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Your strategy's
brilliant—but can you
execute it?

Focusing Your Organization on Strategy—with the Balanced Scorecard, 2nd Edition

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Collection Overview

The Balanced Scorecard has transformed companies around the globe. This revolutionary performance management system has been helping top executives set corporate strategy and objectives—and translate them into a coherent set of measures—since 1992.

What makes the Balanced Scorecard so powerful? It transforms strategy into a continuous process owned by every employee, not just top managers. It also enables you to communicate high-level goals down to all organizational levels. Employees know not only *what* to do, but *why*.

But most important, the Balanced Scorecard doesn't treat strategy from only a financial perspective; it augments financial measures with objectives and metrics in three additional "perspectives"—customer relationships, internal processes, and learning and growth.

These less tangible areas are notoriously difficult to measure and influence. In 2004, Robert Kaplan and David Norton augmented the Scorecard methodology to include new tools that enable you to further unleash the power of intangible assets. In the article "Measuring the Strategic Readiness of Intangible Assets," they describe how to assess how prepared your company's people, systems, and culture are to carry out your strategy—and turn it into long-term tangible results.

The four articles in this collection, all written by Kaplan and Norton, give you the tools to start building and using a Balanced Scorecard in your firm.

The Articles

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4 [Putting the Balanced Scorecard to Work](#)

by Robert S. Kaplan and David P. Norton

Your Balanced Scorecard provides a top-down description of your company's strategy and your assumptions about the corporate objectives and measures needed to implement that strategy.

To begin building your scorecard, ask: "If we successfully implement our strategy, how will we look different to our shareholders and customers? How will our internal processes change? What will happen to our ability to innovate and grow? What are each scorecard perspective's critical success factors? What metrics will tell us whether we're addressing those factors as planned?"

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21 [Measuring the Strategic Readiness of Intangible Assets](#)

by Robert S. Kaplan and David P. Norton

It's not enough to clarify your strategy; you must measure your intangible assets' strategic readiness—how well your employees' skills, information and technical systems, and leadership and culture align with your strategy. These intangible assets directly enhance the internal processes that generate revenue needed to meet your long-term financial goals.

To measure strategic readiness, identify the intangible assets you need to perform the internal processes *most* critical to your strategy. Then assess your current capabilities in all these areas, identifying changes needed to improve alignment.

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You've defined strategic objectives and measures and measured your intangible assets' strategic readiness. Now link employees' everyday actions to your company's long-term goals: translate your vision into metrics everyone can understand; communicate high-level goals and link them to individual performance and compensation; and use scorecard data to test and revise your theories about which actions generate which results.

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51 [Having Trouble with Your Strategy? Then Map It](#)

by Robert S. Kaplan and David P. Norton

To execute your strategy, you must communicate it throughout your organization so employees see how their everyday actions support—or hamper—the strategy. How to send a clear, compelling message? Use a strategy map—a one-page, graphic depiction of the cause-and-effect connections among your Balanced Scorecard's four perspectives. Concise and clear, your strategy map tells employees throughout your organization how to turn resources (especially intangible ones) into the tangible results promised by your strategy.

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A list of related materials, with annotations to guide further exploration of the article's ideas and applications

Putting the Balanced Scorecard to Work

The Idea in Brief

What makes a balanced scorecard special? Four characteristics stand out:

1. It is a top-down reflection of the company's mission and strategy. By contrast, the measures most companies track are bottom-up: deriving from local activities or ad hoc processes, they are often irrelevant to the overall strategy.

2. It is forward-looking. It addresses current and future success. Traditional financial measures describe how the company performed during the last reporting period—without indicating how managers can improve performance during the next.

3. It integrates external and internal measures. This helps managers see where they have made trade-offs between performance measures in the past, and helps ensure that future success on one measure does not come at the expense of another.

4. It helps you focus. Many companies track more measures than they can possibly use. But a balanced scorecard requires managers to reach agreement on only those measures that are most critical to the success of the company's strategy. Fifteen to twenty distinct measures are usually enough, each measure custom-designed for the unit to which it applies.

The Idea in Practice

Linking measurements to strategy is the heart of a successful scorecard development process. The three key questions to ask here:

1. If we succeed with our vision and strategy, how will we look different
 - to our shareholders and customers?
 - in terms of our internal processes?
 - in terms of our ability to innovate and grow?
2. What are the critical success factors in each of the four scorecard perspectives?
3. What are the key measurements that will tell us whether we're addressing those success factors as planned?

The balanced scorecard also brings an organizational focus to the variety of local change programs under way in a company at any given time. As the benchmark against which all new projects are evaluated, the scorecard functions as more than just a measurement system. In the words of FMC Corp. executive Larry Brady, it becomes "the cornerstone of the way you run the business," that is, "the core of the management system" itself.

► Example:

Rockwater, an underwater engineering and construction firm, crafted a five-pronged strategy: to provide services that surpassed customers' expectations and needs; to achieve high levels of customer satisfaction; to make continuous improvements in safety, equipment reliability, responsiveness, and cost effectiveness; to recruit and retain high-quality employees; and to realize shareholder expectations. Using the balanced scorecard, Rockwater's senior management translated this strategy into tangible goals and actions.

- The financial measures they chose included return-on-capital employed and cash flow, because shareholders had indicated a preference for short-term results.
- Customer measures focused on those clients most interested in a high value-added relationship.
- The company introduced new benchmarks that emphasized the integration of key internal processes. It also added a safety index as a means of controlling indirect costs associated with accidents.
- Learning and growth targets emphasized the percentage of revenue coming from new services and the rate of improvement of safety and rework measures.

What do companies like Rockwater, Apple Computer, and Advanced Micro Devices have in common? They're using the scorecard to measure performance and set strategy.

Putting the Balanced Scorecard to Work

by Robert S. Kaplan and David P. Norton

Today's managers recognize the impact that measures have on performance. But they rarely think of measurement as an essential part of their strategy. For example, executives may introduce new strategies and innovative operating processes intended to achieve breakthrough performance, then continue to use the same short-term financial indicators they have used for decades, measures like return-on-investment, sales growth, and operating income. These managers fail not only to introduce new measures to monitor new goals and processes but also to question whether or not their old measures are relevant to the new initiatives.

Effective measurement, however, must be an integral part of the management process. The balanced scorecard, first proposed in the January-February 1992 issue of HBR ("The Balanced Scorecard—Measures that Drive Performance"), provides executives with a comprehensive framework that translates a company's strategic objectives into a coherent set of performance measures. Much more than

a measurement exercise, the balanced scorecard is a management system that can motivate breakthrough improvements in such critical areas as product, process, customer, and market development.

The scorecard presents managers with four different perspectives from which to choose measures. It complements traditional financial indicators with measures of performance for customers, internal processes, and innovation and improvement activities. These measures differ from those traditionally used by companies in a few important ways:

Clearly, many companies already have myriad operational and physical measures for local activities. But these local measures are bottom-up and derived from ad hoc processes. The scorecard's measures, on the other hand, are grounded in an organization's strategic objectives and competitive demands. And, by requiring managers to select a limited number of critical indicators within each of the four perspectives, the scorecard helps focus this strategic vision.

In addition, while traditional financial measures report on what happened last period without indicating how managers can improve performance in the next, the scorecard functions as the cornerstone of a company's current *and* future success.

Moreover, unlike conventional metrics, the information from the four perspectives provides balance between external measures like operating income and internal measures like new product development. This balanced set of measures both reveals the trade-offs that managers have already made among performance measures and encourages them to achieve their goals in the future without making trade-offs among key success factors.

Finally, many companies that are now attempting to implement local improvement programs such as process reengineering, total quality, and employee empowerment lack a sense of integration. The balanced scorecard can serve as the focal point for the organization's efforts, defining and communicating priorities to managers, employees, investors, even customers. As a senior executive at one major company said, "Previously, the one-year budget was our primary management planning device. The balanced scorecard is now used as the language, the benchmark against which all new projects and businesses are evaluated."

The balanced scorecard is not a template that can be applied to businesses in general or even industrywide. Different market situations, product strategies, and competitive environments require different scorecards. Business units devise customized scorecards to fit their mission, strategy, technology, and culture. In fact, a critical test of a scorecard's success is its transparency: from the 15 to 20 scorecard measures, an observer should be able to see through to the business unit's competitive strategy. A few examples will illustrate how the scorecard uniquely combines management and measurement in different companies.

Rockwater: Responding to a Changing Industry

Rockwater, a wholly owned subsidiary of Brown & Root/Halliburton, a global engineering and construction company, is a worldwide leader in underwater engineering and construction. Norman Chambers, hired as CEO in late 1989, knew that the industry's competitive world had changed dramatically. "In the

1970s, we were a bunch of guys in wet suits diving off barges into the North Sea with burning torches," Chambers said. But competition in the subsea contracting business had become keener in the 1980s, and many smaller companies left the industry. In addition, the focus of competition had shifted. Several leading oil companies wanted to develop long-term partnerships with their suppliers rather than choose suppliers based on low-price competition.

With his senior management team, Chambers developed a vision: "As our customers' preferred provider, we shall be the industry leader in providing the highest standards of safety and quality to our clients." He also developed a strategy to implement the vision. The five elements of that strategy were: services that surpass customers' expectations and needs; high levels of customer satisfaction; continuous improvement of safety, equipment reliability, responsiveness, and cost effectiveness; high-quality employees; and realization of shareholder expectations. Those elements were in turn developed into strategic objectives (see the chart "Rockwater's Strategic Objectives"). If, however, the strategic objectives were to create value for the company, they had to be translated into tangible goals and actions.

Rockwater's senior management team transformed its vision and strategy into the balanced scorecard's four sets of performance measures (see the chart "Rockwater's Balanced Scorecard"):

Financial Measures: The financial perspective included three measures of importance to the shareholder. Return-on-capital-employed and cash flow reflected preferences for short-term results, while forecast reliability signaled the corporate parent's desire to reduce the historical uncertainty caused by unexpected variations in performance. Rockwater management added two financial measures. Project profitability provided focus on the project as the basic unit for planning and control, and sales backlog helped reduce uncertainty of performance.

Customer Satisfaction: Rockwater wanted to recognize the distinction between its two types of customers: Tier I customers, oil companies that wanted a high value-added relationship, and Tier II customers, those that chose suppliers solely on the basis of price. A

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price index, incorporating the best available intelligence on competitive position, was included to ensure that Rockwater could still retain Tier II customers' business when required by competitive conditions.

The company's strategy, however, was to emphasize value-based business. An independent organization conducted an annual survey to rank customers' perceptions of Rockwater's services compared to those of its competitors. In addition, Tier I customers were asked to supply monthly satisfaction and performance ratings. Rockwater executives felt that implementing these ratings gave them a direct tie to their customers and a level of market feedback unsurpassed in most industries. Finally, market share by key accounts provided objective evidence that improvements in customer satisfaction were being translated into tangible benefits.

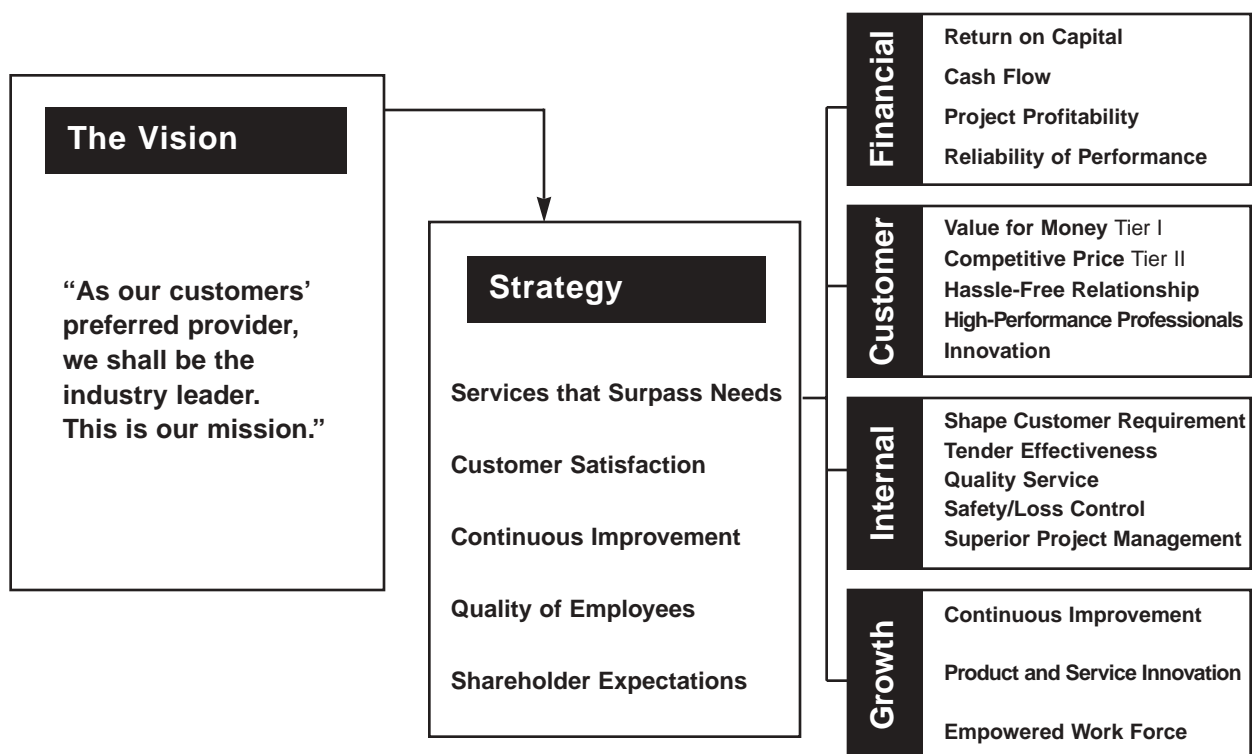
Internal Processes: To develop measures of internal processes, Rockwater executives defined the life cycle of a project from launch (when a customer need was recognized) to completion (when the customer need had

been satisfied). Measures were formulated for each of the five business-process phases in this project cycle (see the chart "How Rockwater Fulfills Customer Needs"):

- *Identify*: number of hours spent with prospects discussing new work;
- *Win*: tender success rate;
- *Prepare and Deliver*: project performance effectiveness index, safety/loss control, rework;
- *Closeout*: length of project closeout cycle.

The internal business measures emphasized a major shift in Rockwater's thinking. Formerly, the company stressed performance for each functional department. The new focus emphasized measures that integrated key business processes. The development of a comprehensive and timely index of project performance effectiveness was viewed as a key core competency for the company. Rockwater felt that safety was also a major competitive factor. Internal studies had revealed that the indirect costs from an accident could be 5 to 50 times the direct costs. The scorecard included a safety index, derived from a comprehensive safety measurement system, that could identify and

Rockwater's Strategic Objectives



classify all undesired events with the potential for harm to people, property, or process.

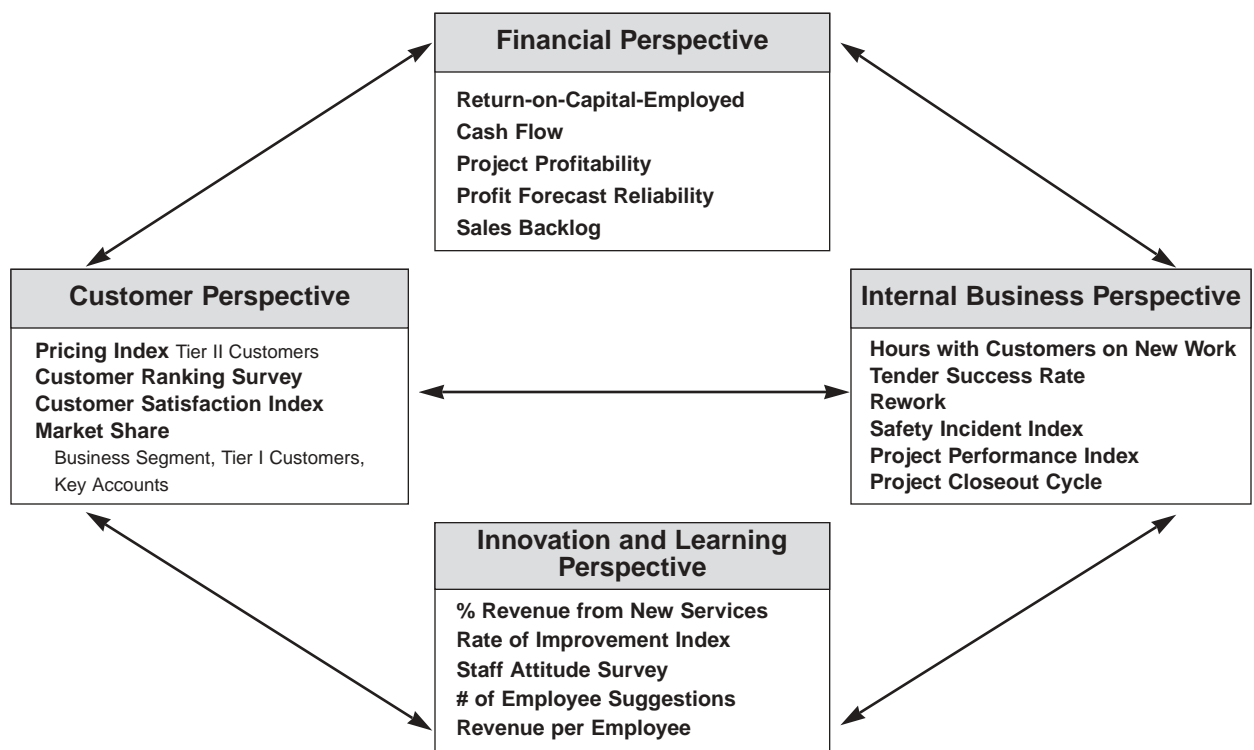
The Rockwater team deliberated about the choice of metric for the identification stage. It recognized that hours spent with key prospects discussing new work was an input or process measure rather than an output measure. The management team wanted a metric that would clearly communicate to all members of the organization the importance of building relationships with and satisfying customers. The team believed that spending quality time with key customers was a prerequisite for influencing results. This input measure was deliberately chosen to educate employees about the importance of working closely to identify and satisfy customer needs.

Innovation and Improvement: The innovation and learning objectives are intended to drive improvement in financial, customer, and internal process performance. At Rockwater, such improvements came from product and service innovation that would create new sources of revenue and market expansion, as well as from continuous improvement in in-

ternal work processes. The first objective was measured by percent revenue from new services and the second objective by a continuous improvement index that represented the rate of improvement of several key operational measures, such as safety and rework. But in order to drive both product/service innovation and operational improvements, a supportive climate of empowered, motivated employees was believed necessary. A staff attitude survey and a metric for the number of employee suggestions measured whether or not such a climate was being created. Finally, revenue per employee measured the outcomes of employee commitment and training programs.

The balanced scorecard has helped Rockwater's management emphasize a process view of operations, motivate its employees, and incorporate client feedback into its operations. It developed a consensus on the necessity of creating partnerships with key customers, the importance of order-of-magnitude reductions in safety-related incidents, and the need for improved management at every phase of multi-year projects. Chambers sees the scorecard as

Rockwater's Balanced Scorecard



an invaluable tool to help his company ultimately achieve its mission: to be number one in the industry.

Apple Computer: Adjusting Long-Term Performance

Apple Computer developed a balanced scorecard to focus senior management on a strategy that would expand discussions beyond gross margin, return on equity, and market share. A small steering committee, intimately familiar with the deliberations and strategic thinking of Apple’s Executive Management Team, chose to concentrate on measurement categories within each of the four perspectives and to select multiple measurements within each category. For the financial perspective, Apple emphasized shareholder value; for the customer perspective, market share and customer satisfaction; for the internal process perspective, core competencies; and, finally, for the innovation and improvement perspective, employee attitudes. Apple’s management stressed these categories in the following order:

Customer Satisfaction: Historically, Apple had been a technology- and product-focused company that competed by designing better computers. Customer satisfaction metrics are just being introduced to orient employees toward becoming a customer-driven company. J.D. Power & Associates, a customer-survey company, now works for the computer industry. However, because it recognized that its customer base was not homogeneous, Apple felt that it had to go beyond J.D. Power & Associates and develop its own independent surveys in order to track its key market segments around the world.

Core Competencies: Company executives wanted employees to be highly focused on a

few key competencies: for example, user-friendly interfaces, powerful software architectures, and effective distribution systems. However, senior executives recognized that measuring performance along these competency dimensions could be difficult. As a result, the company is currently experimenting with obtaining quantitative measures of these hard-to-measure competencies.

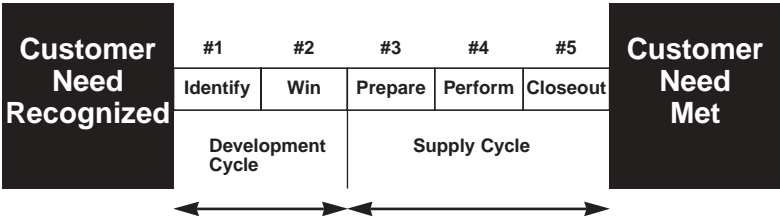
Employee Commitment and Alignment: Apple conducts a comprehensive employee survey in each of its organizations every two years; surveys of randomly selected employees are performed more frequently. The survey questions are concerned with how well employees understand the company’s strategy as well as whether or not they are asked to deliver results that are consistent with that strategy. The results of the survey are displayed in terms of both the actual level of employee responses and the overall trend of responses.

