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**The**

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**BALANCED SCORECARD**

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**TRANSLATING  
STRATEGY  
INTO ACTION**

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**The**

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**BALANCED  
SCORECARD**

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**Robert S. Kaplan  
David P. Norton**

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# Preface

THE ORIGINS OF THIS BOOK can be traced back to 1990 when the Nolan Norton Institute, the research arm of KPMG, sponsored a one-year multicompany study, “Measuring Performance in the Organization of the Future.” The study was motivated by a belief that existing performance-measurement approaches, primarily relying on financial accounting measures, were becoming obsolete. The study participants believed that reliance on summary financial-performance measures were hindering organizations’ abilities to create future economic value. David Norton, CEO of Nolan Norton, served as the study leader and Robert Kaplan as an academic consultant. Representatives from a dozen companies<sup>1</sup>—manufacturing and service, heavy industry and high-tech—met bi-monthly throughout 1990 to develop a new performance-measurement model.

Early in the project, we examined recent case studies of innovative performance-measurement systems. One, the Analog Devices case,<sup>2</sup> described an approach for measuring rates of progress in continuous improvement activities. The case also showed how Analog was using a newly created “Corporate Scorecard” that contained, in addition to several traditional financial measures, performance measures relating to customer delivery times, quality and cycle times of manufacturing processes, and effectiveness of new product developments. Art Schneiderman, then vice president of quality improvement and productivity at Analog Devices, came to one meeting to share his company’s experiences with the scorecard. A variety of other ideas were presented during the first half of the study, including shareholder value, productivity and quality measurements, and new com-

pensation plans, but the participants soon focused on the multidimensional scorecard as offering the most promise for their needs.

The group discussions led to an expansion of the scorecard to what we labeled a “Balanced Scorecard,” organized around four distinct perspectives—financial, customer, internal, and innovation and learning. The name reflected the balance provided between short- and long-term objectives, between financial and nonfinancial measures, between lagging and leading indicators, and between external and internal performance perspectives. Several participants experimented with building prototype Balanced Scorecards at pilot sites in their companies. They reported back to the study group on the acceptance, the barriers, and the opportunities of the Balanced Scorecard. The conclusion of the study, in December 1990, documented the feasibility and the benefits from such a balanced measurement system.

We summarized the findings of the study group in an article, “The Balanced Scorecard—Measures That Drive Performance,” *Harvard Business Review* (January–February 1992). At that time, we were contacted by several senior executives to help them implement the Balanced Scorecard in their organizations. These efforts led to the next round of development. Two executives, Norman Chambers, then chief executive officer of Rockwater, and Larry Brady, then executive vice president (subsequently promoted to president) of the FMC Corporation stand out as particularly effective in extending the application of the scorecard. Chambers and Brady saw the scorecard as more than a measurement system. They both wanted to use the new measurement system to communicate and align their organizations to new strategies: away from the historic, short-term focus on cost reduction and low-price competition, and toward generating growth opportunities by offering customized, value-added products and services to customers. Our work with Chambers and Brady, and with the managers in their organizations, highlighted the importance of tying the measures in the Balanced Scorecard to an organization’s strategy. While seemingly an obvious insight, in fact most organizations, even those implementing new performance-measurement systems, were not aligning measurements to strategy. Most companies were trying to improve the performance of existing processes—through lower cost, improved quality, and shortened response times—but were not identifying the processes that were truly strategic: those that must be performed exceptionally well for an organization’s strategy to succeed. We described the importance of choosing mea-

asures based on strategic success in a second HBR article, "Putting the Balanced Scorecard to Work," published in September–October 1993.

By mid-1993, Norton was CEO of a new organization, Renaissance Solutions, Inc. (RSI), one of whose primary services was strategic consulting, using the Balanced Scorecard as a vehicle to help companies translate and implement strategy. An alliance between Renaissance and Gemini Consulting opened up opportunities for integrating the scorecard into major transformation programs. These experiences further refined the strategic linkages of the scorecard, demonstrating how even 20 to 25 measures across the four perspectives, could communicate and help implement a single strategy. So rather than view the multiple measures as requiring complex trade-offs, the strategic linkages enabled the scorecard measures to be tied together in a series of cause-and-effect relationships. Collectively, these relationships described the strategic trajectory—how investments in employee re-skilling, information technology, and innovative products and services would dramatically improve future financial performance.

