EVALUATION IN THE PERFORMANCE MANAGEMENT

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Abstract

In this article we discussed how to make planning decisions to support operations over the long run. We are described the principles of performance measurement and evaluation in performance management.

Key words: performance management, responsibility centers, cost centers, profit centers, investment centers

INTRODUCTION

Periodically, companies need to evaluate whether everything is going as planned and whether everyone in the organization is on the same page. We discuss how organizations use monitoring, incentives, and performance evaluation systems for these purposes.

1 RESPONSIBILITY CENTERS

As shown in figure 1, let us consider in detail the three common forms of **responsibility centers** listed below. Each of these organizational subunits corresponds to the nature of decisions made by the managers of the subunit.

- Cost centers
- Profit centers
- Investment centers

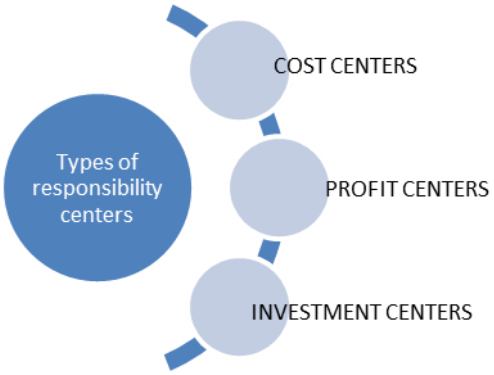

Figure 1. Types of responsibility centers

Let us now review the decision rights delegated to each type of responsibility center. In this article, we focus on the first issue of how to pick performance measures for each kind of responsibility center.

1.1 Cost Centers

Cost center managers exercise control over costs, but not revenues and investments. Their charge is to *minimize the cost of producing a specified level of output or the cost of delivering a specified level of service*. The objective of cost center managers is to improve the *efficiency* of operations by finding ways to cut costs and minimize waste.

Examples of cost centers include departments such as plant maintenance, data processing, human resources, production, and general administration. We could also consider departments such as machining and assembly, both of which are involved in making product, as cost centers. In KCPC, copy operations and PC operations in each location are cost centers.

1.2 Profit Centers

Profit center managers focus on profit. Their goal is to *both minimize costs and to maximize revenues*. KCPC's operations in each of the three regions are profit centers. Other examples include individual product lines in firms such as Procter and Gamble and retail stores of firms such as Sears.

1.3 Investment Centers

Managers of investment centers make decisions that influence costs, revenues, and investments. Their mandate is to *maximize the returns from invested capital, or to put the capital invested by owners and shareholders of their organizations to the most profitable use*.

Examples of investment centers include large independent divisions in organizations such as Sony, Siemens, Microsoft, and Procter and Gamble. In the case of KCPC, the only individual with control over investments is Aaron, as he has not delegated this authority to any of his managers.

As shown in figure 1, organizations need effective performance measurement systems to evaluate the decisions of various responsibility centers and to set appropriate incentives for their managers. Indeed, Aaron's problem at KCPC is the lack of such a system. *What* should Aaron measure to evaluate performance? *How* should he measure the chosen items? *How* should he use these measures in incentive contracts? Let us address these questions next.

2 PRINCIPLES OF PERFORMANCE MEASUREMENT

A **controllable performance measure** reflects the consequences of the actions taken by the decision maker. Intuition suggests that we hold decision makers accountable only for costs and benefits that they can control that is, costs and benefits that change because of their actions. Thus, we should hold a production manager accountable for production delays but not for the overall volume of production.

Marketing managers have the authority to change prices and offer promotions that affect actual sales, which determine the required production.

Production managers, therefore, have little control over the volume of production. It is not reasonable to hold them accountable for someone else's decisions or random market conditions. Likewise, the manager of a restaurant in a beach resort can do little to avoid losses due to a hurricane.