Market Share: Achieving a critical threshold of market share was important to senior management not only for the obvious sales growth benefits but also to attract and retain software developers to Apple platforms.

Shareholder Value: Shareholder value is included as a performance indicator, even though this measure is a result—not a driver—of performance. The measure is included to offset the previous emphasis on gross margin and sales growth, measures that ignored the investments required today to generate growth for tomorrow. In contrast, the shareholder value metric quantifies the impact of proposed investments for business creation and development. The majority of Apple’s business is organized on a functional basis—sales, product design, and worldwide manufacturing and operations—so shareholder value can be calculated only for the entire company instead of at a decentralized level. The measure, however, helps senior managers in each major organizational unit assess the impact of their activities on the entire company’s valuation and evaluate new business ventures.

While these five performance indicators have only recently been developed, they have helped Apple’s senior managers focus their strategy in a number of ways. First of all, the balanced scorecard at Apple serves primarily as a planning device, instead of as a control device. To put it another way, Apple uses the

How Rockwater Fulfills Customer Needs



Building a Balanced Scorecard

Each organization is unique and so follows its own path for building a balanced scorecard. At Apple and AMD, for instance, a senior finance or business development executive, intimately familiar with the strategic thinking of the top management group, constructed the initial scorecard without extensive deliberations. At Rockwater, however, senior management had yet to define sharply the organization's strategy, much less the key performance levers that drive and measure the strategy's success.

Companies like Rockwater can follow a systematic development plan to create the balanced scorecard and encourage commitment to the scorecard among senior and mid-level managers. What follows is a typical project profile:

1. Preparation

The organization must first define the business unit for which a top-level scorecard is appropriate. In general, a scorecard is appropriate for a business unit that has its own customers, distribution channels, production facilities, and financial performance measures.

2. Interviews: First Round

Each senior manager in the business unit—typically between 6 and 12 executives—receives background material on the balanced scorecard as well as internal documents that describe the company's vision, mission, and strategy.

The balanced scorecard facilitator (either an outside consultant or the company executive who organizes the effort) conducts interviews of approximately 90 minutes each with the senior managers to obtain their

input on the company's strategic objectives and tentative proposals for balanced scorecard measures. The facilitator may also interview some principal shareholders to learn about their expectations for the business unit's financial performance, as well as some key customers to learn about their performance expectations for top-ranked suppliers.

3. Executive Workshop: First Round

The top management team is brought together with the facilitator to undergo the process of developing the scorecard (see the chart "Begin by Linking Measurements to Strategy"). During the workshop, the group debates the proposed mission and strategy statements until a consensus is reached. The group then moves from the mission and strategy statement to answer the question, "If I succeed with my vision and strategy, how will my performance differ for shareholders; for customers; for internal business processes; for my ability to innovate, grow, and improve?"

Videotapes of interviews with shareholder and customer representatives can be shown to provide an external perspective to the deliberations. After defining the key success factors, the group formulates a preliminary balanced scorecard containing operational measures for the strategic objectives. Frequently, the group proposes far more than four or five measures for each perspective. At this time, narrowing the choices is not critical, though straw votes can be taken to see whether or not some of the proposed measures are viewed as low priority by the group.

4. Interviews: Second Round

The facilitator reviews, consolidates, and documents the output from the executive workshop and interviews each senior executive about the tentative balanced scorecard. The facilitator also seeks opinions about issues involved in implementing the scorecard.

5. Executive Workshop: Second Round

A second workshop, involving the senior management team, their direct subordinates, and a larger number of middle managers, debates the organization's vision, strategy statements, and the tentative scorecard. The participants, working in groups, comment on the proposed measures, link the various change programs under way to the measures, and start to develop an implementation plan. At the end of the workshop, participants are asked to formulate stretch objectives for each of the proposed measures, including targeted rates of improvement.

6. Executive Workshop: Third Round

The senior executive team meets to come to a final consensus on the vision, objectives, and measurements developed in the first two workshops; to develop stretch targets for each measure on the scorecard; and to identify preliminary action programs to achieve the targets. The team must agree on an implementation program, including communicating the scorecard to employees, integrating the scorecard into a management philosophy, and developing an information system to support the scorecard.

7. Implementation

A newly formed team develops an implementation plan for the scorecard, including linking the measures to databases and information systems, communicating the balanced scorecard throughout the organization, and encouraging and facilitating the development of second-level metrics for decentralized units. As a

result of this process, for instance, an entirely new executive information system that links top-level business unit metrics down through shop floor and site-specific operational measures could be developed.

8. Periodic Reviews

Each quarter or month, a blue book of information on the balanced

scorecard measures is prepared for both top management review and discussion with managers of decentralized divisions and departments. The balanced scorecard metrics are revisited annually as part of the strategic planning, goal setting, and resource allocation processes.

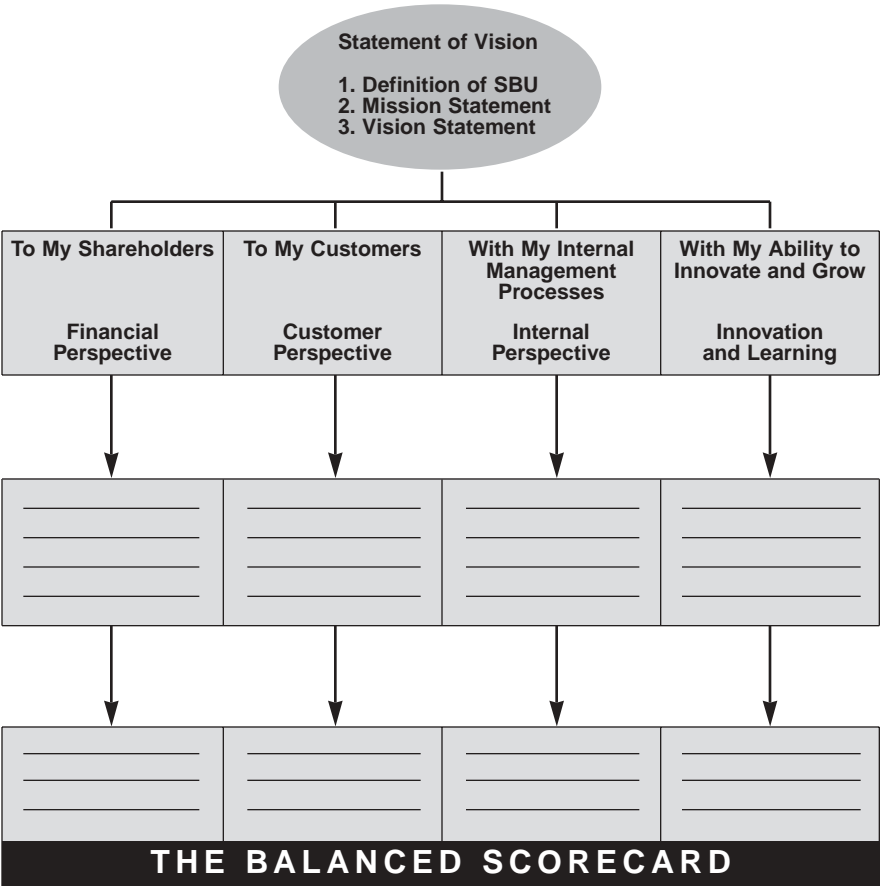
Begin by Linking Measurements to Strategy

What is My Vision of the Future?

If My Vision Succeeds, How Will I Differ?

What Are the Critical Success Factors?

What Are the Critical Measurements?



measures to adjust the “long wave” of corporate performance, not to drive operating changes. Moreover, the metrics at Apple, with the exception of shareholder value, can be driven both horizontally and vertically into each functional organization. Considered vertically, each individual measure can be broken down into its component parts in order to evaluate how each part contributes to the functioning of the whole. Thought of horizontally, the measures can identify how, for example, design and manufacturing contribute to an area such as customer satisfaction. In addition, Apple has found that its balanced scorecard has helped develop a language of measurable outputs for how to launch and leverage programs.

The five performance indicators at Apple are benchmarked against best-in-class organizations. Today they are used to build business plans and are incorporated into senior executives’ compensation plans.

Driving the Process of Change

The experiences of these companies and others reveal that the balanced scorecard is most successful when it is used to drive the process of change. Rockwater, for instance, came into existence after the merger of two different organizations. Employees came from different cultures, spoke different languages, and had different operating experiences and backgrounds. The balanced scorecard helped the company focus on what it had to do well in order to become the industry leader.

Similarly, Joseph De Feo, chief executive of Service Businesses, one of the three operating divisions of Barclays Bank, had to transform what had been a captive, internal supplier of services into a global competitor. The scorecard highlighted areas where, despite apparent consensus on strategy, there still was considerable disagreement about how to make the strategy operational. With the help of the scorecard, the division eventually achieved consensus concerning the highest priority areas for achievement and improvement and identified additional areas that needed attention, such as quality and productivity. De Feo assessed the impact of the scorecard, saying, “It helped us to drive major change, to become more market oriented, throughout our organization. It provided a shared understanding of our goals and what it took to achieve them.”

Analog Devices, a semiconductor company, served as the prototype for the balanced scorecard and now uses it each year to update the targets and goals for division managers. Jerry Fishman, president of Analog, said, “At the beginning, the scorecard drove significant and considerable change. It still does when we focus attention on particular areas, such as the gross margins on new products. But its main impact today is to help sustain programs that our people have been working on for years.” Recently, the company has been attempting to integrate the scorecard metrics with *hoshin* planning, a procedure that concentrates an entire company on achieving one or two key objectives each year. Analog’s *hoshin* objectives have included customer service and new product development, for which measures already exist on the company’s scorecard.

But the scorecard isn’t always the impetus for such dramatic change. For example, AMD’s scorecard has yet to have a significant impact because company management didn’t

The scorecard enables managers to see the breadth and totality of company operations.

Advanced Micro Devices: Consolidating Strategic Information

Advanced Micro Devices (AMD), a semiconductor company, executed a quick and easy transition to a balanced scorecard. It already had a clearly defined mission, strategy statement, and shared understanding among senior executives about its competitive niche. It also had many performance measures from many different sources and information systems. The balanced scorecard consolidated and focused these diverse measures into a quarterly briefing book that contained seven sections: financial measures; customer-based measures, such as on-time delivery, lead time, and performance-to-schedule; measures of critical business processes in wafer fabrication, assembly and test, new product development, process technology development (e.g., submicron etching precision), and, finally, measures for corporate quality. In addition, organizational learning was measured by imposing targeted rates of improvements for key operating parameters, such as cycle time and yields by process.

At present, AMD sees its scorecard as a systematic repository for strategic information that facilitates long-term trend analysis for planning and performance evaluation.

use it to drive the change process. Before turning to the scorecard, senior managers had already formulated and gained consensus for the company's mission, strategy, and key performance measures. AMD competes in a single industry segment. The top 12 managers are intimately familiar with the markets, engineering, technology, and other key levers in this segment. The summary and aggregate information in the scorecard were neither new nor surprising to them. And managers of decentralized production units also already had a significant amount of information about their own operations. The scorecard did enable them to see the breadth and totality of company operations, enhancing their ability to become better managers for the entire company. But, on balance, the scorecard could only encapsulate knowledge that managers in general had already learned.

AMD's limited success with the balanced scorecard demonstrates that the scorecard has its greatest impact when used to drive a change process. Some companies link compensation of senior executives to achieving stretch targets for the scorecard measures. Most are attempting to translate the scorecard into operational measures that become the focus for improvement activities in local units. The scorecard is not just a measurement system; it is a management system to motivate breakthrough competitive performance.

Implementing the Balanced Scorecard at FMC Corporation: An Interview with Larry D. Brady

FMC Corporation is one of the most diversified companies in the United States, producing more than 300 product lines in 21 divisions organized into 5 business segments: industrial chemicals, performance chemicals, precious metals, defense systems, and machinery and equipment. Based in Chicago, FMC has worldwide revenues in excess of \$4 billion.

Since 1984, the company has realized annual returns-on-investment of greater than 15%. Coupled with a major recapitalization in 1986, these returns resulted in an increasing shareholder value that significantly exceeded industrial averages. In 1992, the company completed a strategic review to determine the best future course to maximize shareholder value. As a result of that review, FMC adopted a growth strategy to complement its strong operating performance. This strategy required a greater external focus and appreciation of operating trade-offs.

To help make the shift, the company decided to use the balanced scorecard. In this interview conducted by Robert S. Kaplan, Larry D. Brady, executive vice president of FMC, talks about the company's experience implementing the scorecard.

Robert S. Kaplan: *What's the status of the balanced scorecard at FMC?*

Larry D. Brady: Although we are just completing the pilot phase of implementation, I think that the balanced scorecard is likely to be-

The Scorecard's Impact on External Reporting

Several managers have asked whether or not the balanced scorecard is applicable to external reporting. If the scorecard is indeed a driver of long-term performance, shouldn't this information be relevant to the investment community?

In fact, the scorecard does not translate easily to the investment community. A scorecard makes sense primarily for business units and divisions with a well-defined strategy. Most companies have several divisions, each with its own mission and strategy, whose scorecards cannot be aggregated into an overall corporate scorecard. And if the scorecard does indeed provide a

transparent vision into a unit's strategy, then the information, even the measures being used, might be highly sensitive data that could reveal much of value to competitors. But most important, as a relatively recent innovation, the scorecard would benefit from several years of experimentation within companies before it becomes a systematic part of reporting to external constituencies.

Even if the scorecard itself were better suited to external reporting, at present the financial community itself shows little interest in making the change from financial to strategic reporting. One company president

has found the outside financial community leery of the principles that ground the scorecard: "We use the scorecard more with our customers than with our investors. The financial community is skeptical about long-term indicators and occasionally tells us about some empirical evidence of a negative correlation between stock prices and attention to total quality and internal processes."

However, the investment community has begun to focus on some key metrics of new product performance. Could this be an early sign of a shift to strategic thinking?

“The diversity of initiatives, each with its own slogan, created confusion and mixed signals.”

come the cornerstone of the management system at FMC. It enables us to translate business unit strategies into a measurement system that meshes with our entire system of management.

For instance, one manager reported that while his division had measured many operating variables in the past, now, because of the scorecard, it had chosen 12 parameters as the key to its strategy implementation. Seven of these strategic variables were entirely new measurements for the division. The manager interpreted this finding as verifying what many other managers were reporting: the scorecard improved the understanding and consistency of strategy implementation. Another manager reported that, unlike monthly financial statements or even his strategic plan, if a rival were to see his scorecard, he would lose his competitive edge.

It's rare to get that much enthusiasm among divisional managers for a corporate initiative. What led you and them to the balanced scorecard?

FMC had a clearly defined mission: to become our customers' most valued supplier. We had initiated many of the popular improvement programs: total quality, managing by objectives, organizational effectiveness, building a high-performance organization. But these efforts had not been effective. Every time we promoted a new program, people in each division would sit back and ask, “How is that supposed to fit in with the six other things we're supposed to be doing?”

Corporate staff groups were perceived by operating managers as pushing their pet programs on divisions. The diversity of initiatives, each with its own slogan, created confusion and mixed signals about where to concentrate and how the various programs interrelated. At the end of the day, with all these new initiatives, we were still asking division managers to deliver consistent short-term financial performance.

What kinds of measures were you using?

The FMC corporate executive team, like most corporate offices, reviews the financial performance of each operating division monthly. As a highly diversified company that redeploys assets from mature cash generators to divisions with significant growth opportunities, the return-on-capital-employed (ROCE) measure was especially important for us. We were one of the few companies to inflation-adjust our internal financial measures so that we

could get a more accurate picture of a division's economic profitability.

At year-end, we rewarded division managers who delivered predictable financial performance. We had run the company tightly for the past 20 years and had been successful. But it was becoming less clear where future growth would come from and where the company should look for breakthroughs into new areas. We had become a high return-on-investment company but had less potential for further growth. It was also not at all clear from our financial reports what progress we were making in implementing long-term initiatives. Questions from the corporate office about spending versus budget also reinforced a focus on the short-term and on internal operations.

But the problem went even deeper than that. Think about it. What is the value added of a corporate office that concentrates on making division managers accountable for financial results that can be added up across divisions? We combine a business that's doing well with a business that's doing poorly and have a total business that performs at an average level. Why not split the company up into independent companies and let the market reallocate capital? If we were going to create value by managing a group of diversified companies, we had to understand and provide strategic focus to their operations. We had to be sure that each division had a strategy that would give it sustainable competitive advantage. In addition, we had to be able to assess, through measurement of their operations, whether or not the divisions were meeting their strategic objectives.

If you're going to ask a division or the corporation to change its strategy, you had better change the system of measurement to be consistent with the new strategy.

How did the balanced scorecard emerge as the remedy to the limitations of measuring only short-term financial results?

In early 1992, we assembled a task force to integrate our various corporate initiatives. We wanted to understand what had to be done differently to achieve dramatic improvements in overall organizational effectiveness. We acknowledged that the company may have become too short-term and too internally focused in its business measures. Defining what should replace the financial focus was more difficult. We wanted managers to sustain their

“If you’re going to ask a division or the corporation to change its strategy, you had better change the system of measurement.”

search for continuous improvement, but we also wanted them to identify the opportunities for breakthrough performance.

When divisions missed financial targets, the reasons were generally not internal. Typically, division management had inaccurately estimated market demands or had failed to forecast competitive reactions. A new measurement system was needed to lead operating managers beyond achieving internal goals to searching for competitive breakthroughs in the global marketplace. The system would have to focus on measures of customer service, market position, and new products that could generate long-term value for the business. We used the scorecard as the focal point for the discussion. It forced division managers to answer these questions: How do we become our customers’ most valued supplier? How do we become more externally focused? What is my division’s competitive advantage? What is its competitive vulnerability?

How did you launch the scorecard effort at FMC?

We decided to try a pilot program. We selected six division managers to develop prototype scorecards for their operations. Each division had to perform a strategic analysis to identify its sources of competitive advantage. The 15 to 20 measures in the balanced scorecard had to be organization-specific and had to communicate clearly what short-term measures of operating performance were consistent with a long-term trajectory of strategic success.

Were the six division managers free to develop their own scorecard?

We definitely wanted the division managers to perform their own strategic analysis and to develop their own measures. That was an essential part of creating a consensus between senior and divisional management on operating objectives. Senior management did, however, place some conditions on the outcomes.

First of all, we wanted the measures to be objective and quantifiable. Division managers were to be just as accountable for improving scorecard measures as they had been for using monthly financial reviews. Second, we wanted output measures not process-oriented measures. Many of the improvement programs under way were emphasizing time, quality, and cost measurements. Focusing on T-Q-C measurements, however, encourages manag-

ers to seek narrow process improvements instead of breakthrough output targets. Focusing on achieving outputs forces division managers to understand their industry and strategy and help them to quantify strategic success through specific output targets.

Could you illustrate the distinction between process measures and output measures?

You have to understand your industry well to develop the connection between process improvements and outputs achieved. Take three divisional examples of cycle-time measurement, a common process measure.

For much of our defense business, no premium is earned for early delivery. And the contracts allow for reimbursement of inventory holding costs. Therefore, attempts to reduce inventory or cycle times in this business produce no benefit for which the customer is willing to pay. The only benefits from cycle time or inventory reduction occur when reduction in factory-floor complexity leads to real reductions in product cost. The output performance targets must be real cash savings, not reduced inventory levels or cycle times.

In contrast, significant lead-time reductions could be achieved for our packaging machinery business. This improvement led to lower inventory and an option to access an additional 35% of the market. In this case, the cycle-time improvements could be tied to specific targets for increased sales and market share. It wasn’t linear, but output seemed to improve each time we improved throughput times.

And in one of our agricultural machinery businesses, orders come within a narrow time window each year. The current build cycle is longer than the ordering window, so all units must be built to the sales forecast. This process of building to forecast leads to high inventory—more than twice the levels of our other businesses—and frequent overstocking and obsolescence of equipment. Incremental reductions in lead time do little to change the economics of this operation. But if the build cycle time could be reduced to less than the six-week ordering time window for part or all of the build schedule, then a breakthrough occurs. The division can shift to a build-to-order schedule and eliminate the excess inventory caused by building to forecasts. In this case, the benefit from cycle-time reductions is a step-function that comes only when the cycle time

drops below a critical level.

So here we have three businesses, three different processes, all of which could have elaborate systems for measuring quality, cost, and time but would feel the impact of improvements in radically different ways. With all the diversity in our business units, senior management really can't have a detailed understanding of the relative impact of time and quality improvements on each unit. All of our senior managers, however, understand output targets, particularly when they are displayed with historical trends and future targets.

Benchmarking has become popular with a lot of companies. Does it tie in to the balanced scorecard measurements?