The experiences revealed that innovating CEOs used the Balanced Scorecard not only to clarify and communicate strategy, but also to manage strategy. In effect, the Balanced Scorecard had evolved from an improved *measurement system* to a core *management system*. In addition to our initial group of companies, including Brown & Root Energy Services (the parent division of Rockwater) and FMC, we observed the evolving Balanced Scorecard process in several companies mentioned throughout this book: Metro Bank, National Insurance, Kenyon Stores, and Pioneer Petroleum (names have been disguised to preserve confidentiality). The senior executives in these companies were now using the Balanced Scorecard as the central organizing framework for important managerial processes: individual and team goal setting, compensation, resource allocation, budgeting and planning, and strategic feedback and learning. We summarized these developments in a third article, "Using the Balanced Scorecard as a Strategic Management System," *Harvard Business Review* (January–February 1996).

The rapid evolution of the Balanced Scorecard into a strategic management system led us to realize that we had learned far more than we were able to communicate in a series of articles. Also, we were receiving numerous requests for additional information about how to build and implement Balanced Scorecards. The combination of an ample supply of rich, detailed implementation experiences and a perceived demand for additional information led us to write this book.

The book, while as comprehensive and complete as we could make it, is still a progress report. During the past three years, we have seen new developments and applications as the scorecard concept takes hold in more and more organizations. Our hope is that the observations reported in this book will help more executives to launch and implement Balanced Scorecard programs in their organizations. And we are confident that many of them will be innovating companies, like the ones we have been fortunate to learn from during the past five years, that will expand the structure and use of the scorecard even further. So perhaps in a few years readers can look forward to *Balanced Scorecard: The Sequel*.

We are clearly indebted to many people and organizations who have assisted us in our intellectual journey. They include executives and project leaders at FMC (Larry Brady and Ron Mambu), Rockwater (Norm Chambers and Sian Lloyd Rees), and Analog Devices (Ray Stata, Jerry Fishman, and Art Schneiderman). We wish we could acknowledge the executives at Metro Bank, National, Kenyon Stores, Pioneer Petroleum, and several other companies by name, but for reasons of confidentiality, we cannot. Through their leadership and actions, all these executives have showed how the Balanced Scorecard can become the cornerstone of an organization's management systems.

We have also benefited immeasurably from efforts of many professionals at RSI who have worked with their clients to widen the envelope of Balanced Scorecard applications. In particular, Michael Contrada and Rebecca Steinfort synthesized the experiences of a diverse set of clients into a living body of knowledge within RSI. Laura Downing and Marissa Hendrickson showed us how to apply the Balanced Scorecard in a not-for-profit setting, the Massachusetts Special Olympics, to which they devote much of their personal time. RSI co-founders, Harry Lasker and David Lubin, helped us extend implementation into technology-based solutions, including the strategic feedback and learning system described in Chapter 11. This extension enabled us to embed the scorecard concept into the meetings, information systems, and everyday life of organizations. Our relationship with Gemini Consulting, particularly the support of Francis Gouillart, created further opportunities to expand the scorecard concept into complex transformational processes. From all these professional partnerships, we found the true meaning of learning organizations.

Several people played important roles in the preparation of the book. Carol Franco, director of the Harvard Business School Press, gave enthusias-

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tic endorsement and editorial assistance throughout the project. Hollis Heimbouch, our editor, gave invaluable and insightful comments on initial and subsequent drafts that significantly improved the book's organization and contents. Thoughtful comments from Ted Francavilla, Tom Valerio, and Professors William Bruns, Robert Simons, and Robin Cooper enabled us to make important improvements in the final manuscript.

Natalie Greenberg applied her usual painstaking and thorough copy-editing skills that, among many other benefits, eliminated our tendency toward repetition. Barbara Roth kept us on schedule by managing effectively the production process and gave excellent advice in art production and editing. Rose Fitzpatrick of Renaissance Solutions supported us by translating crude hand-written notes and roughly scrawled figures and tables into a polished final manuscript. Her patience through many iterations and refinements was a source of strength. To all these people we say thank you.

Robert S. Kaplan and David P. Norton  
Boston and Lincoln, Mass., February 1996

## NOTES

1. The companies included Advanced Micro Devices, American Standard, Apple Computer, Bell South, CIGNA, Conner Peripherals, Cray Research, DuPont, Electronic Data Systems, General Electric, Hewlett-Packard, and Shell Canada.
2. R. S. Kaplan, "Analog Devices: The Half-Life Metric," Harvard Business School Case #9-190-061, 1990.

# Chapter One

## Measurement and Management in the Information Age

IMAGINE ENTERING THE COCKPIT of a modern jet airplane and seeing only a single instrument there. How would you feel about boarding the plane after the following conversation with the pilot?

Q: I'm surprised to see you operating the plane with only a single instrument. What does it measure?