While intuitive, the controllability principle is not always the right approach for choosing performance measures. Instead, we should rely on the **informativeness principle**. A performance measure is *informative* if it provides information about a manager's effort, even if the manager does not have control over it.

Most controllable measures are informative. Students control their performance on a quiz, and their score is informative about their grasp of the subject matter. However, an informative measure is not necessarily controllable. Consider the practice of grading on a curve, in which a student's grade also reflects overall class performance. What does this relative grading accomplish? Well, it controls for the level of difficulty of the exam. In an exam where the top score is 70 out of 100, a score of 69 is a high mark. An individual student has little control over how the rest of the class performs. Yet, the overall class performance is useful information in evaluating each individual student's performance because it tells us how hard the exam is.

This example extends readily to business settings. If a firm incurs losses when other firms in the industry are highly profitable, we may attribute those losses to poor managerial performance. However, if other firms in the industry are doing even worse, then the firm's management may actually be doing a terrific job of dealing with adverse business conditions. Thus, evaluating a firm relative to other firms in the industry, or **relative performance evaluation**, is useful, even though the firm's managers may have little control over how other firms do.

3 CHARACTERISTICS OF EFFECTIVE PERFORMANCE MEASURES

An ideal performance measure:

- *Aligns employee and organizational goals*.
- *Yields maximum information about the decisions or actions of the individual or organizational unit*.
- *Is easy to measure*.
- *Is easy to understand and communicate.*

A single performance measure rarely possesses *all* of these characteristics. Rewarding employees based on customer satisfaction can help align organizational and employee goals. The measure motivates employees to pay attention to customers, and happy customers are the sources of future profit. But, customer satisfaction is subjective and difficult to measure. Some school districts rely heavily on objective test scores to evaluate the performance of their employees (such as grade school teachers). These scores might divert employees' attention from building other important skills such as creative thinking, which are hard to measure. To make effective trade-offs among the attributes, organizations often use a combination of performance measures. Let us apply these principles to KCPC and select performance measures for its cost and profit centers.

Cost center managers serve two roles in organizations: achieving cost targets for a given level of output in the short term, and making continuous efficiency improvements to cut costs in the long term.

Organizations typically use budget variances to measure cost center performance. Operating budgets specify the resources needed to achieve a targeted level of output or service for the plan period.

The budget makes assumptions about materials usage and prices to determine the expected quantities of raw materials and their costs. We analyzed flexible budget variances to evaluate performance during a budget period. For example, we can employ usage variances to evaluate the Production Department and raw material price variances to evaluate the purchasing function.

Ever since Aaron began KCPC, he has followed a practice of making detailed budgets for each branch. These budgets specify expected sales volume by product and the costs of providing the requisite service. At the end of each week, Aaron performs a variance analysis, by branch, to highlight problem areas and institute immediate corrective action.

4 LONG-TERM MEASURES

To achieve long-term reductions in cost, organizations use performance measures arising from techniques such as benchmarking and kaizen.

- **Benchmarking** is a process that involves comparing the effectiveness and efficiency

of various activities and business processes in a firm against the best practices in the industry. Such best practices are not controllable by the decision maker but still are useful performance measures. For example, a firm may hold a manager accountable for achieving greater reductions in cycle time than attained by immediate competitors.

- **Kaizen** is a philosophy of continuous improvement. This initiative encourages and rewards employees who constantly seek and suggest improvements to activities and business processes. One way to implement continuous improvement is to hold managers accountable for achieving *permanent* cost reductions. Within KCPC, Aaron has tried to instill a spirit of continuous improvement. He routinely benchmarks the costs in one branch versus the others. If a branch consistently turns in a poor performance, Aaron steps in to help the manager find ways to reduce costs. Each month, Aaron also recognizes the employee with the "best cost saving idea for the month," and implements the idea in all branches. On an inflation-adjusted basis, his goal is to obtain a 5% reduction in overall costs each year.