Unfortunately, benchmarking is one of those initially good ideas that has turned into a fad. About 95% of those companies that have tried benchmarking have spent a lot of money and have gotten very little in return. And the difference between benchmarking and the scorecard helps reinforce the difference between process measures and output measures. It's a lot easier to benchmark a process than to benchmark an output. With the scorecard, we ask each division manager to go outside their organization and determine the approaches that will allow achievement of their long-term output targets. Each of our output measures has an associated long-term target. We have been deliberately vague on specifying when the target is to be accomplished. We want to stimulate a thought process about how to do things differently to achieve the target rather than how to do existing things better. The activity of searching externally for how others have accomplished these breakthrough achievements is called target verification not benchmarking.

Were the division managers able to develop such output-oriented measures?

Well, the division managers did encounter some obstacles. Because of the emphasis on output measures and the previous focus on operations and financial measures, the customer and innovation perspectives proved the most difficult. These were also the two areas where the balanced scorecard process was most helpful in refining and understanding our existing strategies.

But the initial problem was that the management teams ran afoul of both conditions: the measures they proposed tended to be non-

quantifiable and input- rather than output-oriented. Several divisions wanted to conduct customer surveys and provide an index of the results. We judged a single index to be of little value and opted instead for harder measures such as price premiums over competitors.

We did conclude, however, that the full customer survey was an excellent vehicle for promoting external focus and, therefore, decided to use survey results to kick-off discussion at our annual operating reviews.

Did you encounter any problems as you launched the six pilot projects?

At first, several divisional managers were less than enthusiastic about the additional freedom they were being given from headquarters. They knew that the heightened visibility and transparency of the scorecard took away the internal trade-offs they had gained experience in making. They initially interpreted the increase in visibility of divisional performance as just the latest attempt by corporate staff to meddle in their internal business processes.

To offset this concern, we designed targets around long-term objectives. We still closely examine the monthly and quarterly statistics, but these statistics now relate to progress in achieving long-term objectives and justify the proper balance between short-term and long-term performance.

We also wanted to transfer quickly the focus from a measurement system to achieving performance results. A measurement orientation reinforces concerns about control and a short-term focus. By emphasizing targets rather than measurements, we could demonstrate our purpose to achieve breakthrough performance.

But the process was not easy. One division manager described his own three-stage implementation process after receiving our directive to build a balanced scorecard: denial—hope it goes away; medicinal—it won't go away, so let's do it quickly and get it over with; ownership—let's do it for ourselves.

In the end, we were successful. We now have six converts who are helping us to spread the message throughout the organization.

I understand that you have started to apply the scorecard not just to operating units but to staff groups as well.

Applying the scorecard approach to staff groups has been even more eye-opening than

"I see the scorecard as a strategic measurement system, not a measure of our strategy."

our initial work with the six operating divisions. We have done very little to define our strategy for corporate staff utilization. I doubt that many companies can respond crisply to the question, "How does staff provide competitive advantage?" Yet we ask that question every day about our line operations. We have just started to ask our staff departments to explain to us whether they are offering low cost or differentiated services. If they are offering neither, we should probably outsource the function. This area is loaded with real potential for organizational development and improved strategic capability.

My conversations with financial people in organizations reveal some concern about the expanded responsibilities implied by developing and maintaining a balanced scorecard. How does the role of the controller change as a company shifts its primary measurement system from a purely financial one to the balanced scorecard?

Historically, we have had two corporate departments involved in overseeing business unit performance. Corporate development was in charge of strategy, and the controller's office kept the historical records and budgeted and measured short-term performance. Strategists came up with five- and ten-year plans, controllers one-year budgets and near-term forecasts. Little interplay occurred between the two groups. But the scorecard now bridges the two. The financial perspective builds on the traditional function performed by controllers. The other three perspectives make the division's long-term strategic objectives measurable.

In our old environment, division managers tried to balance short-term profits with long-term growth, while they were receiving different signals depending on whether or not they were reviewing strategic plans or budgets. This structure did not make the balancing of short-term profits and long-term growth an easy trade-off, and, frankly, it let senior management off the hook when it came to sharing responsibility for making the trade-offs.

Perhaps the corporate controller should take responsibility for all measurement and goal setting, including the systems required to implement these processes. The new corporate controller could be an outstanding system administrator, knowledgeable about the various trade-offs and balances, and skillful in reporting and presenting them. This role does not eliminate the need for strategic planning. It

just makes the two systems more compatible. The scorecard can serve to motivate and evaluate performance. But I see its primary value as its ability to join together what had been strong but separated capabilities in strategy development and financial control. It's the operating performance bridge that corporations have never had.

How often do you envision reviewing a division's balanced scorecard?

I think we will ask group managers to review a monthly submission from each of their divisions, but the senior corporate team will probably review scorecards quarterly on a rotating basis so that we can review up to seven or eight division scorecards each month.

Isn't it inconsistent to assess a division's strategy on a monthly or quarterly basis? Doesn't such a review emphasize short-term performance?

I see the scorecard as a strategic measurement system, not a measure of our strategy. And I think that's an important distinction. The monthly or quarterly scorecard measures operations that have been configured to be consistent with our long-term strategy.


Here's an example of the interaction between the short and the long term. We have pushed division managers to choose measures that will require them to create change, for example, penetration of key markets in which we are not currently represented. We can measure that penetration monthly and get valuable short-term information about the ultimate success of our long-term strategy. Of course, some measures, such as annual market share and innovation metrics, don't lend themselves to monthly updates. For the most part, however, the measures are calculated monthly.

Any final thoughts on the scorecard?

I think that it's important for companies not to approach the scorecard as the latest fad. I sense that a number of companies are turning to scorecards in the same way they turned to total quality management, high-performance organization, and so on. You hear about a good idea, several people on corporate staff work on it, probably with some expensive outside consultants, and you put in a system that's a bit different from what existed before. Such systems are only incremental, and you don't gain much additional value from them.

It gets worse if you think of the scorecard as a new measurement system that eventually re-

quires hundreds and thousands of measurements and a big, expensive executive information system. These companies lose sight of the essence of the scorecard: its focus, its simplicity, and its vision. The real benefit comes from making the scorecard the cornerstone of the way you run the business. It should be the core of the management system, not the measurement system. Senior managers alone will determine whether the scorecard becomes a

mere record-keeping exercise or the lever to streamline and focus strategy that can lead to breakthrough performance. 

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Putting the Balanced Scorecard to Work

Further Reading

ARTICLES

[The Balanced Scorecard: Measures That Drive Performance](#)

by Robert S. Kaplan and David P. Norton
Harvard Business Review
January–February 1992
Product no. 4096

This article introduced the concept of a balanced scorecard to *Harvard Business Review* readers. Traditional performance measurement systems focus on control, the authors argue—for example, measuring the number of widgets produced against the number budgeted. But a balanced scorecard approach to performance focuses on vision and strategy. It provides a comprehensive snapshot of a business by combining financial measures with metrics for customer satisfaction, key internal processes, and organizational learning and growth.

[Using the Balanced Scorecard as a Strategic Management System](#)

by Robert S. Kaplan and David P. Norton
Harvard Business Review
January–February 1996
Product no. 4126

Traditional management systems that rely heavily on financial metrics are typically unable to link a company's long-term strategy with its short-term actions. In their third *Harvard Business Review* article about the balanced scorecard, Kaplan and Norton demonstrate how the scorecard helps a company clarify and update strategy, communicate that strategy throughout the company, align unit and individual goals with the strategy, link strategic objectives to long-term targets and annual budgets, and conduct periodic performance reviews to improve the strategy. In essence, a balanced scorecard functions best as the cornerstone of a strategic management system.

[The Performance Measurement Manifesto](#)

by Robert G. Eccles
Harvard Business Review
January–February 1991
Product no. 91103

Eccles's main contention echoes that of Kaplan and Norton: the leading indicators of business performance cannot be found in financial data alone. More and more managers are changing their company's performance measurement systems to track nonfinancial measures and reinforce new competitive strategies. Five activities are essential, writes the author: developing an information architecture; putting the technology in place to support this architecture; aligning bonuses and other new incentives with the system; drawing on outside resources; and designing an internal process to ensure that the other four activities occur.

BOOK

[The Balanced Scorecard: Translating Strategy into Action](#)

by Robert S. Kaplan and David P. Norton
Harvard Business School Press
1996
Product no. 6513

Developing and using a balanced scorecard helps executives solve what is perhaps their most central issue: how to implement strategy, particularly one that requires radical change. This book builds on the authors' three *Harvard Business Review* articles, providing additional insight into the mechanics of choosing measures for each of the four scorecard perspectives. Extended examples from industries such as oil, banking, insurance, and retailing demonstrate how companies have built scorecards tailored to their particular competitive challenges and strategic goals.

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Measuring the Strategic Readiness of Intangible Assets

by Robert S. Kaplan and David P. Norton

Included with this full-text *Harvard Business Review* article:

20 [Article Summary](#)

The Idea in Brief—*the core idea*

The Idea in Practice—*putting the idea to work*

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A list of related materials, with annotations to guide further exploration of the article's ideas and applications

Measuring the Strategic Readiness of Intangible Assets

The Idea in Brief

You've formulated a sound strategy—but can you execute it? To answer that, **measure the strategic readiness of your intangible assets:** how well your employees' skills, your information and technical systems, and your leadership and organizational culture align with your strategy.

But *how* do you measure this alignment? Using Balanced Scorecard assessment tools, determine how strongly your intangible assets enhance the processes—creating, producing, and delivering valuable offerings to customers—that generate the revenue needed to meet your long-term financial goals.

When you measure your intangible assets' alignment with your strategy, you more easily see ways to *improve* each asset's alignment. For example:

- Strengthen skills of employees in the most strategically critical jobs—rather than all employees.
- Put the right technical systems in place (customer databases, knowledge management systems) to execute your strategy.
- Cultivate exceptional leaders and a cohesive workforce committed to sharing knowledge and achieving strategic goals.

By assessing and then enhancing the alignment of your company's human, information, and organizational capital, you unleash those intangible assets' full power.

The Idea in Practice

To measure your intangible assets' strategic readiness, determine what human, information, and organizational capital your company needs to perform the internal processes most critical to your strategy. Then assess your current capabilities in all three areas. Finally, identify and address gaps.

HUMAN CAPITAL

Certain jobs have a particularly significant impact on your organization's ability to perform the processes most critical to your strategy. These *strategic job families* often employ less than 10% of a company's workforce. Identify the strategic job families in your company, then list the knowledge and skills employees in those job families require. Watch for gaps between employees' required and current capabilities.

► Example:

Consumer Bank shifted its strategy from promoting individual products to offering customers one-stop financial-solutions shopping. For its critical internal process "cross-sell the product line," financial planning was the most crucial job—which required solution selling, relationship management, and other fundamental skills.

The bank estimated it needed 100 skilled financial planners for effective cross-selling. But assessments revealed only 40 proficient planners. The bank knew where to invest to improve its human capital's strategic readiness.

INFORMATION CAPITAL

To gauge how well your information capital (IC) supports your organization's strategy, identify the IT systems needed to support each critical internal process. These may include infrastructure (central servers, communication networks), software applications, and managerial expertise (standards, disaster planning, security).

Determine whether needed systems:

- are available and operating normally
- have been identified and funded but aren't installed or operational
- have been identified but not funded

To get the fullest picture of your IC readiness, combine these qualitative assessments with quantitative ones—such as user-satisfaction surveys and analyses of IT operations and maintenance costs.

ORGANIZATIONAL CAPITAL

To measure your organizational capital's (OC) readiness, ask these questions:

- **Culture:** Which corporate-wide *and* unit-specific behaviors and attitudes (for example, commitment to customer satisfaction, respect, innovativeness) does executing your strategy require?
- **Leadership:** What competencies (ability to inculcate specific values or encourage teamwork and accountability) do your firm's leaders need to implement strategy?
- **Alignment:** What communications (town meetings, training programs) and incentives (rewards for meeting personal and corporate targets) would help employees understand the strategy and their roles in supporting it?
- **Teamwork and knowledge sharing:** What must you do to encourage employees to share their ideas and knowledge with others? What formal knowledge management systems would help?

A real—and revolutionary—opportunity lies in studying and assessing how well prepared a company's people, systems, and culture are to carry out its strategy.

Measuring the Strategic Readiness of Intangible Assets

by Robert S. Kaplan and David P. Norton

How valuable is a company culture that enables employees to understand and believe in their organization's mission, vision, and core values? What's the payoff from investing in a knowledge management system or in a new customer database? Is it more important to improve the skills of all employees or focus on those in just a few key positions?

Measuring the value of such intangible assets is the holy grail of accounting. Employees' skills, IT systems, and organizational cultures are worth far more to many companies than their tangible assets. Unlike financial and physical ones, intangible assets are hard for competitors to imitate, which makes them a powerful source of sustainable competitive advantage. If managers could find a way to estimate the value of their intangible assets, they could measure and manage their company's competitive position much more easily and accurately.

But that's simpler said than done. Unlike financial and physical assets, intangible assets are worth different things to different people.

An oil well, for example, is almost as valuable to a retail firm as it is to an oil exploration corporation because either company could sell it swiftly if necessary. But a workforce with a strong sense of customer service and satisfaction is worth far more to the retailer than it would be to the oil company. Also, unlike tangible assets, intangible assets almost never create value by themselves. They need to be combined with other assets. Investments in IT, for example, have little value unless complemented with HR training and incentive programs. And, conversely, many HR training programs have little value unless complemented with modern technology tools. HR and IT investments must be integrated and aligned with corporate strategy if the organization is to realize their full potential. Indeed, when companies separate functions like HR and IT organizationally, they usually end up with competing silos of technical specialization. The HR department argues for increases in employee training, while the IT department lobbies for buying new hardware and software packages.

What's more, intangible assets seldom affect financial performance directly. Instead, they work indirectly through complex chains of cause and effect. Training employees in Total Quality Management and Six Sigma, for instance, should improve process quality. That improvement should then increase customer satisfaction and loyalty—and also create some excess resource capacity. But only if the company can transform that loyalty into improved sales and margins and eliminate or redeploy the excess resources will the investment in training pay off. By contrast, the impact of a new tangible asset is immediate: When a retailer develops a new site, it sees financial benefits from the sales in the newly opened outlet right away.

Although these characteristics make it impossible to value intangible assets on a free-standing basis, they also point the way to a new approach for quantifying how intangible assets add value to the company. By understanding the problems associated with valuing intangible assets, we learn that the measurement of the value they create is embedded in the context of the strategy the company is pursuing. Companies such as Dell, Wal-Mart, or McDonald's that are following a low-cost strategy derive value from Six Sigma and TQM training because their strategies are predicated on continuous process improvement. The strategy of offering customers integrated solutions (rather than discrete products) pursued by Goldman Sachs, IBM Consulting, and the like requires employees good at establishing and maintaining long-term customer relationships. An organization cannot possibly assign a meaningful financial value to an intangible asset like "a motivated and prepared workforce" in a vacuum because value can be derived only in the context of the strategy. What the company *can* measure, however, is whether its workforce is properly trained and motivated to pursue a particular goal.

Viewed in this light, it becomes clear that measuring the value of intangible assets is really about estimating how closely aligned those assets are to the company's strategy. If the company has a sound strategy and if the intangible assets are aligned with that strategy, then the assets will create value for the organization. If the assets are not aligned with the strategy or if the strategy is flawed, then intangible assets will create little value, even if large

amounts have been spent on them.

In the following pages, we will draw on the concepts and tools of the Balanced Scorecard to present a way to systematically measure the alignment of the company's human, information, and organization capital—what we call its *strategic readiness*—without which even the best strategy cannot succeed.

Defining Strategic Readiness

In developing the Balanced Scorecard more than a decade ago, we identified, in its Learning and Growth Perspective, three categories of intangible assets essential for implementing any strategy:

- **Human Capital:** the skills, talent, and knowledge that a company's employees possess.
- **Information Capital:** the company's databases, information systems, networks, and technology infrastructure.
- **Organization Capital:** the company's culture, its leadership, how aligned its people are with its strategic goals, and employees' ability to share knowledge.

To link these intangible assets to a company's strategy and performance, we developed a tool called the "strategy map," which we first introduced in our previous article for *Harvard Business Review*, "Having Trouble with Your Strategy? Then Map It" (September–October 2000). As the exhibit "The Strategy Map" shows, intangible assets influence a company's performance by enhancing the internal processes most critical to creating value for customers and shareholders. Companies build their strategy maps from the top down, starting with their long-term financial goals and then determining the value proposition that will deliver the revenue growth specified in those goals, identifying the processes most critical to creating and delivering that value proposition, and, finally, determining the human, information, and organization capital the processes require.

This article focuses on the bottom—the foundation—of the map and will show how intangible assets actually determine the performance of the critical internal processes. Once that link has been established, it becomes easy to trace the steps back up the map to see exactly how intangible assets relate to the company's strategy and performance. That, in turn, makes it possible to align those assets

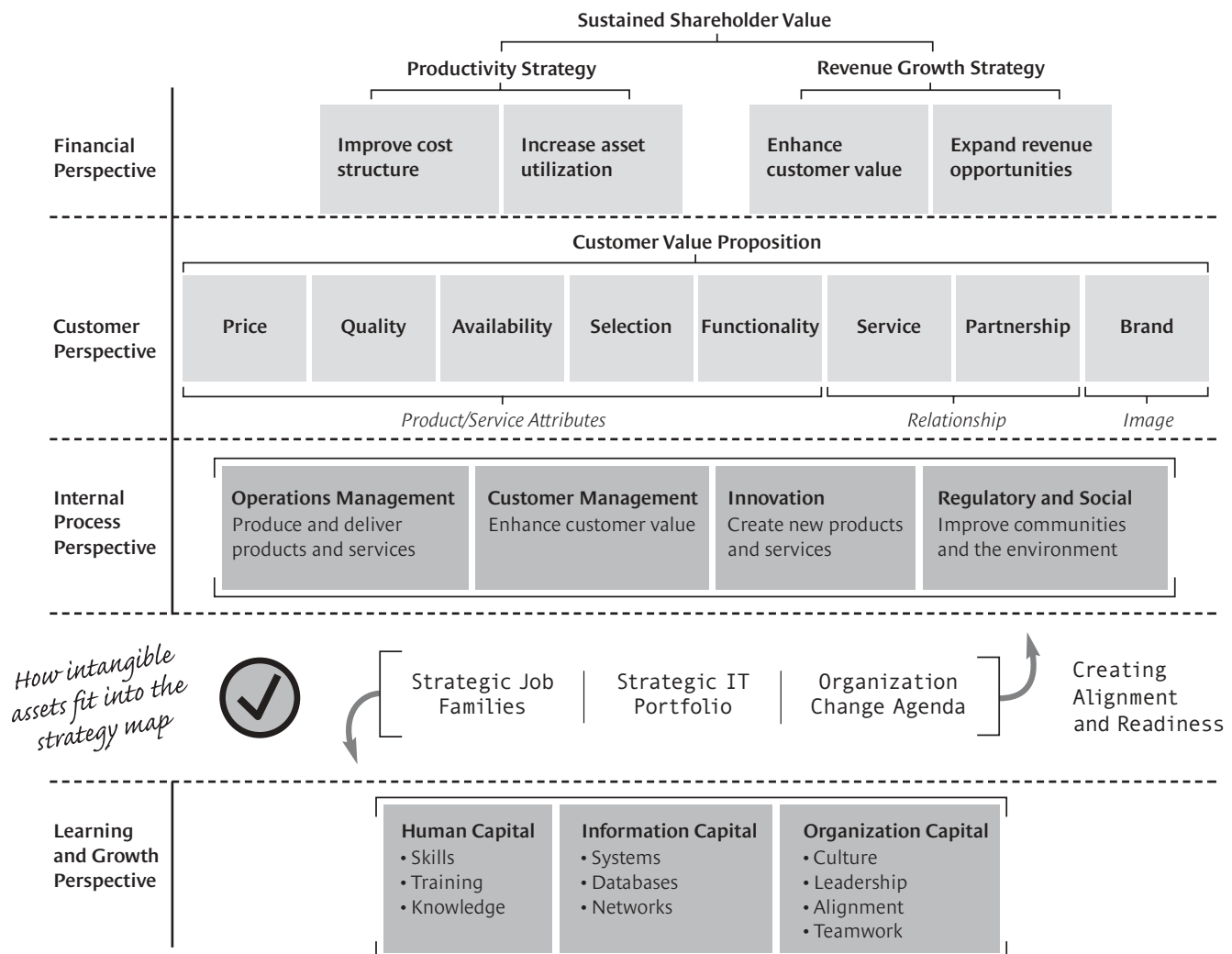
Robert S. Kaplan (rkaplan@hbs.edu) is the Marvin Bower Professor of Leadership Development at Harvard Business School in Boston. **David P. Norton** (dnorton@bscol.com) is the founder and president of the Balanced Scorecard Collaborative (www.bscol.com) in Lincoln, Massachusetts. This article is based on their book *Strategy Maps: Converting Intangible Assets into Tangible Outcomes* (Harvard Business School Press, 2004).

