# 1

# Limitations of Cost Accounting

The need to understand costs is a clear one. Organizations need to know what their costs are in order to determine and manage their profitability. To aid in determining their profitability, organizations need to understand what their total costs were, are, or are going to be over a given period of time. The difference between the revenue for that period and the costs incurred during the same period determines the profitability for the period. Thus, since costs normally are visible to an organization for historical periods to the present, profits and organizational performance easily can be determined. An organization might observe, for example, "We were profitable two years ago, increased our profits by 15 percent last year, and are on pace for a 10 percent increase this year." Understanding costs and the dynamics of costs yesterday and today helps managers make decisions so that they can effect current and future profits. Clearly, the better that costs and the impact of decisions on costs are understood, the greater the potential for more effective decision making. The effective management of costs is important for at least two reasons:

1. Effective management of costs can help improve profitability.
2. Effective management of costs can indicate management competence.

## IMPROVING PROFITABILITY

Ultimately, decisions are made in for-profit organizations to drive profitability. While other salient factors help to determine the long-term viability of an organization, without profitable performance, long-term viability is not an option. In order to survive for the long run, an organization ultimately must be able to show that it can make more money from a product or service than it cost to make that product or service. The importance of understanding costs and managing costs to help manage and improve profitability can be categorized into four scenarios:

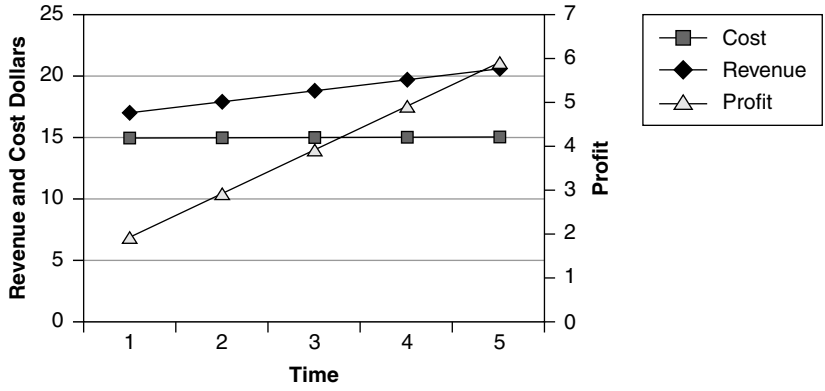
1. Organizations must be able to increase revenues at a consistent cost level.
2. Organizations must be able to reduce costs given consistent revenue levels.
3. Organizations must increase revenues at a rate faster than costs increase.
4. Organizations must decrease costs at a rate faster than revenues decrease.

The math in this situation is simple: Profits are equal to the difference between revenues and costs. Profits can be increased in only three ways. First, if the costs were to remain relatively constant for a period, revenues must be increased given the same level of costs. In other words, more output for a given input level must be achieved. This is the definition of productivity at a high level. Second, and similarly, if the revenues were to remain the same, reducing costs would have a positive impact on the profitability of the organization. This, too, would ultimately be considered an overall productivity increase since the organization is still getting a high level of output for a lower level of input. The final option is one to consider when the markets are more dynamic. If operating in an expanding market, the rate of increase of revenues must be greater than the rate of costs to ensure that profits continue to grow. If the market is getting smaller, the rate of revenue loss must be offset with cost-cutting measures that occur at a greater rate.

### Increasing Revenues

In the first scenario, it is assumed that an organization is operating in a slowly expanding or a stagnant market. The adverb *slowly* is used

*Exhibit 1.1* Increasing Revenues Through Increases in Productivity

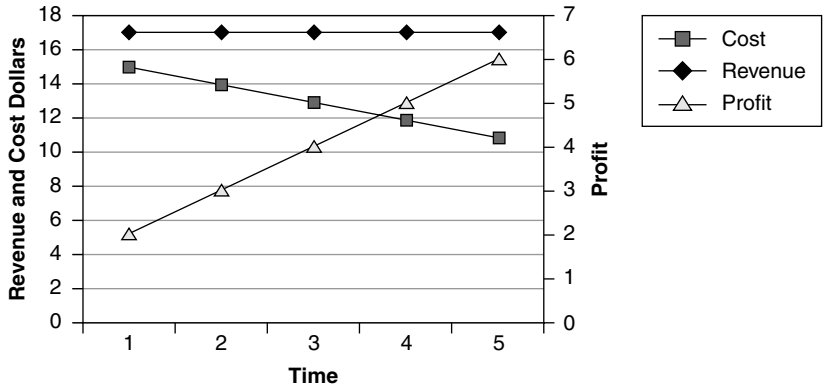



because costs must be managed more carefully in this environment versus a fast-growing market. An increase in costs should reflect an increase in capacity, which should ultimately increase revenues. However, with a market that is either stagnant or growing slowly, additional capacity does not offer much because the market limits sales. In this case, therefore, managers must try to keep costs from growing. They must look to maximize the output of existing resources while constraining cost growth so that additional revenues can be achieved without substantially increasing the organization's capacity. As shown in (Exhibit 1.1), this would be considered a traditional productivity increase as the organization is selling more (output) from the same resources (input).

