name, which is widely recognized for its high quality and has a loyal customer following. Most products are packaged in sizes for end consumption and are sold through supermarkets, convenience shops, and similar outlets. Depending on the nature of the product and consumer preferences, products are sold frozen, refrigerated, canned, boxed, or packaged in other ways. Some items, like small individual packets of ketchup, mayonnaise, and mustard, are sold to fast food restaurants and similar outlets. The company also sells half-gallon containers of salad dressings, ketchup, mustard, and similar items with a plastic pump and branded with the company logo so that restaurant customers can serve themselves at salad bars and similar places. Other products are sold, often in bulk, to institutional users such as large food service groups, caterers, and the like. These products may or may not be branded. A small portion of sales is made to other food producers, for example, salad dressing packets are sold to producers of packaged fresh salad greens. Fine Foods, Inc. doesn't deal with fresh products.

Fine Foods, Inc. is owned by Great Plains Capital, a private equity firm. Great Plains Capital gives Fine Foods almost complete freedom and control over management, product selection, performance evaluation, and so forth. Because it is privately owned, there is no external financial reporting, nor is there any obligation to use any set of financial accounting standards for internal reporting. Any external financial reporting is on a group or consolidated basis and done by Great Plains Capital.

Great Plains Capital also owns Fine Foods Canada, Ltd., which sells products almost exclusively in Canada, with primary operations nearby in the prairie provinces. Fine Foods, Inc. and Fine Foods Canada, Ltd. don't have any mutual ownership in each other, and there's no management connection between the two. Because the two companies produce many identical products using the Fine 'n' Fast brand, they do share recipes and process technology. Fine Foods, Inc. also produces some products for Fine Foods Canada, Ltd. that don't have sufficient market size in Canada to justify separate production. Great Plains Capital also owns smaller companies with the Fine 'n' Fast name that are mostly importers of Fine 'n' Fast products in countries outside of the U.S. and Canada where high quality, branded North American food products have niche markets. These products are produced by Fine Foods, Inc.

Fine Foods, Inc. (Fine Foods from this point forward) is organized into three strategic marketing units (SMUs) based on the markets they serve. SMU1 serves supermarkets and similar outlets. SMU2 serves mostly institutional customers who order in large volumes and often in bulk quantities. SMU2 also sells special orders from time to time that involve unbranded bulk products that are exported. SMU3 serves affiliated Fine Foods companies in other countries, mostly for import into those countries; governmental organizations that sell food and have food service facilities, such as military organizations; and similar customers that have special contracting requirements.

Products sold by all three SMUs are manufactured by the same production facilities, including warehouses, food preparation and cooking facilities, and packaging facilities. The SMUs also share most headquarters activities, such as IT, accounting and other administration, human resources, and similar activities. SMU1 and SMU2 have their own marketing and sales departments, while there are no separate departments for these tasks in SMU3. Figure 1 shows an organizational chart for Fine Foods, Inc.

Cost Allocation

Smith tells you somewhat strongly and persistently that she believes her unit is being treated unfairly in the way costs are allocated to products. In particular, she has a problem with the product cost allocation for special orders of product MP, a basic product that is widely con-

