

Does the **Balanced Scorecard** Improve Performance?

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MUCH OF THE EVIDENCE AVAILABLE TO GAUGE THE SUCCESS OF THE BALANCED SCORECARD HAS BEEN ANECDOTAL. A RECENT SURVEY OF IMA MEMBERS PROVIDES NUMBERS. DO THEY REACH A FINAL VERDICT? YOU BE THE JUDGE.

EXECUTIVE SUMMARY A survey of IMA members in management positions indicates that 88% of regular users of the balanced scorecard believe it has led to improved operating performance. Conversely, a KPMG management consultant tags the overall failure rate at 70%. The survey also implies that it is valuable—albeit risky—to link performance targets to compensation.

he balanced scorecard (BSC) has been shown by our survey to be successful in many cases. Managers who want to implement this innovation should be cautious, however-it can be risky. Before getting into the hazards and how to guard against them, we will provide some background on the BSC.

Robert S. Kaplan and David P. Norton created the balanced scorecard to provide managers with a better performance measurement system—one that is linked to the organization's strategy and does not suffer from the problems of relying solely on financial measures. Financial measures are lagging indicators of performance. They are usually too aggregated to be of much help to management. Financial measures also are easily manipulated to achieve short-term results at the expense of longterm performance.

The BSC is a system of financial and nonfinancial

measures that reflect a balance between leading and lagging indicators of performance and between outcome measures and measures that drive performance. These measures are selected to complement the organization's strategy.

To implement the BSC in an effort to boost the performance of their organization and employees, those designing their scorecards:

- 1. Identify the best strategy for the organization (usually a specific business unit);
- 2. Select specific business unit objectives to complement the strategy;
- **3.** Select 20-25 performance measures to track the business unit's progress in achieving those strategic objectives;
- 4. Establish targets or goals for the performance measures, such as ROI=15%, sales growth=8%, market share=35%, process cycle time=two days, and

- employee turnover=<2%;
- 5. Communicate these targets to managers and employees;
- **6.** Encourage managers and employees to meet these goals by offering incentives;
- **7.** Communicate the BSC to all levels of the business unit by developing departmental and employee scorecards that complement the measures in the business unit scorecard.

The performance goals are usually organized to address four perspectives. Kaplan and Norton recommend addressing the four perspectives that appear in Table 1.1

The management group implementing the BSC must understand that the four BSC perspectives cited in Table 1 are linked; making improvements in one area

Table 1: The Four **Perspectives**

PERSPECTIVE	MEASURES
Financial	
The strategy for growth, pro- fitability, and risk viewed from the perspective of the shareholder.	Lagging indicators of performance, e.g., operating income, return on investment (ROI), Economic Value Added (EVA®), and operating cash flows.
Customer	
The strategy for creating value and differentiation from the perspective of the customer.	Customer satisfaction, sales growth, and market share are examples of possible customer measures.
Internal Business Processes	
The strategic priorities for various business processes that create customer and shareholder satisfaction.	Measures of operating efficiency and effectiveness, such as labor productivity, machine utilization, processcycle time, quality, and on-time delivery.
Learning and Growth	
The strategy for continuous improvement and creating value.	Learning, growth, and satisfaction are often measured in terms of employee skill levels, training hours, and employee turnover.

can advance others (see Table 2). For example, in a manufacturing organization, employees who are skilled and trained are better able than unskilled workers to improve quality and lower cycle times. Better quality can lead directly to improved measures of customer satisfaction. Lower factory cycle times and fewer defects will lead to increases in the percentage of goods delivered on time. A higher percentage of goods delivered on time will also affect customer satisfaction. An increased level of customer satisfaction will lead to more sales and profits.

Table 2: Example of Cause and Effect in the **Balanced Scorecard**

Financial	Operating Income/ROI/EVA
Customer	Customer Satisfaction/Market Share
Internal Business Processes	On-Time Delivery/Cycle Time
Learning and Growth	Employee Skills/Training/Turnover Ratio

EFFECTIVE COMMUNICATION

Kaplan and Norton believe that employing the balanced scorecard leads to new business processes that can be used to link long-term strategies to short-term decisions.² They call one of these new processes "Communicating and Linking." To implement the BSC successfully, a business unit must effectively communicate the organization's strategies for increasing shareholder value to all employees. For example, if quality is a component of the business strategy that needs to be sharpened, employees will see measures such as "defect rates" and "warranty claims" among the 20-25 performance goals communicated on the BSC.