The Strategy Map

The strategy map provides a framework for linking intangible assets to shareholder value creation through four interrelated perspectives. The *financial perspective* describes the tangible outcomes of the strategy in traditional financial terms, such as ROI, shareholder value, profitability, revenue growth, and lower unit costs. The *customer perspective* defines the value proposition the organization intends

to use to generate sales and loyalty from targeted customers. This value proposition forms the context in which the intangible assets create value. The *internal process perspective* identifies the critical few processes that create and deliver the differentiating customer value proposition. At the foundation of the map, we have the *learning and growth perspective*, which identifies the intangible assets that are

most important to the strategy. The objectives in this perspective identify which jobs (the human capital), which systems (the information capital), and what kind of climate (the organization capital) are required to support the value-creating internal processes. These intangible assets must be integrated and aligned with the critical internal processes.



with the strategy and measure their contribution to it. The degree to which the current set of assets does—or does not—contribute to the performance of the critical internal processes determines the strategic readiness of those assets and thus their value to the organization. The strategic readiness of each type of intangible asset can be thought of as follows:

Human Capital (HC): In the case of human capital, strategic readiness is measured by whether employees have the right kind and level of skills to perform the critical internal processes on the strategy map. The first step in estimating HC readiness is to identify the *strategic job families*—the positions in which employees with the right skills, talent, and knowledge have the biggest impact on enhancing the organization’s critical internal processes. The next step is to pinpoint the set of specific competencies needed to perform each of those strategic jobs. The difference between the requirements needed to carry out these jobs effectively and the company’s current capabilities represents a “competency gap” that measures the organization’s HC readiness.

Information Capital (IC): The strategic readiness of information capital is a measure of how well the company’s strategic IT portfolio of infrastructure and applications supports the critical internal processes. Infrastructure comprises hardware—such as central servers and communication networks—and the managerial expertise—such as standards, disaster planning, and security—required to effectively deliver and use applications. Two categories of applications, in turn, are built on this infrastructure: *Transaction-processing applications*, such as an ERP system, automate the basic repetitive transactions of the enterprise. *Analytic applications* promote analysis, interpretation, and sharing of information and knowledge. Either type may or may not be a *transformational application*—one that changes the prevailing business model of the enterprise. Levi’s uses a transformational application to tailor jeans to individual customers. Home Shopping Network uses a transformational application to measure the “profits per second” being generated by currently offered merchandise. Transformational applications have the most potential impact on strategic objectives and require the greatest degree of organization change to deliver their benefits.

Organization Capital (OC): Organization capital is perhaps the least understood of the intangible assets, and the task of measuring it is correspondingly difficult. But in looking at the strategic priorities that companies in our database of Balanced Scorecard implementations used for their organization capital objectives, we found a consistent picture. Successful companies had a *culture* in which people were deeply aware of and internalized the mission, vision, and core values needed to execute the company’s strategy. These companies strove for excellent *leadership* at all levels, leadership that could mobilize the organization toward its strategy. They strove for a clear *alignment* between the organization’s strategic objectives and individual, team, and departmental goals and incentives. Finally, these companies promoted *teamwork*, especially the sharing of strategic knowledge throughout the organization. Determining OC readiness, we concluded, would involve first identifying the changes in organization capital required by the new strategy—what we call the “organization change agenda”—and then separately identifying and measuring the state of readiness of the company’s cultural, leadership, alignment, and teamwork objectives.

Strategic readiness is related to the concept of liquidity, which accountants use to classify financial and physical assets on a company’s balance sheet. Accountants divide a firm’s assets into various categories, such as cash, accounts receivable, inventory, property, plant and equipment, and long-term investments. These are ordered hierarchically according to the ease and speed with which they can be converted to cash—in other words, according to the degree of their liquidity. Accounts receivable is more liquid than inventory, and both accounts receivable and inventory are classified as short-term assets since they typically convert to cash within 12 months, faster than the cash recovery cycle from such illiquid assets as plant and equipment. Strategic readiness does much the same for intangible assets—the higher their state of readiness, the faster they contribute to generating cash.

Human Capital Readiness

All jobs are important to the organization; otherwise, people wouldn’t be hired and paid to perform them. Organizations may require truck drivers, computer operators, production

Human Capital Readiness at Consumer Bank

Here we can see how human capital at our composite company, Consumer Bank, is linked to its critical strategic processes and how well the company scores in terms of the skills and capabilities it needs. The top row lists the internal processes the bank identified as critical to delivering its value proposition. The second row shows the jobs that have the greatest influence on those processes—the *strategic job families*. The third row lists the competen-

cies needed for each job, and the fourth row specifies the number of people with those skills the company requires.

The bottom row shows how ready Consumer Bank's human capital is for its new strategy. Taken together, these internal assessments indicate the extent to which the bank actually has the capacity it needs. The bank is in excellent shape for its two operations management processes (100% and 90%

readiness) but deficient for the two customer management processes (only 40% and 50% readiness) and for one of the innovation processes (20% readiness). The aggregate measure of 65% human capital readiness (in the red zone) is a weighted average of readiness scores for all seven strategic job families. In terms of human capital, this report tells executives how quickly they can implement their new strategy.

Strategic Processes	Operations Management		Customer Management		Innovation		Regulatory and Social
	Minimize problems	Provide rapid response	Cross-sell the product line	Shift to appropriate channel	Understand customer segments	Develop new products	Diversify workforce
Strategic Job Families	Quality manager	Call center representative	Certified financial planner	Telemarketer	Consumer marketer	Joint venture manager	Community recruiter
Competency Profile	<ul style="list-style-type: none"> • Six Sigma program • Problem management system 	<ul style="list-style-type: none"> • Customer interaction center • Problem management system • Team building 	<ul style="list-style-type: none"> • Solutions selling • Relationship management • Product-line knowledge • Professional certification 	<ul style="list-style-type: none"> • Phone selling • Product-line knowledge • Order management system 	<ul style="list-style-type: none"> • Market research • Market communication • Cross-business process 	<ul style="list-style-type: none"> • Relationship management • Negotiation • E-commerce know-how 	<ul style="list-style-type: none"> • Community roots • Public relations • Legal frameworks
Number Required	30	20	100	20	10	30	10
Strategic Job Readiness	100%	90%	40%	50%	20%	70%	80%
							Overall Assessment of Human Capital Readiness
							65%

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supervisors, materials handlers, and call center operators and should make it clear that contributions from all these employees can improve organizational performance. But we have found that some jobs have a much greater impact on strategy than others. Managers must identify and focus on the critical few that have the greatest impact on successful strategy implementation.

John Bronson, vice president of human resources at Williams-Sonoma, estimates that people in only five job families determine 80% of his company's strategic priorities. The executive team of a chemical company has identified eight job families critical to its strategy of offering customized innovative solutions. These job families employ, in aggregate, 100 individuals—less than 7% of the total workforce. Kimberlee Williams, vice president of human resources at Unicco, a large integrated facilities-services management company, says that three job families are key to its strategy: project managers, who oversee the operations in specific accounts; operations directors, who broaden the relationships within existing accounts; and business development executives, who help acquire new accounts. These three job families employ only 215 people, less than 4% of the workforce. By focusing human capital development activities on these critical few individuals, the chemical company, Unicco, and Williams-Sonoma can greatly leverage their human capital investments. It is sobering to think that strategic success in these three companies is determined by how well they develop competencies in less than 10% of their workforces.

Once a company identifies its strategic job families, it must define the requirements for these jobs in considerable detail, a task often referred to as "job profiling" or "competency profiling." A competency profile describes the knowledge, skills, and values required by successful occupants in the job family. Often, HR managers will interview individuals who best understand the job requirements to develop a competency profile they can use to recruit, hire, train, and develop people for that position. To see how this might be done, consider Consumer Bank, a composite example distilled from our experiences in working with about a dozen retail banks.

Consumer Bank was migrating from its historic strategy of promoting individual products

to one offering complete financial solutions and one-stop shopping to targeted customers. The map for this new strategy identified seven critical internal processes, one of which was "cross-sell the product line." Human resources and line executives then identified the financial planner as the job most important to the effective performance of this process. A planning workshop further identified four skills fundamental to the financial planner's job: solutions selling, relationship management, product-line knowledge, and professional certification. For each internal process on its strategy map, Consumer Bank replicated this approach, identifying the strategic job families and critical competencies each required. The results are summarized in the exhibit "Human Capital Readiness at Consumer Bank."

To take the next step—assessing the current capabilities and competencies of each of the employees in each strategic job family—companies can draw from a broad range of approaches. For example, employees can themselves assess how well their current capabilities fit the job requirements and then discuss those assessments with a mentor or career manager. Alternatively, an assessor can solicit 360-degree feedback on employees' performance from their supervisors, peers, and subordinates. From these assessments, employees get a clear understanding of their objectives, meaningful feedback on their current levels of skill and performance, and specific recommendations for future personal development.








Consumer Bank estimated that it needed 100 trained and skilled financial planners to execute the cross-selling process. But in assessing its recent targeted hiring, training, and development programs, the bank's HR group determined that only 40 of its financial planners had reached a high enough level of proficiency. The bank's human capital readiness for this piece of the strategy was, therefore, only 40%, as the exhibit shows. By replicating this analysis for all its strategic job families, the bank learned the state of its human capital readiness and thus whether the organization could move forward quickly with its new strategy.

Information Capital Readiness

Executives must understand how to plan, set priorities for, and manage an information capital portfolio that supports their organiza-

Information Capital Readiness at Consumer Bank

The first two rows of the information capital readiness report, like the human capital report, list the company's critical internal processes and its strategic job families. The remaining five rows specify the various items in the IC portfolio, assigning scores indicating how well developed each item is. In this example, Consumer Bank has the IC portfolio it needs to support innovation but is less able to support the jobs most critical to its customer management and operational excellence goals.

Strategic Processes	Operations Management		Customer Management		Innovation	
	Minimize problems	Provide rapid response	Cross-sell the product line	Shift to appropriate channel	Understand customer segments	Develop new products
Strategic Job Families	Quality manager	Call center representative	Certified financial planner	Telemarketer	Consumer marketer	Joint venture manager
Strategic Information Capital Portfolio						
Transformational Applications		Customer self-help 4	Customer portfolio self-management 4			
Analytical Applications	Service quality analysis 2	Best-practice community knowledge management system 3	Customer profitability 3	Best-practice community knowledge management system 2	Customer profitability 3	Best-practice community knowledge management system 2
Transaction-Processing Applications	Incident tracking 6	Workforce scheduling 3	Integrated customer file 2	CRM/lead management 6	Customer feedback 2	Project management 2
	Problem management 2	Problem management 2		CRM/order management 2		
Technology Infrastructure			CRM packaged software 2		CRM packaged software 2	
	Web enabled 3		Web enabled 3	Web enabled 3		
	Computer telephony integration 4	Computer telephony integration 4		Computer telephony integrated 4		
		Interactive voice response 3				
Combined Readiness Level						
						

Ratings

- 1** OK
- 2** Minor enhancements needed
- 3** New development under way
- 4** New development behind schedule
- 5** Major enhancements required
- 6** New application required

tion's strategy. As with human capital, the strategy map serves as a starting point for delineating a company's IC objectives. In the case of Consumer Bank, the chief information officer led an initiative to identify the specific information capital needs of each of the seven internal processes previously identified as critical to the bank's new value proposition.

For the customer management process "cross-sell the product line," the workshop team identified an application for customers to analyze and manage their portfolios by themselves (a customer portfolio self-management system) as a transformational application. The workshop team identified an analytical application for the same process (a customer profitability system) and a transaction-processing application (an integrated customer file). The internal process "understand customer segments" also needed a customer profitability system, as well as a separate customer feedback system to support market research. The process "shift to appropriate channel" required a strong foundation of transactional systems, including a packaged CRM software suite that included modules for lead management, order management, and sales force automation. For the operations process "provide rapid response," participants identified a transformational application (customer self-help) as well as an analytic application (a best-practice community knowledge management system) for sharing successful sales techniques among telemarketers. Finally, the "minimize problems" process required an analytical application (service quality analysis) to identify problems and two related transaction-level systems (one for incident tracking and another for problem management).

After defining its portfolio of IC applications, the project team identified several required components of IT infrastructure. Some applications needed a CRM transactions database. Others required that a Web-enabled infrastructure be integrated into the bank's overall Web site architecture. The team also learned about the need for an internal R&D project to develop a new interactive voice-response technology. All together, the bank's planning process defined an information capital portfolio made up of 14 unique applications (some of which supported more than one internal process) and four IT infrastructure projects. (See the exhibit "Information Capital

Readiness at Consumer Bank.")

The team then turned to assessing the readiness of the bank's existing portfolio of IC infrastructure and applications, assigning a numerical indicator from 1 to 6 to each system. A score of 1 or 2 indicates that the system is already available and operating normally, perhaps needing only minor enhancements. A score of 3 or 4 indicates that the system has been identified and funded but is not yet installed or operational. In other words, current capability does not yet exist but development programs are under way to close the gap. A score of 5 or 6 signals that a new infrastructure or application is needed to support the strategy, but nothing has yet been done to create, fund, and deliver the capability. Managers responsible for the IC development programs provided the subjective judgments for this simple measurement system, and the CIO was responsible for assessing the integrity of the reported numbers. In the IC exhibit, we can also see that Consumer Bank aggregated the readiness measures of individual applications and infrastructure programs—designating them green, yellow, or red, based on the worst-case application in the category—to create a portfolio status report. With such a report, managers can see the strategic readiness of the organization's information capital at a glance, easily pinpointing the areas in which more resources are needed. It is an excellent tool for monitoring a portfolio of information capital development programs.

Many sophisticated IT organizations already use more quantitative, objective assessments of their information capital portfolios than the subjective process we've just described for Consumer Bank. These organizations survey users to assess their satisfaction with each system. They perform financial analyses to determine the operating and maintenance costs of each application. Some conduct technical audits to assess the underlying quality of the code, ease of use, quality of documentation, and frequency of failure for each application. From this profile, an organization can build strategies for managing its portfolio of existing IC assets just as one would manage a collection of physical assets like machinery or a fleet of trucks. Applications with high levels of maintenance can be streamlined, for example, applications with high operating costs can be optimized, and applications with high

levels of user dissatisfaction can be replaced. This more comprehensive approach can be effective for managing a portfolio of applications that are already operational.

Organization Capital Readiness

Success in performing the critical internal processes identified in an organization's strategy map invariably requires an organization to change in fundamental ways. Assessing OC readiness is essentially about assessing how well the company can mobilize and sustain the organization change agenda associated with its strategy. For instance, if the strategy involves focusing on the customer, the company needs to determine whether its existing culture is customer-centric, whether its leaders have the requisite skills to foster such a culture, whether employees are aware of the goal and are motivated to deliver exceptional customer service, and, finally, how well employees share with others their knowledge about the company's customers. Let's explore how companies can make these kinds of assessments for each of the four OC dimensions.

Culture. Of the four, culture is perhaps the most complex and difficult dimension to understand and describe because it encompasses a wider range of behavioral territory than the others. That's probably why "shaping the culture" is the most often-cited objective in the Learning and Growth section of our Balanced Scorecard database. Executives generally believe that changes in strategy require basic changes in the way business is conducted at all levels of the organization, which means, of course, that people will need to develop new attitudes and behaviors—in other words, change their culture.

Assessment of cultural readiness relies heavily on employee surveys. But in preparing surveys, companies need to distinguish clearly between the values that all employees share—the company's base culture—and the perceptions that employees have of their existing system—the climate. The concept of base culture has its roots in anthropology, which defines an organization's culture as the symbols, myths, and rituals embedded in the group consciousness (or subconscious). To describe a company's base culture, therefore, you have to uncover the organization's systems of shared meanings, assumptions, and values.

The concept of climate has its roots in social

psychology and is determined by the way organizational influences—such as the incentive structure or the perceived warmth and support of superiors and peers—affect employees' motivation and behavior. The anthropological component reflects employees' shared attitudes and beliefs independent of the actual organizational infrastructure, while climate reflects their shared perception of existing organizational policies, practices, and procedures, both formal and informal.

Surveying perceptions of existing organizational policies and practices is a fairly straightforward task, but getting at the base culture requires a little more digging. Anthropologists usually rely on storytelling to identify shared beliefs and images, but that approach is inadequate for quantifying the alignment of culture to strategy. Organizational behavior scholars have developed measurement instruments, such as Charles O'Reilly and colleagues' Organizational Culture Profile, in which employees rank 54 value statements according to their perceived importance and relevance in the organization. Once ranked, an organization's culture can be described with a reasonable degree of reliability and validity. Then the organization can assess to what extent the existing culture is consistent with its strategy and what kinds of changes may be needed.

One caveat: Managers do need to be aware that some variations in culture are necessary and desirable in different operating units or functions. The culture of an R&D group, for example, should be different from the culture of a manufacturing unit; the culture of an emergent business unit should be different from the culture of a mature one. Executives should strive for agreement throughout the organization about corporatewide values such as integrity, respect, treatment of colleagues, and commitment to customer satisfaction. But some value statements in the survey instrument should refer to the culture of specific operating units. So, for example, surveys of the employees in operations and service-delivery units would include statements about quality and continuous improvement, whereas the R&D department survey might include statements about creativity and innovation. For employees involved in customer acquisition, statements might relate to retention and growth or to a deep understanding of individual customers' preferences and needs.

Leadership. If companies change their strategies, people will have to do some things differently as well. It is the responsibility of leaders at all levels of the organization—from the CEO of a retail chain down to the local store managers—to help employees identify and understand the changes needed and to motivate and guide them toward the new ways of working.

In researching the best practices in our Balanced Scorecard database, we were able to identify seven generic types of behavioral changes that build organization capital, and each fell into one of two categories: changes that support the creation of value—such as increasing people’s focus on the customer—and those required to carry out the company’s strategy—such as increasing accountability. The sidebar “Seven Behaviors for Transformation” describes these behavioral changes in more detail.

To ensure that it gets the kind of leaders it needs, a company should draw up a *leadership competency model* for each of its leadership positions. This is a kind of job profile that defines the competencies a leader is expected to have to be effective in carrying out the company’s strategy. For example, one manufacturing company, attempting to create teams to solve customers’ problems, identified and defined three competencies essential for people in team leadership positions:

- **Customer Focus**—Outstanding leaders understand their customers. They place them-

selves in the customers’ minds and spend time with them to understand their current and future needs.

- **Fostering Teamwork**—Outstanding leaders work collaboratively with their own teams and across organizational and geographic boundaries. They empower their teams to achieve excellence.

- **Open Communications**—Outstanding leaders tell the truth. They openly share information with peers, managers, and subordinates. They tell the whole story, not just how it looks from their position.

Often, organizations will measure leadership traits, such as those listed above, through employee surveys. A staff or external unit solicits information from subordinates, peers, and superiors about a leader’s mastery of the critical skills. This personal feedback is used mainly for coaching and developing the leader, but the unit can also aggregate the detailed (and confidential) data from the individual reviews to create a status report on the readiness of key leadership competencies needed throughout the organization.

Alignment. An organization is aligned when all employees have a commonality of purpose, a shared vision, and an understanding of how their personal roles support the overall strategy. An aligned organization encourages behaviors such as innovation and risk taking because individuals’ actions are directed toward achieving high-level objectives. Encouraging

Seven Behaviors for Transformation

All new strategies require employees to make, and leaders to identify and foster, some specific changes in behavior. But in our research, companies that have successfully changed their strategies have needed only a limited number of behavioral changes—just seven, in fact—to maximize the contributions of their people to the execution of their new strategies. The changes fall into two categories:

- **Value Creation:** Behaviors that support value creation are those that increase focus on customers, innovation, and results.
- **Strategy Execution:** Behaviors that support strategy execution are those that increase employees’ understanding of the

company’s mission, vision and values; accountability; communications; and teamwork.

Of course, no organization will try to change all seven behaviors at once. Typically, a company will identify the two to four most important ones for implementing a specific strategy. For example, firms in deregulated industries like utilities or telecommunications now place a heavy emphasis on becoming customer focused and innovative, which are, for them, totally new behaviors. Previously, operating from a monopoly position, they had focused on operating efficiency and on avoiding risks to protect revenues.

That said, customer focus was the most

frequently identified required new behavior in all the companies we studied. That’s partly because virtually every strategy initiative starts with a clarification or redefinition of the customer value proposition. But some new strategies impose different priorities. Companies introducing shareholder value programs, for example, may already be sufficiently customer focused and will need instead to focus on results.

Companies adopting strategies that require high degrees of integration commonly need to increase communication. That was so, for instance, for one pharmaceutical company in our database that was attempting to transfer knowledge and marketplace experience from its commercial division to

and empowering individual initiative in an unaligned organization leads to chaos, as the innovative risk takers pull the organization in contradictory directions.

Achieving alignment is a two-step process. First, managers communicate the high-level strategic objectives in ways that all employees can understand. This involves using a wide range of communication mechanisms: brochures, newsletters, town meetings, orientation and training programs, executive talks, company intranets, and bulletin boards. The goal of this step is to create intrinsic motivation, to inspire employees to internalize the organization's values and objectives so that they want to help the organization succeed. The next step uses extrinsic motivation. The organization has employees set explicit personal and team objectives aligned to the strategy







and establishes incentives that reward employees when they meet personal, departmental, business unit, and corporate targets.

Measuring alignment readiness is relatively straightforward. Many survey instruments are already available for assessing how much employees know about and how well they understand high-level strategic objectives. It is also fairly easy to see whether or not individuals' personal objectives and the company's existing incentive schemes are consistent with the high-level strategy.

