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**CHOOSE YOUR CUSTOMERS,  
NARROW YOUR FOCUS,  
DOMINATE YOUR MARKET**

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& FRED WIERSEMA**

## THE NEW RULES OF COMPETITION

Is this any way to do business?

During the Gulf War in 1991, when the flow of Middle East crude oil was interrupted, gas prices rose 10 to 15 cents a gallon at most retail stations. But prices at the pumps of one major oil company stayed down. Its stations in Chicago charged 10 cents less for a gallon of regular gasoline than other brand-name retailers. By not hiking prices, the company shorted that year's revenues and profits by tens of millions of dollars.

Or how about this?

On the third floor of the headquarters of a large consumer electronics company, marketers are planning an extravagant launch for a new mini-camcorder. They expect the product to become the company's hottest-selling item. If they are correct, the mini-camcorder will generate the best profit margin the company has ever earned on a single product. At the same time, on the seventh, eighth, ninth, and twelfth floors, four other teams are competing among themselves to create a still better mini-camcorder with the goal of making the soon-to-be-unveiled one obsolete.

Or this?

A member of the sales staff at a home-improvement store phones a customer to ask if the new attic fan he bought last week is working all right. Just fine, the customer says. Good, replies the salesperson, who then asks if the customer has any other problems around the house that the store might help with. The dimmer switch in the dining room isn't working, the customer says. I'll drop a new one off tonight on my way home, the salesperson says, and I'll show you how to install it. Total sale: \$6.71. The store's profit, allowing for the cost of the salesperson's time: nothing. A loss, in fact.

Do any of these stories suggest smart ways for a company to make money? In fact, they all do, and the companies—Atlantic Richfield Company (Arco), Sony, and Home Depot—are clear leaders in their markets. Just look at the numbers:

- Arco has over the past five years averaged a 20 percent return on equity, more than triple the average of its industry.

- Sony outperforms its competitors by almost every financial measure. Its average annual revenue growth over the past five years was 29 percent, compared to 14 percent for rivals. Sony's annual return on equity in the same period outpaced other consumer electronics companies.

- Home Depot has averaged 37 percent annual sales growth over the past five years, almost triple the average for the industry. Return on equity over the same period came to 26 percent, more than twice the industry average.

These companies aren't doing just a little better than the competition; they are leaving them in the dust. So if certain of their practices seem contrary to sound business doctrine, maybe it is the doctrine that needs looking at.

Let's consider the principles the examples above demonstrate. Because Arco produces its own crude oil on Alaska's North Slope, its production wasn't threatened by the Middle East conflict. It could have reaped a windfall, but by not raising prices Arco reaffirmed its commitment to its customers of being the low-price leader, and after announcing its price freeze, it enjoyed a 20 percent increase in sales overnight. What's more, by maintaining its low prices, Arco avoided the temptation to relax its stringent cost discipline.

Sony's first mini-camcorder became the most successful item in the home electronics market. Because of the product's success, however, Sony knew that a handier, lighter, perhaps more user-friendly product would soon appear. The company didn't want to see the Panasonic or Canon name on this product. So Sony rendered the first mini-camcorder obsolete before wringing every last penny of profit out of it. It gained in two ways: by boosting its market reputation as a product innovator and by improving its ability to innovate.

The Home Depot sales associate telephoned the customer who had bought the attic fan because the man lived in a neighborhood of expensive, older houses. That phone call probably earned Home Depot the loyalty of a customer who would make major home improvement and repair purchases over the next few years. The loss on the dimmer switch was a small down payment on a long, profitable relationship.

All three companies are hugely successful, and all three are selling something more than the obvious. This something more is customer value. Not just ordinary, but superior value. And not just superior value, but *continually improving* superior value.

Arco's superior value resides in its assurance to customers that, today and tomorrow, they won't find better gasoline prices elsewhere and needn't bother trying. With Sony, the superior value does not reside just in the camcorder, but also in the comfort customers can take from knowing that whatever product they buy from Sony will represent the state of the art. With Home Depot, the superior value resides in the consistently high level of helpful advice and service offered.

