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THE CRIMSON GROUP, INC.

Neighborhood Servings

> A few years ago, I didn't think we'd make it. Some other agencies and several small restaurants were competing with us, and were undercutting our prices. So a year ago we decided to begin making specialty meals for AIDS and cancer patients, and for other people with special dietary needs. I thought that strategy was working. Certainly sales were up. But now a consultant tells me that our cost accounting system is giving us misleading results, and we may actually be losing money on our specialty meals. On top of that, some of our regular customers are complaining about our prices.

The speaker was George Larson, CEO of Neighborhood Servings (NS), a nonprofit organization that produced and delivered meals to homes throughout the greater Kansas City area. He continued:

> I realize that we now need to dig into our costs. We established our prices based on these costs. If the costs for specialty meals are higher than we thought, then our prices are too low, and our whole new strategy is in jeopardy. In addition, if our costs for regular meals are too high, then we're setting our prices too high and we'll lose out to the competition even more. Also, we use our cost data for budgeting each year, so if the data are bad, then our budget will be unrealistic.

BACKGROUND

NS had been in business for over ten years. It began as a "meals on wheels" agency, providing dinners to elderly people and individuals who were permanently or temporarily homebound. Almost all of its clients were single and lived alone. Over the years, its menu had expanded, although, based on extensive market research into customer preferences, NS continued to provide its clients with only one meal a day. All meals were sold in "collections" of seven—a different meal for each day of the week, and deliveries (of seven meals each) were made once per week to each client (clients often froze a few of the meals for use in the latter half of the week).

During the past few years, NS had encountered some competition for its services. One or two other nonprofits that had been successful in other parts of either Kansas or Missouri had expanded their operations into the Kansas City area. In addition, some of the local fast-food restaurants, realizing that they could use their kitchen staffs to provide basic fare for delivery to nearby homes, had begun providing meals in certain neighborhoods that were close to their restaurants.

In response, and after considerable debate, NS decided to offer specialty meals. There were two main differences between NS's specialty meals and its regular meals: (1) specialty meals used a variety of nonstandard ingredients, frequently including organically grown fruits and vegetables, and often being meatless, and (2) because of a greater need for freshness, specialty meals were delivered daily (one per customer).

The new strategy seemed to be working. During the past year, approximately 80,000 of NS's 200,000 meals were specialty meals. The remainder were regular meals.

THE COST ACCOUNTING SYSTEM

NS's cost accounting system calculated the cost of a meal by summing its direct and indirect costs. Direct costs included ingredients, packaging materials, and kitchen labor. When a new meal was introduced, NS's accounting staff spent considerable time determining exactly what ingredients it contained, and measuring the time it took the prep and line staffs to actually prepare the ingredients and cook the meal. Prep staff were those kitchen workers who washed and cut the ingredients, prepared sauces, and took care of other tasks needed prior to actually cooking the meals. Line staff cooked and assembled the ingredients for each meal.

This case was prepared by Professor David W. Young. It is intended as a basis for class discussion and not to illustrate either effective or ineffective handling of an administrative situation.

Indirect costs were classified into two categories: administration and general (A&G), and occupancy. A&G included the costs of the administrative staff, as well as the purchasing staff, drivers, and dietitians. Occupancy included rent, utilities, and cleaning. Gus Janeway, NS's accountant explained the process he followed to arrive at a per meal cost:

> For years, we had only one overhead rate, but we realized that we got much greater accuracy by having two rates. Our studies have shown that A&G is always about 220 percent of kitchen labor, and occupancy is always about 20 percent of direct costs. In fact, once we know our budgeted kitchen labor and other direct costs for the year, we use this information to set the budgets for A&G and occupancy. Sometimes the actual budgeted amounts are slightly more or less than these standards, but we always come pretty close.
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> Our overhead rates were quite handy when we shifted to the special meal strategy. Both ingredient and kitchen labor costs were higher than with the special meals than with our regular meals, and our overhead rates were quite helpful in showing us the higher *total* cost of the special meals. That, of course, helped us with preparing our budget for the year.