For example, a large property and casualty insurance company adopted a new strategy intended to reduce its underwriting losses by creating a tighter link between the underwriters, who decide whether to accept a new piece of business, and the claims agents, who deal with the consequences from poor underwriting de-

Organization Capital Readiness Report

The various measures for organization capital readiness should be put together in a readiness report, which shows, for all the components of organization capital, where the company needs to introduce changes to its behaviors and policies. The report shown here is a simplified version of one prepared by a company in our Balanced Scorecard database.

Attribute	Strategic Objective	Strategic Measure	Target	Actual
Culture	Foster awareness and internalization of the mission, vision, and core values needed to execute the strategy	Customer-focused (customer survey; percentage who understand the organization's mission)	80%	68% 
		Other core values (employee change readiness survey)	80%	52% 
Leadership	Develop leaders at all levels who can mobilize the organization toward its strategy	Leadership gap (percentage of key attributes in competency model rated above threshold)	90%	92% 
Alignment	Align goals and incentives with the strategy at all levels of the organization	Strategic awareness (percentage of staff who can identify organization's strategic priorities)	80%	75% 
		Strategic alignment (percentage of staff whose objectives and incentives link to Balanced Scorecard)	100%	60% 
Teamwork	Ensure that knowledge and staff assets that have strategic potential are shared	Sharing best practices (number of knowledge management system hits per employee)	5.0	6.1 

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cisions. Historically, these specialists lived in different parts of the organization, and their incentives were totally unrelated to each other, which clearly did little to foster cooperation between them or with the line business units they supported. To reflect the new strategy, the company changed to a team-based compensation system in which everyone's incentive pay was based on a common set of measures (their Balanced Scorecard). Underwriters and claims agents, who worked in service departments shared by the various business units, were now rewarded using the Balanced Scorecard measures related to the business units they supported. The company used a survey instrument to capture the employees' perceptions of the improved teamwork created by aligning the incentive systems.

Teamwork and Knowledge Sharing. There is no greater waste than a good idea used only once. Most organizations have to go through a cultural change to shift individuals from hoarding to sharing their local knowledge. No asset has greater potential for an organization than the collective knowledge possessed by all its employees. That's why many companies, hoping to generate, organize, develop, and distribute knowledge throughout the organization, have spent millions of dollars to purchase or create formal knowledge management systems.

The challenge in implementing such systems is motivating people to actually document their ideas and knowledge to make them available to others. Most organizations in our Balanced Scorecard database attempted to develop such motivation by selecting "teamwork" and "knowledge sharing" as strategic priorities in their Learning and Growth Perspective. Typical measures for these priorities included the number of best practice ideas the employees identified and used, the percentage of employees who transferred knowledge in a workout process, the number of people who actually used the knowledge management system, how often the system is used, the percentage of information in the knowledge management system that was updated, and how much was obsolete.

For knowledge sharing to matter, it must be aligned with the priorities of the strategy map. For example, one organization—a chemical company—created several best practice com-

munities to complement the internal process objectives on its strategy map. The Improve Workplace Safety community consisted of the safety directors from every facility. They studied the best practices at the high-performing plants and created a best practice-sharing program. The company's output measure, "days away from work," dropped by 70%. In another example, a children's hospital was attempting to reduce costs without reducing the quality of patient care. Intensive discussions resulted in a top-ten list of best practices already being used somewhere in the hospital. The hospital then formed cross-functional medical practice teams of physicians, nurses, and administrators to implement as many of these procedures as they practically could. It measured success, the output of this knowledge-sharing process, by the "number of best practices utilized." The effective implementation of best practices over the next three years led to dramatic improvements in organizational outcomes: Readmission rates dropped by 50%, cost per case and length of stay each declined by 25%, and both customer satisfaction and quality of care increased. In these and many other examples in our case files, organizations enhanced their performance by aligning the teamwork and knowledge-sharing component of their organization capital with their strategy.


To get an overview of organizational readiness, companies can put the information they obtain from their various surveys and assessments together in a report like the one shown in "Organization Capital Readiness Report." In this exhibit, the leadership measure, drawn from the leadership competency model, displays the company's estimate, based on employee surveys, of the degree to which the company possesses the key attributes for leadership. At 92%, the company is above target on its leadership objective and can be considered strategically ready in terms of this dimension. The company's OC with respect to teamwork and knowledge sharing is also in good shape. But the firm is performing inadequately in alignment and in developing the right culture, and these problems are lowering its overall level of organization capital readiness.

...

The intangible assets described in the Balanced Scorecard's Learning and Growth Perspective are the foundation of every organization's strategy, and the measures in this

perspective are the ultimate lead indicators. Human capital becomes most valuable when it is concentrated in the relatively few strategic job families implementing the internal processes critical to the organization's strategy. Information capital creates the greatest value when it provides the requisite infrastructure and strategic applications that complement the human capital. Organizations introducing a new strategy must create a culture of corresponding values, a cadre of exceptional leaders who can lead the change agenda, and an informed workforce aligned to the strategy, working together, and sharing knowledge to help the strategy succeed.

Some managers shy away from measuring their intangible assets because these measures are usually "softer," or more subjective, than the financial measures they conventionally use to motivate and assess performance. The Balanced Scorecard movement has encouraged organizations to face the measurement chal-

lenge. Using the systematic approaches set out in this article, companies can now measure what they want, rather than wanting only what they can currently measure. Even if the measures are imprecise, the simple act of attempting to gauge the capabilities of employees, information systems, and organization capital communicates the importance of these drivers for value creation. In the course of our work, we have seen many companies find new ways to measure—and consequently new ways to enhance the value of—their intangible assets. The measurement and management of these assets played a prominent role in their transformation into successful, strategy-focused organizations. 

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Measuring the Strategic Readiness of Intangible Assets

Further Reading

ARTICLES

[The Growth Crisis—and How to Escape It](#)

by Adrian J. Slywotzky and Richard Wise

Harvard Business Review

July 2002

Product no. 5577

These authors describe additional intangible assets and explain how to leverage them for impressive financial results. Beyond human, information, and organizational capital, your company has accumulated **hidden assets** in the normal course of doing business. These include *customer relationships* (your reputation for expertise, your high level of customer interaction), *strategic “real estate”* (your strong market position, your place in the value chain), and *networks* (your installed product base, user communities, supplier links).

Hidden assets offer numerous advantages:

They generate more growth than product extensions and pose less risk than new products or new markets. They reinforce—not cannibalize—your core product business. And rivals can’t easily replicate them.

Sears, for example, leveraged its reputation for expertise to enter the home-renovation market. Sears Great Indoors provides full-spectrum remodeling services—from design and financing to construction and installation. It streamlines customers’ shopping time and project planning, and improves the quality of the finished renovation. It also enabled Sears to build a strong position in this market.

[Coming Up Short on Nonfinancial Performance Measurement](#)

by Christopher D. Ittner and David F. Larcker

Harvard Business Review

November 2003

Product no. 5380

Ittner and Larcker agree that measuring intangible assets is crucial to achieving your company’s strategic objectives. But too many companies, they maintain, don’t identify, analyze, and act on the *right* measures. Nor do they demonstrate clear connections between improvements in nonfinancial areas, such as customer loyalty or employee satisfaction, and financial results, such as profit or stock price. The consequences? Misdirected investments and unfulfilled strategies

To complete the picture of your company’s strategic performance, create a causal model linking nonfinancial drivers to financial performance. For example, “Better employee selection will increase employee satisfaction and performance, which will drive customer satisfaction, purchase frequency, and retention—improving growth, earnings, and cash flow.” Verify the assumptions in your causal model; for instance, ask “What *kind* of supervision and support drive employee satisfaction? How do satisfied employees increase customer satisfaction?” Then set reasonable performance targets for your intangible assets. For example, don’t aim for 100% customer satisfaction if completely satisfied customers spend no more than mostly satisfied ones. And use valid measures to assess your assets—such as customer surveys with sufficient breadth or depth of questions—and consistent measurement techniques across all departments.

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Using the Balanced Scorecard as a Strategic Management System

by Robert S. Kaplan and David P. Norton

Included with this full-text *Harvard Business Review* article:

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The Idea in Brief—*the core idea*

The Idea in Practice—*putting the idea to work*

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A list of related materials, with annotations to guide further exploration of the article's ideas and applications

Using the Balanced Scorecard as a Strategic Management System

The Idea in Brief

Why do budgets often bear little direct relation to a company's long-term strategic objectives? Because they don't take enough into consideration. A balanced scorecard augments traditional financial measures with benchmarks for performance in three key nonfinancial areas:

- a company's relationship with its customers
- its key internal processes
- its learning and growth.

When performance measures for these areas are added to the financial metrics, the result is not only a broader perspective on the company's health and activities, it's also a powerful organizing framework. A sophisticated instrument panel for coordinating and fine-tuning a company's operations and businesses so that all activities are aligned with its strategy.

The Idea in Practice

The balanced scorecard relies on four processes to bind short-term activities to long-term objectives:

1. Translating the vision. By relying on measurement, the scorecard forces managers to come to agreement on the metrics they will use to operationalize their lofty visions.

► **Example:**

A bank had articulated its strategy as providing "superior service to targeted customers." But the process of choosing operational measures for the four areas of the scorecard made executives realize that they first needed to reconcile divergent views of who the targeted customers were and what constituted superior service.

2. Communicating and linking. When a scorecard is disseminated up and down the organizational chart, strategy becomes a tool available to everyone. As the high-level scorecard cascades down to individual business units, overarching strategic objectives and measures are translated into objectives and measures appropriate to each particular group. Tying these targets to individual performance and compensation systems yields "personal scorecards." Thus, individual employees understand how their own productivity supports the overall strategy.

3. Business planning. Most companies have separate procedures (and sometimes units) for strategic planning and budgeting. Little wonder, then, that typical long-term planning is, in the words of one executive, where "the rubber meets the sky." The discipline of creating a balanced scorecard forces companies to integrate the two functions, thereby ensuring that financial budgets do indeed support strategic goals. After agreeing on performance measures for the four scorecard perspectives, companies identify the most influential "drivers" of the desired outcomes and then set mile-

stones for gauging the progress they make with these drivers.

4. Feedback and learning. By supplying a mechanism for strategic feedback and review, the balanced scorecard helps an organization foster a kind of learning often missing in companies: the ability to reflect on inferences and adjust theories about cause-and-effect relationships.

Feedback about products and services. New learning about key internal processes. Technological discoveries. All this information can be fed into the scorecard, enabling strategic refinements to be made continually. Thus, at any point in the implementation, managers can know whether the strategy is working—and if not, why.

Building a scorecard can help managers link today's actions with tomorrow's goals.

Using the Balanced Scorecard as a Strategic Management System

by Robert S. Kaplan and David P. Norton

As companies around the world transform themselves for competition that is based on information, their ability to exploit intangible assets has become far more decisive than their ability to invest in and manage physical assets. Several years ago, in recognition of this change, we introduced a concept we called the balanced scorecard. The balanced scorecard supplemented traditional financial measures with criteria that measured performance from three additional perspectives—those of customers, internal business processes, and learning and growth. (See the chart “Translating Vision and Strategy: Four Perspectives.”) It therefore enabled companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they would need for future growth. The scorecard wasn’t a replacement for financial measures; it was their complement.

Recently, we have seen some companies move beyond our early vision for the scorecard to discover its value as the cornerstone of a

new strategic management system. Used this way, the scorecard addresses a serious deficiency in traditional management systems: their inability to link a company’s long-term strategy with its short-term actions.

Most companies’ operational and management control systems are built around financial measures and targets, which bear little relation to the company’s progress in achieving long-term strategic objectives. Thus the emphasis most companies place on short-term financial measures leaves a gap between the development of a strategy and its implementation.

Managers using the balanced scorecard do not have to rely on short-term financial measures as the sole indicators of the company’s performance. The scorecard lets them introduce four new management processes that, separately and in combination, contribute to linking long-term strategic objectives with short-term actions. (See the chart “Managing Strategy: Four Processes.”)

The first new process—*translating the vision*—

helps managers build a consensus around the organization's vision and strategy. Despite the best intentions of those at the top, lofty statements about becoming "best in class," "the number one supplier," or an "empowered organization" don't translate easily into operational terms that provide useful guides to action at the local level. For people to act on the words in vision and strategy statements, those statements must be expressed as an integrated set of objectives and measures, agreed upon by all senior executives, that describe the long-term drivers of success.

The second process—*communicating and linking*—lets managers communicate their strategy up and down the organization and link it to departmental and individual objectives. Traditionally, departments are evaluated by their financial performance, and individual incentives are tied to short-term financial goals. The scorecard gives managers a way of ensuring that all levels of the organization understand the long-term strategy and that both departmental and individual objectives are aligned with it.

The third process—*business planning*—enables companies to integrate their business and financial plans. Almost all organizations today are implementing a variety of change programs, each with its own champions, gurus, and consultants, and each competing for senior executives' time, energy, and resources. Managers find it difficult to integrate those diverse initiatives to achieve their strategic goals—a situation that leads to frequent disappointments with the programs' results. But when managers use the ambitious goals set for balanced scorecard measures as the basis for allocating resources and setting priorities, they can undertake and coordinate only those initiatives that move them toward their long-term strategic objectives.

The fourth process—*feedback and learning*—gives companies the capacity for what we call strategic learning. Existing feedback and review processes focus on whether the company, its departments, or its individual employees have met their budgeted financial goals. With the balanced scorecard at the center of its management systems, a company can monitor short-term results from the three additional perspectives—customers, internal business processes, and learning and growth—and evaluate strategy in the light of recent per-

formance. The scorecard thus enables companies to modify strategies to reflect real-time learning.

None of the more than 100 organizations that we have studied or with which we have worked implemented their first balanced scorecard with the intention of developing a new strategic management system. But in each one, the senior executives discovered that the scorecard supplied a framework and thus a focus for many critical management processes: departmental and individual goal setting, business planning, capital allocations, strategic initiatives, and feedback and learning. Previously, those processes were uncoordinated and often directed at short-term operational goals. By building the scorecard, the senior executives started a process of change that has gone well beyond the original idea of simply broadening the company's performance measures.

For example, one insurance company—let's call it National Insurance—developed its first balanced scorecard to create a new vision for itself as an underwriting specialist. But once National started to use it, the scorecard allowed the CEO and the senior management team not only to introduce a new strategy for the organization but also to overhaul the company's management system. The CEO subsequently told employees in a letter addressed to the whole organization that National would thenceforth use the balanced scorecard and the philosophy that it represented to manage the business.

National built its new strategic management system step-by-step over 30 months, with each step representing an incremental improvement. (See the chart "How One Company Built a Strategic Management System.") The iterative sequence of actions enabled the company to reconsider each of the four new management processes two or three times before the system stabilized and became an established part of National's overall management system. Thus the CEO was able to transform the company so that everyone could focus on achieving long-term strategic objectives—something that no purely financial framework could do.

Translating the Vision

The CEO of an engineering construction company, after working with his senior management team for several months to develop a

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mission statement, got a phone call from a project manager in the field. "I want you to know," the distraught manager said, "that I believe in the mission statement. I want to act in accordance with the mission statement. I'm here with my customer. What am I supposed to do?"

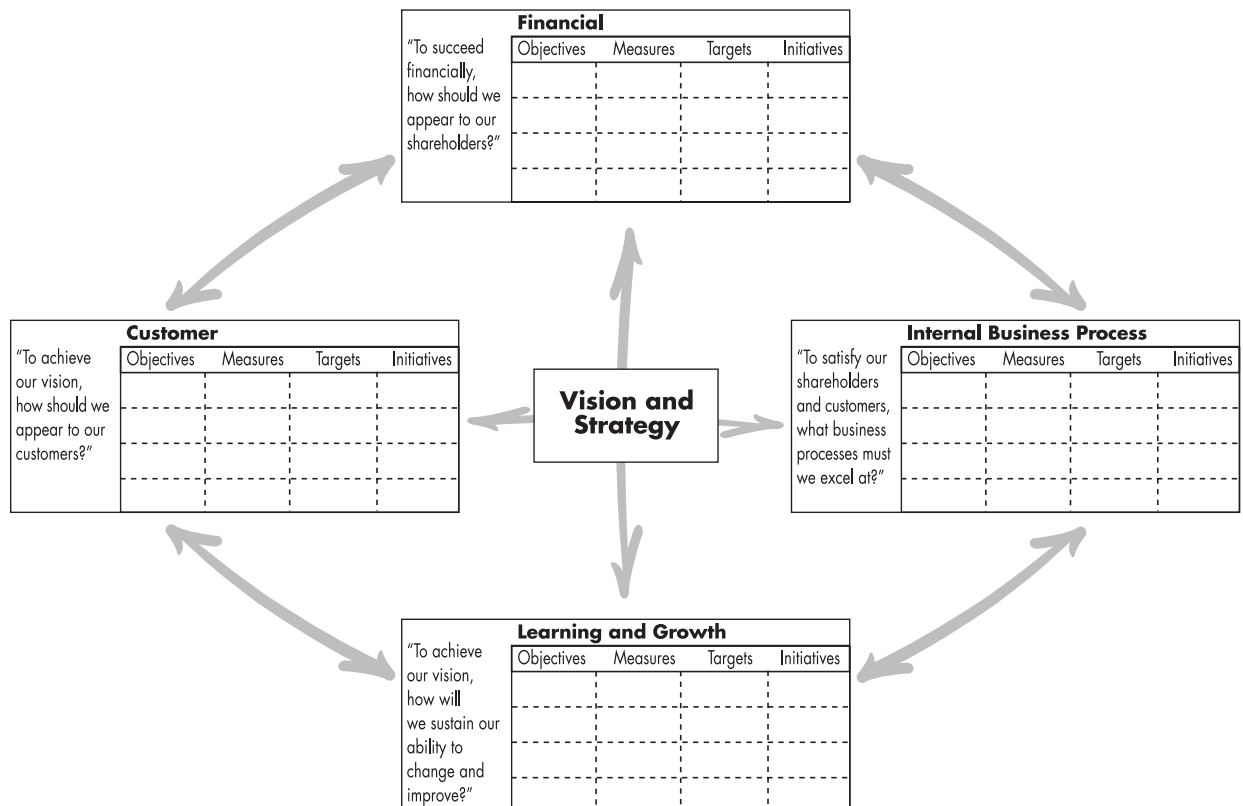
The mission statement, like those of many other organizations, had declared an intention to "use high-quality employees to provide services that surpass customers' needs." But the project manager in the field with his employees and his customer did not know how to translate those words into the appropriate actions. The phone call convinced the CEO that a large gap existed between the mission statement and employees' knowledge of how their day-to-day actions could contribute to realizing the company's vision.

Metro Bank (not its real name), the result of a merger of two competitors, encountered a similar gap while building its balanced scorecard. The senior executive group thought it

had reached agreement on the new organization's overall strategy: "to provide superior service to targeted customers." Research had revealed five basic market segments among existing and potential customers, each with different needs. While formulating the measures for the customer-perspective portion of their balanced scorecard, however, it became apparent that although the 25 senior executives agreed on the words of the strategy, each one had a different definition of *superior service* and a different image of the *targeted customers*.

The exercise of developing operational measures for the four perspectives on the bank's scorecard forced the 25 executives to clarify the meaning of the strategy statement. Ultimately, they agreed to stimulate revenue growth through new products and services and also agreed on the three most desirable customer segments. They developed scorecard measures for the specific products and services that should be delivered to customers in the

Translating Vision and Strategy: Four Perspectives



targeted segments as well as for the relationship the bank should build with customers in each segment. The scorecard also highlighted gaps in employees' skills and in information systems that the bank would have to close in order to deliver the selected value propositions to the targeted customers. Thus, creating a balanced scorecard forced the bank's senior managers to arrive at a consensus and then to translate their vision into terms that had meaning to the people who would realize the vision.

Communicating and Linking

"The top ten people in the business now understand the strategy better than ever before. It's too bad," a senior executive of a major oil company complained, "that we can't put this in a bottle so that everyone could share it." With the balanced scorecard, he can.

One company we have worked with deliberately involved three layers of management in the creation of its balanced scorecard. The senior executive group formulated the financial and customer objectives. It then mobilized the talent and information in the next two levels of managers by having them formulate the internal-business-process and learning-and-growth objectives that would drive the

achievement of the financial and customer goals. For example, knowing the importance of satisfying customers' expectations of on-time delivery, the broader group identified several internal business processes—such as order processing, scheduling, and fulfillment—in which the company had to excel. To do so, the company would have to retrain frontline employees and improve the information systems available to them. The group developed performance measures for those critical processes and for staff and systems capabilities.