Management conveys the BSC with its performance targets to an entire business unit in meetings and on bulletin boards so employees can see which areas they must focus on without having to read top-level strategy documents. In this way, the strategy is publicized throughout the organization. Lower-level managers can link their departmental objectives to the organizationwide goals by selecting targets for their departmental scorecards that support the organization's overall objectives. That helps to get everyone behind the overall strategy.

The success of management actions at any level can be gauged by comparing scorecard results to the targets that were previously defined. For example, performance would be unfavorable if cycle time were 2.5 days when the goal was two days.

Some organizations communicate the BSC to each employee by developing personal scorecards. The personal scorecards often contain only a few measures, but these measures are linked to the department- and organization-wide scorecards. Employees know they have done a good job when they perform better than the targets on their scorecards. For example, a machine operator will have done well when his/her machine operates above targeted efficiency levels.

DEVELOPING EMPIRICAL EVIDENCE

Since the inception of the BSC, much has been written touting its benefits, though it can be costly to develop and implement. Implementing the BSC usually incurs costs in two areas:

- 1. Consultants are often needed to help map the organizational strategy and its effect on performance. They also tend to play a role in selecting performance measures.
- 2. Existing information systems often do not include the data required for the new performance measures. These systems have to be modified, sometimes at great expense, to supply the necessary information.

There has been little empirical evidence, however, that companies adopting the BSC have experienced the benefits. We conducted a survey of members of the Institute of Management Accountants (IMA®) in management positions from more than 1,000 organizations

to find out if companies implementing the BSC have improved their performance as a result. We set out to clarify:

- ◆ How widespread is the use of the BSC?
- ◆ What industries are using the BSC?
- ◆ Does adopting the BSC improve a company's operating performance and profitability?
- ◆ Do organizations often tie the BSC to compensation incentives?

The results of our survey suggest that many organizations have implemented the BSC and that it has improved their performance. Of the organizations surveyed, 23% (hereafter referred to as "regular users") were using the BSC in some or most of their operating divisions.

Regular users of the BSC can be found in a variety of industries from manufacturing to service organizations to not-for-profit firms, as shown in Figure 1.

Most of the organizations (88%) regularly using the BSC reported improvements in operating performance, and 66% of them also reported an increase in profits. Correspondingly, those who have not experienced an increase in operating performance generally have not noticed an increase in profits due to implementing the BSC. This is evidence of the cause-and-effect linkage between the BSC perspectives. A significant majority (61%) reported improvements in bottom-line financial results. The numbers indicate that using the balanced scorecard can be beneficial. Any survey like ours may have a favorable response bias, however. Those who have not experienced success with the BSC may have chosen not to participate in the survey.

Moreover, many BSC implementations fail. Paul McCunn, a KPMG management consultant, estimates the overall failure rate at 70%.3 Those survey participants whose BSC implementation has failed may be reflected in our survey as nonusers. Breakdowns in communication and difficulty in translating the strategy into action are common reasons for failure.4 It is often difficult for employees to know what to do to improve performance. Measures and targets are often chosen by management and conveyed to the employees. Getting employees involved in picking measures and setting targets can help them to be more committed to reaching the goals.

■ Manufacturing 18% Service 42% Other 16% ■ Transportation / Utilities ■ Nonprofit 9% 7% 8% Merchandising

Figure 1: Use of the BSC by Industry

PROVIDING INCENTIVE COMPENSATION: EASIER SAID THAN DONE

Sixty percent of regular users of the BSC provided financial incentives to employees for meeting or exceeding targets that were congruent with BSC measures, according to our survey. At the top level, CEOs are given stock options to provide an incentive to increase share prices. Business unit managers, middle managers, and front-line supervisors can have their bonuses and salary increases linked to their meeting or exceeding targets.

Linking BSC measures to compensation is difficult, though, and carries some risk. The difficulty comes in determining the relative weights of the various performance measures on the scorecard.

There are two methods for determining the weightings of multiple performance measures for an incentive pay scheme. One method uses predetermined weights for each measure in a prescribed formula. For example, 15% of the incentive pay may be based on operating income, 10% on revenue growth, 10% on customer satisfaction, 5% on internal defect rates, etc. The percentages of weights would be determined before the beginning of the period and could not be changed by the supervising manager.