**Reducing Costs**

In the second scenario, the focus is on reducing costs when the revenues are stagnant or slowly declining. The difference between this scenario and the first is that in a declining market, the focus is more on cost reduction while in an expanding market, cost maintenance or slight cost growth is the focus. In this case, the market might be somewhat stagnant and there is pressure to maintain or increase profits. When sales are limited, the only other option to maintain profitability is to reduce costs. As mentioned previously, this would be considered a productivity increase since the organization is getting the same output as before with less input. For more information regarding increasing profits by increasing efficiencies, see (Exhibit 1.2).

*Exhibit 1.2* Increasing Profits by Increasing Efficiency




**Rate of Revenue Increase**

In the third scenario, two situations are actually involved. In the first situation, the organization might be operating in an expanding market. If a market is expanding and if the organization is capitalizing on the growth, revenues are going to increase. The question then becomes: How are costs being managed to ensure that profits increase? If costs are increasing at a rate greater than revenues, it is clear that the profits will be reduced, which may or may not be negative for the organization. If the costs are increasing for investment purposes, it may be positive depending on the outcome of the investments. If the investments fail and the organization is less profitable, the situation is clearly suboptimal. If, however, the investments succeed, the organization may be better off in the long run. The investments do not have to be purely financial investments. For example, if the organization is investing in its infrastructure, this may enable future growth or eliminate the opportunity to constrain future growth by ensuring that future capacity will be available. In the second situation, organizations might be looking at operational improvements. If the sales increase because of a cost increase, it is positive for the organization as long as the sales increase is at a rate greater than the cost increase (Exhibit 1.3).

**Rate of Cost Decrease**

The final case assumes a declining market or margins eroding at a reasonable to rapid pace. The objective is to ensure that costs are being reduced at a rate that is at least equal to and preferably greater

*Exhibit 1.3* Effects of Managing Costs during Periods of Increasing Revenues

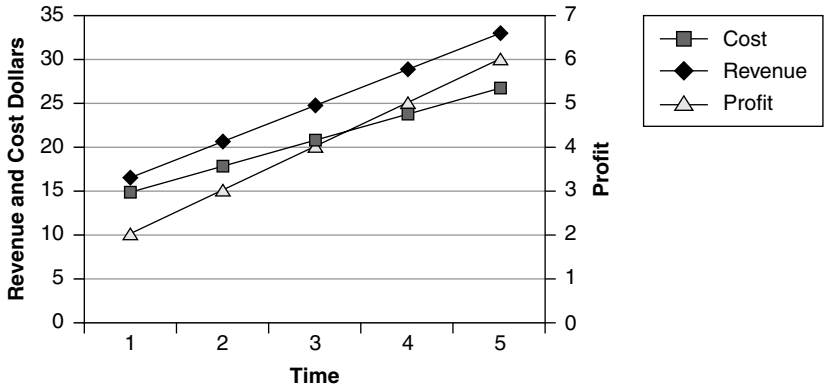
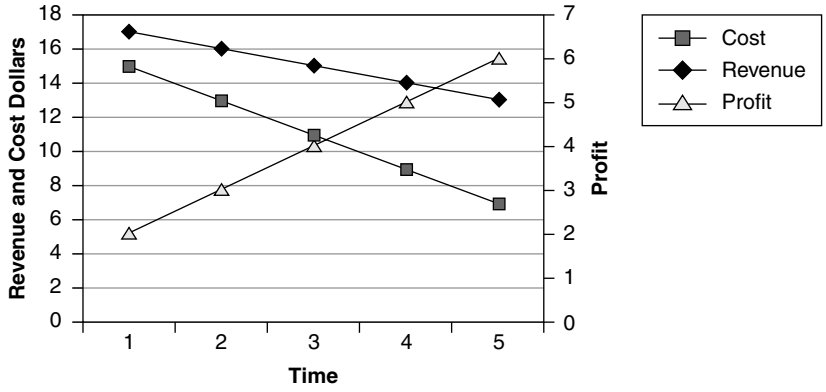



*Exhibit 1.4* Minimizing Profit Loss in Declining Markets




than the rate at which revenues are declining. Since there may be multiple dynamics involved in this situation, it is very important for managers to have the relevant information to make their decisions. In the case of a declining market, the assumption is that available capacity will increase due to a reduction in demand. Managers will need to know how much capacity is available and the cost of that capacity so that decisions can be made whether to reduce the capacity or to maintain it for future use. If the choice is to reduce capacity, the impact on cost, profit, and infrastructure must be understood so that managers can be sure that they are making the right decisions for financial and operational purposes (Exhibit 1.4).