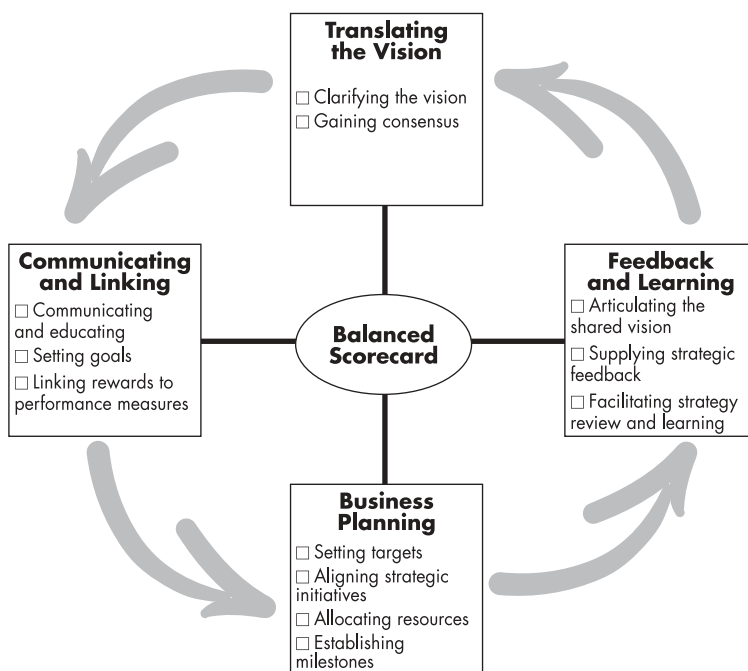
Broad participation in creating a scorecard takes longer, but it offers several advantages: Information from a larger number of managers is incorporated into the internal objectives; the managers gain a better understanding of the company's long-term strategic goals; and such broad participation builds a stronger commitment to achieving those goals. But getting managers to buy into the scorecard is only a first step in linking individual actions to corporate goals.

The balanced scorecard signals to everyone what the organization is trying to achieve for shareholders and customers alike. But to align employees' individual performances with the overall strategy, scorecard users generally engage in three activities: communicating and educating, setting goals, and linking rewards to performance measures.

Communicating and Educating. Implementing a strategy begins with educating those who have to execute it. Whereas some organizations opt to hold their strategy close to the vest, most believe that they should disseminate it from top to bottom. A broad-based communication program shares with all employees the strategy and the critical objectives they have to meet if the strategy is to succeed. Onetime events such as the distribution of brochures or newsletters and the holding of "town meetings" might kick off the program. Some organizations post bulletin boards that illustrate and explain the balanced scorecard measures, then update them with monthly results. Others use groupware and electronic bulletin boards to distribute the scorecard to the desktops of all employees and to encourage dialogue about the measures. The same media allow employees to make suggestions for achieving or exceeding the targets.

The balanced scorecard, as the embodiment of business unit strategy, should also be communicated upward in the organization—to

Managing Strategy: Four Processes



The personal scorecard helps to communicate corporate and unit objectives to the people and teams performing the work.

corporate headquarters and to the corporate board of directors. With the scorecard, business units can quantify and communicate their long-term strategies to senior executives using a comprehensive set of linked financial and nonfinancial measures. Such communication informs the executives and the board in specific terms that long-term strategies designed for competitive success are in place. The measures also provide the basis for feedback and accountability. Meeting short-term financial targets should not constitute satisfactory performance when other measures indicate that the long-term strategy is either not working or not being implemented well.

Should the balanced scorecard be communicated beyond the boardroom to external shareholders? We believe that as senior executives gain confidence in the ability of the scorecard measures to monitor strategic performance and predict future financial performance, they will find ways to inform outside investors about those measures without disclosing competitively sensitive information.

Skandia, an insurance and financial services company based in Sweden, issues a supplement to its annual report called "The Business Navigator"—"an instrument to help us navigate into the future and thereby stimulate renewal and development." The supplement describes Skandia's strategy and the strategic measures the company uses to communicate and evaluate the strategy. It also provides a report on the company's performance along those measures during the year. The measures are customized for each operating unit and include, for example, market share, customer satisfaction and retention, employee competence, employee empowerment, and technology deployment.

Communicating the balanced scorecard promotes commitment and accountability to the business's long-term strategy. As one executive at Metro Bank declared, "The balanced scorecard is both motivating and obligating."

Setting Goals. Mere awareness of corporate goals, however, is not enough to change many people's behavior. Somehow, the organization's high-level strategic objectives and measures must be translated into objectives and measures for operating units and individuals.

The exploration group of a large oil company developed a technique to enable and encourage individuals to set goals for themselves that were

consistent with the organization's. It created a small, fold-up personal scorecard that people could carry in their shirt pockets or wallets. (See the exhibit "The Personal Scorecard.") The scorecard contains three levels of information. The first describes corporate objectives, measures, and targets. The second leaves room for translating corporate targets into targets for each business unit. For the third level, the company asks both individuals and teams to articulate which of their own objectives would be consistent with the business unit and corporate objectives, as well as what initiatives they would take to achieve their objectives. It also asks them to define up to five performance measures for their objectives and to set targets for each measure. The personal scorecard helps to communicate corporate and business unit objectives to the people and teams performing the work, enabling them to translate the objectives into meaningful tasks and targets for themselves. It also lets them keep that information close at hand—in their pockets.

Linking Rewards to Performance Measures. Should compensation systems be linked to balanced scorecard measures? Some companies, believing that tying financial compensation to performance is a powerful lever, have moved quickly to establish such a linkage. For example, an oil company that we'll call Pioneer Petroleum uses its scorecard as the sole basis for computing incentive compensation. The company ties 60% of its executives' bonuses to their achievement of ambitious targets for a weighted average of four financial indicators: return on capital, profitability, cash flow, and operating cost. It bases the remaining 40% on indicators of customer satisfaction, dealer satisfaction, employee satisfaction, and environmental responsibility (such as a percentage change in the level of emissions to water and air). Pioneer's CEO says that linking compensation to the scorecard has helped to align the company with its strategy. "I know of no competitor," he says, "who has this degree of alignment. It is producing results for us."

As attractive and as powerful as such linkage is, it nonetheless carries risks. For instance, does the company have the right measures on the scorecard? Does it have valid and reliable data for the selected measures? Could unintended or unexpected consequences arise from the way the targets for the measures are

achieved? Those are questions that companies should ask.

Furthermore, companies traditionally handle multiple objectives in a compensation formula by assigning weights to each objective and calculating incentive compensation by the extent to which each weighted objective was achieved. This practice permits substantial incentive compensation to be paid if the business unit overachieves on a few objectives even if it falls far short on others. A better approach would be to establish minimum threshold levels for a critical subset of the strategic measures. Individuals would earn no incentive compensation if performance in a given period fell short of any threshold. This requirement should motivate people to achieve a more balanced performance across short- and long-term objectives.

Some organizations, however, have reduced their emphasis on short-term, formula-based incentive systems as a result of introducing the balanced scorecard. They have discovered that dialogue among executives and managers about the scorecard—both the formulation of the measures and objectives and

the explanation of actual versus targeted results—provides a better opportunity to observe managers' performance and abilities. Increased knowledge of their managers' abilities makes it easier for executives to set incentive rewards subjectively and to defend those subjective evaluations—a process that is less susceptible to the game playing and distortions associated with explicit, formula-based rules.

One company we have studied takes an intermediate position. It bases bonuses for business unit managers on two equally weighted criteria: their achievement of a financial objective—economic value added—over a three-year period and a subjective assessment of their performance on measures drawn from the customer, internal-business-process, and learning-and-growth perspectives of the balanced scorecard.

That the balanced scorecard has a role to play in the determination of incentive compensation is not in doubt. Precisely what that role should be will become clearer as more companies experiment with linking rewards to scorecard measures.

How One Company Built a Strategic Management System...

2A *Communicate to Middle Managers:* The top three layers of management (100 people) are brought together to learn about and discuss the new strategy. The balanced scorecard is the communication vehicle. (months 4 - 5)

2B *Develop Business Unit Scorecards:* Using the corporate scorecard as a template, each business unit translates its strategy into its own scorecard. (months 6 - 9)

5 *Refine the Vision:* The review of business unit scorecards identifies several cross-business issues not initially included in the corporate strategy. The corporate scorecard is updated. (month 12)

Time Frame (in months)

0	1	2	3	4	5	6	7	8	9	10	11	12
Actions:												
1 <i>Clarify the Vision:</i> Ten members of a newly formed executive team work together for three months. A balanced scorecard is developed to translate a generic vision into a strategy that is understood and can be communicated. The process helps build consensus and commitment to the strategy.						3A <i>Eliminate Nonstrategic Investments:</i> The corporate scorecard, by clarifying strategic priorities, identifies many active programs that are not contributing to the strategy. (month 6)			4 <i>Review Business Unit Scorecards:</i> The CEO and the executive team review the individual business units' scorecards. The review permits the CEO to participate knowledgeably in shaping business unit strategy. (months 9 - 11)			
						3B <i>Launch Corporate Change Programs:</i> The corporate scorecard identifies the need for cross-business change programs. They are launched while the business units prepare their scorecards. (month 6)						

Business Planning

“Where the rubber meets the sky”: That’s how one senior executive describes his company’s long-range-planning process. He might have said the same of many other companies because their financially based management systems fail to link change programs and resource allocation to long-term strategic priorities.

The problem is that most organizations have separate procedures and organizational units for strategic planning and for resource allocation and budgeting. To formulate their strategic plans, senior executives go off-site annually and engage for several days in active discussions facilitated by senior planning and development managers or external consultants. The outcome of this exercise is a strategic plan articulating where the company expects (or hopes or prays) to be in three, five, and ten years. Typically, such plans then sit on executives’ bookshelves for the next 12 months.

Meanwhile, a separate resource-allocation and budgeting process run by the finance staff sets financial targets for revenues, expenses, profits, and investments for the next fiscal year. The budget it produces consists almost entirely

of financial numbers that generally bear little relation to the targets in the strategic plan.

Which document do corporate managers discuss in their monthly and quarterly meetings during the following year? Usually only the budget, because the periodic reviews focus on a comparison of actual and budgeted results for every line item. When is the strategic plan next discussed? Probably during the next annual off-site meeting, when the senior managers draw up a new set of three-, five-, and ten-year plans.

The very exercise of creating a balanced scorecard forces companies to integrate their strategic planning and budgeting processes and therefore helps to ensure that their budgets support their strategies. Scorecard users select measures of progress from all four scorecard perspectives and set targets for each of them. Then they determine which actions will drive them toward their targets, identify the measures they will apply to those drivers from the four perspectives, and establish the short-term milestones that will mark their progress along the strategic paths they have selected. Building a scorecard thus enables a company to link its financial budgets with its strategic goals.

7 Update Long-Range Plan and Budget: Five-year goals are established for each measure. The investments required to meet those goals are identified and funded. The first year of the five-year plan becomes the annual budget. (months 15 - 17)

9 Conduct Annual Strategy Review: At the start of the third year, the initial strategy has been achieved and the corporate strategy requires updating. The executive committee lists ten strategic issues. Each business unit is asked to develop a position on each issue as a prelude to updating its strategy and scorecard. (months 25 - 26)

13	14	15	16	17	18	19	20	21	22	23	24	25	26
6A <i>Communicate the Balanced Scorecard to the Entire Company:</i> At the end of one year, when the management teams are comfortable with the strategic approach, the scorecard is disseminated to the entire organization. (month 12 - ongoing)					8 <i>Conduct Monthly and Quarterly Reviews:</i> After corporate approval of the business unit scorecards, a monthly review process, supplemented by quarterly reviews that focus more heavily on strategic issues, begins. (month 18 - ongoing)					10 <i>Link Everyone's Performance to the Balanced Scorecard:</i> All employees are asked to link their individual objectives to the balanced scorecard. The entire organization's incentive compensation is linked to the scorecard. (months 25 - 26)			
6B <i>Establish Individual Performance Objectives:</i> The top three layers of management link their individual objectives and incentive compensation to their scorecards. (months 13 - 14)													

Note: Steps 7, 8, 9, and 10 are performed on a regular schedule. The balanced scorecard is now a routine part of the management process.

For example, one division of the Style Company (not its real name) committed to achieving a seemingly impossible goal articulated by the CEO: to double revenues in five years. The forecasts built into the organization's existing strategic plan fell \$1 billion short of this objective. The division's managers, after considering various scenarios, agreed to specific increases in five different performance drivers: the number of new stores opened, the number of new customers attracted into new and existing stores, the percentage of shoppers in each store converted into actual purchasers, the portion of existing customers retained, and average sales per customer.

By helping to define the key drivers of revenue growth and by committing to targets for each of them, the division's managers eventually grew comfortable with the CEO's ambitious goal.

The process of building a balanced scorecard—clarifying the strategic objectives and then identifying the few critical drivers—also creates a framework for managing an organization's various change programs. These initiatives—reengineering, employee empowerment, time-based management, and total quality management, among others—promise to deliver results but also compete with one another for

scarce resources, including the scarcest resource of all: senior managers' time and attention.

Shortly after the merger that created it, Metro Bank, for example, launched more than 70 different initiatives. The initiatives were intended to produce a more competitive and successful institution, but they were inadequately integrated into the overall strategy. After building their balanced scorecard, Metro Bank's managers dropped many of those programs—such as a marketing effort directed at individuals with very high net worth—and consolidated others into initiatives that were better aligned with the company's strategic objectives. For example, the managers replaced a program aimed at enhancing existing low-level selling skills with a major initiative aimed at retraining salespersons to become trusted financial advisers, capable of selling a broad range of newly introduced products to the three selected customer segments. The bank made both changes because the scorecard enabled it to gain a better understanding of the programs required to achieve its strategic objectives.

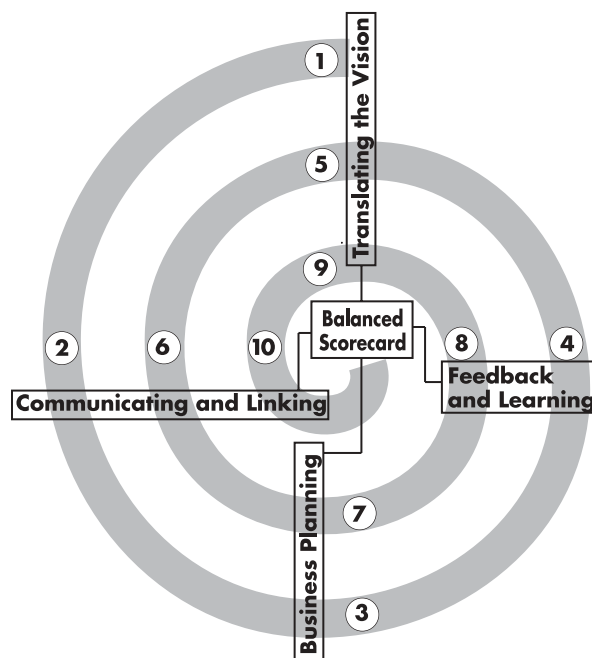
Once the strategy is defined and the drivers are identified, the scorecard influences managers to concentrate on improving or reengineering those processes most critical to the organization's strategic success. That is how the scorecard most clearly links and aligns action with strategy.

The final step in linking strategy to actions is to establish specific short-term targets, or milestones, for the balanced scorecard measures. Milestones are tangible expressions of managers' beliefs about when and to what degree their current programs will affect those measures.

In establishing milestones, managers are expanding the traditional budgeting process to incorporate strategic as well as financial goals. Detailed financial planning remains important, but financial goals taken by themselves ignore the three other balanced scorecard perspectives. In an integrated planning and budgeting process, executives continue to budget for short-term financial performance, but they also introduce short-term targets for measures in the customer, internal-business-process, and learning-and-growth perspectives. With those milestones established, managers can continually test both the theory underlying the strategy and the strategy's implementation.

At the end of the business planning process, managers should have set targets for the long-

...Around the Balanced Scorecard



term objectives they would like to achieve in all four scorecard perspectives; they should have identified the strategic initiatives required and allocated the necessary resources to those initiatives; and they should have established milestones for the measures that mark progress toward achieving their strategic goals.

Feedback and Learning

“With the balanced scorecard,” a CEO of an engineering company told us, “I can continually test my strategy. It’s like performing real-time research.” That is exactly the capability that the scorecard should give senior managers: the ability to know at any point in its implementation whether the strategy they have formulated is, in fact, working, and if not, why.

The first three management processes—translating the vision, communicating and linking, and business planning—are vital for implementing strategy, but they are not sufficient in an unpredictable world. Together they form an important single-loop-learning process—single-loop in the sense that the objective remains constant, and any departure from the planned trajectory is seen as a defect to be

remedied. This single-loop process does not require or even facilitate reexamination of either the strategy or the techniques used to implement it in light of current conditions.

Most companies today operate in a turbulent environment with complex strategies that, though valid when they were launched, may lose their validity as business conditions change. In this kind of environment, where new threats and opportunities arise constantly, companies must become capable of what Chris Argyris calls *double-loop learning*—learning that produces a change in people’s assumptions and theories about cause-and-effect relationships. (See “Teaching Smart People How to Learn,” HBR May–June 1991.)

Budget reviews and other financially based management tools cannot engage senior executives in double-loop learning—first, because these tools address performance from only one perspective, and second, because they don’t involve strategic learning. Strategic learning consists of gathering feedback, testing the hypotheses on which strategy was based, and making the necessary adjustments.

The balanced scorecard supplies three elements that are essential to strategic learning.

The Personal Scorecard

Corporate Objectives

- ☐ Double our corporate value in seven years.
- ☐ Increase our earnings by an average of 20% per year.
- ☐ Achieve an internal rate of return 2% above the cost of capital.
- ☐ Increase both production and reserves by 20% in the next decade.

Corporate Targets					Scorecard Measures					Business Unit Targets					Team/Individual Objectives and Initiatives				
1995	1996	1997	1998	1999						1995	1996	1997	1998	1999					
					Financial										1.				
100	120	160	180	250	Earnings (in millions of dollars)														
100	450	200	210	225	Net cash flow														
100	85	80	75	70	Overhead and operating expenses										2.				
					Operating														
100	75	73	70	64	Production costs per barrel														
100	97	93	90	82	Development costs per barrel														
100	105	108	108	110	Total annual production										3.				
Team/Individual Measures					Targets														
1.																			
2.																			
3.															4.				
4.																			
5.																			
Name:															5.				
Location:																			

First, it articulates the company's shared vision, defining in clear and operational terms the results that the company, as a team, is trying to achieve. The scorecard communicates a holistic model that links individual efforts and accomplishments to business unit objectives.

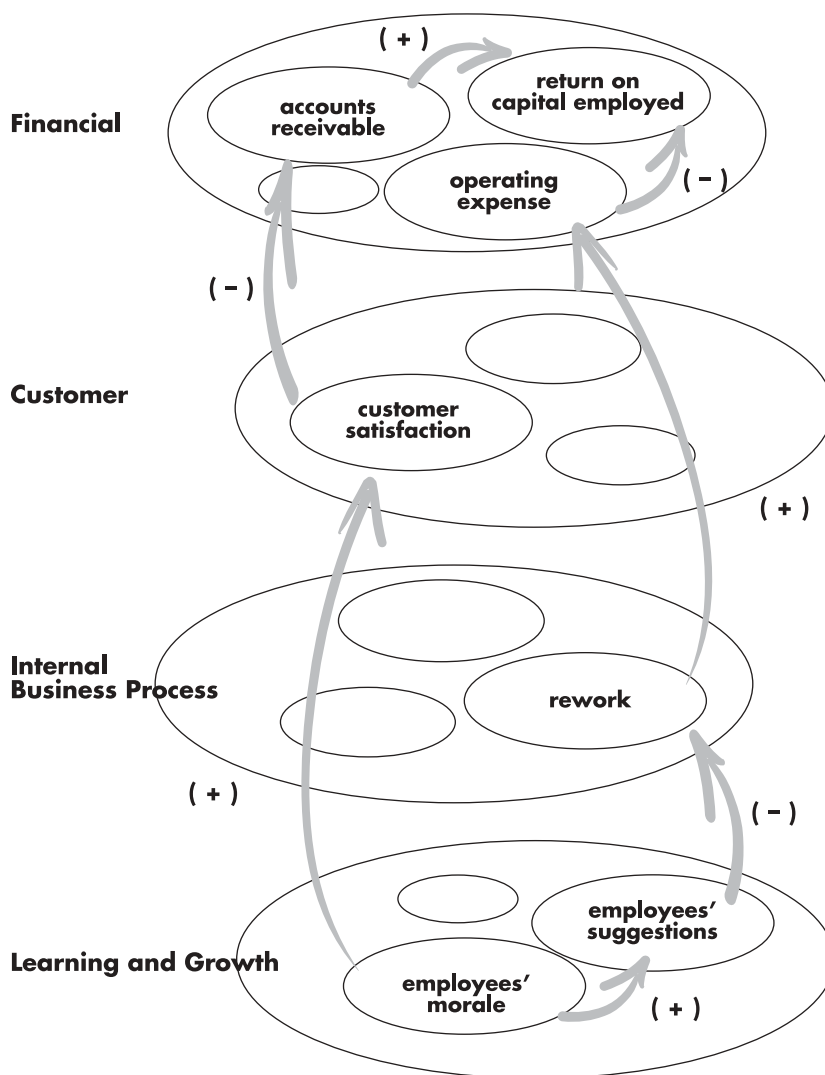
Second, the scorecard supplies the essential strategic feedback system. A business strategy can be viewed as a set of hypotheses about cause-and-effect relationships. A strategic feedback system should be able to test, validate, and modify the hypotheses embedded in a business unit's strategy. By establishing short-term goals, or milestones, within the business

planning process, executives are forecasting the relationship between changes in performance drivers and the associated changes in one or more specified goals. For example, executives at Metro Bank estimated the amount of time it would take for improvements in training and in the availability of information systems before employees could sell multiple financial products effectively to existing and new customers. They also estimated how great the effect of that selling capability would be.

