The Grantsmanship Center

NEWS

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controlling costs requires a basic knowledge of how accountants think and what issues they raise

by christopher t. callaghan and william j. whalen

the tension between what one would like to do and what is possible sometimes makes planning programs and budgeting for them an acrimonious process. the world's need — for services, for art and culture, for ideas and information, assistance and organizing — is immense and seemingly open-ended, while the resources available to respond seem so limited. organizations must always budget and plan, but in the current environment of diminishing funds for nonprofit activities the first line of defense is controlling costs.

there are a number of ways to control or cut costs, from laying off employees to reducing services and programs. most of these choices are painful because people's lives and the mission of the organization are involved. furthermore it is poor management to take these major steps when better planning and systematic control of avoidable costs could make them unnecessary. it is also poor management to press for more productivity from the existing staff while the organization's budget is being unnecessarily drained through unplanned expenses.

there is a natural impulse to hope for a miraculous infusion of funds or to plunge into whatever new idea is presented that seems as though it might produce a better balance sheet. often the officials responsible for an organization's programs and ideas don't want to hear the cautious advice of those responsible for finances and accounts. often they don't even speak the same language. however, since a realistic perspective from the accountant can be the key to an effective program, a productive relationship between accountants and others in an organization is a vital element in controlling costs, avoiding waste, enhancing the effectiveness of programs and planning for the future.

demystifying the science some would say the "art" of accounting is a necessary first step in developing this relationship. this article is designed to give non-accountants a basic understanding of the methods and vocabulary used in accounting. it highlights the issues that accountants are likely to raise in the process of controlling costs and preparing budgets or planning programs, revenue-producing strategies and management controls. cost accounting terms are defined both as they are introduced and in the glossary on page 32.

once the basics of cost accounting — identifying, tracking and reporting financial information — are mastered, program directors and financial people can work together to control costs and perhaps avoid reducing services or taking other extreme cost-cutting measures.

accounting in context

as with other management areas, cost accounting cannot be treated in a vacuum or produce useful information all by itself. it works in context with other factors:

1. need: what volume of goods or services could be purchased or used by a client group?

2. design: what is it to design and provide a distinct product or service that the client group will want to purchase or use?

3. packaging: how are producer services grouped and presented to the customer?

4. distribution: are the products or services distributed directly by the organization or by an agent on its behalf? if the latter, how much is the distributor paid?

5. pricing: given the anticipated volume of services needed (1) with a known design cost (2) and offered in various combinations (3), what price must be charged to recover the costs?

6. promotion: given factors 1, 2, 3 and 5, how much in promotion and advertising expenses would be required to sell the products or services? and should promotion costs be figured as part of the cost of producing services, or should they be treated separately?

to demonstrate how these factors function, suppose a senior citizens' program is applying for funds to serve two remote, presently underserved counties with a meal center. in determining the need, the program directors study census information; they discover that of the 58,367 residents in the two counties, 11,384 are 62 or older, 4,624 live alone; and 1,586 are ambulatory and therefore able to come to a meal center. a conservative estimate of the need, then, is 1,586 potential clients.

in designing meals that will satisfy nutritional requirements and in selecting and decorating a place that will appeal to potential clients, the program managers need to make a tentative assessment of the costs involved. they evaluate two facilities within a 30-minute drive of the target 1,586 clients. one facility has a kitchen and community room and is located in a civic organization's

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building. Another has no kitchen, but there is a comfortable gathering room and it is more conveniently located. They decide on this location because it will save transportation costs. They can then use competitive bidding to choose a caterer to bring in the meals. At this point, the total operating costs of this facility are less than the additional cost required for the catered meals. Some popular menu items and meal formats in other counties are used to get an idea of how much it would cost to serve meals in the facility. These kinds of assessments provide the preliminary information for a subsequent cost accounting.

To package their service attractively, the senior citizens' program could offer special discounts for meals if transportation tickets to the center are purchased at the same time. This arrangement would maximize use of the bus, reducing the cost per passenger. The offer would also increase the number of seniors coming to the meal center, thereby minimizing the cost per meal. The senior citizens benefit because the price of the meal is reduced and transportation is provided on a pay-as-you-go basis.

In considering distribution, the rule of thumb is that if a service or product can be provided through a distributor at smaller cost than without one, then contract with the distributor. The caveat here, though, is that the distributor's performance must be monitored to ensure acceptable quality. A number of vendors could be involved in a distribution network. The program manag-
ers have decided to use a caterer, therefore adding a distributor to the chain between the program administration and the ultimate consumer.

