

Chapter 1

Introduction to the Balanced Scorecard and Performance Measurement Systems

by Christian C. Johnson

From the beginning, it is important to understand why measuring an organization's performance is both necessary and vital. An organization operating without a performance measurement system is like an airplane flying without a compass, a Formula One race car driver guiding his car blindfolded, or a CEO operating without a strategic plan. The purpose of measuring performance is not only to know how a business is performing but also to enable it to perform better. The ultimate aim of implementing a performance measurement system is to improve the performance of an organization so that it may better serve its customers, employees, owners, and stakeholders.

If one "gets" performance measurement right, the data generated will tell the user where the business is, how it is doing, and where it is going. In short, it is a report card for a business that provides users with information on what is working well and what is not. With this in mind, Chapter 1 provides an overview of the various performance measurement systems used today by enterprises to drive improvements in overall organizational performance.

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defined strategy. In short, it enables a business to achieve desired results and to create shareholder value.

The major performance measurement systems in use today are profiled below (in order of global adoption) and include

- The Balanced Scorecard
- Activity-based Costing and Management
- Economic Value Added (EVA)
- Quality Management
- Customer Value Analysis/Customer Relationship Management
- Performance Prism

THE BALANCED SCORECARD

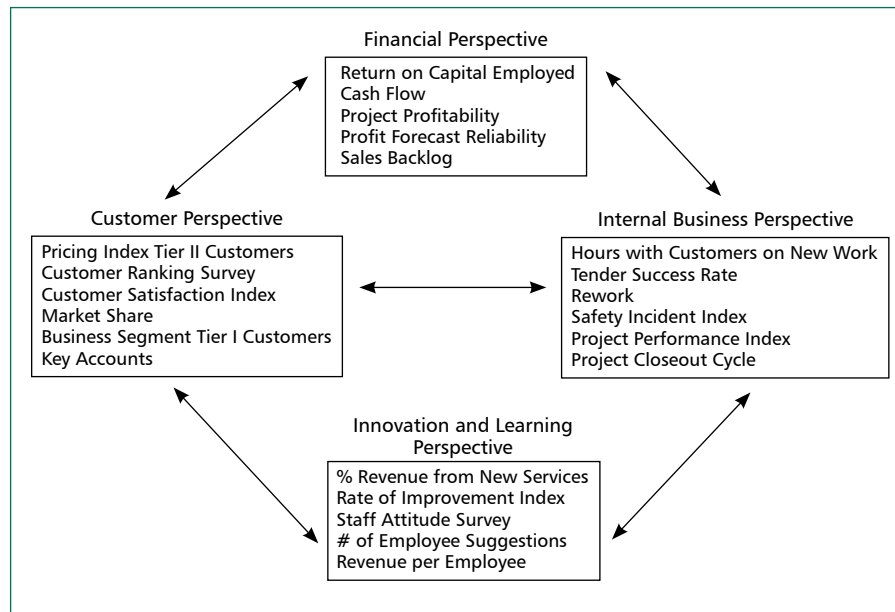
The balanced scorecard (BSC) is the most widely applied performance management system today.¹ The BSC was originally developed as a performance measurement system in 1992 by Dr. Robert Kaplan and Dr. David Norton at the Harvard Business School. Unlike earlier performance measurement systems, the BSC measures performance across a number of different perspectives—a financial perspective, a customer perspective, an internal business process perspective, and an innovation and learning perspective.

Through the use of the various perspectives, the BSC captures both leading and lagging performance measures, thereby providing a more “balanced” view of company performance. Leading indicators include measures, such as customer satisfaction, new product development, on-time delivery, employee competency development, etc. Traditional lagging indicators include financial measures, such as revenue growth and profitability. The BSC performance management systems have been widely adopted globally, in part, because this approach enables organizations to align all levels of staff around a single strategy so that it can be executed more successfully.

¹ We will use the acronym BSC as a substitute for spelling out Balanced Scorecard. This saves space and is easier on the reader.