By delivering superior value, each of these three companies has changed its customers' expectations. In effect, these companies became market leaders not by fulfilling old-fashioned ideas of value, but by getting their business to master one band in the value spectrum. They don't try to be the best in everything. They believe in three important truths that characterize the new world of competition:

- Different customers buy different kinds of value. You can't hope to be the best in all dimensions, so you choose your customers and narrow your value focus.
- As value standards rise, so do customer expectations; so you can stay ahead only by moving ahead.
- Producing an unmatched level of a particular value requires a superior operating model—a "machine"—dedicated to just that kind of value.

#### **DIFFERENT CUSTOMERS BUY DIFFERENT KINDS OF VALUE**

Let's define customer value more precisely; after all, the value provided by Arco, Sony, and Home Depot comes in very different forms. Customer value is the sum of benefits received minus the costs incurred

by the customer from the product (what we sell) and the service (how we do business) that we provide. Figure 2 shows a simple matrix that illustrates these dimensions of value. Costs include both the money spent on the purchase and maintenance, and the time spent on basic service errors, delays, and inconvenience. Both tangible and intangible costs reduce value. Product benefits build value to the extent that the product has features that improve the customer's performance or experience. Service can also add value when it provides expert advice, personalized service, or other benefits that exceed basic service expectations.

	Cost	Benefit
<b>Products</b> <i>"What we sell"</i>	<ul style="list-style-type: none"> <li>• price</li> <li>• reliability &amp; durability</li> </ul>	<ul style="list-style-type: none"> <li>• unique features</li> <li>• brand experience</li> </ul>
<b>Services</b> <i>"How we do business"</i>	<ul style="list-style-type: none"> <li>• service dependability</li> <li>• convenience</li> </ul>	<ul style="list-style-type: none"> <li>• expert advice</li> <li>• personalized services</li> </ul>

FIGURE 2 DIMENSIONS OF CUSTOMER VALUE

Price, product quality, product features, service convenience, service reliability, expert advice, and support services can either create or destroy value for the customer. The value added or destroyed depends on how much the value exceeds or falls short of customer expectations.

As we began to study 80 market-leading companies, we noted that their customers tended to fall into a small number of categories. Some customers, including those of 3M and Nike, view a product's performance or uniqueness as the pivotal component of value. Price played some role in their decision-making because there is a limit to how much they will pay. But product results matter most.

A second group of customers, which include those of Nordstrom and Airborne Express, most value personalized service and advice. They can't be satisfied with standard products or fair prices. They want their individual requirements met. Companies that serve such customers emphasize relationships, develop an intimate knowledge of the customer's needs, and make a commitment to providing a total solution.

A third group of customers looks largely for the lowest total cost, through some combination of price and dependability. Customers of FedEx, Hertz #1 Club Gold, and McDonald's are examples. For them, no-hassle, speedy service is paramount. Customers of companies like Southwest Airlines, PriceCostco, and Arco, which put a high premium on price, fall into this group as well.

Value among the customers of these three categories of market-leading companies has come to mean three different things: best products, best total solution, best total cost. Market leaders choose to excel in delivering extraordinary levels of one particular value and their customers recognize them for it. This is illustrated in Figure 3.

	<b>Cost</b>	<b>Benefit</b>
	<u>Best Total Cost</u>	<u>Best Product</u>
<b>Products</b>	"Great prices and quality."	"Premium priced, but worth it."
	"Their products last and last and last."	"Consumers ask for it by name."
<b>Services</b>	"A no-hassle firm."	<u>Best Total Solution</u>
	"Consistency is their middle name."	"They are experts in my business."
		"Their services are exactly what I need."

**FIGURE 3 WHAT CUSTOMERS SAY ABOUT VALUE**

These companies have created a set of expectations in customers' minds that competitors now must strive to meet. They abide by the first of four new rules that govern market leaders' actions:

- Rule 1: Provide the best offering in the marketplace by excelling in a specific dimension of value.

Market leaders first develop a value proposition, one that is compelling and unmatched. This rule does not mean that a company that focuses on price can ignore fashion or technological advances, or that it can deny its customers convenience. Any market leader, whatever

value it chooses to deliver, must maintain reasonable standards in the other dimensions as well. But it doesn't have to excel in all of them—just one.

Our experience as consultants indicates that customers are able to distinguish among the various kinds of value, and they generally won't demand them all from the same supplier. Wal-Mart's proposition is "always the low price, always." Nobody goes there expecting personalized service. No one buys designer fashions from Bloomingdale's expecting a low price. Customers know that to expect superior value in every dimension from the same supplier is unreasonable.