## MANAGEMENT COMPETENCE

Effective cost management can also indicate competent organizational management. This is especially important in an environment where organizations are often land-grabbing while trying to develop web-based and other strong technology-oriented businesses in areas such as biotechnology. Investors understand that in many cases there will be no revenues or that there will be no profits for long periods of time. The gamble is on the relevance of the idea and the competence of management to efficiently and effectively operationalize the idea. Relevance without competence, however, will not sustain a business for long. By showing competence in terms of how the business increases or decreases its capacity, management sends a message that should be interpreted by current and future investors that this management group has the knowledge and capability of achieving its vision and is therefore worthy of the investors' capital.

Because understanding the dynamics of costs is important, organizations spend a significant amount of time and money learning and using various techniques so that the dynamics of their cost can be understood. A number of techniques used in the past and today help organizations understand their cost dynamics. Many, if not all, of the major techniques are created on the basis of allocating costs to a unit of production in a manufacturing environment.

## NEED TO ACCOUNT FOR COSTS

Assume that a large percentage of an organization's costs is created by the direct labor force. Assume, additionally, that these individuals were not paid by the hour but by the piece. This scenario describes many manufacturing companies at the turn of the century and earlier. If, for example, 90 percent of all costs were incurred by paying workers for the pieces they had produced and the material they had consumed, it is easy to see that direct labor, those involved directly with producing the goods, would be considered a varying cost. It costs the organization more to make the $n + 1$st unit than it does to make the $n$th unit. Therefore, in this scenario, the unit of production impacts a significant amount of the costs that the organization incurs.

What does the organization do with the other 10 percent of the costs? These costs typically do not vary directly, if at all, with the num-

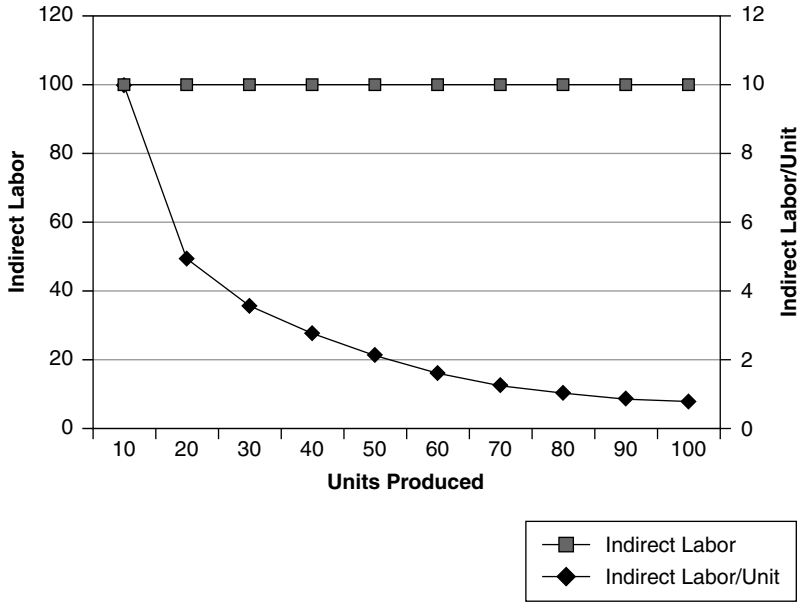
ber of items being produced. Traditionally, the answer chosen was to allocate the cost by dividing the 10 percent of the costs by the number of units produced. If an organization were to allocate this 10 percent, it would place the unit of production into the center of its cost dynamics decision making. With the information now available, a unit cost can be determined.

Consider the following example. An organization spends $10.00 for every unit produced. This value includes labor and materials. It also has costs not associated with the production of its products of $100.00 for the period. The question is: How much will it cost for the organization to make *X* products? The computation for the example is very simple. If the direct cost for the organization is $10.00 for every unit produced, to determine the total direct cost, multiply the unit rate by the number of units produced. Thus, to produce 10 units, it would cost $100.00 because the organization would pay the workers for what they produced and the suppliers for what it bought. This is a linear relationship. The more that is produced, the more it costs by a constant amount neglecting some type of bonus structure (for example, if the worker makes 100 or more, the pay increases by $1.00 so that the total cost per unit is $11.00).

The costs that are not directly related, or the indirect costs, are a different story. The indirect costs are fixed, meaning they do not vary with production. However, organizations traditionally chose to include the indirect costs in the unit cost in order to absorb the impact of the cost. This is done through allocating. The idea is that each unit of production takes a portion of the indirect costs associated with running the business. The mathematics in this case are simple also. To determine an indirect cost per unit, divide the indirect costs by the number of units produced. If the indirect cost is fixed, dividing it by a number that increases (units produced) creates the effect of a reduction in the cost per unit. As more units are produced, the amount being absorbed is reduced (Exhibit 1.5).