An example of a BSC is shown below:

Figure 1: Example of a Balanced Scorecard



Source: Kaplan and Norton. Putting the Balanced Scorecard to Work. Harvard Business Review. September-October 1993.

Organizations have adapted the BSC to their particular external and internal circumstances. Both commercial and not-for-profit organizations have successfully used the BSC framework. Since 1992, Drs. Kaplan and Norton have studied the success of various applications of the BSC in different types of organizations. Companies have used as few as four measures and as many as several hundred measures when designing a BSC performance measurement system. Based on this research, it has been found that a BSC framework using about 20–25 measures is the usual recommended best practice. Smaller organizations might use fewer measures, but it is generally not advisable to go beyond a total of 25 measures for any single organization, holding company, or conglomerate group of holding companies.

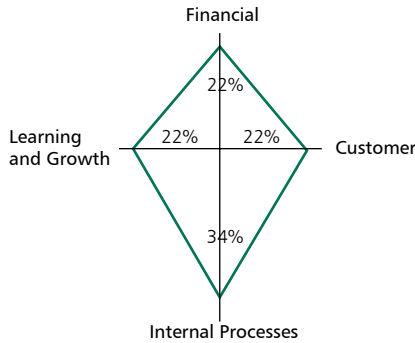


Figure 2: Example an “Ideal” Balanced Scorecard

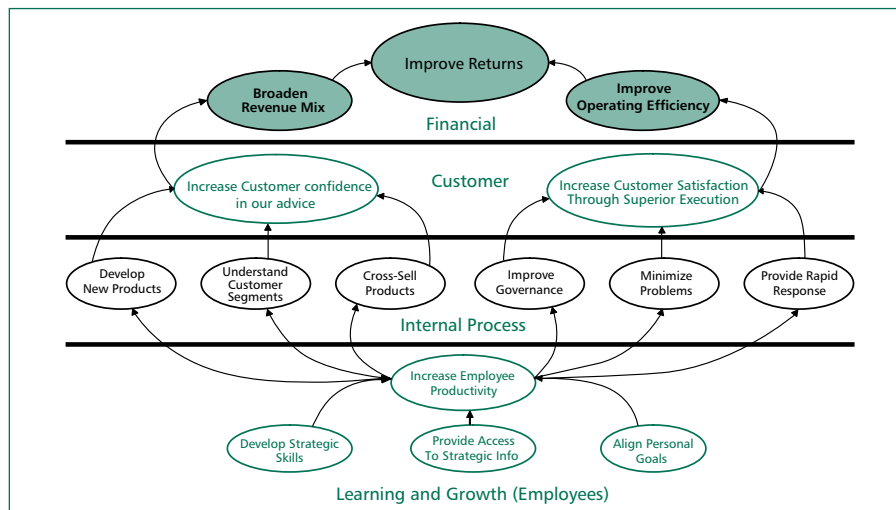
Perspective	#of Metrics	Weight
Financial	5	22%
Customer	5	22%
Learning and Innovation	5	22%
Internal Processes	9	34%
24 measures		100%

Source: Norton, David. 2000. Beware: The Unbalanced Scorecard.

Figure 2 is drawn from an article written by Dr. David Norton. The brief article explained the need for balancing the number of measures in all four perspectives, with greater emphasis on process measures, because the process perspective is the primary domain through which organizational strategy is implemented.

Eight years after introducing the BSC, Kaplan and Norton published an article entitled, Having Trouble with Strategy, Then Map It! The article introduced the concept of a “Strategy Map” to the BSC framework. A “Strategy Map” enables organizations to clarify their strategy and assist organizations with creating their BSC framework and measures. A generic corporate strategy map is provided below to illustrate the “Strategy Map” concept.