■ Rule 2: Maintain threshold standards on other dimensions of value.

As Yugo found out, having the lowest-cost automobile on the market wasn't enough when the package also included subpar quality and service standards. As Apple and Compaq discovered, leadership in technology, innovation, or product performance wasn't enough when customers demanded lower prices. And as Nordstrom and Home Depot know, heaps of advice and warm, personal service can get a cold shoulder from customers if the companies fall short in attractive pricing or hassle-free basic service.

The rule is that you can't allow performance in other dimensions to slip so much that it impairs the attractiveness of your company's unmatched value. However, you don't have to strive to be the best on these other dimensions. Instead, channel energy into what separates you from the pack—and perform ably and adequately in other areas.

**AS VALUE STANDARDS RISE,  
SO DO CUSTOMER EXPECTATIONS**

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Market leaders raise expectations and value norms not only in their own industries, but across the board. Customers are being conditioned—spoiled, some may say—to anticipate lower prices, speedier service, and more innovative products from all of their suppliers. So market leaders are finding that their preeminent position is always under siege from two directions: from rivals that focus on the same kind of value as they do and from other companies that increase customer expectations on the secondary dimensions of value.

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Nike is not just facing threats from Reebok, another product performance leader. It's also facing Wal-Mart, which is changing customers' notions of what a pair of running shoes should cost. In turn, Wal-Mart can't relax when companies like PriceCostco are redefining the cost and convenience standards that Wal-Mart itself established. To sustain market leadership, it is not enough to deliver today's best product, price, or total solution; you must also be able to deliver tomorrow's and the next day's. To sustain its position at the top, a market leader must ensure that its operating model improves faster than the competition's—which leads to the third new rule:

- Rule 3: Dominate your market by improving value year after year.

If one company could somehow deliver the absolute best in all dimensions of value, it would surely own the market. But no company can be the best at everything. When a company focuses all its assets, energies, and attention on delivering and improving one type of customer value, it can nearly always deliver better performance in that dimension than another company that divides its attention among more than one. Market leaders understand this as another truth in the new world of competition.

#### **PRODUCING UNSURPASSED, EVER-IMPROVING VALUE REQUIRES A SUPERIOR, DEDICATED OPERATING MODEL**

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When we took a deep look at the market-leading companies, we invariably saw a wide variety of value propositions. We also saw the specific ways the companies structured their operations to deliver on their proposition—what we call operating models. Strikingly, the operating models were clustered not by industry, but by which value proposition—best product, best total cost, or best total solution—the company was pursuing.

In other words, the operating models of market-leaders pursuing the same value proposition in different industries are remarkably similar. Wal-Mart, FedEx, Schwab, Taco Bell, Southwest Airlines—all deliver lowest total cost and all focus on a similar combination of operating processes, management systems, business structure, and culture. Thus, an executive at one of these companies could move with relative ease



across industry boundaries to another lowest-total-cost company, because the mechanisms for delivering value and making money are so similar.

Consider, for example, the gasoline retailing business. It illustrates how tightly linked the value proposition and operating model of a market leader are. Everyone knows that over the last decade the number of gasoline service stations has declined, that those remaining have become more price-competitive, and that the companies that operate them have gone to great lengths to increase the revenues, margins, and profits generated from their expensive corner real estate. They've added car washes, convenience stores, fast-food outlets, video rentals, and dry cleaning drop-off and delivery. Gas retailers have had no shortage of ideas.

Imagine that you are a strategic planner in the service station business. How might you make your business the most competitive in the market?

Well, you could automate the pumps. You could offer promotional giveaways on convenience items like milk and motor oil. You could take credit cards at the pump, or take other companies' credit cards. You could run specials on certain days of the week. You could give away soft drinks, glasses, or movie tickets. You could offer computer-generated maps. You could install a convenience store or a car wash. With a week to think about it, anyone could come up with 100 ideas for spurring sales. However, the competition could come up with the same list or an even better one. In fact, the competition doesn't even have to think about it. If your ideas are any good, they'll copy them. And if the ideas are no good, the competition will let you learn that lesson yourself, at your own expense.

In other words—and this applies to more than just the retail gasoline business—if you want, you can try to match every move made by your competitors and then up the ante a bit. It's a strategy lots of companies follow—"keeping up with the Joneses." But in the end, you'll offer no more than the next guy, and therefore be no better off.