A: Airspeed. I'm really working on airspeed this flight.

Q: That's good. Airspeed certainly seems important. But what about altitude. Wouldn't an altimeter be helpful?

A: I worked on altitude for the last few flights and I've gotten pretty good on it. Now I have to concentrate on proper air speed.

Q: But I notice you don't even have a fuel gauge. Wouldn't that be useful?

A: You're right; fuel is significant, but I can't concentrate on doing too many things well at the same time. So on this flight I'm focusing on air speed. Once I get to be excellent at air speed, as well as altitude, I intend to concentrate on fuel consumption on the next set of flights.

We suspect that you would not board the plane after this discussion. Even if the pilot did an exceptional job on air speed, you would be worried about colliding with tall mountains or running low on fuel. Clearly, such a conversation is a fantasy since no pilot would dream of guiding a complex vehicle like a jet airplane through crowded air spaces, with only a single instrument. Skilled pilots are able to process information from a large number of indicators to navigate their aircraft. Yet navigating today's organizations through complex competitive environments is at least as complicated as flying a jet. Why should we believe that executives need anything less than a full battery of instrumentation for guiding their companies? Managers, like pilots, need instrumentation about many aspects of their environment and performance to monitor the journey toward excellent future outcomes.

The Balanced Scorecard (BSC) provides managers with the instrumentation they need to navigate to future competitive success. Today, organizations are competing in complex environments so that an accurate understanding of their goals and the methods for attaining those goals is vital. The Balanced Scorecard translates an organization's mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system. The Balanced Scorecard retains an emphasis on achieving financial objectives, but also includes the performance drivers of these financial objectives. The scorecard measures organizational performance across four balanced perspectives: financial, customers, internal business processes, and learning and growth. The BSC enables companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they need for future growth.

### **COMPETING IN THE INFORMATION AGE**

Companies are in the midst of a revolutionary transformation. Industrial age competition is shifting to information age competition. During the industrial age, from 1850 to about 1975, companies succeeded by how well they could capture the benefits from economies of scale and scope.<sup>1</sup> Technology mattered, but, ultimately, success accrued to companies that could embed the new technology into physical assets that offered efficient, mass production of standard products.

During the industrial age, financial control systems were developed in companies, such as General Motors, DuPont, Matsushita, and General

Electric, to facilitate and monitor efficient allocations of financial and physical capital.<sup>2</sup> A summary financial measure such as return-on-capital-employed (ROCE) could both direct a company's internal capital to its most productive use and monitor the efficiency by which operating divisions used financial and physical capital to create value for shareholders.

The emergence of the information era, however, in the last decades of the twentieth century, made obsolete many of the fundamental assumptions of industrial age competition. No longer could companies gain sustainable competitive advantage by merely deploying new technology into physical assets rapidly, and by excellent management of financial assets and liabilities.

The impact of the information era is even more revolutionary for service organizations than for manufacturing companies. Many service organizations, especially those in the transportation, utility, communication, financial, and health care industries, existed for decades in comfortable, noncompetitive environments. They had little freedom in entering new businesses and in pricing their output. In return, government regulators protected these companies from potentially more efficient or more innovative competitors, and set prices at a level that provided adequate returns on their investment and cost base. Clearly, the past two decades have witnessed major deregulatory and privatization initiatives for service companies throughout the world as information technology created the "seeds of destruction" of industrial-era regulated service companies.

The information age environment for both manufacturing and service organizations requires new capabilities for competitive success. The ability of a company to mobilize and exploit its tangible or invisible assets has become far more decisive than investing and managing physical, tangible assets.<sup>3</sup> Intangible assets enable an organization to:

- develop customer relationships that retain the loyalty of existing customers and enable new customer segments and market areas to be served effectively and efficiently;
- introduce innovative products and services desired by targeted customer segments;
- produce customized high-quality products and services at low cost and with short lead times;
- mobilize employee skills and motivation for continuous improvements in process capabilities, quality, and response times; and
- deploy information technology, data bases, and systems.

### *New Operating Environment*

Information age organizations are built on a new set of operating assumptions.

#### **CROSS-FUNCTIONS**

Industrial age organizations gained competitive advantage through specialization of functional skills: in manufacturing, purchasing, distribution, marketing, and technology. This specialization yielded substantial benefits, but, over time, maximization of functional specialization led to enormous inefficiencies, hand-offs between departments, and slow response processes. The information age organization operates with integrated business processes that cut across traditional business functions.<sup>4</sup> It combines the specialization benefits from functional expertise with the speed, efficiency, and quality of integrated business processes.