Figure 3: Example of a “Generic” Strategy Map



As a result of continued research and innovations over the last 15 years, the BSC has gone through an evolutionary process of improvement, from performance measurement (1990–1996) to performance management (1996–2000), to becoming a globally recognized best practice for strategic management (2001–to present). In fact, the benefits a firm can obtain from properly implementing the BSC include

- Translating strategy into more easily understood operational metrics and goals;
- Aligning organizations around a single, coherent strategy;
- Making strategy everyone’s everyday job, from CEO to the entry-level employee;
- Making strategic improvement a continual process; and
- Mobilizing change through strong, effective leadership.

Although thousands of companies have adopted and benefited from the BSC, it is the Balanced Scorecard Collaborative, Inc. (BSCol) that has taken a leadership role in the evolution of the BSC Methodology as it is adapted by more and more organizations globally. BSCol is a consulting, education, training, research, and development firm facilitating the worldwide awareness, use, enhancement, and integrity of the BSC as a value-added management process. BSCol is founded and led by the creators of the BSC concept, Dr. Robert Kaplan and Dr. David Norton. The company serves as a global center of BSC excellence and expertise. BSCol merged with two other firms in 2005 to form Palladium Group, Inc.—the largest global firm focused exclusively on strategy execution services.

The BSC Methodology has been in use for 15 years. Early adopters of the methodology were confined to developed markets of the United States/Europe and later Asia/Australia. Adoption of the BSC in transitional economies has been slow but growing as evidenced by the case studies contained in later chapters. More importantly, firms, including eGate Consulting and BearingPoint, are increasingly spreading best practices to both the governments and private sectors of emerging markets.

ACTIVITY-BASED MANAGEMENT (ABM)

Traditional cost accounting permeates most organizations and is characterized by arbitrary allocations of overhead costs to items being produced. Typically, the company's total overhead is allocated to goods produced based on volume-based measures (labor hours, machine hours, etc.). The underlying assumption is that there is a relationship between overhead and the volume-based measure.

Activity-based costing (ABC) was developed to provide better insight into how overhead costs should be allocated to individual products or customers. Businesses that do not use ABC typically only make simple adjustments to allocate overhead costs that do not accurately fit elsewhere. Businesses that use ABC link expenses related to resources supplied to the company to the activities performed within the company. Through the use of ABC, expenses are allocated from resources to activities and then to products, services, and customers.

Activity-Based Management (ABM) is a discipline that focuses on the management of activities to maximize the profit from each activity and to improve the value received by the customer. This discipline includes cost-driver analysis, activity analysis, and performance measurement. ABM draws on ABC as its major source of information.

Using the ABC approach, companies get insights into profitable and profitless activities based on a customer or a product viewpoint. ABC then is a way of measuring which of the firm's activities generate revenues in excess of costs and, as a result, provide keen insight into what is really providing value for customers.² ABC is used by many organizations that implement the BSC because ABC enables businesses to more accurately define and measure their metrics (or, measures as referred to in later chapters).

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² Meyer, Marshall W. 2002. Finding performance: The new discipline of management. In *Business Performance Measurement: Theory and Practice*, edited by Andrew Neely. Cambridge University Press.

The figure below provides a window into the value of ABC vs. traditional accounting.

Figure 4: Comparison of Traditional and ABC Accounting

Traditional View		ABC View	
Salaries	\$375,000	Select Suppliers	\$82,000
Benefits	\$92,000	Procure Material	\$175,000
Supplies	\$47,000	Certify Vendors	\$92,000
Phone	\$8,500	Resolve Problems	\$103,500
Travel	\$13,000	Expedite Shortages	\$83,000
Total	\$535,500	Total	\$535,500

Firms that implement an ABC methodology are able to

- Identify the most and least profitable customers, products, and channels;
- Determine the true contributors to (and detractors from) financial performance;
- More accurately predict costs, profits, and resource requirements associated with changes in production volumes, organizational structure, and resource costs;
- More easily identify the root causes of poor financial performance;
- Better track costs of activities and work processes; and
- Provide front-line managers with cost intelligence to drive improvements.