Figure 1: Fine Foods, Inc. Organization Chart

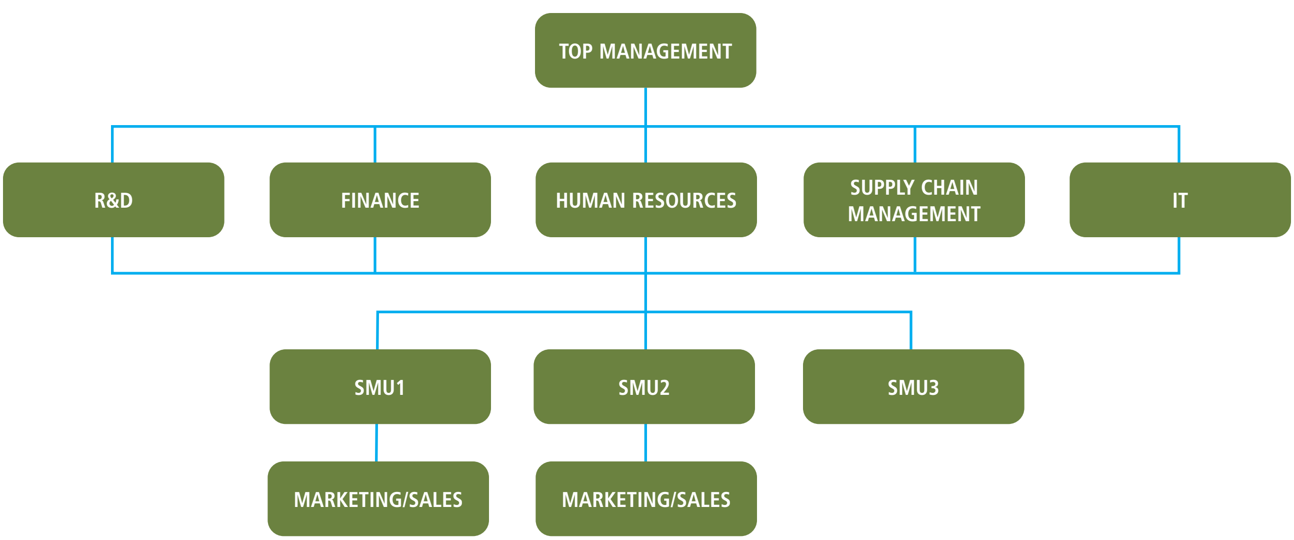
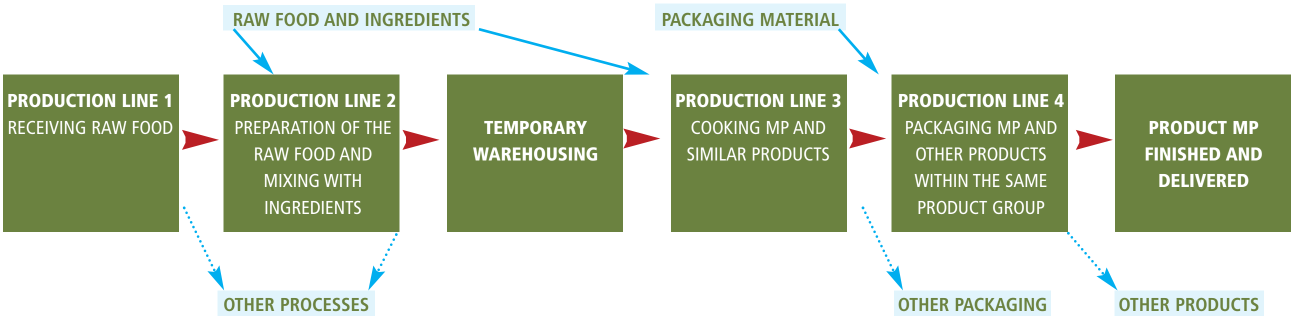


Figure 2: Production Process for Product MP



sumed in North America. SMU2 is the only unit with special orders, and almost all the special orders are for product MP. While all three units sell product MP, it represents a significantly larger percentage of total sales for SMU2 than it does for the other two units. SMU1 and SMU3 don't perceive a product-costing problem because a substantial portion of their sales come from other products, which means the product costs for product MP aren't a major part of their cost of sales.

After talking with Smith, you review what you learned in your accounting classes about product costing and special orders. With this knowledge, you set out to conduct an in-depth look at product costing and accounting for special orders at Fine Foods, especially in SMU2.

The Production Process

In order to learn about product costing at Fine Foods, you decide you first need to understand the physical flow of products through production lines. A simplified diagram of the product MP production process, which is typical of many of the company's products, is shown in Figure 2.

Basic raw food items begin production with preliminary inspection, sorting, and so forth. The raw material then goes to the first stage of preparation, which can involve chopping, peeling, and other preparation. Some preliminary cooking can also take place at this step. After possible temporary storage, additional ingredients are added, such as seasonings, flavorings, etc., and the final cooking and processing occur. The prepared product is then packaged, frozen, stored temporarily (if necessary), and then shipped to the customer.

Product Costing

The management of Fine Foods believes that it must allocate all costs to its products in order to get a true and accurate measure of each product's profitability. Here's a look at the product-costing procedure that would apply to product MP as well as virtually all other products. (Product MP is one of several different products that come from the same initial raw material but are then processed and sold in different configurations and package sizes.)

Raw material, packaging material, and direct production salaries are added to determine what Fine Foods calls *direct calculated costs*. Electricity, steam, water, and warehouse costs are then allocated based on estimates and a mark-up to cover spoilage and other incalculable costs. This calculation gives an amount the company calls *variable manufacturing costs*. Material costs are determined based on the cost required for one unit of product. Direct salaries are determined by the amount of time normally required for one unit multiplied by the hourly labor cost.

Fine Foods allocates what it considers to be *fixed production costs* in a complicated process. A list of what Fine Foods considers to be fixed production costs is shown in Table 1.

Costs for production management, steam boilers, and quality are shared by different factories. Estimates are made about usage of these activities, and costs are allocated to factories based on these estimates. If only one factory uses a service, the entire cost of the service is allocated to that factory. When these and other costs are assigned to factories, two approaches are used for further allocation to product groups (which represent groups of similar products, such as salad dressings, canned soups and vegetables, and puddings) and products:

◆ All costs for steam boilers, building maintenance, vehicles, and sanitation are allocated directly to products using net weight or gross weight.