On the other hand, you could decide to do one thing better than anyone else—to focus on price, for instance. Then you could direct all your creative energies to selling the cheapest gas in your market. That's what Arco did.

Arco built an integrated system, starting with its own North Slope crude oil and an efficient refinery tuned to refine only that grade of crude. It pulled its distribution system back to the West and Midwest in order to stay closer to its refinery. As a result, Arco now dominates California with a clear price advantage that customers recognize. It will perform well enough in other ways to avoid irritating customers, but it doesn't try to keep up with the Joneses. It's focused, specialized. Only if an idea lowers Arco's cost and thereby enhances its value proposition, will the company pursue it.

Could another company compete with Arco? Of course, but it would be difficult to do so on price. For argument's sake, let's assume that Arco has nailed down the price advantage. Some other company might decide to be the fastest gasoline retailer; every customer will get served, pay, and depart in 60 seconds. It could build its operating model around that proposition. Its dollar price might be a little higher than Arco's, but not so much higher that it would bother customers who value time.

How could a company do it? It could put its stations on easily accessible lots. It could spend R&D money on fast-pump technology. Its attendants could wear computerized credit-card terminals on their belts like the ones car rental companies use.

The point is that if the customer value you decide to offer is speed, the ideas automatically fall into place on how to create an operating system. The particular value that you decide to offer has the effect of defining your thinking about your business—of shaping the company's operating model. Low price, as we have seen, defines everything that Arco is and does. Once it chose to be the price leader in its market, the notion of installing computerized map machines or other gimmicks became irrelevant. The company is passionate about the one value it delivers to customers. Arco is behaving consistently with the fourth new rule for market leaders:

■ Rule 4: Build a well-tuned operating model dedicated to delivering unmatched value.

In a competitive marketplace, improving customer value is the market leader's imperative. The operating model is the key to raising and

resetting customer expectations. Improving it can make competitors' offerings look less appealing, or even shatter their position by rendering their value proposition obsolete. The operating model is the market leader's ultimate weapon in its quest for market domination.

### WHAT'S DIFFERENT

For some readers, the new rules of market leadership will be intuitively appealing. To others, they will raise stubborn questions. How can a company offer the best value proposition in the market (read: give its products and services away), and still make money? How can a company provide better customer value every year and still make money in the long run? Won't you burn out your employees if you're never satisfied with the level of value you offer—if you're on this treadmill of ever-expanding ambition? Isn't delivering value to customers in potential conflict with delivering value to shareholders?

We think not. In fact, in all market-leading companies we observed—corporations like Wal-Mart, Southwest Air, FedEx, Glaxo, Airborne, and Intel—customer value, shareholder wealth, and employee satisfaction move in lockstep. These companies view customer value as the indispensable source of both shareholder value and employee satisfaction. Without customer value, there is no sustainable business.

The strategy for achieving superior profits and shareholder value is different for each category of value leadership. Firms such as Walmart, Southwest Airlines, and FedEx, leaders in delivering the best total cost, generate superior returns by achieving the low cost position on product or service support. Those who are value leaders through best product, such as Glaxo and Intel, build a better product, for which customers will pay a premium. Airborne, a value leader that delivers the best total solution, achieves its profitability by solving the client's broader problem and sharing in the benefit. This is illustrated in Figure 4.

Some readers will ask what's new and different in our perspective. How does it relate to accepted wisdom that learning organizations, customer loyalty, and core competencies—to name a few of today's popular notions—contain the answers to all management woes? Our conclusion

	Cost	Benefit
<b>Products</b>	<u>Best Total Cost</u>	<u>Best Product</u>  Build a better product, for which customers will pay a premium
<b>Services</b>	Achieve the low cost position on product and service support	<u>Best Total Solution</u>  Solve the client's broader problem and share in the benefit

FIGURE 4 VALUE LEADERSHIP AND PROFIT

is that none of these notions gets to the heart of what sustains success in a competitive marketplace. At best, they provide partial solutions. Their relevance depends entirely on whether and how well they are channeled toward the pivotal issue of increasing customer value, year after year.