While firms will likely benefit from ABC, the system is mainly an accounting and cost-based method of viewing and analyzing an organization and its activities. ABC also lacks the strategic and nonfinancial elements that are captured in the BSC. Thus, most successful firms use ABC to manage costs and gain insight into their internal competitive advantages. ABC is particularly valuable initially as a management accounting and reporting tool, but has also proved valuable as providing metrics for use in the BSC's internal process perspective. In other words, successful firms use ABC in combination with the BSC to drive the achievement of a firm's strategy and competitive advantage.

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ECONOMIC VALUE ADDED (EVA)

Stern Stewart Corporation developed in 1982 the Economic Value Added (or, more simply EVA) as an overall measure of organizational performance. EVA is both a specific performance measure and the basis for a larger performance measurement framework. According to Stern Stewart, EVA is a financial performance metric that is most directly linked to the creation of shareholder value over time.

The definition of EVA is net operating profit less an appropriate charge for the opportunity cost of all capital invested in an enterprise. Mathematically it is

$$\text{EVA} = \text{Net Operating Profit After Taxes} \\ - (\text{Capital} \times \text{Cost of Capital})$$

EVA is designed to give managers better information and motivation to make decisions that will create the greatest shareholder wealth. Since EVA is a single metric (although it can cascade down and across an enterprise to evaluate the performance of specific investments) it is complementary to the BSC and can be included in a BSC framework (for example, as a financial perspective measure). Using EVA alone has been found to cause managers to invest in less risky, cost-reducing activities rather than in growth activities. Also, because it is a pure financial model, EVA does not serve as a vehicle for articulating a strategy. When coupled with the BSC, the trade-offs between short-term productivity improvements and long-term growth goals can be managed.³

Some criticize EVA as being a very complex framework that relies on complicated calculations. The “Cost of Capital” calculation is particularly difficult to calculate and prone to errors that lead to grossly misleading results. Also, EVA is not easily understood by the majority of employees because of its complex framework and calculations.

Since EVA is a single metric, it is complementary to the balanced scorecard and can be included in a balanced scorecard framework (for example, as a financial perspective measure)

³ Kaplan, Robert. 2001. Integrating shareholder value and activity-based costing with the balanced scorecard. *Balanced Scorecard Report*. 15 January.

Consider a simplified calculation of EVA for an organization called “Firm A.” Suppose Firm A generated net profit after taxes of yuan (CNY)100 in 2006, and suppose that Firm A had capital (plant, equipment, cash, etc.) of CNY100,000, if one determines the prevailing cost of capital (both debt and equity) average 10% during 2006 in the areas where Firm A raises capital, we can calculate its “cost of capital” as being equal to 10% x CNY100,000 = CNY10,000.

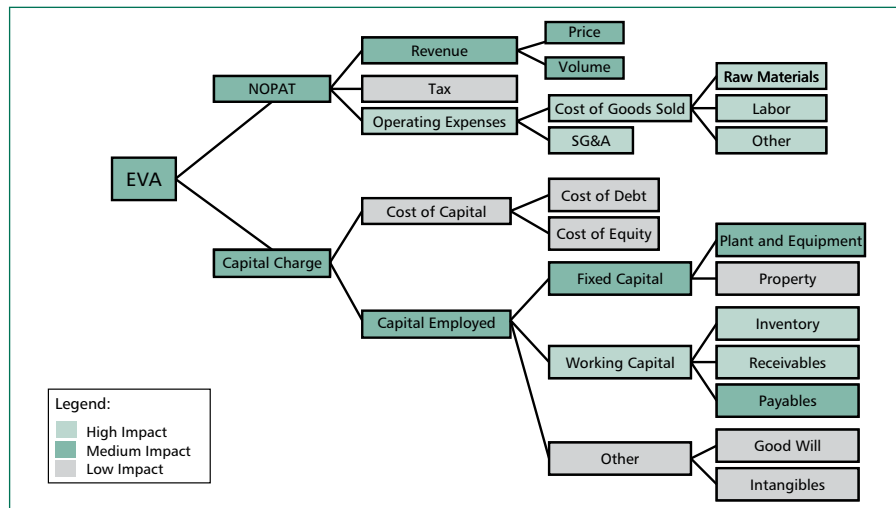
The firm’s EVA would then equal –CNY9,900.