◆ Remaining factory costs are first allocated to product groups. One allocation is a fixed percentage based on estimates that don't change for each product group. Other costs are allocated based on the weight, labor time, and

Table 1: Fixed Production Costs Allocated to Product MP

Workshop Storage
Environment
Electricity
Maintenance Mechanics
Quality
Engineering
Production Line Maintenance
Production Line Cleaning
Lower Production Management
Handling Raw Material Department
Production Office Services
Production Manager and Related Costs
Warehouse/Storage
Internal Logistics/Resource Planning
Sanitation
Vehicles
Building Maintenance
Steam Boiler

production time of the product produced. If the allocation of remaining factory costs is a fixed percentage, then allocation to products is based on production time.

◆ For special orders (virtually all product MP), the total *freight out* is accumulated for a month and then allocated based on the weight of product shipped. The estimated freight cost is included in the sales price. Similar procedures are followed for other products, for which Fine Foods pays the freight.

Media and sales promotion costs for SMU1 and SMU2 are allocated to product groups and to individual products based on weight of product sold.

Fine Foods allocates what it calls *other fixed costs* in two ways:

◆ Sales and marketing costs, which are incurred only in SMU1 and SMU2, are allocated to products based on sales volume.

◆ Costs for top management, business administration, information systems, human resources, supply management, and logistics are allocated in two steps. Costs are first allocated to cost centers based on number of employees, labor time, production time, or set percentages. Then costs are further allocated to products based on gross sales, amount of time spent on internal reviews, number of marketing campaigns, quantity sold, number of orders, net weight of product delivered, or equally to each product.

Smith is concerned that the amount of costs allocated to special orders for product MP is excessive and therefore causing her unit to be viewed less favorably than the other units. Among other things, she believes allocations based on weight are unfair because product MP is a relatively dense, bulky, and heavy product that, while profitable, has a relatively low profit per pound compared to other products.

Special Orders

Because of Smith's concerns, you further explore what Fine Foods considers to be *special orders.* According to Smith, a special order is one in which the contract specifies that it can be rejected within one year before delivery; otherwise it isn't special. Such special orders constitute 2% of total revenues for Fine Foods.

Virtually all of the special orders are for product MP and for a food distributor in Mexico. Product MP isn't a normal part of the diet of Mexican people, but there is a niche market for it. The market isn't large enough to motivate a Mexican food production company to produce the item, but Fine Foods is motivated to provide the items to Mexican food suppliers as so-called special orders because the company is already producing the product for a variety of customers in the U.S. and Canada. It's packaged unbranded for sale in Mexico because it will be used primarily by institutional food preparers; it's shipped frozen in 10-pound packages.

The raw material used to make product MP can be kept in storage for a fairly long time under proper conditions, and there's always a ready stock on hand because it's used in many other products. Once product MP is produced, it can be kept frozen for up to one year. These factors provide a high degree of flexibility in scheduling production to meet such special orders. Production of product MP can be readily scheduled when there's idle production capacity. Sometimes requests for these special orders come unexpectedly; other times, SMU2 approaches the customer to indicate that idle capacity is planned. Typically, orders are in relatively large quantities.

SMU2 accepts special orders when the contribution margin (CM1) is positive. As shown in Table 2, Fine Foods defines CM1 as net sales minus variable manufacturing costs (defined above) and freight out. Smith is convinced that decisions to accept the special orders are good for the company and contribute to Fine Foods'

Table 2: Contribution Margins and Operating Profit

Gross sales
(Standard discounts)
(Activity discounts)
(Special discount activities for customers)
Net sales
(Variable manufacturing cost)
(Fixed manufacturing cost)
(Freight out)
CONTRIBUTION MARGIN 1
(Media)
(Sales promotion)
CONTRIBUTION MARGIN 2
(Marketing and sales)
CONTRIBUTION MARGIN 3
(Top management)
(Business administration)
(Information system)
(Human resources)
(Supply chain)
(Production)
(External logistics for finished goods)
(Markup - Manufacture expenditures)
(Other fixed costs)
CONTRIBUTION MARGIN 4
(Structural costs)
(Total depreciation)
OPERATING PROFIT

overall profitability, but she's frustrated at the impact on the results of her unit's operations.

Performance Evaluation at Fine Foods

At about the time you were halfway through your project, you found yourself discussing it with friends and colleagues who are also recent accounting graduates. As you described Smith's concerns with Fine Foods' product costing, as well as your frustration as you attempt to analyze and develop recommendations, one friend interrupted to say that the product-costing problem appeared to be only a symptom of a larger issue. Your friend had recently covered the issue of symptoms vs. underlying problems in her management control class, and it seemed to her that the major issue is performance evaluation of the SMUs, not product costing.