Mr. Janeway's computations are shown in Exhibit 1. As this exhibit indicates, the cost of ingredients for special meals was about three times greater than for regular meals, and there were higher kitchen labor costs. The result was higher overhead allocations, and a total cost per meal of $11.70 as compared to only $6.90 for a regular meal.

PRICING POLICY

As Exhibit 1 indicates, NS's pricing policy was to add 20 percent to the total cost of a meal. Since demand fluctuated slightly during the year, and since no costs were completely predictable, Mr. Larson believed that the 20 percent margin was about right. He commented:

> It gives us enough to cover seasonal and other fluctuations. It also to helps to provide the funds needed to upgrade or replace our kitchen equipment, which includes some large items, but also small items, such as pots, pans, and cooking utensils. The prices of these items seem to go up at about 5 percent a year. And, of course, for items where there are constant improvements in quality and functionality, the inflation rate is even greater.

Pricing Problems

The problem that Mr. Larson alluded to in his opening comments had arisen because a growing number of regular customers were complaining about NS's prices. Some said that they had tried the meals of competing organizations and found them comparable, with prices about $1.00 to $1.50 below those of NS.

It was because of these complaints that Mr. Larson had called in a consultant, who subsequently had told him that the cost accounting system was giving misleading information. The result was Mr. Larson's concern not only about having his regular meals priced too high, but having his special meals priced too low.

THE CONSULTANT'S REPORT

According to Ramona Canard, Mr. Larson's consultant, the problem with NS's accounting system was that overhead was divided into only two "pools," as she called them:

> Two overhead pools could work if all overhead activities were about the same regardless of the kind of meal produced. That seems to be true for occupancy, but A&G is another matter. Purchasing, for example, is quite different for special meals. This is because purchasing people need to work very closely with local farmers to make sure that the food is organically grown, which takes much more of their time than when they're purchasing for regular meals, which only requires a few phone calls.
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> Similarly, the dietitians have to spend a lot more time and effort designing the meals around the organic foods that are available during each season. That takes a whole lot longer than when they can just specify a meal's ingredients without concern for product availability—these days you can buy anything at almost any time of the year as long as you don't care where it comes from.
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> Finally, delivering special meals is a lot different than delivering regular meals. Each customer for a special meal receives only one meal per delivery, whereas a customer for the regular meals gets seven meals at a time. So the per-meal delivery cost is a lot higher.
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> What all this means is that we need different overhead pools for the different costs. My goal was to not only create the pools, but to identify a "driver" for each—that is, an activity that would cause the pool to increase or decrease.

Ms. Canard's overhead pools are contained in Exhibit 2. As this exhibit indicates, she removed $447,500 from the original A&G line, and distributed it among three new lines: purchasing, dietitians, and delivery. Purchasing contained not only the salaries of the purchasing agents, but transportation associated with trips to farms, and other purchasing-related expenses. She did the same for the dietitians, including both their salaries and associated expenses. Finally the pool for delivery included not only drivers' salaries, but depreciation on the delivery vehicles, and expenses for fuel, repairs, maintenance, and garaging. Ms. Canard commented on this effort:

> Creating the pools was relatively easy, although pretty time consuming. The hard part was the "cost drivers," as I call them. I talked with purchasing people, dietitians, and van drivers to try to get a sense of what would cause their costs to rise. At the end I reached what I think are some pretty solid conclusions. Purchasing costs are related to purchase orders, and because there are many small local organic farmers, the number of purchase orders for special meals is a lot greater than for regular meals. I verified this by going through two years' worth of purchase orders, and comparing them prior to and after the switch to special meals.
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> Dietitian costs are related to the number of special ingredients, and, again, special meals have more special ingredients than regular meals. That was easy to figure out. The hard part here was verifying that, as the number of special meals increased, the company's dietitian-related costs rose, not linearly, of course, but in a way that seemed pretty directly related.
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> Delivery was the easiest; it's pretty clearly related to the number of trips that the drivers must make to customers. Now, it's true that a driver can take many meals with him when he goes out in the van, so a "trip" wasn't a driver leaving the plant and returning. Rather, it was a "stop" at a customer's house. With regular meals, one stop was needed to deliver seven meals, but with special meals, one stop resulted in only one meal being delivered. This obviously causes delivery costs to be higher for special meals than for regular meals.