$$\begin{aligned}
 \text{EVA} &= (\text{Net Operating Profit After Taxes}) - (\text{Capital} \times \text{Cost of Capital}) \\
 &= \text{CNY}100 - (\text{CNY}100,000 \times 10\%) \\
 &= \text{CNY}100 - \text{CNY}10,000 \\
 &= -\text{CNY}9,900
 \end{aligned}$$

In other words, the firm *lost value* for its shareholders because the firm’s capital was not effectively invested and used.

A more detailed view of the EVA framework and impact analysis is provided below. The figure below (for a manufacturing organization) shows the areas that have the highest impact on EVA—those being operating expenses and working capital.

Figure 5: Example of a Framework for EVA Impact Analysis



Source: Demystifying EVA and EVA Implementation. Finegan and Company, LLC. Presentation at Icelandic Management Association. EVA Conference, November 16, 1999.

A major difficulty faced by firms implementing EVA is the calculation of the “cost of equity” and the “cost of debt.” As mentioned previously, small errors in this calculation can lead to grossly misleading results. For example, the cost of equity is easiest to measure for extremely liquid, publicly traded firms. Calculating the “cost of equity” for private firms or those with limited liquidity is difficult and inexact. Thus, firms that are not publicly traded tend to avoid EVA as a performance measurement system.

QUALITY MANAGEMENT

Over the past few decades, many firms have adopted various quality programs, such as Total Quality Management (TQM), Six Sigma, European Foundation Quality Management (EFQM), and The Baldrige National Quality Program. Such Quality Programs aim to assist organizations to improve the quality of the manufacturing and service offerings. A central tenet for all of these programs is business performance measurement. For example, The Baldrige National Quality Program measures businesses in seven categories and the EFQM in nine.⁴

Although Quality Programs focus a firm on continuous improvement, they are not well suited to measuring relative

Table 1: Framework Comparison of Baldrige and EFQM Criteria

Baldrige Categories	EFQM Criteria
Leadership	Leadership
Human Resource Focus	People
Strategic Planning	Policy and Strategy
Process Management	Processes
Customer and Market Focus	Customer Results
Information and Analytics	Key Performance Indicators
Business Results	People Results, Society Results Partnerships and Resources

Source: Baldrige, *EFQM Publications*.

⁴ Kaplan, Robert S. and G. Lamotte. 2001. The balanced scorecard and Quality Programs. *Balanced Scorecard Report*. 15 March.

performance among differing enterprises in different industries. A 2001 *Balanced Scorecard Report* noted the differences and synergies between the Quality Frameworks and the BSC:

- The BSC emphasizes explicit causal links through strategy maps and cascaded objectives more than the quality programs do.
- The BSC programs rely on benchmarking approaches.
- The BSC sets strategic priorities for process enhancements.
- The BSC integrates budgeting, resource allocation, target-setting, reporting, and feedback on performance into ongoing management processes.
- These elements enable the BSC to be a central management tool for an upgraded and more effective performance measurement system and *strategy management process*.

CUSTOMER VALUE ANALYSIS AND CRM

Customer Value Analysis (CVA) and Customer Relationship Management (CRM) techniques are enabling businesses to improve performance, to measure that improvement, and to focus a firm on the value of its customers. Moreover, CVA and CRM technologies are providing firms with better data integration and, hence, better measurement regarding customers.

Given the obvious strategic importance of customers, it is natural for businesses to begin exploring more robust ways of measuring customer and business activities directly related to customers. For example, the Baldrige National Quality Award includes a customer focus and satisfaction criteria, which contribute to about 30% of the overall score for the award.