#### **LINKS TO CUSTOMERS AND SUPPLIERS**

Industrial age companies worked with customers and suppliers through arm's-length transactions. Information technology enables today's organizations to integrate supply, production, and delivery processes so that operations are triggered by customer orders, not by production plans that push products and services through the value chain. An integrated system, from customer orders upstream to raw material suppliers, enables all organizational units along the value chain to realize enormous improvements in cost, quality, and response times.

#### **CUSTOMER SEGMENTATION**

Industrial age companies prospered by offering low-cost but standardized products and services; recall Henry Ford's famous dictum, "They can have whatever color they want as long as it is black." Once consumers have satisfied their basic needs for clothing, shelter, food, and transportation, they want more individualized solutions to their wants. Information age companies must learn to offer customized products and services to its diverse customer segments, without paying the usual cost penalty for high-variety, low-volume operations.<sup>5</sup>

#### **GLOBAL SCALE**

Domestic borders are no longer a barrier to competition from more efficient and responsive foreign companies. Information age companies compete

against the best companies in the world. The large investments required for new products and services may require customers worldwide to provide adequate returns. Information age companies must combine the efficiencies and competitive honing of global operations with marketing sensitivity to local customers.

### **INNOVATION**

Product life cycles continue to shrink. Competitive advantage in one generation of a product's life is no guarantee of product leadership in the next technological platform.<sup>6</sup> Companies that compete in industries with rapid technological innovation must be masters at anticipating customers' future needs, devising radical new product and service offerings, and rapidly deploying new product technologies into efficient operating and service delivery processes. Even for companies in industries with relatively long product-life cycles, continuous improvement in processes and product capabilities is critical for long-term success.

### **KNOWLEDGE WORKERS**

Industrial age companies created sharp distinctions between two groups of employees. The intellectual elite—managers and engineers—used their analytical skills to design products and processes, select and manage customers, and supervise day-to-day operations. The second group was composed of the people who actually produced the products and delivered the services. This direct labor work force was a principal factor of production for industrial age companies, but used only their physical capabilities, not their minds. They performed tasks and processes under direct supervision of white-collar engineers and managers. At the end of the twentieth century, automation and productivity have reduced the percentage of people in the organization who perform traditional work functions, while competitive demands have increased the number of people performing analytic functions: engineering, marketing, management, and administration. Even individuals still involved in direct production and service delivery are valued for their suggestions on how to improve quality, reduce costs, and decrease cycle times. As the plant manager of a refurbished Ford engine plant declared, "The machines are designed to run automatically. The people's job is to think, to problem solve, to ensure quality, not to watch the parts go by. Here, people are viewed as problem-solvers, not variable costs."<sup>7</sup>

Now all employees must contribute value by what they know and by the information they can provide. Investing in, managing, and exploiting the knowledge of every employee have become critical to the success of information age companies.

As organizations attempt to transform themselves to compete successfully in the future, they are turning to a variety of improvement initiatives:

- Total quality management
- Just-in-time (JIT) production and distribution systems
- Time-based competition
- Lean production/lean enterprise
- Building customer-focused organizations
- Activity-based cost management
- Employee empowerment
- Reengineering

Each of these improvement programs has had demonstrated success stories, champions, gurus, and consultants. Each competes for the time, energy, and resources of senior executives. And each offers the promise of breakthrough performance and enhanced value creation for many, if not all, of a company's constituencies: shareholders, customers, suppliers, and employees. The goal of these programs is not incremental improvement or survival. The goal is discontinuous performance, enabling an organization to succeed in the new information age competition.

But many of these improvement programs have yielded disappointing results. The programs are often fragmented. They may not be linked to the organization's strategy, nor to achieving specific financial and economic outcomes. Breakthroughs in performance require major change, and that includes changes in the measurement and management systems used by an organization. Navigating to a more competitive, technological, and capability-driven future cannot be accomplished merely by monitoring and controlling financial measures of past performance.

