



## TOOL KIT

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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.<sup>1</sup> 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).<sup>2</sup> 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.

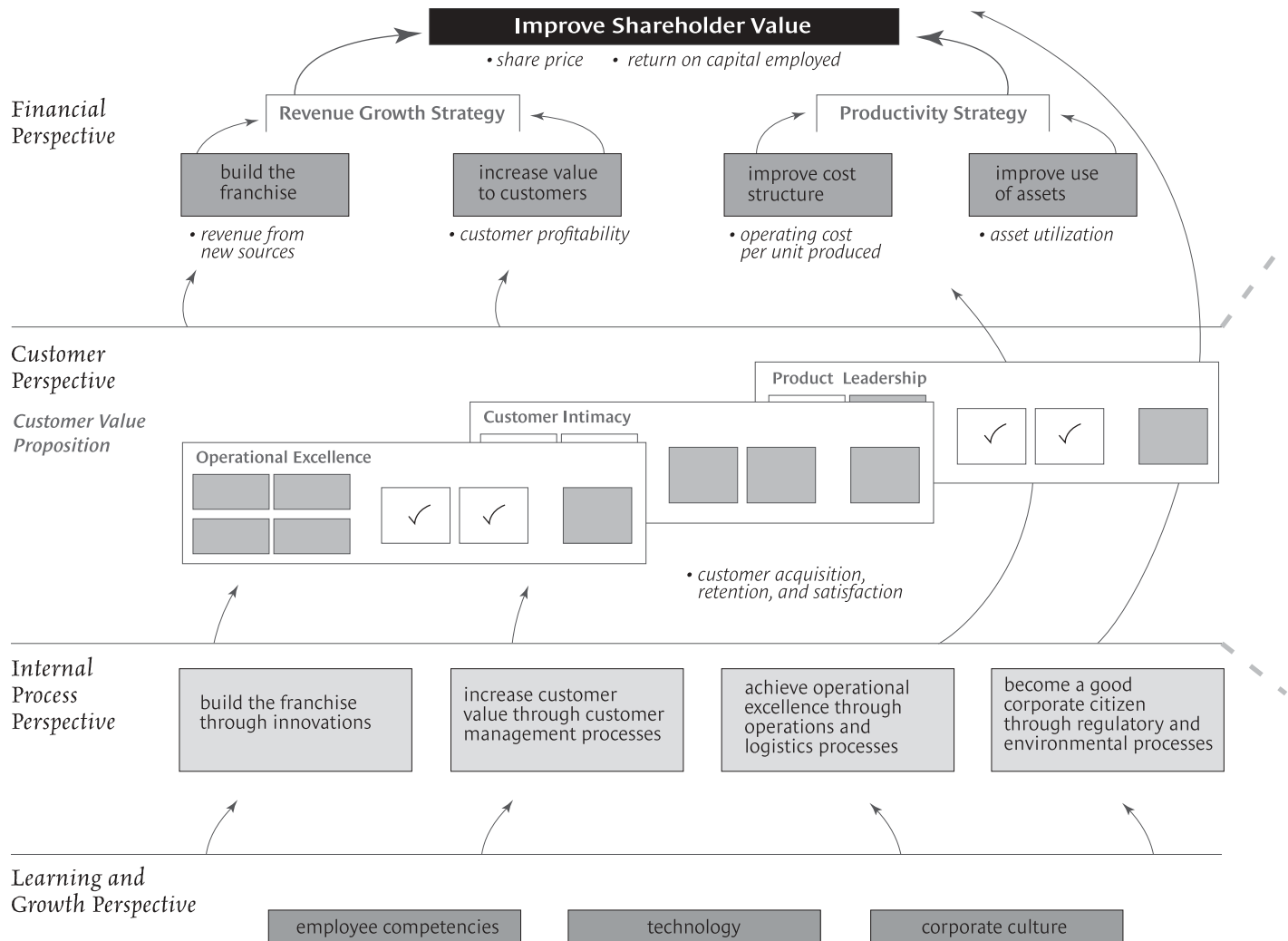
The inset of the exhibit "The Balanced Scorecard Strategy Map" highlights the different objectives for the three generic strategy concepts of operational excellence, customer intimacy, and product leadership. Specifically, companies that pursue a strategy of operational excellence need to excel at competitive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

✓	✓
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###### Image

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

##### Customer Intimacy

###### Product/Service Attributes

✓	✓
✓	✓

###### Relationship

service	customer relations
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###### Image

trusted brand
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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
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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