In pricing, the senior citizen program has two choices: it can charge the prevailing or market price in the community for the meals and services it provides, or it can charge a price based on the cost of providing the services. This cost-based price is often called target pricing, since the aim is to recover the allowable costs involved in providing the services for a certain number of people and according to a particular design. In coming up with a target price, however, an organization must make sure that the consumer can afford it. In this case, although there is really one price for a meal, the funding source will be asked to bear most of it so that the senior citizens may pay a below-market rate. Actually, the portion of the price borne by the funding source is also well below the market rate for a comparable meal, which meets its standard.

In promoting this new site, some important activities will need to be funded. Posters, brochures, open houses, speakers to community groups, small but frequent pre-opening ads advising where and how to sign up all need to happen before the doors can open. Of course, it will take a lot less convincing and promoting if the service is well designed, attractively priced, and based on a genuine community need.

To accomplish this, however, there must be a tentative budget, an operating plan expressed in terms of dollars and costs. To get a budget, the program should correspond to that of the operating plan; e.g., if an operating plan covers five years, then it should be reflected in a five-year budget. Usually, however, operating plans and budgets are for one year.

Program budgets form the basis for cost centers, i.e., any program, unit or activity to which costs are assigned. Cost centers may also be funding sources or cost-reimbursable contracts, programs, specific functions or activities. Make certain that two funding sources don’t end up paying for the same expense. Besides being illegal, it’s bad cost accounting.

Nature of Costs

In cost accounting, the first step is to identify the nature of a cost. A cost such as rent is fixed if its amount remains the same even though the level of activity (e.g., number of patients or seminars conducted) changes. A cost is variable if the amount varies as the level of activity changes (e.g., more syringes or writing tablets).

Basic to any discussion of costs is a break-even analysis, which will show the level of sales that must be achieved to recover the costs of operation (break-even point). Obviously, a level of sales below the break-even point will result in a loss. The break-even analysis is based on a business technique called a cost-volume-profit analysis.

In the graph at left (using the senior citizen’s program), the straight line near the bottom represents the fixed costs such as rent, salaries and utilities associated with the program. Irrespective of the number of meals served, these costs stay the same, and therefore show up as a straight line on the graph. Next are the variable costs, which are added to fixed costs and increase along with or in proportion to the number of meals served. Here, the variable costs associated with serving a meal increase from zero before the first meal is served. Note that the fixed cost of $2,000 and the variable cost of $22,000 add up to a total cost of $24,000 when the 11,000th meal is served.

Now look at the revenue line, i.e., the price of the meal (which was set at $2 based on the target pricing concept). For 8,000 meals at $2, the program should receive $16,000 revenue. As the graph shows, this point also represents $16,000 in total costs. This is the break-even point, the point at which total costs equal total revenue. If fewer than 8,000 meals are served, the cost line is greater than the revenue line and will show up, as in the graph, as a loss. Conversely, serving more than 8,000 meals will result in a surplus, which could be used to help defray some of the indirect or overhead costs the parent senior citizens’ program incurs in administering this program.

In looking at the cost-volume-profit graph, you can see that the further one moves to the right after the break-even point, the more profit is realized. What is to prevent an infinitely high profit? You must consider the capacity of the facility and other associated fixed costs budgetary items such as the site and staff salaries. If our meals are increased from, say, 70 a day to 200 a day, a much larger facility and additional employees would be required. The fixed cost line would rise, perhaps to the level of $4,000 per month, and a new break-even point would need to be calculated. For each program that is planned, there is a fixed cost; there is also an upper limit or capacity that must be determined. As the program expands, serving that extra meal may generate profits. But if it also requires a new facility and more employees, it will generate a loss, since the higher fixed costs now make the total cost greater than the total revenue. One therefore needs to design the capacity of the program carefully and develop a break-even point based on the relevant range of production—the range between the minimum and maximum number of meals that can be served in the chosen facility. If one goes outside this range, the fixed and variable and revenue lines must be redrawn to determine the break-even point.

In looking at fixed and variable costs, it is necessary to develop standard costs. Standard costs are benchmarks for management to control potential areas of cost overrun. For example, a standard cost may be calculated for a labor cost for the driver providing transportation for the senior citizens each day. Assuming that the driver’s compensation is $200 per week and that he or she is able...
to drive 200 miles per week picking up and delivering clients, then one standard labor cost would be $1 per mile. These standard costs may vary (standard cost variance) for two reasons. First, if the driver travels less than 200 miles per week because of less passenger traffic, then the volume will drop and the standard cost will rise. If she travels 100 miles per week, the new labor cost is $2 per mile, or $200 per week divided by 100 miles per week.

This difference from the original standard cost is a form of volume variance—the difference between the actual volume of the product or service used and the normal standard cost volume. There can also be a volume variance if, for example, you need to add a service or feature to a standard cost item, such as adding orange juice to a midday meal. Here the additional cost of the orange juice must be factored into the new standard cost.