For example, the concept of core competence is that a company succeeds by leveraging what it's good at. Honda has a core competence in small engines. It has leveraged that capability in many markets, from motorcycles and autos to lawnmowers and generators. But Briggs and Stratton has a core competence in small engines, too. Why hasn't it been as successful? The answer lies not in examining these two companies' core competencies, but by understanding that they have different value disciplines. Honda, dedicated to the value discipline of best product, has built an operating model that naturally leverages its small engine competence into new application markets. Briggs and Stratton, with a value discipline focused on best total cost, has built an operating model that channels its small engine competence toward making its engines cheaper and cheaper.

Core competencies may be part of the operating model, but they aren't sufficient. They don't, like the operating model, help managers to balance the management of core and secondary processes, structure, and culture. 3M may have developed nonwoven technology as a core competency, but that's not enough to make it a product leader in tapes

and soap pads. Likewise, suggesting that Wal-Mart's success stems solely from its logistics competency, or that Intel's success stems solely from its microprocessor design competency, pushes the concept of core competencies too far. Success is more multifaceted.

Similarly, the pursuit of customer satisfaction and loyalty doesn't by itself create unmatched value. Value comes from choosing customers and narrowing the operations focus to best serve those customers. Customer satisfaction and loyalty are simply the by-product of delivering on a compelling value proposition—not the drivers behind it.

Those companies that wish to sail at the head of their markets must weigh anchor from a mooring secured to value, namely the value proposition. That proposition must stress just one particular kind of value that customers want. Leaders will not pursue a diffused business strategy, but must continually focus on running a tight ship where their business practices enhance the one special value that they can provide better than anyone else.

THE WINNER'S  
CHOICE

FedEx falls into the category of operational excellence, Airborne into the category of customer intimacy. Companies such as 3M, Nike, Motorola, and Sony fall into the category of product leadership. These companies have taken their leadership positions by narrowing their business focus, not broadening it. In line with the new rules of competition we set out in the last chapter, they chose a value proposition that highlighted a particular strength. With it, they developed a matching operating model to deliver that value. And they disciplined themselves to stick to and continually improve their combination of value proposition and operating model, while resisting the temptation to broaden their scope. When a company selects and pursues one of these value disciplines, it ceases to resemble its competitors.

### THE OPERATING MODEL

The choice of a value discipline shapes the company's subsequent plans and decisions, coloring the whole organization, from its culture to its public stance. To choose a value discipline—and hence its underlying operating model—is to define the very nature of a company. What sets the inner workings of market leaders apart from their also-ran competitors is the sophistication and coherence of their operating models.

Operating models are made up of operating processes, business structure, management systems, and culture, all of which are synchronized to create a certain superior value. At the heart of the operating model sits not one but a set of core processes that make or break an organization's ability to create unsurpassed value at a profit.

Different value disciplines demand different operating processes. For instance, if your customers love your consistency and speed in delivering a value-for-the-money burger—as is the case with operationally excellent McDonald's—you'd better be stellar at the core processes of product supply, expedient customer service, and demand management. At the same time, you'll fine tune your structure to empower the people who can make a difference in producing value. You'll design your management systems around measuring and rewarding what's most important. And you'll make sure that your staff is indoctrinated with your specific definition of success.

In the other two disciplines, the operating model revolves around different core processes. If you're a product leader, such as Sony or Johnson & Johnson, the critical processes include invention, product development, and market exploitation. If you're a customer-intimate company—Home Depot, for example, or Cable & Wireless, the telecom corporation—you'll demonstrate superior aptitude in advisory services and relationship management.

Companies that excel in the same value discipline have remarkably similar operating models. Arco and McDonald's, for example, are strikingly similar because both pursue operational excellence. Likewise, the management systems, business structure, and culture of product leaders such as Sony and Johnson & Johnson look alike. But across two disciplines, the similarities end. Send people from Arco to Sony, and they will think they are on a different planet. Even within an industry, market leaders pursuing different value disciplines, such as Wal-Mart and Nordstrom, look completely different. Moreover, homogeneity exists only among leaders in the same value discipline; mediocre performers look pretty much like other mediocre performers in their own industries.

Let's look at each of the three value disciplines.

### — OPERATIONAL EXCELLENCE —

Operationally excellent companies deliver a combination of quality, price, and ease of purchase that no one else in their market can match. They are not product or service innovators, nor do they cultivate one-to-one relationships with their customers. They execute extraordinarily well, and their proposition to customers is guaranteed low price and/or hassle-free service.