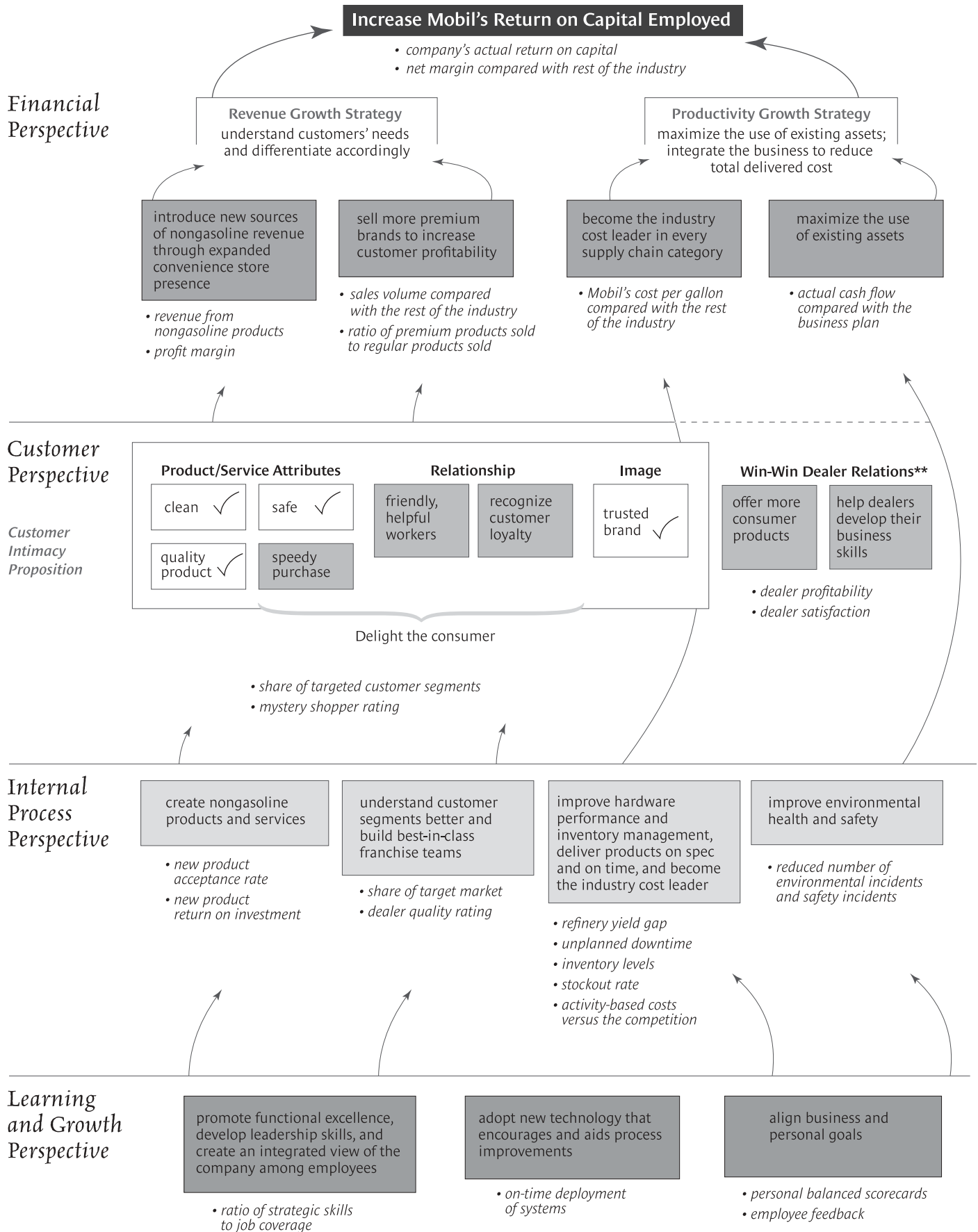
## Mobil’s Strategy Map

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.

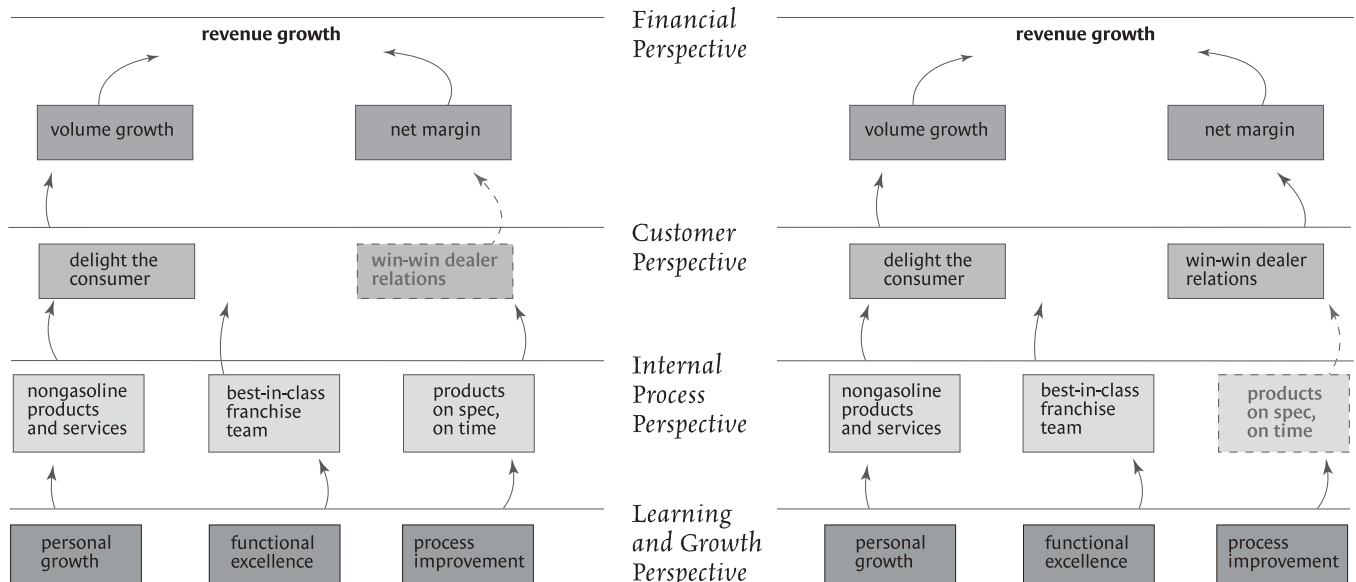
Finally, as part of both its operational-excellence and corporate-citizen themes, Mobil wanted to eliminate environmental and safety accidents. Executives believed that if there were injuries and other problems at work, then employees were probably not paying sufficient attention to their jobs.

**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-


dustury's 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. 

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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

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[Map It](#) is also part of the *Harvard Business Review* OnPoint collection [Focusing Your Organization on Strategy—with the Balanced Scorecard, 2nd Edition](#), Product no. 5933, which includes these additional articles:

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