Ms. Canard's cost driver data are contained below:

	Regular	Special	Total
Number of meals	120,950	79,600	200,550
Number of purchase orders	150	500	650
Special ingredients per meal	2	8	
Number of "trips"	17,279	79,600	96,879

She continued:

> It's pretty clear when you use my new overhead pools and cost drivers that the per-meal costs are quite different than George and Gus think they are. I plan to present my conclusions to them this afternoon. I expect that this information will help George to rethink not only NS's prices, but perhaps the agency's whole strategy.

Mr. Larson, in thinking about the upcoming meeting, had a couple of reactions to Ms. Canard's work:

> I think Ramona is on to something here, and I guess when we run the numbers, her approach will make a difference, but is it a big enough difference to be meaningful? Assuming it is, what do we do with this new information? Should we compute these costs once a year as part of preparing the budget, and should we use the information to assist us with pricing? If so, we don't need a new cost accounting system— we just need an annual analysis of the sort that Ramona did. Or should we be computing these figures on a monthly basis to assist us with controlling our costs? If so, it looks as though we'll need to completely update our cost accounting system so that we can produce monthly reports. Of course, the question then is whether it's worth the time and effort. What would it cost to prepare monthly reports using this new information, and what kinds of decisions would I make on the basis of these reports that I couldn't make without them?

Assignment:

1. Compute the cost of a regular and special meal using the new overhead pools and cost drivers. What explains the differences between these costs and the ones in Exhibit 1?

2. What is your assessment of the overhead pools and cost drivers that Ms. Canard has chosen? How, if at all, might they be improved?

3. Assuming the overhead pools and cost drivers give a better indication of actual costs, what should Mr. Larson do with this information? In answering this question, you should address the questions he raises at the end of the case.

NEIGHBORHOOD SERVINGS
Exhibit 1. Cost Accounting Data

Total Costs	
Ingredients	$ 426,200
Packaging materials	57,000
Kitchen labor (prep and line)	348,000
Overhead	
Admin and General	764,500
Occupancy	170,000
Total	$ 1,765,700

Per meal costs	**Regular**	**Special**		
Ingredients	$ 1.20	$ 3.53		
Packaging materials	0.28	0.28		
Kitchen labor (prep and line)	1.50	2.09		
Total direct costs	$ 2.98	$ 5.90		
Admin and General	3.30	4.59	219.7%	of kitchen labor
Occupancy	0.61	1.21	20.5%	of direct costs
Total	$ 6.89	$ 11.70		
Price	$ 8.27	$ 14.04	120%	of total cost
Number of meals	120,950	79,600	200,550	
Total revenue	$ 1,000,257	$ 1,117,584	$ 2,117,841	
Total cost	833,346	931,320	1,764,666	
	$ 166,911	$ 186,264	$ 353,175	

Exhibit 2. New Cost Pools

			% of Total Cost	
	Before	**After**	**Before**	**After**
Ingredients	$ 426,200	$ 426,200	24.1%	24.1%
Packaging materials	57,000	57,000	3.2%	3.2%
Kitchen labor (prep and line)	348,000	348,000	19.7%	19.7%
Overhead				
Admin and General	764,500	317,000	43.3%	18.0%
Occupancy	170,000	170,000	9.6%	9.6%
Purchasing		132,500		7.5%
Dieticians		121,000		6.9%
Delivery		194,000		11.0%
Total	$ 1,765,700	$ 1,765,700	100.0%	100.0%