PriceCostco, the Kirkland, Washington and San Diego-based chain of warehouse "club" stores, doesn't provide a particularly rich selection of merchandise—only 3,500 items compared to the 50,000 or more found in competing stores. But as a customer, you don't have to spend much time deliberating over what brand of coffee or home appliance to select. PriceCostco saves you that hassle by choosing for you. The company's *Consumer Reports* mentality leads to rigorous evaluation of leading brands and shrewd purchasing of just the one brand in each cat-



egory that represents the best value. To add excitement to the whole shopping experience—that is, to get the customer to come again and again—new items are constantly sprinkled into the assortment to build anticipation and a “value-of-the-week” atmosphere, while the on-premise bakery wafts a delicious smell of fresh bread and pastry.

Behind the scenes, PriceCostco follows an operating model in which it buys larger quantities and negotiates better prices to pass along to customers. It also carries only items that sell well. The company's information systems track product movement—and move it does! This data drives stocking decisions that optimize floor space usage. The place hums. It runs like a well-oiled machine and customers love it.

Dell Computer is another master of operational excellence. Dell has shown PC buyers that they do not have to sacrifice quality or state-of-the-art technology to buy personal computers easily and inexpensively. In the mid-1980s, while Compaq concentrated on making its PCs cheaper and faster than IBM's, college student Michael Dell saw a chance to outdo both companies by focusing not on the product but on the delivery system. Out of a dorm room in Austin, Texas, Dell burst onto the scene with a radically different and far more efficient model for operational excellence.

Dell realized that he could outperform PC computer dealers by cutting dealers out of the distribution process altogether. By selling to customers directly, building to order rather than to inventory, integrating his company's logistics with its suppliers', and creating a disciplined, extremely low-cost culture, Dell undercut Compaq and other PC makers in price while providing high quality products and services.

Yet another, less well-known example of operational excellence is GE's “white goods” business, which manufactures large household appliances. It has focused on operational excellence in serving the vast market of small, independent appliance retailers.

In the late 1980s, GE Appliances set out to transform itself into a low-cost, no-hassle supplier to dealers. It designed its Direct Connect program in pursuit of that objective. Direct Connect required that GE reengineer several of its operating processes, redesign its information systems, reconfigure its management systems, and create a new mindset among employees. As a result, the company has lowered dealers' net cost of appliances and simplified its business transactions.

Historically the appliance industry has endorsed the theory that a loaded dealer is a loyal dealer. If a dealer's warehouse was full of a manufacturer's product, went the argument, the dealer would be committed to that company's product line because no room remained to stock goods from anyone else. Manufacturers' programs and pricing were built around the idea that dealers got the best price when they bought a full truckload of appliances and offered the best floor plan.

But changes in retailing caused GE to question that assumption. For one, the loaded-dealer concept was costly for independent appliance dealers, whose very existence was threatened by the growing clout of low-price, multibrand chains like Circuit City. Independent stores could hardly afford to match the large stock of the chains. Moreover, the chains could put price pressure on manufacturers, causing makers' margins to shrink.

Realizing that it had to supply high-quality products at competitive prices with little hassle, General Electric abandoned the loaded-dealer concept and reinvented its operating model—the way it made, sold, and distributed appliances. Under Direct Connect, retailers no longer maintain their own inventories of major appliances. They rely instead on General Electric's "virtual inventory," a computer-based logistics system that allows stores to operate as though they have hundreds of ranges and refrigerators in the back room when, in fact, they have none at all.

With Direct Connect, retailers acquire a computer package that gives them instant access to GE's on-line order-processing system 24 hours a day. They can use the system to check on model availability and to place orders for next-day delivery. The dealers get GE's best price, regardless of order size. Direct Connect dealers also get, among other benefits, priority over other dealers in delivery scheduling, plus consumer financing through GE Credit with the first 90 days free of interest. In exchange, Direct Connect dealers make several commitments: to sell nine major GE product categories while stocking only carryout products, such as microwave ovens and air conditioners; to ensure that GE products generate 50 percent of sales and to open their books for review; and to pay GE through electronic funds transfer on the 25th of the month after purchase.

Under the Direct Connect system, dealers have had to give up some float time in payables, the comfort of having their own back-room

inventory, and some independence from the supplier. In return, they get GE's best price while eliminating the hassle and cost of maintaining inventory and assembling full-truckload orders. The result: Their profit margins on GE products have soared.