Another organization attempted to validate its hypothesized cause-and-effect relationships in the balanced scorecard by measuring the strength of the linkages among measures in the different perspectives. (See the chart "How One Company Linked Measures from the Four Perspectives.") The company found significant correlations between employees' morale, a measure in the learning-and-growth perspective, and customer satisfaction, an important customer perspective measure. Customer satisfaction, in turn, was correlated with faster payment of invoices—a relationship that led to a substantial reduction in accounts receivable and hence a higher return on capital employed. The company also found correlations between employees' morale and the number of suggestions made by employees (two learning-and-growth measures) as well as between an increased number of suggestions and lower rework (an internal-business-process measure). Evidence of such strong correlations help to confirm the organization's business strategy. If, however, the expected correlations are not found over time, it should be an indication to executives that the theory underlying the unit's strategy may not be working as they had anticipated.

Especially in large organizations, accumulating sufficient data to document significant correlations and causation among balanced scorecard measures can take a long time—months or years. Over the short term, managers' assessment of strategic impact may have to rest on subjective and qualitative judgments. Eventually, however, as more evidence accumulates, organizations may be able to provide more objectively grounded estimates of cause-and-effect relationships. But just getting managers to think systematically about the assumptions underlying their strategy is an improvement over the current practice of making decisions based on short-term operational results.

How One Company Linked Measures from the Four Perspectives



Third, the scorecard facilitates the strategy review that is essential to strategic learning. Traditionally, companies use the monthly or quarterly meetings between corporate and division executives to analyze the most recent period's financial results. Discussions focus on past performance and on explanations of why financial objectives were not achieved. The balanced scorecard, with its specification of the causal relationships between performance drivers and objectives, allows corporate and business unit executives to use their periodic review sessions to evaluate the validity of the unit's strategy and the quality of its execution. If the unit's employees and managers have delivered on the performance drivers (retraining of employees, availability of information systems, and new financial products and services, for instance), then their failure to achieve the expected outcomes (higher sales to targeted customers, for example) signals that the theory underlying the strategy may not be valid. The disappointing sales figures are an early warning.

Managers should take such disconfirming evidence seriously and reconsider their shared conclusions about market conditions, customer value propositions, competitors' behavior, and internal capabilities. The result of such a review may be a decision to reaffirm their belief in the current strategy but to adjust the quantitative relationship among the strategic measures on the balanced scorecard. But they also might conclude that the unit needs a different strategy (an example of double-loop learning) in light of new knowledge about market conditions and internal capabilities. In any case, the scorecard will have stimulated key executives to learn about the viability of their strategy. This capacity for enabling organizational learning at the executive level—strategic learning—is what distinguishes the balanced scorecard, making it invaluable for those who wish to create a strategic management system.


Toward a New Strategic Management System

Many companies adopted early balanced-scorecard concepts to improve their performance measurement systems. They achieved tangible but narrow results. Adopting those

concepts provided clarification, consensus, and focus on the desired improvements in performance. More recently, we have seen companies expand their use of the balanced scorecard, employing it as the foundation of an integrated and iterative strategic management system. Companies are using the scorecard to

- clarify and update strategy,
- communicate strategy throughout the company,
- align unit and individual goals with the strategy,
- link strategic objectives to long-term targets and annual budgets,
- identify and align strategic initiatives, and
- conduct periodic performance reviews to learn about and improve strategy.

The balanced scorecard enables a company to align its management processes and focuses the entire organization on implementing long-term strategy. At National Insurance, the scorecard provided the CEO and his managers with a central framework around which they could redesign each piece of the company's management system. And because of the cause-and-effect linkages inherent in the scorecard framework, changes in one component of the system reinforced earlier changes made elsewhere. Therefore, every change made over the 30-month period added to the momentum that kept the organization moving forward in the agreed-upon direction.

Without a balanced scorecard, most organizations are unable to achieve a similar consistency of vision and action as they attempt to change direction and introduce new strategies and processes. The balanced scorecard provides a framework for managing the implementation of strategy while also allowing the strategy itself to evolve in response to changes in the company's competitive, market, and technological environments. 

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Using the Balanced Scorecard as a Strategic Management System

Further Reading

ARTICLES

[Putting the Balanced Scorecard to Work](#)

by Robert S. Kaplan and David P. Norton
Harvard Business Review
September–October 1993
Product no. 4118

In this development of their initial article, the authors argue that the balanced scorecard is more than a measurement system. Four characteristics make it distinctive: it is a top-down reflection of the company's mission and strategy, it is forward-looking, it integrates external and internal measures, and it helps a company focus. Together, these characteristics enable a scorecard to serve as a means for motivating and implementing breakthrough performance.

[Profit Priorities from Activity-Based Costing](#)

by Robin Cooper and Robert S. Kaplan
Harvard Business Review
May–June 1991
Product no. 3588

When used as the financial metric of a balanced scorecard, activity-based costing (ABC) can help managers find the places in their organizations where improvement is likely to have the greatest payoff. ABC involves separating whatever expenses are required to produce individual products from those required to process batches, to maintain a product, or to keep a manufacturing facility up and running. Since management cannot control costs at the aggregate level of cost of goods sold or administrative expenses, ABC analysis provides a valuable tool that enables managers to look into a specific part of the business and at all of its related activities. By looking at how those activities are linked to revenue generation and expenses, managers can understand the cause-and-effect relationships and pinpoint the changes required to increase profits.

[The Balanced Scorecard—Measures that Drive Performance](#)

by Robert S. Kaplan and David P. Norton
Harvard Business Review
January–February 1992
Product no. 4096

This article introduced the concept of a balanced scorecard to HBR readers. Traditional performance measurement systems focus on control, the authors argue—for example, measuring the number of widgets produced against the number budgeted. But a balanced scorecard approach to performance focuses on vision and strategy. It provides a comprehensive snapshot of a business by combining financial measures with metrics for customer satisfaction, key internal processes, and organizational learning and growth.

BOOK

[The Balanced Scorecard: Translating Strategy Into Action](#)

by Robert S. Kaplan and David P. Norton
Harvard Business School Press
1996
Product no. 6513

Developing and using a balanced scorecard helps executives solve what is perhaps their most central issue: how to implement strategy, particularly one that requires radical change. This book builds on the authors' three *Harvard Business Review* articles, providing additional insight into the mechanics of choosing measures for each of the four scorecard perspectives. Extended examples from industries such as oil, banking, insurance, and retailing demonstrate how companies have built scorecards tailored to their particular competitive challenges and strategic goals.

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4th article from the collection:
**Focusing Your Organization on
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card, 2nd Edition**

Having Trouble with Your Strategy? Then Map It

by Robert S. Kaplan and David P. Norton

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Having Trouble with Your Strategy? Then Map It

The Idea in Brief

How does Mobil make sure that every gas station owner understands the company's strategy—and implements it each time a customer drives up to his pumps? How did Mobil become the industry's profit leader and boost its cash flow by \$1 billion+ per year? By using a **strategy map**—a powerful new tool built on the balanced scorecard.

The **balanced scorecard** measures your company's performance from four perspectives—*financial, customer, internal processes, and learning and growth*. A **strategy map** is a visual framework for the corporate objectives within those four areas. The authors created strategy map templates for various industries, including retail, telecommunications, and e-commerce.

Strategy maps put into focus the often-blurry line of sight between your corporate strategy and what your employees do every day—significantly enhancing collaboration and coordination.

The Idea in Practice

WHY STRATEGY MAPS?

Strategy maps are essential in the information age, when intangible assets—customer relationships, employee skills, the ability to innovate—are competitive advantages. But these assets have value *only within the context of a strategy*.

For example, a growth-oriented strategy might require in-depth customer knowledge, sales training, and incentive-based compensation. But none of these, alone, would be enough to *implement* that strategy. Strategy maps quantify the value of tangible *and* intangible assets—linking them all to your overarching strategy.

BUILDING YOUR STRATEGY MAP

Step 1.

Clarify your mission and strategic vision. Mobil sought “to be the best integrated refiner-marketer in the U.S. by efficiently delivering unprecedented value to customers.”

Step 2.

Specify objectives in the four scorecard areas to realize your company's vision.

- **Financial.** Balance revenue growth and productivity improvement.
 - ▶ Example: Mobil **grew revenue** by selling more non-gasoline products and services and more premium gas. It **improved productivity** by slashing operating expenses (e.g., reducing refinery downtime).
- **Customer.** Differentiate your firm from competitors. Choose one of these value propositions: **operational excellence**, **customer intimacy**, or **product leadership**.
 - ▶ Example: Mobil emphasized **customer intimacy**, targeting premium customers by offering fast, friendly, and safe service. Satisfied customers gladly paid more.

- **Internal Processes.** Identify operational, customer-relationship, and innovation processes to support your customer and financial goals.

▶ Example:

Mobil reduced environmental and safety incidents (**operational**), built best-in-class franchise teams (**customer relationships**), and developed non-gasoline services (**innovation**).

- **Learning and Growth.** Define the skills, technologies, and corporate culture needed to support your strategy.

▶ Example:

Mobil's objectives were: increase employee knowledge of refining business; nurture leadership skills necessary to articulate its vision.

Mobil's strategy map linked the four perspectives, providing all its business units clear direction for creating their own more detailed maps.

The key to executing your strategy is to have people in your organization understand it—including the crucial but perplexing processes by which intangible assets will be converted into tangible outcomes. Strategy maps can help chart this difficult terrain.

TOOL KIT

Having Trouble with Your Strategy? Then Map It

by Robert S. Kaplan and David P. Norton

Imagine that you are a general taking your troops into foreign territory. Obviously, you would need detailed maps showing the important towns and villages, the surrounding landscape, key structures like bridges and tunnels, and the roads and highways that traverse the region. Without such information, you couldn't communicate your campaign strategy to your field officers and the rest of your troops.

Unfortunately, many top executives are trying to do just that. When attempting to implement their business strategies, they give employees only limited descriptions of what they should do and why those tasks are important. Without clearer and more detailed information, it's no wonder that many companies have failed in executing their strategies. After all, how can people carry out a plan that they don't fully understand? Organizations need tools for communicating both their strategy and the processes and systems that will help them implement that strategy.

Strategy maps provide such a tool. They

give employees a clear line of sight into how their jobs are linked to the overall objectives of the organization, enabling them to work in a coordinated, collaborative fashion toward the company's desired goals. The maps provide a visual representation of a company's critical objectives and the crucial relationships among them that drive organizational performance.

Strategy maps can depict objectives for revenue growth; targeted customer markets in which profitable growth will occur; value propositions that will lead to customers doing more business and at higher margins; the key role of innovation and excellence in products, services, and processes; and the investments required in people and systems to generate and sustain the projected growth.

Strategy maps show the cause-and-effect links by which specific improvements create desired outcomes—for example, how faster process-cycle times and enhanced employee capabilities will increase retention of customers and thus increase a company's revenues.

From a larger perspective, strategy maps

show how an organization will convert its initiatives and resources—including intangible assets such as corporate culture and employee knowledge—into tangible outcomes.

Why Strategy Maps?

In the industrial age, companies created value by transforming raw materials into finished products. The economy was primarily based on tangible assets—inventory, land, factories, and equipment—and an organization could describe and document its business strategy by using financial tools such as general ledgers, income statements, and balance sheets.

In the information age, businesses must increasingly create and deploy intangible assets—for instance, customer relationships; employee skills and knowledge; information technologies; and a corporate culture that encourages innovation, problem solving, and general organizational improvements.

Even though intangible assets have become major sources of competitive advantage, no tools existed to describe them and the value they can create. The main difficulty is that the value of intangible assets depends on their organizational context and a company's strategy. For example, a growth-oriented sales strategy might require knowledge about customers, additional training for salespeople, new databases and information systems, a different organizational structure, and an incentive-based compensation program. Investing in just one of those items—or in a few of them but not all—would cause the strategy to fail. The value of an intangible asset such as a customer database cannot be considered separately from the organizational processes that will transform it and other assets—both intangible and tangible—into customer and financial outcomes. The value does not reside in any individual intangible asset. It arises from the entire set of assets and the strategy that links them together.

To understand how organizations create value in the information age, we developed the balanced scorecard, which measures a company's performance from four major perspectives: financial, customer, internal process, and learning and growth.¹ Briefly summarized, balanced scorecards tell you the knowledge, skills, and systems that your employees will need (their learning and growth) to innovate and build the right strategic capabilities and ef-

ficiencies (the internal processes) that deliver specific value to the market (the customers), which will eventually lead to higher shareholder value (the financials).

Since we introduced the concept in 1992, we have worked with hundreds of executive teams from various organizations, in both the private and public sectors. From this extensive research, we have noticed certain patterns and have brought them into a common visual framework—a strategy map—that embeds the different items on an organization's balanced scorecard into a cause-and-effect chain, connecting desired outcomes with the drivers of those results.

We have developed strategy maps for companies in various industries, including insurance, banking, retail, health care, chemicals, energy, telecommunications, and e-commerce. The maps have also been useful for nonprofit organizations and government units. From this experience, we have developed a standard template that executives can use to develop their own strategy maps. (See the exhibit "The Balanced Scorecard Strategy Map.") The template contains four distinct regions—financial, customer, internal process, and learning and growth—that correspond to the four perspectives of the balanced scorecard.

The template provides a common framework and language that can be used to describe any strategy, much like financial statements provide a generally accepted structure for describing financial performance. A strategy map enables an organization to describe and illustrate, in clear and general language, its objectives, initiatives, and targets; the measures used to assess its performance (such as market share and customer surveys); and the linkages that are the foundation for strategic direction.

To understand how a strategy map is built, we will study Mobil North American Marketing and Refining, which executed a new strategy to reconstruct itself from a centrally controlled manufacturer of commodity products to a decentralized, customer-driven organization. As a result, Mobil increased its operating cash flow by more than \$1 billion per year and became the industry's profit leader.

From the Top Down

The best way to build strategy maps is from the top down, starting with the destination

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and then charting the routes that will lead there. Corporate executives should first review their mission statement and their core values—why their company exists and what it believes in. With that information, managers can develop a strategic vision, or what the company wants to become. This vision should create a clear picture of the company's overall goal—for example, to become the profit leader in an industry. A strategy must then define the logic of how to arrive at that destination.

Financial Perspective. Building a strategy map typically starts with a financial strategy for increasing shareholder value. (Nonprofit and government units often place their customers or constituents—not the financials—at the top of their strategy maps.) Companies have two basic levers for their financial strategy: revenue growth and productivity. The former generally has two components: build the franchise with revenue from new markets, new products, and new customers; and increase value to existing customers by deepening relationships with them through expanded sales—for example, cross-selling products or offering bundled products instead of single products. The productivity strategy also usually has two parts: improve the company's cost structure by reducing direct and indirect expenses, and use assets more efficiently by reducing the working and fixed capital needed to support a given level of business.

In general, the productivity strategy yields results sooner than the growth strategy. But one of the principal contributions of a strategy map is to highlight the opportunities for enhancing financial performance through revenue growth, not just by cost reduction and improved asset utilization. Also, balancing the two strategies helps to ensure that cost and asset reductions do not compromise a company's growth opportunities with customers.

Mobil's stated strategic vision was "to be the best integrated refiner-marketer in the United States by efficiently delivering unprecedented value to customers." The company's high-level financial goal was to increase its return on capital employed by more than six percentage points within three years. To achieve that, executives used all four of the drivers of a financial strategy that we break out in the strategy map—two for revenue growth and two for productivity. (See the financial portion of the

exhibit "Mobil's Strategy Map.")

The revenue growth strategy called for Mobil to expand sales outside of gasoline by offering convenience store products and services, ancillary automotive services (car washes, oil changes, and minor repairs), automotive products (oil, antifreeze, and wiper fluid), and common replacement parts (tires and wiper blades). Also, the company would sell more premium brands to customers, and it would increase sales faster than the industry average. In terms of productivity, Mobil wanted to slash operating expenses per gallon sold to the lowest level in the industry and extract more from existing assets—for example, by reducing the downtime at its oil refineries and increasing their yields.

Customer Perspective. The core of any business strategy is the customer value proposition, which describes the unique mix of product and service attributes, customer relations, and corporate image that a company offers. It defines how the organization will differentiate itself from competitors to attract, retain, and deepen relationships with targeted customers. The value proposition is crucial because it helps an organization connect its internal processes to improved outcomes with its customers.

Typically, the value proposition is chosen from among three differentiators: operational excellence (for example, McDonald's and Dell Computer), customer intimacy (for example, Home Depot and IBM in the 1960s and 1970s), and product leadership (for example, Intel and Sony).² Companies strive to excel in one of the three areas while maintaining threshold standards in the other two. By identifying its customer value proposition, a company will then know which classes and types of customers to target. In our research, we have found that although a clear definition of the value proposition is the single most important step in developing a strategy, approximately three-quarters of executive teams do not have consensus about this basic information.

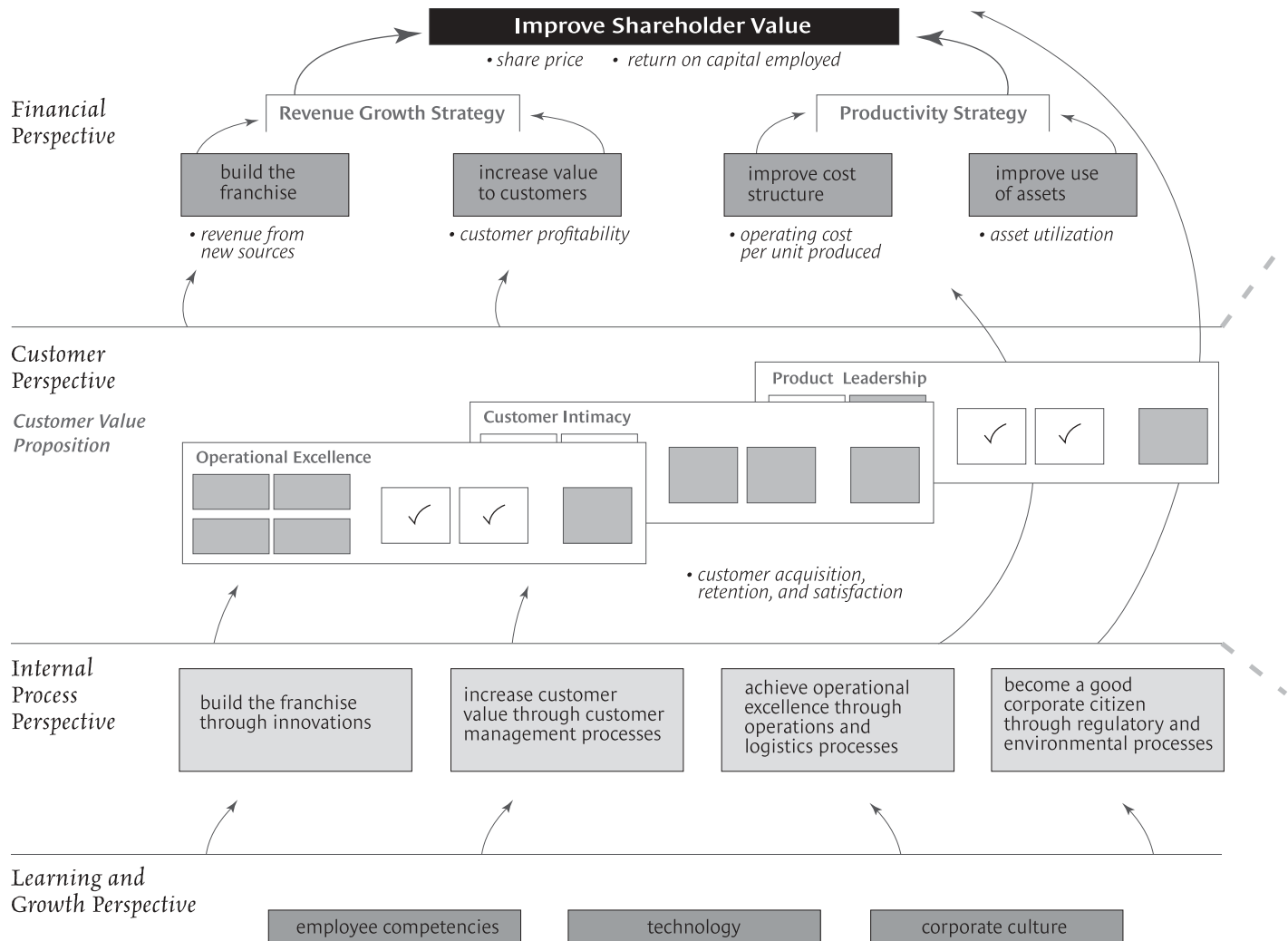
The inset of the exhibit "The Balanced Scorecard Strategy Map" highlights the different objectives for the three generic strategy concepts of operational excellence, customer intimacy, and product leadership. Specifically, companies that pursue a strategy of operational excellence need to excel at competitive pricing, product quality and selection, speedy

order fulfillment, and on-time delivery. For customer intimacy, an organization must stress the quality of its relationships with customers, including exceptional service and the completeness of the solutions it offers. And companies that pursue a product leadership strategy must concentrate on the functionality, features, and overall performance of its products or services.