Price variance is another major type of standard cost variance. If we must pay the driver an additional $30 per week in a salary increase, the new labor cost per mile is now $220 per week divided by 200 miles, or $1.10 per mile. Notice what happens if we combine that with an unfavorable price variance. With the price at $220 per week and the mileage at 100 per week, the new labor cost is $2.20 per mile—$220 per week divided by 100 miles per week.

By monitoring actual costs and comparing them with standard costs, management is able not only to assess cost overruns specifically and quickly but also to analyze the cause of these overruns. Are they due to volume variations or price variations or both? Usually standard costs are developed and monitored each month.

The cost of each component can be further analyzed if a variance is detected. On the other hand, if new features are added to the meal perhaps some way of customizing in other areas of the program might allow raising the standard cost of the meal.

Following are a few hints in handling price variances:

1. Always pay major cost items out for bid.
2. Make purchases in as large lots as possible, but plan carefully for storage.
3. Ask for donations, discounts, and when special sales are planned. Look for distress sales for fixtures and equipment.
4. Ask whether cash and carry terms are available.
5. Try not to order goods or services until you need them.

In handling a volume variance, ask:

1. If there is not enough to work to justify hiring a full-time permanent employee, can you hire on a part-time or temporary basis?
2. Can you pay someone overtime for handling infrequent extra work?
3. Can you reduce spoilage or waste in providing your service? The closer you can predict utilization, the less waste there will be.
4. Can you combine services with another program to reduce the impact of declines in utilization? For example, can you have the driver pick up some neighboring senior citizens who need to visit the clinic next to the meal site?
5. Are there controls on issuing items such as office supplies, food or gasoline?

Cost Allocation

Direct costs are costs directly linked with providing a product or service, and indirect costs are those that are not. Direct and indirect costs may be grouped into two categories: program costs and support costs.

Program services represent the organization's products and services. For example, education, training, and counseling might represent three broad classifications under which all of an organization's products and services fall. Usually, an organization will define program services based on the diversity of the organization's programming and funding source requirements.

Support services, as defined by the accounting profession, are management and general, and fund raising. Management and general costs are those costs incurred in maintaining the agency—costs that cannot be attributed to any single program. Fund raising costs are expenses incurred for the purpose of persuading others to contribute money, securities, time, materials or facilities, for which the contributor will receive no direct economic benefit.

Cost allocation assigns all expenses to various cost centers. Cost allocation may be performed for many purposes, including (a) predicting economic effects for planning and control, (b) determining the cost per unit of

NONPROFITS AND THE ACCOUNTING PROFESSION

Only recently has the accounting profession begun to pay close attention to the accounting and financial reporting needs of nonprofits and those who invest in them. The American Institute of Certified Public Accountants (AICPA) has worked through its various divisions relating to nonprofits. These address hospitals, colleges and universities, and voluntary health and welfare organizations. With respect to all "other" nonprofits, e.g., museums, performing arts organizations, research and scientific organizations, etc. AICPA has issued a Statement of Position covering accounting, principles and reporting practices for these organizations (see "New Math for Nonprofits," March/April 1979).

Although none of these guides addresses cost allocation in the subtitle: "Accounting for Nonprofit organizations" by R. J. Broome and F. E. Ittner, CIMA, AICPA (1980).
service delivery, (c) determining the cost to purchase or produce a product, or (d) ascertaining an appropriate selling price at target pricing.

The general process of cost allocation is straightforward and simple. It involves
1. Choosing the cost center,
2. Identifying and allocating the costs relating to the cost center, and
3. Selecting a method for specifically linking (2) with (1) or selecting what is called the allocation base.

Usually the funding source has specific instructions for how allocation base the program is to be used. In the absence of this, the rule of thumb is to assign costs to cost centers based upon each cost center's actual utilization. For example, a cost center's support space costs should be related to the square footage of space where the cost center's activities are carried out. Payroll, which generally an agency's largest expense, is best allocated on the basis of where personnel spend their time. This almost inevitably requires some form of time activity reporting. The degree of sophistication depends on the number of activities performed and the number of cost centers designated.

The time span covered by a grant may prohibit the allocation of costs incurred before or after the "technical" duration of the grant or contract. In all cases the method, amount and result of each and every allocation of cost must be documented. It is essential for internal management and, often legally required, that an agency be able to demonstrate (a) how an allocation was made, (b) what base was used for the allocation and (c) why that base is appropriate (that is, its relation to both the underlying cost and to the cost center) and (d) whether the cost was an allowable cost for allocation to a particular funding source.