Formula-based systems usually ignore most of the BSC measures, however, because of the complexity of basing bonuses on a formula with 20 or more variables. Incentive pay based on a few variables will focus the manager's attention on those variables that can increase his or her compensation. The remaining variables will tend to be ignored even though they are also linked to the organization's strategy. An incentive pay plan that focuses on only a few variables will also tend to focus on financial measures, which are focused on short-term results and can be manipulated easily.

Another method allows the supervising manager to subjectively determine the measurement weights at the end of the period. Financial and BSC results are reported for a typical accounting period, such as a month or quarter, and targets are established for each period. Kaplan and Norton assert that BSC implementation makes it easier for managers to set bonuses and other incentive rewards subjectively.⁵ They believe that the development of the performance measures with their targets allows supervising managers an opportunity to better observe the performance of subordinate managers and assess their abilities.6

The supervising managers then can set incentive rewards (such as bonuses and pay raises) subjectively based on their overall assessment of the scorecard performance. Kaplan and Norton believe that a subjective weighting scheme allows supervising managers to utilize key measures for a defined time period and ignore other BSC measures that are not key for that period.

"OUT-GAMING" MANIPULATIVE MANAGERS

The subjective weighting scheme helps to ensure that subordinate managers cannot "game" the system. One way to game the pay system is to trade performance on one measure to meet or exceed the target on another measure. For example, an unscrupulous purchasing manager whose bonus is based primarily on material prices might order excessive quantities of raw materials in order to get quantity discounts. This practice could completely ignore the organization's emphasis on keeping inventory levels low.

Another example would be a business unit manager whose bonus is heavily weighted toward revenue growth. That growth might be achieved by discounting prices, giving favorable payment terms, and selling to customers with poor credit ratings.

These attempts to trick the system should be apparent to the supervising manager with a BSC. The supervising manager can thwart attempts to game the system by failing to pay incentives in such situations. In this instance, the supervising manager has subjectively determined the weights of the various measures in the incentive pay plan.

There are some risks in subjectively determining measurement weights. The following three claims were made by employees of a major financial services firm that attempted to link the BSC to its incentive compensation system. The firm later abandoned the BSC in favor of a formulaic calculation of incentive pay based on revenues.7

- ◆ Too much emphasis may be placed on financial measures, which are lagging indicators of performance that focus too much attention on gaining short-term results at the expense of long-term performance. This happens because managers have historically used financial measures in incentive pay plans.
- ◆ It may be difficult for the employee to understand just how bonuses were determined.

◆ Those who receive less incentive compensation than they expected may allege favoritism or bias.

Even with the problems of linking the BSC to management compensation noted above, it may be necessary to make this connection in order to implement this management tool successfully because managers usually focus on items that affect their compensation directly. In fact, the survey provides evidence of a correlation between improved operating performance and the linking of the BSC to compensation. In another survey result, we found that 65% of the respondents who did not see an increase in operating performance did not use the BSC to determine management compensation. Of those respondents who did see an increase in operating performance, 66% used the BSC to determine management compensation.

While linking BSC performance goals to compensation may present additional complexity, this step seems to be a valuable tool in implementing the BSC successfully.

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ENDNOTES

- 1 Robert S. Kaplan and David P. Norton, The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment, Harvard Business School Press, Boston, Mass., 2001.
- 2 Robert S. Kaplan and David P. Norton, "Using the Balanced Scorecard as a Strategic Management System," Harvard Business Review, January-February 1996, pp. 75-85.
- 3 Hugh Pforsich, "Does Your Scorecard Need a Workshop?" Strategic Finance, February 2005, pp. 31-35.
- 5 Robert S. Kaplan and David P. Norton, The Balanced Scorecard: Translating Strategy into Action, Harvard Business School Press, Boston, Mass., 1996.
- 6 Kaplan and Norton, January-February 1996, pp. 75-85.
- 7 Christopher D. Ittner, David F. Larcker, and Marshall W. Myer, "Subjectivity and the Weighting of Performance Measures: Evidence from a Balanced Scorecard," The Accounting Review, July 2003, pp. 725-758.