To determine the total cost per unit, simply add the direct cost per unit to the indirect cost per unit (Exhibit 1.6). With this unit cost, many decisions can be made. First, by understanding how much a unit costs to make, pricing and production decisions are easier to make. For example, if it costs $15.00 to make one unit, the product can be sold at $16.00 to make a profit. Similarly, if the market price is $14.00 for the same unit, the organization may choose not to produce and sell the product. However, if more units are produced and

*Exhibit 1.5* Indirect Labor/Unit as a Function of Units Produced



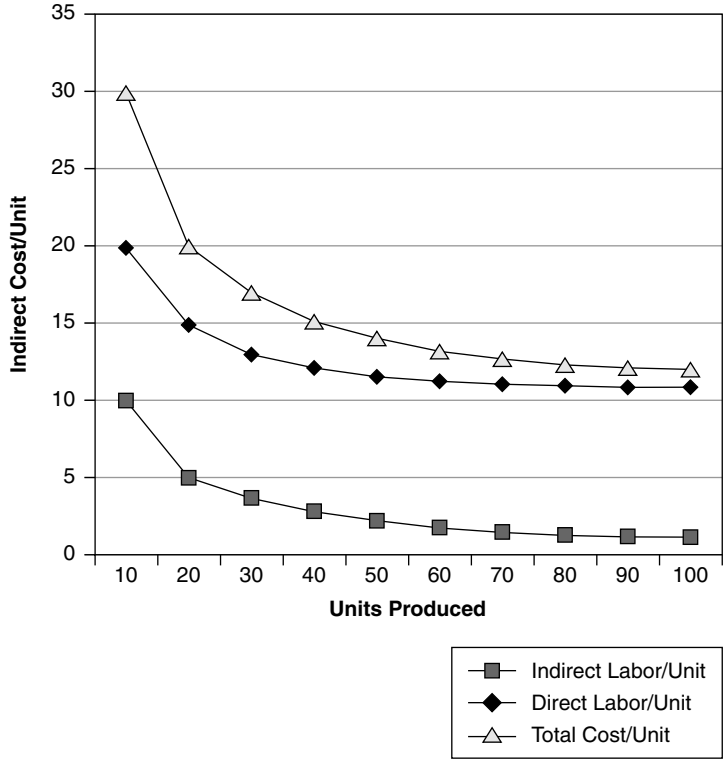

the unit cost of production is reduced to, say, $13.00, the market price of $14.00 may now become attractive.

Clearly, this technique of allocating costs has holes. To spread the indirect costs evenly across products may not be appropriate. What if, for instance, the number of units produced is comprised of multiple products? What if the indirect resources spend unequal amounts of time on the different products? Should all products absorb the same amount of the indirect costs? The answer at the time was generally yes. Remember that at the time, indirect labor costs were such a small amount of the total costs that the amount absorbed and the differences between what might be considered right or wrong were negligible. In other words, the amount was too small to be concerned about.

Over time, the concept of accounting became more complicated for various reasons, including the following:

1. Hourly rates for employees were introduced.
2. Industrial engineering standards impacted the perception of what costs should be.

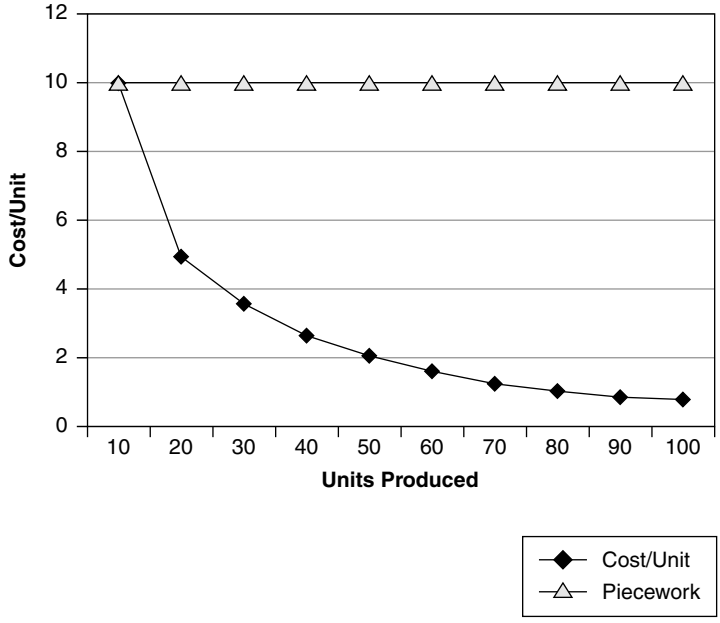
*Exhibit 1.6* Total Cost Per Unit Decreases with Increased Production




**Hourly Rates**

The introduction of hourly rates creates a different dynamic in terms of managing costs. Recall before the introduction of hourly wages, a worker was paid on output. Assume that workers who made 10 parts would be paid $100.00. If they made 10 parts in 40 hours, they would be paid the equivalent of $2.50/hour. If two parts per day were an expected output, the organization could choose to pay the employee $20.00/day for an anticipated eight-hour workday. Although the math and the accounting might be simpler for the organization and hourly payments may be more attractive in terms of hiring and maintaining employees, this change made the concept of accounting for costs more complicated. With hourly wages no longer directly tied to the cost of producing a unit, they also had to be allocated. Whenever a cost is spread across entities by dividing,

*Exhibit 1.7* Comparing Hourly Cost/Unit to Piecework Cost/Unit




the assumption is that each item is getting an equal share of the amount being spread. So, if the employee made 20 parts in 40 hours rather than the 10 that was expected, the cost of production *had* to go down. Why? Because each unit must now absorb a portion of the direct labor costs as well, and the larger the number of units produced, the smaller the cost amount allocated to each unit. The result is that the direct labor cost per unit goes down when more is produced (Exhibit 1.7). The assumption remained, therefore, that direct labor was a variable cost; the more that a person produced, the lower the unit cost.