Virtual inventory, it turns out, works better than real inventory for both dealers and customers. "Instead of telling a customer I have two units on order," says one dealer, "I can now say that we have 2,500 in our warehouse. I can also tell a customer when a model is scheduled for production and when it will be shipped. If the schedule doesn't suit the customer, the GE terminal will identify other available models and compare their features with competitive units."

Meanwhile, GE gets half the dealer's business and saves about 12 percent of distribution and marketing costs. And since dealers serve themselves through the network, GE saves time and labor in responding to inquiries and in order entry; in fact, the Direct Connect system *is* the order-entry process. Most important, GE has gained a valuable commodity from its dealers: data on the actual movement of its products. Most appliance manufacturers have been unable to track consumer sales accurately because they can't tell whether dealers' orders represent requests for additional inventory or actual customer purchases. With Direct Connect, GE knows that vendors' orders are actual sales to customers.

GE links its order-processing system to other systems involved in forecasting demand and planning production and distribution. The company now, in effect, manufactures in response to customer demand instead of to inventory. It has reduced and simplified a complex and expensive warehousing and distribution system down to 10 strategically located warehouses that can deliver appliances to 90 percent of the country within 24 hours.

Businesses like PriceCostco, Dell Computer, and GE Appliances, which have vigorously pursued a strategy of operational excellence, have built an operating model based on four distinct features:

- Processes for end-to-end product supply and basic service that are optimized and streamlined to minimize costs and hassle.
- Operations that are standardized, simplified, tightly controlled, and centrally planned, leaving few decisions to the discretion of rank-and-file employees.

- Management systems that focus on integrated, reliable, high-speed transactions and compliance to norms.
- A culture that abhors waste and rewards efficiency.

### PRODUCT LEADERSHIP

A company pursuing product leadership continually pushes its products into the realm of the unknown, the untried, or the highly desirable. Its practitioners concentrate on offering customers products or services that expand existing performance boundaries. A product leader's proposition to customers is best product, period.

A product leader consistently strives to provide its market with leading-edge products or useful new applications of existing products or services. Reaching that goal requires that they challenge themselves in three ways. First, they must be creative. More than anything else, being creative means recognizing and embracing ideas that may originate anywhere—inside the company or out. Second, they must commercialize their ideas quickly. To do so, all their business and management processes are engineered for speed. Third and most important, they must relentlessly pursue ways to leapfrog their own latest product or service. If anyone is going to render their technology obsolete, they prefer to do it themselves. Product leaders do not stop for self-congratulation; they are too busy raising the bar.

Johnson & Johnson meets all three of these challenges. It brings in new ideas, develops them quickly, and then looks for ways to improve them. In 1983, the president of J&J's Vistakon, Inc., a maker of specialty contact lenses, heard about a Copenhagen ophthalmologist who had conceived a way of manufacturing disposable contact lenses inexpensively. At the time, Vistakon generated only \$20 million in annual sales, primarily from a single product, a contact lens for people with astigmatism.

Vistakon's president got his tip by telephone from a J&J employee who worked for Janssen Pharmaceutical, a Belgian drug subsidiary. Instead of dismissing the ophthalmologist as a mere tinkerer, these two executives speedily bought the rights to the technology, assembled a management team to oversee development, and built a state-of-the-art facility in Florida to manufacture disposable contact lenses called Acuvue.

By the summer of 1987, Acuvue was ready for test marketing. In less than a year, Vistakon rolled out the product across the United States with a high-visibility ad campaign. Vistakon—and its parent, J&J—were willing to incur high manufacturing and inventory costs before a single lens was sold. Vistakon's high-speed production facility helped give the company a six-month head start over would-be rivals such as Bausch & Lomb and Ciba-Geigy. Caught off guard, the competition never caught up. Vistakon also took advantage of the benefits of decentralization—autonomous management, speed, and flexibility—without having to give up the resources, financial and otherwise, that only a giant corporation could provide.

In 1991, Vistakon's sales topped \$225 million worldwide, and it had captured a 25 percent share of the U.S. contact lens market. Part of the success resulted from directing much of the marketing effort to eye-care professionals to explain how they would profit if they prescribed the new lenses. In other words, Vistakon did not market just to consumers. It said, in effect, that it's not enough to come up with a new product; you have to come up with a new way to go to market as well.