### **TRADITIONAL FINANCIAL ACCOUNTING MODEL**

All the new programs, initiatives, and change management processes of information age companies are being implemented in an environment governed

by quarterly and annual financial reports. The financial-reporting process remains anchored to an accounting model developed centuries ago for an environment of arm's-length transactions between independent entities. This venerable financial accounting model is still being used by information age companies as they attempt to build internal assets and capabilities, and to forge linkages and strategic alliances with external parties.<sup>8</sup>

Ideally, this financial accounting model should have been expanded to incorporate the valuation of a company's intangible and intellectual assets, such as high-quality products and services, motivated and skilled employees, responsive and predictable internal processes, and satisfied and loyal customers. Such a valuation of intangible assets and company capabilities would be especially helpful since, for information age companies, these assets are more critical to success than traditional physical and tangible assets. If intangible assets and company capabilities could be valued within the financial accounting model, organizations that enhanced these assets and capabilities could communicate this improvement to employees, shareholders, creditors, and communities. Conversely, when companies depleted their stock of intangible assets and capabilities, the negative effects could be reflected immediately in the income statement. Realistically, however, difficulties in placing a reliable financial value on such assets as the new product pipeline; process capabilities; employee skills, motivation, and flexibility; customer loyalty; data bases; and systems will likely preclude them from ever being recognized in organizational balance sheets. Yet these are the very assets and capabilities that are critical for success in today's and tomorrow's competitive environment.

### **THE BALANCED SCORECARD**

The collision between the irresistible force to build long-range competitive capabilities and the immovable object of the historical-cost financial accounting model has created a new synthesis: the Balanced Scorecard. The Balanced Scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation.

The Balanced Scorecard complements financial measures of past performance with measures of the drivers of future performance. The objectives and measures of the scorecard are derived from an organization's vision and strategy. The objectives and measures view organizational performance from four perspectives: financial, customer, internal business process, and learning and growth. These four perspectives provide the framework for the Balanced Scorecard (see Figure 1-1).

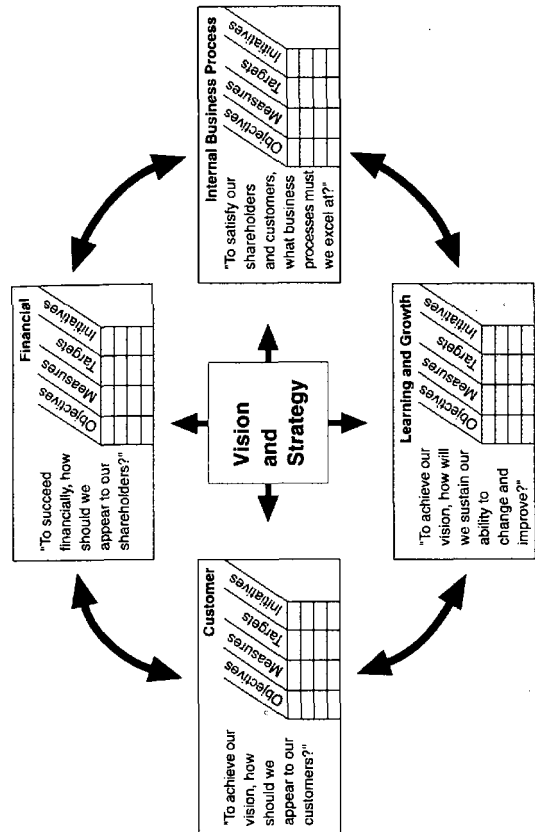
The Balanced Scorecard expands the set of business unit objectives beyond summary financial measures. Corporate executives can now measure how their business units create value for current and future customers and how they must enhance internal capabilities and the investment in people, systems, and procedures necessary to improve future performance. The Balanced Scorecard captures the critical value-creation activities created by skilled, motivated organizational participants. While retaining, via the financial perspective, an interest in short-term performance, the Balanced Scorecard clearly reveals the value drivers for superior long-term financial and competitive performance.

### *The Balanced Scorecard as a Management System*

Many companies already have performance measurement systems that incorporate financial and nonfinancial measures. What is new about a call for a "balanced" set of measures? While virtually all organizations do indeed have financial and nonfinancial measures, many use their nonfinancial measures for local improvements, at their front-line and customer-facing operations. Aggregate financial measures are used by senior managers as if these measures could summarize adequately the results of operations performed by their lower and mid-level employees. These organizations are using their financial and nonfinancial performance measures only for tactical feedback and control of short-term operations.

The Balanced Scorecard emphasizes that financial and nonfinancial measures must be part of the information system for employees at all levels of the organization. Front-line employees must understand the financial consequences of their decisions and actions; senior executives must understand the drivers of long-term financial success. The objectives and the measures for the Balanced Scorecard are more than just a somewhat ad hoc collection of financial and nonfinancial performance measures; they are derived from a top-down process driven by the mission and strategy

Figure 1-1 The Balanced Scorecard Provides a Framework to Translate a Strategy into Operational Terms



Source: Robert S. Kaplan and David P. Norton, "Using the Balanced Scorecard as a Strategic Management System," Harvard Business Review (January-February 1996): 76. Reprinted with permission.