**Industrial Engineering**

Industrial engineering introduced another approach: the time standard.[1] Time standards are used as a basis to determine the amount of time that it should take to make a product. Going back to the worker discussed previously, it may have been determined that, on average, the employee can make two units per day, or one unit every

four hours. This information can be used for multiple reasons. Standards can be used:

- to determine a standard cost to produce
- to determine and improve manufacturing efficiency and productivity

*Standard Cost*

In practice, the standard cost is a simple concept. It is the cost that the organization incurs to make an item if production is operating and consuming materials at a standard rate. For example, if an employee who makes $20.00 per day makes two units each day, the math suggests that it costs $10.00 per unit in direct labor cost at standard (Equation 1.1). In general, the product of the time standard and the labor rate, as seen in Equation 1.2, determines the standard labor cost per unit. This information is used as a basis for understanding operational performance and to get a quick feel of what a product does cost or should cost.

$$\frac{8\ \text{Hours}}{2\ \text{Units}} \times \frac{\$20.00}{8\ \text{Hours Direct Labor}} = \frac{\$10.00}{\text{Unit}} \qquad (1.1)$$

$$\text{Labor Standard } (^{\text{Hours}}/_{\text{Unit}}) \times \text{Labor Cost } (^{\$}/_{\text{Hour}}) = \text{Standard Labor Cost } (^{\$}/_{\text{Unit}}) \qquad (1.2)$$

*Efficiency and Productivity*

Due to variations that can result from multiple sources, workers often do not operate exactly at standard. At times they might be a little slower than the standard, and at other times they might be faster. Understanding the actual rate of production can be used to determine an actual cost, which, under the circumstances described previously, is different than the standard cost (Equation 1.3). Since it is assumed that direct labor varies, it is important to understand the impact of the change in production rate, or the variance between what was expected and what actually happened. This variance in cost is simply the difference between the standard cost and the actual cost (Equation 1.4). If the actual cost is less than the standard cost, there is a favorable variance; if it is less, there is an

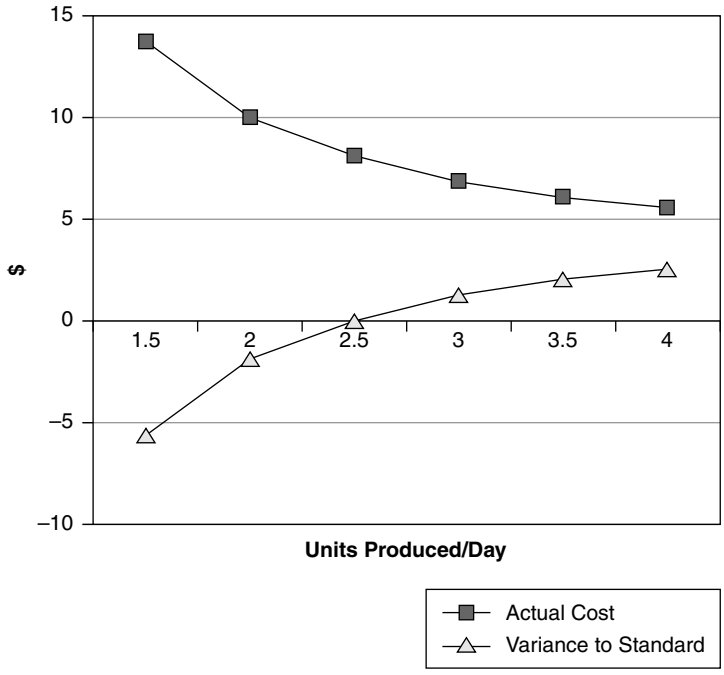
unfavorable variance. So, if the employee only makes 1.5 units per day, each unit must absorb more of the fixed cost of the labor. The actual unit cost in this case goes up to $13.33 per unit, leading to an unfavorable variance of $3.33. If the output goes up to four units, the cost goes down to $5.00 per unit, leading to a favorable variance of $5.00. The more a worker positively exceeds the standard, the lower the actual cost and the higher the favorable variance (Exhibit 1.8).

$$\text{Actual Labor Rate } (\text{Hours}/\text{Unit}) \times \text{Labor Cost } (\$/\text{Hour}) = \text{Actual Labor Cost } (\$/\text{Unit}) \quad (1.3)$$

$$\text{Cost Variance} = \text{Standard Cost} - \text{Actual Cost} \quad (1.4)$$

If an organization finds that it consistently has unfavorable variances, the standards may be difficult for the organization to meet. By not meeting the standard, the products are considered more expen-

*Exhibit 1.8* Production Rates and the Impact on Actual Cost and Cost Variance



sive to make than expected from a unit cost perspective. In this case, the options are basically to improve operations to help make up for the variance in other ways, to find ways for the operators to operate more quickly, or to change the standard. In other situations, the standards may be too aggressive, in which case the engineers and the workers would collaborate to lower the value for expected output. The result would be products with a higher unit cost, but that cost would be considered a more reasonable number from cost and people management perspectives.