The above discussion focuses on evaluating cost centers for which there is a clear relation between inputs and outputs. Such centers are termed **engineered cost centers**. However, many managers oversee **discretionary cost centers** where measuring output can be difficult. For example, members of the corporate legal staff guide and counsel management, but their output is intangible as it pertains to the quality of corporate decisions. Because there is no obvious relation between inputs and outputs in discretionary cost centers, the concerned managers' evaluation is primarily subjective. Often, the manager is required to operate within a fixed budget set at top management's discretion. The manager also is responsible for meeting qualitative targets, such as promptness in responding to inquiries or anticipating and heading off problems. Being relatively small, KCPC does not have many discretionary cost centers. Aaron has outsourced most services such as accounting, advertising, IT support, and legal. Periodically, he evaluates the efficiency and effectiveness of the purchased services by obtaining competing price quotes and querying his managers about their satisfaction with the level of service.

Because of the limitations of ROI discussed in the preceding sections, some firms use **residual income (RI)**. Residual income is the amount an investment generates above and beyond the required rate of return on operating assets, or the residual after subtracting the expected return.

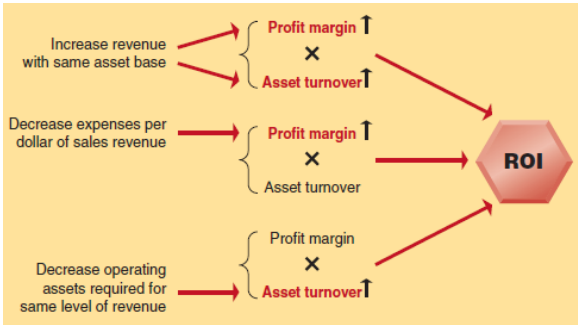

Figure 2. Construcion of the ROI

In recent years, a modified calculation of the residual income has gained popularity among organizations. **Economic value added (EVA)** is a measure developed and popularized by a consulting firm, Stern Stewart & Company. Although similar to residual income, EVA reflects the belief that managers are responsible for covering both the operating *and* capital costs of a business, including taxes.

While the formula for calculating EVA appears simple, the actual calculations are quite involved. Calculating NOPAT requires a number of adjustments to the income reported in financial statements. In essence, these adjustments "undo" the impact of many accounting rules used to prepare the financial statements. EVA computations also specify how to measure the weighted average cost of capital and the investment base.

One example of adjustments to NOPAT relates to research and development expenditures. Generally Accepted Accounting Principles (GAAP) require that research and development costs be expensed for financial reporting purposes. However, EVA computations treat these expenses in much the same way as investments in long-lived assets such as property, plant, and equipment. The proponents of EVA argue that expensing research and development costs reduces NOPAT, which will adversely affect EVA. As a result, managers will be reluctant to undertake valuable R&D activities. Capitalizing research and development costs, and expensing them gradually over time, better reflects the fact that R&D provides benefits for many years.

While useful for measuring investment center performance, it is important to recognize that ROI, EVA, and RI all focus on the short term. These measures consider current period profit and current investment. Moreover, these are lag measures, reflecting the outcomes of past decisions.

Recognizing these limitations, many firms complement ROI, RI, and EVA with other measures that have a longer-term focus, such as market share, customer satisfaction, or growth in new product sales. These measures provide

information on the expected long-term outcomes of current period actions. Thus, using ROI, RI, or EVA in conjunction with long-term performance measures can help in setting the right incentives for management.

So where does all this information leave Aaron? At the overall company level, Aaron decides to add EVA to ROI as a measure of divisional performance. For individual branches, he decides to pay increased attention to setting budget targets and using variances to identify any budget deviations. He also sets up nonfinancial measures such as sales targets for product lines, average wait times, and the number of new corporate accounts for continued growth. Using the fact that all branches employ similar technology, Aaron decides to use the average cost realized by the top quartile of branches for cost benchmarks. Finally, he decides to set up incentive schemes that better align the interests of his managers with KCPC.

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