Somewhat skeptical, you looked at some of your textbooks and other sources to brush up your knowledge of performance evaluation. You then explored performance evaluation at Fine Foods. You began by speaking to Peter Jones, the controller of Fine Foods, Inc., who explained how the company computes CM1, CM2, CM3, CM4, and operating profit for each unit (see Table 2). Jones said the SMUs have the ability to control the costs of their divisions, and other costs are allocated easily and fairly. Targets are established for CM1, CM2, CM3, CM4, and operating profit, and the numbers are reviewed monthly to see if corrective action is necessary. Evaluation of performance against the targets is made at the end of the year.

Smith, however, tells you that the primary evaluation for the SMUs is operating profit. This is confirmed by SMU2's controller and another unit controller. Smith feels the method used by Fine Foods to calculate operating profit doesn't reflect the true performance of the SMUs because unit management can't control several of the cost elements included in the calculation. Further, she believes using operating profit as the primary indicator for evaluating units has a negative motivational effect on the employees of her unit.

Your Report

With your analysis complete, you are ready to present your findings. For better organization, you decide to divide everything into four sections: product costing, special orders, performance evaluation, and conclusions and recommendations.

Part 1: Product Costing

1. Develop a glossary of terms and definitions to be used by Smith in her presentation and discussions to ensure consistency and mutual understanding of terms. In addition to definitions, provide a brief description of the applicability of terms to Fine Foods. The glossary should include, but not be limited to:

- Cost object
- Cost driver
- Product vs. period
- Fixed vs. variable
- Direct vs. indirect
- Incremental and common
- Relevant vs. irrelevant
- Controllable vs. Noncontrollable
- Dual allocation (sometimes called departmental)
- Volume allocation
- Activity-based allocation

2. Write a draft of a memorandum that Smith can present to her colleagues and management to support her case. The memo should include, but not be limited to, an analysis of current product costing approaches used at Fine Foods, Inc., changes she should recommend, and the extent to which the recommend changes would resolve her concerns.

Part 2: Special Orders

Write a draft of a memorandum that Smith can present to her colleagues and higher management that focuses on what Fine Foods calls special orders. The memo should include, but not be limited to:

◆ A description of the accounting and other considerations that should be considered with respect to special orders.

◆ A brief definition of the terms "by products" and "joint products" and the extent to which these items apply to special orders at Fine Foods, if at all.

◆ Identification of all the benefits that Fine Foods receives from special orders.

◆ An analysis of the way Fine Foods, Inc. handles its special orders and any recommended changes

Part 3: Performance Evaluation

1. Develop a glossary of terms and definitions to be used by Smith in her presentation and discussions to ensure consistency and mutual understanding of terms. In addition to definitions, provide a brief description of the applicability of terms to Fine Foods. The glossary should include, but not be limited to:

◆ Types of responsibility centers:
- cost centers
- revenue centers
- profit centers
- investment centers

◆ Computation methods of monetary amounts to evaluate performance:
- contribution margin
- operating profit
- return on investment
- residual income and similar value-added approaches, such as EVA™

◆ Agency costs

2. Prepare a draft of a memorandum for Smith to present to her colleagues and management that includes, but isn't limited to:

◆ What roles do performance-evaluation and reward systems play in organizations? Discuss individual vs. team-based performance evaluation in this context. Are these roles relevant for all types of organizations and employees? To what extent, if any, do these roles apply to Fine Foods?

◆ Discuss basic concepts of performance evaluation, particularly results control. Discuss issues of financial vs. nonfinancial performance in this context.

◆ What types of responsibility centers are the SMUs in Fine Foods? Are these appropriate types of responsibility centers for Fine Foods? Why or why not?

◆ Identify potential agency costs that might occur within Fine Foods. Discuss performance measurement (monitoring) and incentive systems as mechanisms to decrease agency costs at Fine Foods. Identify and discuss any recommendations to implement a reward system. Analyze the extent to which your recommendations would solve the issues that concern Smith and would decrease agency costs.

◆ Analyze the performance evaluation approaches at Fine Foods. Identify and discuss any changes you might recommend. Analyze the extent to which these changes would resolve the issues raised by Smith.

Part 4: Conclusion and Recommendations

1. Prepare a draft memorandum for Smith to present to her colleagues and management that gives recommendations for changes and discusses their benefits for the company as a whole.

2. Prepare a draft of an executive summary of the entire memorandum (Parts 1-4).

3. Prepare a slide presentation for Smith to use when presenting the memorandum to her colleagues and management. **SF**

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