If there were always favorable variances, the standards might not be aggressive enough. Constantly beating the standard would suggest that meeting the standard might be too *easy* for the operation and that a more reasonable target rate should be chosen. By increasing the standard operating rate, the product cost per unit would go down, leading to products that are believed to be less expensive to make.

## IMPACT OF STANDARD COSTING ON OPERATIONS

Understanding cost behavior and cost dynamics from the standard-cost perspective made cost management both more manageable and less manageable. It also created certain behavior in the organization that was both more desirable and less desirable.

### More Manageable

From the perspective of understanding how outputs (production) and inputs (labor) interact, standard-costing techniques started to enable discussions regarding efficiency and productivity and their implied impact on the bottom line. For example, managers began to financially understand, whether correctly or not, that increased productivity and efficiency can impact the bottom line of the organization. The belief, for instance, was that increased efficiency and increased productivity could reduce costs, which would lead to positive bottom-line results. This drove certain behavior, such as trying to focus on areas to manage and reduce costs in order to increase profits. Motion and time study, for example, is an exercise to drive down costs based on standards. By viewing how an operation is performed and by identifying improvements, operations standards could be improved, leading to lower standard costs for products.

### Less Manageable

Costs from this perspective also become less manageable for multiple reasons:

- In reality, a large portion of total costs are being allocated arbitrarily.
- Variance analysis adds to the complexity of cost management.
- Organizations begin to lose control and visibility of their cost drivers.
- Organizations are beginning to understand that cost dynamics exist but are learning the wrong aspects of cost dynamics.

### Arbitrary Allocations

As discussed previously, standard-costing techniques often allocate costs based on standards. These standards might not reflect reality if improperly determined, if not updated to reflect the current state of operations, or if the standards are not consistent with what creates the costs being allocated. Standards might be improperly determined, for instance, if improper assumptions were made regarding the capabilities of the operations. If standards were determined in a controlled setting where the assumptions leading to the control do not reflect the reality of the operation, the standards are likely to be incorrect. For example, in a controlled setting, all incoming materials might be perfectly to specification, whereas in a real situation, the materials might include defects, which can impact the number of good parts coming out of the operation.

In addition, an organization's standards are often found to be outdated. Organizations often go through an extensive process to determine standards and then will assume improvements from anecdotal information, leaving others to question the relevance of the standards. One organization determined its standards a number of years in the past and measured performance increases by analyzing year-to-year variances and job-to-job variances. Improvements were determined based on the value of the variance vis-à-vis previous jobs. Improvements, therefore, were discussed in terms of whether an unfavorable variance was reduced or whether a favorable variance had increased using standards often many years old as the basis.

Finally, one of the biggest problems associated with standard costing is the fact that costs are being allocated using values that may have nothing to do with why the costs were incurred in the first place. Assume, for instance, that an organization makes two products, A and B. Although A and B take the exact same amount of direct labor to produce, because B is a custom product, 90 percent of the time of the indirect labor force is focused on supporting the needs of B. If allocation is performed using direct labor hours, as is the case using standard-costing techniques, the indirect labor is spread evenly across the products. This hides the fact that much of the activities of the indirect labor is being driven by the needs associated with supporting B. Standard costing would suggest, in this case, that the costs would be the same for both products; logic would suggest that B should cost more because it creates the majority of the costs. This is not as much of a problem when only 10 percent or so of an organization's costs are being allocated. However, many organizations today find that a significant percentage and often a clear majority of its costs are being allocated, inferring that unit costs are very much out of alignment with real costs.

*Variance Analysis*

The concept of a variance analysis that is driven by standard labor or operating hours is fairly complicated and very time consuming. First, the conditions leading to the variance in the first place have often passed, which reduces the potential to identify meaningful operation attributes. For example, if the organization identifies a favorable variance, can it also identify the specific circumstances that led to the variance? Can it identify what may have led to an unfavorable variance to the extent that process changes can be made? Second, the relevance of the analysis must be checked. If a significant amount of costs are being allocated using standards, slight variations in actual versus standards may have a very large implication in unit cost; in the overall scheme of things in a profit-focused environment, however, the slight difference does not matter at all.

*Losing Control and Visibility of Cost Drivers*

With the focus being on standards, the issue becomes how an organization determines why fixed costs exist in the first place. In the

earlier example where product B requires 90 percent of the resources, the organization loses visibility to this fact when focusing on standards. Organizations need to be able to understand why they incur costs without the ambiguity created by standard-costing techniques.