Mobil, in the past, had attempted to sell a full range of products and services to all consumers, while still matching the low prices of nearby discount stations. But this unfocused strategy had failed, leading to poor financial performance in the early '90s. Through market research, Mobil discovered that price-sensitive consumers represented only about 20% of gasoline purchasers, while consumer segments

representing nearly 60% of the market might be willing to pay significant price premiums for gasoline if they could buy at stations that were fast, friendly, and outfitted with excellent convenience stores. With this information, Mobil made the crucial decision to adopt a "differentiated value proposition." The company would target the premium customer segments by offering them immediate access to gasoline pumps, each equipped with a self-payment mechanism; safe, well-lit stations; clean restrooms; convenience stores stocked with fresh, high-quality merchandise; and friendly employees.

Mobil decided that the consumer's buying experience was so central to its strategy that it invested in a new system for measuring its progress in this area. Each month, the com-



pany sent “mystery shoppers” to purchase fuel and a snack at every Mobil station nationwide and then asked the shoppers to evaluate their buying experience based on 23 specific criteria. Thus, Mobil could use a fairly simple set of metrics (share of targeted customer segments and a summary score from the mystery shoppers) for its consumer objectives.

But Mobil does not sell directly to consumers. The company’s immediate customers are the independent owners of gasoline stations. These franchised retailers purchase gasoline and other products from Mobil and sell them to consumers in Mobil-branded stations. Because dealers were such a critical part of the new strategy, Mobil included two additional metrics to its customer perspective: dealer profitability and dealer satisfaction.

Thus, Mobil’s complete customer strategy motivated independent dealers to deliver a great buying experience that would attract an increasing share of targeted consumers. These consumers would buy products and services at premium prices, increasing profits for both Mobil and its dealers, who would then continue to be motivated to offer the great buying experience. And this virtuous cycle would generate the revenue growth for Mobil’s financial strategy. Note that the objectives in the customer perspective portion of Mobil’s strategy map were not generic, undifferentiated items like “customer satisfaction.” Instead, they were specific and focused on the company’s strategy.

Internal Process Perspective. Once an organization has a clear picture of its customer

Customer Value Proposition Strategies

Operational Excellence

Product/Service Attributes

price	time
quality	selection

Relationship

✓	✓
---	---

Image

smart shopper

Companies excel at competitive pricing, product quality, and on-time delivery.

Customer Intimacy

Product/Service Attributes

✓	✓
✓	✓

Relationship

service	customer relations
---------	--------------------

Image

trusted brand

Companies excel at offering personalized service to customers and at building long-term relations with them.

Product Leadership

Product/Service Attributes

✓	time
✓	functionality

Relationship

✓	✓
---	---

Image

best in class

Companies excel at creating unique products that push the envelope.

The Balanced Scorecard Strategy Map

Strategy maps show how an organization plans to convert its various assets into desired outcomes. Companies can use the template here to develop their own strategy maps, which are based on the balanced scorecard. At far left, from bottom to top, the template shows how employees need certain knowledge, skills, and systems (learning and growth perspective) to innovate and build the right strategic capabilities and efficiencies (internal process perspective) so that they can deliver specific value to the market (customer perspective), which will lead to higher shareholder value (financial perspective). For the customer perspective, companies typically select one of three strategies: operational excellence, customer intimacy, or product leadership.

- ✓ general requirement
- differentiator
- measure of achievement

and financial perspectives, it can then determine the means by which it will achieve the differentiated value proposition for customers and the productivity improvements to reach its financial objectives. The internal process perspective captures these critical organizational activities, which fall into four high-level processes: build the franchise by innovating with new products and services and by penetrating new markets and customer segments; increase customer value by deepening relationships with existing customers; achieve operational excellence by improving supply chain management, the cost, quality, and cycle time of internal processes, asset utilization, and capacity management; and become a good corporate citizen by establishing effective relationships with external stakeholders.

An important caveat to remember here is that while many companies espouse a strategy that calls for innovation or for developing value-adding customer relationships, they mistakenly choose to measure only the cost and quality of their operations—and not their innovations or their customer management processes. These companies have a complete disconnect between their strategy and how they measure it. Not surprisingly, these organizations typically have great difficulty implementing their growth strategies.



The financial benefits from improved business processes typically reveal themselves in stages. Cost savings from increased operational efficiencies and process improvements create short-term benefits. Revenue growth from enhanced customer relationships accrues in the intermediate term. And increased innovation can produce long-term revenue and margin improvements.

Thus, a complete strategy should involve generating returns from all three of these internal processes. (See the internal process portion of the exhibit “Mobil’s Strategy Map.”)

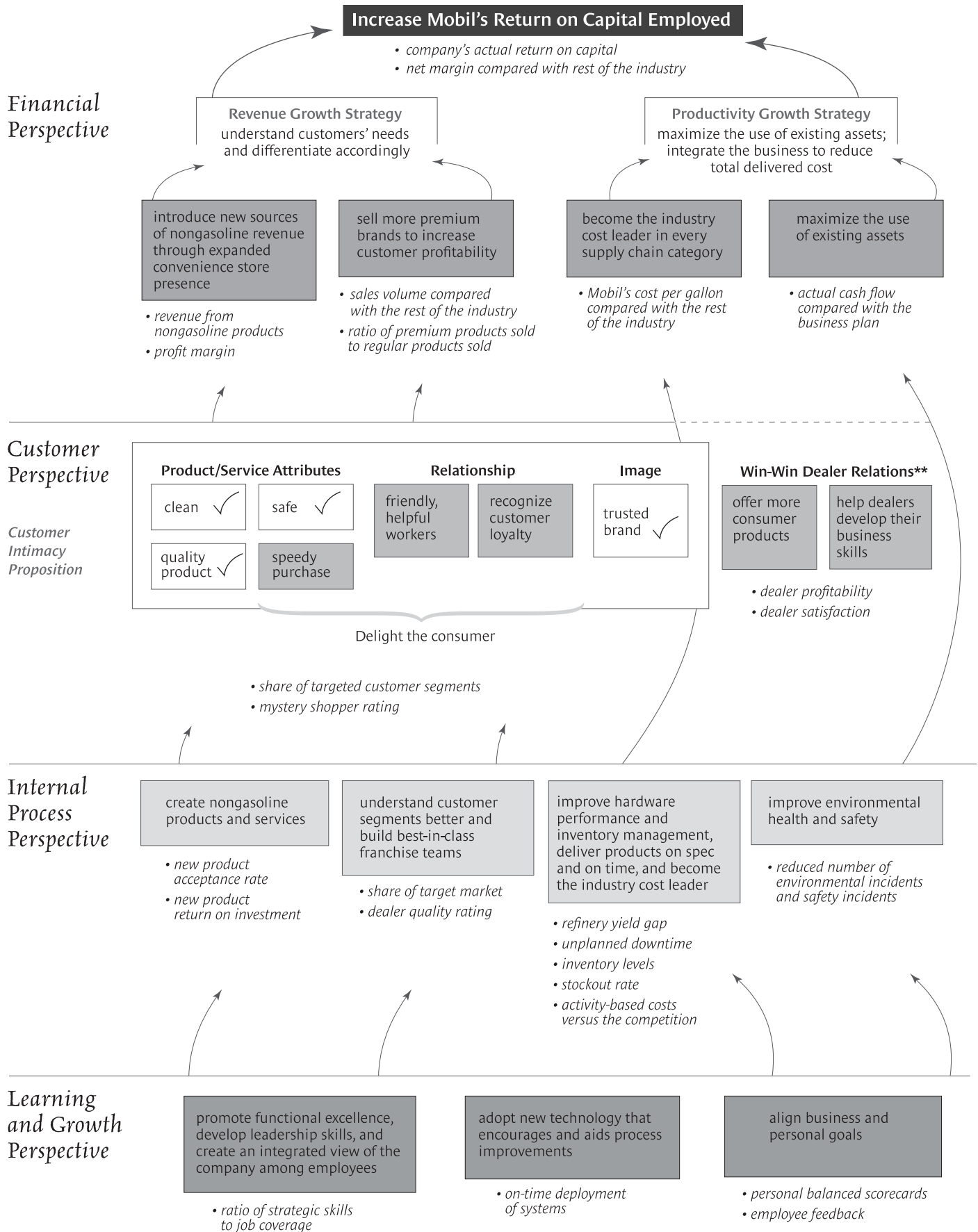
Mobil’s internal process objectives included building the franchise by developing new products and services, such as sales from convenience stores; and enhancing customer value by training dealers to become better managers and by helping them generate profits from nongasoline products and services. The plan was that if dealers could capture increased revenues and profits from products other than gasoline, they could then rely less on gasoline sales, allowing Mobil to capture a

Mobil’s Strategy Map

Shown here is a map for the strategy that Mobil North American Marketing and Refining used to transform itself from a centrally controlled manufacturer of commodity products to a decentralized customer-driven organization. A major part of the strategy was to target consumers who were willing to pay price premiums for gasoline if they could buy at fast, friendly stations that were outfitted with excellent convenience stores. Their purchases enabled Mobil to increase its profit margins and its revenue from nongasoline products. Using the strategy map shown here, Mobil increased its operating cash flow by more than \$1 billion per year.

-  general requirement
-  differentiator
- measure of achievement

**To account for Mobil’s independent-dealer customers—not just consumers—the company adapted the strategy map template to factor in dealer relationships.



larger profit share of its sales of gasoline to dealers.

For its customer intimacy strategy, Mobil had to excel at understanding its consumer segments. And because Mobil doesn't sell directly to consumers, the company also had to concentrate on building best-in-class franchise teams.

Interestingly, Mobil placed a heavy emphasis on objectives to improve its basic refining and distribution operations, such as lowering operating costs, reducing the downtime of equipment, and improving product quality and the number of on-time deliveries.

When a company such as Mobil adopts a customer intimacy strategy, it usually focuses on its customer management processes. But Mobil's differentiation occurred at the dealer locations, not at its own facilities, which basically produced commodity products (gasoline, heating oil, and jet fuel). So Mobil could not charge its dealers higher prices to make up for

any higher costs incurred in its basic manufacturing and distribution operations. Consequently, the company had to focus heavily on achieving operational excellence throughout its value chain of operations.

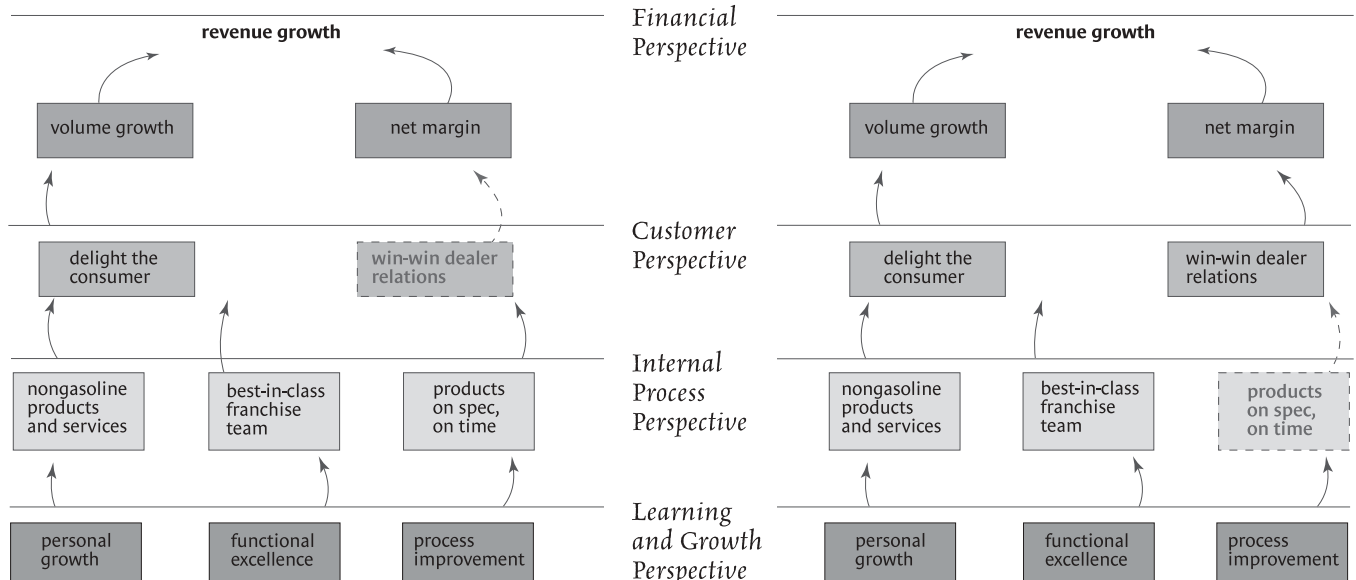
Finally, as part of both its operational-excellence and corporate-citizen themes, Mobil wanted to eliminate environmental and safety accidents. Executives believed that if there were injuries and other problems at work, then employees were probably not paying sufficient attention to their jobs.

Learning and Growth Perspective. The foundation of any strategy map is the learning and growth perspective, which defines the core competencies and skills, the technologies, and the corporate culture needed to support an organization's strategy. These objectives enable a company to align its human resources and information technology with its strategy. Specifically, the organization must determine how it will satisfy the requirements

What's Missing?

Strategy maps can help a company detect major gaps in the strategies being implemented at lower levels in the organization. At Mobil, senior managers noticed that one business unit had no objectives or metrics for dealers, as

shown below left. Had this unit discovered how to bypass Mobil dealers and sell gasoline directly to consumers? Another business unit had no measure for quality, as shown below right. Had this unit somehow perfected its operations?



from critical internal processes, the differentiated value proposition, and customer relationships. Although executive teams readily acknowledge the importance of the learning and growth perspective, they generally have trouble defining the corresponding objectives.

Mobil identified that its employees needed to gain a broader understanding of the marketing and refining business from end to end. Additionally, the company knew it had to nurture the leadership skills that were necessary for its managers to articulate the company's vision and develop employees. Mobil identified key technologies that it had to develop, including automated equipment for monitoring the refining processes and extensive databases and tools to analyze consumers' buying experiences.

Upon completing its learning and growth perspective, Mobil now had a complete strategy map linked across the four major perspectives, from which Mobil's different business units and service departments could develop their own detailed maps for their respective operations. This process helped the company detect and fill major gaps in the strategies being implemented at lower levels of the organization. For example, senior management noticed that one business unit had no objectives or metrics for dealers (see the exhibit "What's Missing?"). Had this unit discovered how to bypass dealers and sell gasoline directly to consumers? Were dealer relationships no longer strategic for this unit? Another business unit had no measure for quality. Had the unit achieved perfection? Strategy maps can help uncover and remedy such omissions.

Strategy maps also help identify when scorecards are not truly strategic. Many organizations have built stakeholder scorecards, not strategy scorecards, by developing a seemingly balanced measurement system around three dominant groups of constituents: employees, customers, and shareholders. A strategy, however, must describe *how* a company will achieve its desired outcome of satisfying employees, customers, and shareholders. The "how" must include the value proposition in the customer perspective; the innovation, customer management, and operating processes in the internal process perspective; and the employee skills and information technology capabilities in the learning and growth perspective. These elements are as fundamental

to the strategy as the projected outcome of the strategy.

Another limitation occurs when companies build key performance indicator (KPI) scorecards. For example, one financial services organization identified the four Ps in its balanced scorecard: profits, portfolio (the volume of loans), process (the percentage of processes that are ISO certified), and people (the diversity of new employees). Although this approach was more balanced than using just financial measures, a comparison of the four Ps with a strategy map revealed several missing components: no customer measures, only a single internal-process metric—which was focused on an initiative, not an outcome—and no defined role for information technology, a strange omission for a financial services organization. In actuality, KPI scorecards are an ad hoc collection of measures, a checklist, or perhaps elements in a compensation plan, but they don't describe a coherent strategy. Unless the link to strategy has been clearly thought through, a KPI scorecard can be a dangerous illusion.

Perhaps the greatest benefit of strategy maps is their ability to communicate strategy to an entire organization. The power of doing so is amply demonstrated by the story of how Mobil developed Speedpass, a small device carried on a keychain that, when waved in front of a photocell on a gasoline pump, identifies the consumer and charges the appropriate credit or debit card for the purchase. The idea for Speedpass came from a planning manager in the marketing technology group who learned from Mobil's balanced scorecard about the importance of speed in the purchasing transaction. He came up with the concept of a device that could automatically handle the entire purchasing transaction. He worked with a gasoline-pump manufacturer and a semiconductor company to turn that idea into reality. After its introduction, Speedpass soon became a strong differentiator for Mobil's value proposition of fast, friendly service. From 1997 on, executives modified Mobil's balanced scorecard to include new objectives for the number of consumers and dealers that adopted Speedpass.

With all its employees now aligned to the new strategy, Mobil North American Marketing and Refining executed a remarkable turnaround in less than two years to become the in-


dustries' profit leader from 1995 up through its merger with Exxon in late 1999. The division increased its return on capital employed from 6% to 16%; sales growth exceeded the industry average by more than 2% annually; cash expenses decreased by 20%; and in 1998, the division's operating cash flow was more than \$1 billion per year higher than at the launch of the new strategy.

These impressive financial results were driven by improvements throughout Mobil's strategy map: mystery-shopper scores and dealer quality increased each year; the number of consumers using Speedpass grew by one million annually; environmental and safety accidents plunged between 60% and 80%; lost oil-refinery yields due to systems downtime dropped by 70%; and employee awareness and commitment to the strategy more than quadrupled.

Not an Art Form

We do not claim to have made a science of strategy; the formulation of great strategies is an art, and it will always remain so. But the description of strategy should not be an art. If people can describe strategy in a more disciplined way, they will increase the likelihood of its successful implementation. Strategy maps will help organizations view their strategies in a cohesive, integrated, and systematic way. They often expose gaps in strategies, enabling

executives to take early corrective actions. Executives can also use the maps as the foundation for a management system that can help an organization implement its growth initiatives effectively and rapidly.

Strategy implies the movement of an organization from its present position to a desirable but uncertain future position. Because the organization has never been to this future place, the pathway to it consists of a series of linked hypotheses. A strategy map specifies these cause-and-effect relationships, which makes them explicit and testable. The key, then, to implementing strategy is to have everyone in the organization clearly understand the underlying hypotheses, to align all organizational units and resources with those hypotheses, to test the hypotheses continually, and to use those results to adapt as required. 

1. See Robert S. Kaplan and David P. Norton's, *The Balanced Scorecard: Translating Strategy into Action* (Harvard Business School Press, 1996).

2. These three generic value propositions were initially articulated in Michael Treacy and Fred Wiersema's *The Discipline of Market Leaders* (Addison-Wesley, 1995).

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Further Reading

ARTICLES

[The Balanced Scorecard—Measures that Drive Performance](#)

by Robert S. Kaplan and David P. Norton
Harvard Business Review
January–February 1992
Product no. 4096

This article introduced the balanced scorecard—and lays the foundation for understanding strategy maps. It clarifies why no single perspective fully captures a company's health. Instead, balance four perspectives—*financial*, *customer*, *internal business processes*, and *innovation and learning*—and track performance in each.

[Putting the Balanced Scorecard to Work](#)

by Robert S. Kaplan and David P. Norton
Harvard Business Review
September–October 1993
Product no. 4118

Before building your strategy map, learn how to create a balanced scorecard that reflects your company's mission and strategy. Define corporate objectives and metrics within each of the four scorecard perspectives. These metrics will clarify how different you'll look to customers and shareholders when you reach your goals. They will also indicate how your internal processes, as well as your ability to innovate and grow, should change.

[Using the Balanced Scorecard as a Strategic Management System](#)

by Robert S. Kaplan and David P. Norton
Harvard Business Review
January–February 1996
Product no. 4126

A strategy map helps employees know how their everyday actions support the company's goals. This article outlines four steps for ensuring that those short-term actions lead to the right outcomes: 1) Communicate strategy throughout the organization. 2) Align unit and individual goals with the strategy. 3) Link strategic objectives to long-term targets and budgets. 4) Conduct performance reviews to hone the strategy.

BOOKS

[The Balanced Scorecard: Translating Strategy into Action](#)

by Robert S. Kaplan and David P. Norton
Harvard Business School Press
1996
Product no. 6513

Your balanced scorecard and strategy map help you focus on implementing strategy. This book provides greater insight into how to choose objectives and metrics to guide your strategy execution. Extended examples show how actual companies have used these tools.

[The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment](#)

by Robert S. Kaplan and David P. Norton
Harvard Business School Press
2000
Product no. 2506

This latest book by Kaplan and Norton expands on the theme of strategy focus and execution. They emphasize the importance of making strategy absolutely clear to—and a continuous process for—*everyone*. Drawing on 10 years of research into more than 200 companies, the authors use in-depth case examples to show how balanced scorecard adopters have taken this groundbreaking tool to the next level—putting strategy at the center of management processes and systems. This research resulted in a series of industry-specific strategy maps that any company can use to build its own.

NEWSLETTER

[Balanced Scorecard Report](#)

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