Several CVA/CRM frameworks have evolved over the years. One illustrative framework decomposes the customer problem down to three top-level areas (with further decomposition beneath each of the three):⁵

⁵ Rust, Roland T., V.A. Zeithaml, and Katherine E. Lemon. 2000. *Driving Customer Equity*. The Free Press.

1. Value equity refers to the customers' perceptions of value
2. Brand equity refers to the customers' subjective appraisal of the brand
3. Retention equity refers to the firm building relationships with customers and encouraging repeat-purchasing

These three areas correspond to three distinct disciplines in the CVA/CRM and marketing literature (brand management, customer value analysis, and customer loyalty analysis)—each with its own detailed measurement approaches. The implications for organizational performance measurement systems are clear: measuring business activities and outcomes regarding customers is becoming increasingly complex and increasingly important to the successful execution of a firm's strategy.

Proponents of the BSC note that the BSC framework includes the customer as one of four perspectives, while CVA and CRM techniques fail to account for important noncustomer aspects of a business. That being said, CVA and CRM are often used by BSC practitioners to drive improvements in the customer perspective of the BSC. In other words, the benefits of CVA and CRM technologies are increasingly used in a BSC framework evaluation.

PERFORMANCE PRISM

The
"Performance
Prism" is an
example of a
"customized"
balanced
scorecard
framework

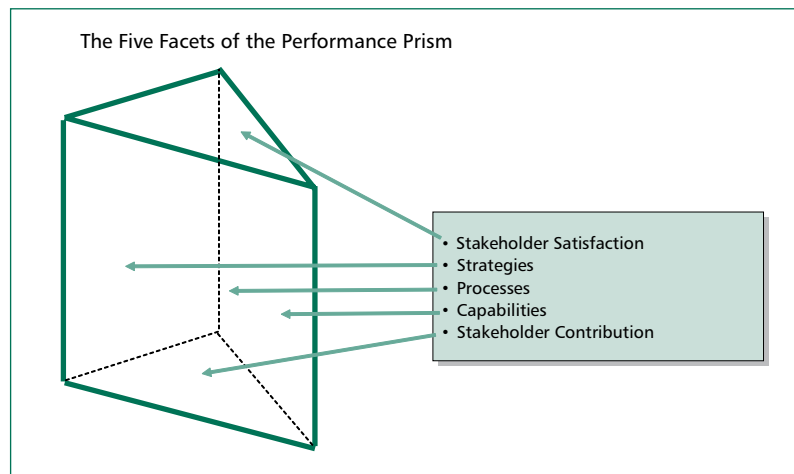
Many alternative and "customized" frameworks continue to be developed based on the breakthrough BSC framework developed by Kaplan and Norton in 1992. The "Performance Prism" is an example of one such "customized" BSC framework.

In the "Performance Prism," companies view their organizations from five perspectives, rather than the four traditional perspectives of the BSC. These five perspectives are

- Stakeholder Satisfaction – *Who are the key stakeholders and What do they want and need?*
- Strategies – *What strategies do we have to put in place to satisfy the wants and needs of these key stakeholders?*

- Processes – *What critical processes do we require if we are to execute these strategies?*
- Capabilities – *What capabilities do we need to operate and enhance these processes?*
- Stakeholder Contribution – *What contributions do we require from our stakeholders if we are to maintain and develop these capabilities?*

Figure 6: Illustration of the Five Facets of the “Performance Prism”



Source: Perspectives on Performance: The Performance Prism. Professor Any Neely, Cranfield School of Management, Undated Paper.
<http://www.som.cranfield.ac.uk/som/research/centres/cbp/downloads/prismarticle.pdf>

The “Performance Prism” is relatively new, having been developed by a major consulting firm and the Cranfield School of Management in 2000. Its first significant implementation was in 2001, and it illustrates the flexibility of the BSC framework to be adapted and applied to the various needs of businesses.