*Learning the Wrong Aspects of Cost Dynamics*

With documented techniques for accounting for costs, organizations can begin to understand the dynamics of costs—how and why they change. However, they often are learning the wrong dynamics. Fixed costs, for example, may not change with changes in production amounts, yet these systems often suggest that they do. From this perspective, organizations begin to focus on the dynamics of a unit of production rather than the dynamics of the bottom line. As described in the next section, unit cost dynamics and bottom-line cost dynamics are not the same.

**Desirable Behavior**

Much of the desirable behavior that resulted from standard costing centered on the idea of making costs and cost improvement opportunities salient in the minds of those making decisions. Along with motion and time study and other techniques, standard costing focused improvements on saving time and reducing waste in the operations. For the most part, this is positive for the organization as long as the efforts are appropriately focused. Increasing speed to reduce unit cost is an example of one area of focus for some organizations. The idea of optimization could now be applied to product mix, procurement, and setup which led to techniques and equations that supposedly reduced costs or at least sought to *optimize costs.*[2] Finally, ways to measure and to provide incentives for workers was now available. If organizations met or favorably exceeded standards, they were rewarded because meeting or exceeding standards meant that all costs were absorbed at least as expected and sometimes more favorably.

**Undesirable Behavior**

The undesirable behavior driven by standard-costing techniques is centered on the following two topics:

1. Belief that focusing on unit costs and on production is the correct way to manage cost dynamics
2. Belief that unit cost reduction leads to profit enhancement

*Unit Costs and Production as Focus of Cost Dynamics*

Because of the ease of documenting cost per unit changes, organizations began to place production and the unit cost at the forefront of their thinking. If costs were allocated based on standard labor hours, the more the production time reduced or the overall output increased, the lower the cost per unit. Since the cost per unit was a controllable portion of the unit margin (revenue/unit − cost/unit), organizations began to focus on reducing costs through decisions in production.

The results of such thinking were disastrous. First, organizations began to focus on efficiency, utilization, and economy-of-scale measures in ways that were not good for manufacturing. For example, the efficiency and utilization measures caused production managers to make sure that the machines and the workers were operating as close to 100 percent of the time as possible. While it seems that this would be beneficial to organizations, in a great majority of the measures that were used to drive production, demand was not taken into account. As a result, organizations often produced much more than demand required so that costs were reduced. Second, the organizations began to operate assuming that large batches were actually cheaper to process. Organizations began to practice combining batches that had similar setups to reduce the downtime of the operation and, therefore, the cost of the operation. This was often done without considering the downstream effects of the action. In one factory, for instance, an operator with plenty of capacity took it upon himself to combine batches even though the production schedulers did not recommend the practice. This practice ultimately was praised by managers and proudly was discussed as an example of an empowered workforce. The problem with the practice was that it created havoc in their downstream heat-treat operations. Materials with differing heat-treat requirements arrived into the queue at inopportune times, leading to poor efficiency at the limited-capacity *heat-treat* operation. Third, most organizations began to break processes up into their constitutive components, analyzed the components, optimized the components individually, and assumed that when the process was

fully operational, the overall process was optimized. As discussed by many experts such as Eli Goldratt, this practice actually suboptimizes the overall operations, as was seen in the heat-treat example discussed previously.[3]

*Profit Enhancement through Unit Cost Reduction*

The other major undesired behavior is that profit enhancement was assumed to occur through increasing unit margins. This is incorrect for two reasons:

1. Even though the cost per unit goes down, the bottom-line costs may not change, leading organizations to believe that they are better off than they actually are.
2. To assume that changes in unit cost reduction through allocation with labor standards as drivers reduces overall costs is inaccurate.

*Margin Enhancement as Profit Enhancement*

The assumption that margin enhancement equals profit enhancement is simple but also incorrect. Since unit margin is equal to the difference between unit revenue and unit cost, it is assumed that as the unit cost goes down, the profit per unit goes up. Conceptually, this is true; however, as unit costs go down, total costs do not always go down (see, for example, Exhibits 1.5 and 1.7). The expenses of the organization determine the cost component of profit, and as seen in the aforementioned examples, the expenses incurred do not go down as production increases. In each case, although the amount of money that the organization spends is the same, the perception might be that the organization is making money by doing more. However, because the focus is on the unit cost, efforts to reduce this cost often lead to overproduction and overall wasteful behavior.

*Reducing Costs by Reducing Standards*

When using standard-costing techniques, costs are allocated based on standard labor hours. In the earliest and simpler forms of allocation, this allocation would include indirect labor. So, as the standard was decreased, the amount of indirect labor absorbed by each unit

was reduced, leading to a lower unit cost. As time progressed and as more and more allocable costs were independent of the number of units produced or the time required for each unit, standards often still drove the cost allocation process.