Nonprofits should record donations such as supplies, furniture and equipment at their fair market value at the date of receipt. However, these resources are the two most often omitted items from financial statements. Where they are omitted, and where such assets are used in performing the service of the organization, the costs of such services will be understated. The American Institute of Certified Public Accountants established guidelines in 1974 for the recognition of donated materials and services. It is usually fairly easy for the organization to establish a value for such assets.

The donation of services by volunteers, on the other hand, is more difficult to deal with. Few organizations presently record the value of such services, yet the value of donated services often has a material effect on the cost of services rendered. If such values are not recorded, the total cost of the program is understated. To properly reflect the value of these services to your organization, the following criteria should be satisfied:

1. The services performed are a normal part of the agency's program or supporting services and would be performed by salaried personnel.
2. The agency exercises control over the duties of the contributors of the services.
3. The agency has a clearly measurable basis for the value placed on the services.

reporting standards of the "nonbusiness" organizations. As a result of this research, the FASB in December 1980 issued a statement of financial accounting concepts relating to the objectives of financial reporting by nonbusiness organizations. I ASC also issued a study, "Reporting of Service Efforts and Accomplishments" which provides information about reporting by certain types of nonbusiness organizations (including colleges and universities, hospitals and human service organizations). It focuses on their efforts and accomplishments related to the services they are established to provide. The importance of this study is the attention it gives to performance measurement, particularly information that is useful to resource providers in assessing the services provided by a nonprofit and its ability to continue to provide these services. Another important breakthrough in financial reporting occurred when the IRS began requiring institutional reporting information in its annual 1990 report. Nonprofits required to complete this annual report now need to furnish a statement of functional expenses comparable to those MICFA suggested.
Capital Assets and Depreciation

Another decision concerns whether to depreciate an asset. That decision must be made at the time of acquisition. If it is decided to depreciate, the item must first be capitalized, i.e., first recorded as an asset, then its value decreased over a given time period. This means that the cost during each time period is less than if the acquisition were not depreciated but rather charged to the operating expenses for the period in which it was purchased. For example, if the senior citizen's program purchased a bus for $10,000 and did not depreciate it, their records would reflect a $10,000 expense for the year in which they acquired it. If, however, they depreciated the bus over five years on an equal basis, their records would show an expense of $2,000 per year.

From a cost accounting standpoint, it is essential that fixed assets be capitalized and depreciated. Without depreciation, the total cost of rendering the services of the organization is understated over successive periods and overstated for the period of the acquisition.

Many nonprofits do not capitalize and depreciate their assets since funding sources often will not reimburse them for depreciation expense. That is beginning to change. In its report to the Filer Commission, the Accounting Advisory Committee concluded that fixed assets should be capitalized for all nonprofit organizations, and it cited as justification that capitalizing assets has the following benefits:

A. Since assets are a much more comprehensive concept than just the physical plant and equipment, it gives a more accurate picture of the total resources available to the board for use in carrying out programs.

B. It presents a more comparable statement of activity from period to period, eliminating distortions from large acquisitions in any one period.

C. It permits allocation of the cost of fixed assets to programs activities over the period benefited by these assets.

D. Capitalizing fixed assets is generally accepted for other types of organizations and is generally understood by business people.

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COST ACCOUNTING GLOSSARY

allocation base—the method for allocating overhead, general or support costs to the appropriate program cost center.
break-even analysis—a technique for determining the income necessary to recover the total of expenses, both fixed and variable, associated with a product or service.
break-even point—the dollar volume of sales that must be achieved to recover the costs of operation.
capitalization—the process under which an item is first recorded as an asset and then is depreciated over a predetermined basis reflecting its decline in usefulness of value.
cost allocation—the assignment of expenses to various program cost centers.
cost center—a program, activity or operating unit to which costs are assigned.
depreciation—the reduction in the value of an asset as it wears out or is used up over successive accounting periods.
direct costs—a cost that is clearly associated with a specific program or activity.
fixed costs—a cost (such as rent) that remains unchanged regardless of the level of activity in other categories.
indirect costs—an overhead or general cost allocated to program activities or units on some pre-determined basis.
price variance—the difference between the standard price established for a particular product or service for a component of either and the price actually paid.
relevant range of production—the minimum and maximum output for a particular program within which assumptions about cost behavior are valid.
standard cost—a predetermined cost for producing a specific component of a product or service under ideal conditions.
standard cost variance—the difference between the actual cost and the standard cost—of less than the standard cost, then a favorable variance; if more, then an unfavorable variance.
target pricing—setting a price in the consumer that will recover the costs involved in making a product or providing a service.
variable cost—a cost that increases or decreases with the level of activity.
volume variance—the difference between the actual volume of the product or service used and the ideal standard cost volume.