## ACTIVITY-BASED COSTING

Although standard costing offered improvements over what was available previously, a number of serious issues associated with its use remained. There were fundamental questions that organizations needed to be able to answer with their costing system. Among the questions were the following:

- What are the true costs of producing certain products?
- What are the true costs of serving customers?
- What is the cause of the significant amount of indirect labor that exists?

Although these questions are very important to the decision making process and operation of an organization, they are unanswerable, at best, by standard costing. If the question is unanswered or made based on anecdotal information, it might be better than being led down a wrong path by the precision of the standard-costing system. It supports the application of the cliché: *It is better to be approximately right than precisely wrong.*

Activity-based costing (ABC) was created to provide more meaningful allocation of costs. It is still an allocation technique, but the costs are allocated using what are considered to be more relevant drivers or bases for allocation. Thus, using the earlier example with the two products, A and B, B would get 90 percent of the indirect labor costs using ABC. This allocation process suggests that ABC is more relevant, leading to a better representation of costs and their dynamics.

### How ABC Works

Activity-based costing focuses on identifying the large cost drivers associated with a decision to be made or a process being analyzed. The allocation, then, is based on that which drives the costs that

affect the decision. The following examples explain how ABC answers the questions posed previously.

*What Are the True Costs?*

Assume again that there are two products, A and B, that have the same production requirements. The activities that the indirect labor force undertakes to support B require 90 percent of its time. If there were $10,000.00 in indirect labor to be allocated, product B would get $9,000.00. The $9,000.00 would then be allocated evenly to each B that is produced. If there were 1,000 units of both A and B produced, each unit of A would receive $1.00 while each unit of B would receive $9.00. This is compared to each unit receiving $5.00. With this information, it is believed that organizations can more effectively price the products to ensure that they achieve the right margin.

*What Are the Costs of Serving Customers?*

Although many techniques exist to determine the cost of serving certain customers, an organization would simply use the same technique employed to determine "true" costs. For example, if the organization spent 90 percent of its customer service efforts on one client, then 90 percent of the pool of costs could somehow be allocated to the products purchased by that client. The organization could then decide how to deal with the excessive costs of serving that customer, including trying to increase the price of the products sold to this customer or choosing not to serve the customer at all.

*What Is Driving the Costs That Exist?*

The concept of activity-based management is really an extension of ABC without the cost information being allocated. Simply, an organization can look at the activities associated with a pool of labor to help determine whether the resources are being used efficiently and effectively. For example, if, after performing an analysis, the organization finds that 40 percent of its time is not being effectively utilized, management decisions can be made either to reduce the cost or to more effectively utilize the resources.

**Good Idea or Not?**

In general, what ABC attempts to achieve may be beneficial to the organization. The desire is to allocate based on relevant drivers.

However, in the limit, ABC is still an allocation technique and still has significant limitations.

- As with standard costing, the cost-per-unit focus provides misinformation regarding bottom-line cost dynamics. Once the costs have been allocated using more relevant drivers, there is still the issue of dividing the total cost pool by the number of units produced, suggesting that costs go down even though they may be fixed.
- How does an organization handle varying activities? If the organization spends 90 percent of its time on an activity on Monday, 50 percent on Tuesday, and 10 percent on Wednesday, do the costs of the products to which the pool is being allocated on those days change? Are the products more expensive on Monday than on Wednesday? Does the organization use an average? If it uses an average, is it weighted? How many weighting options exist? Does the organization use the average if there is a large standard deviation?
- How does an organization handle inefficient operations? What if only 80 percent of the time is allocable? What happens to the other 20 percent? Is the decision of what to do with the 20 percent arbitrary?
- ABC is another allocation methodology with arbitrary cost drivers. Two individuals can assess the same situation in different ways and determine different costs per unit. Although the logic appears to be in place and although the concept attempts to answer many of the right questions, the results of an ABC analysis and the use of these results are still highly questionable.

## NEED FOR NONALLOCATION COST MANAGEMENT

It is apparent that ABC is still not enough, and the problems center on the allocation of costs. Allocation exists for the purpose of understanding operations and cost dynamics. However, allocation-based cost management systems fail to provide this information because they create situations that do not exist. As will be shown in Chapter 2, for example, under no circumstance can costs go down as a result of doing more. By dividing two numbers, an illusion of cost dynamics is created, which suggests that the more a person does, the

cheaper it is to do it. The bottom line, however, tells a different story, and only the bottom line determines profitability.

Instead, a cost management system is needed where there is no allocation and yet information is provided that is at least as important as organizations believe they are getting from their existing cost management systems.

## Endnotes

[1]Although material standards exist and are used in ways similar to labor standards, their use adds nothing to the discussion and will therefore not be considered further.

[2]One must question whether costs can be optimized at all. Does it mean maximize costs? If it means minimize costs, then not operating the business is the lowest cost solution. One optimizes profits by maximizing the difference between revenues and costs.

[3]See, for example, Eliyahu M. Goldratt and Jeff Cox, *The Goal: A Process of Ongoing Improvement,* 2nd ed. (Croton-on-Hudson, NY: North River Press, 1992).