J&J, like other product leaders, works hard at developing an open-mindedness to new ideas. Vistakon continues to investigate new materials that would extend the wearability of the contact lenses and even some technologies that would make the lenses obsolete. Product leaders create and maintain an environment that encourages employees to bring ideas into the company and, just as important, to listen to and consider these ideas, however unconventional. Where others see glitches in their marketing plans or threats to their product lines, companies that focus on product leadership see opportunity and rush to capitalize on it.

Product leaders avoid bureaucracy at all costs because it slows commercialization of their ideas. Managers make decisions quickly since, in a product leadership company, it is often better to make a wrong decision and correct it than to make a decision too late or not at all. That is why these companies are prepared to decide today, then implement tomorrow. Moreover, they continually look for new ways—such as concurrent engineering—to shorten their cycle times. Japanese companies, for example, succeed in automobile innovation because they use concurrent development processes to reduce time to market. They do not have to aim better than competitors to score more hits on the target because they can take more shots from a closer distance.

Companies excelling in product leadership do not plan for every possible contingency, nor do they spend much time on up front detailed analysis. Their strength lies in reacting to situations as they occur. Fast reaction times are an advantage when dealing with the unknown. Vistakon's managers, for example, were quick to order changes to the Acuvue marketing program when early market tests were not as successful as they had expected. They also responded quickly when competitors challenged the safety of the lenses. They distributed data combating the charges, via FedEx, to some 17,000 eye-care professionals. Vistakon's speedy response engendered goodwill in the marketplace.

Product leaders have a vested interest in protecting the entrepreneurial environment that they have created. To that end, they hire, recruit, and train employees in their own mold. When it is time for Vistakon to hire new salespeople, for example, its managers do not look for people experienced in selling contact lenses; they look for people who will fit in with J&J's culture. That means their first question isn't about a candidate's related experience; it's more likely to be, "Could you work cooperatively in teams?" or "How open are you to criticism?"

Product leaders are their own fiercest competitors. They no sooner cross one frontier than they are scouting out the next. They have to be adept at rendering obsolete the products and services that they have created. They realize that if they don't develop a successor, another company will. J&J and other innovators are willing to take the long view of profitability, recognizing that extracting the full profit potential from an existing product or service is less important than maintaining product leadership and momentum. These companies are never blinded by their own successes.

Not surprisingly, the operating model of the product leader is very different from that of the operationally excellent company. Its main features include:

- A focus on the core processes of invention, product development, and market exploitation.
- A business structure that is loosely knit, ad hoc, and ever-changing to adjust to the entrepreneurial initiatives and redirections that characterize working in unexplored territory.
- Management systems that are results-driven, that measure and reward new product success, and that don't punish the experimentation needed to get there.

■ A culture that encourages individual imagination, accomplishment, out-of-the-box thinking, and a mind-set driven by the desire to create the future.

### CUSTOMER INTIMACY

A company that delivers value via customer intimacy builds bonds with customers like those between good neighbors. Customer-intimate companies don't deliver what the market wants, but what a specific customer wants. The customer-intimate company makes a business of knowing the people it sells to and the products and services they need. It continually tailors its products and services, and does so at reasonable prices. Its proposition is: "We take care of you and all your needs," or "We get you the best total solution." The customer-intimate company's greatest asset is, not surprisingly, its customers' loyalty.

Customers don't have to be resold through expensive advertising and promotion. Customer-intimate companies don't pursue transactions; they cultivate relationships. They are adept at giving the customer more than he or she expects. By constantly upgrading their offerings, customer-intimate companies stay ahead of their customers' rising expectations—expectations that, by the way, they themselves create. Home Depot is a good example of a company that is better than most at building relationships that pay off in repeat sales from a loyal customer base.

However, the high-water mark for customer intimacy probably was set by IBM in the 1960s and 1970s. Customers never looked to IBM for the hottest product. In fact, IBM's response to customers who asked about leading-edge technology was always, "Just wait 18 months, and we will have that, too." It was not that IBM didn't invest in product innovation, but it knew that product innovation was not the central value proposition binding customers to the company. Best price wasn't part of the company's proposition, either. That was left to the plug-compatible computer makers, such as Amdahl.

So if IBM didn't mean best price or best technology, what did it mean? IBM was a comfort, a friend. IBM's people knew the heads of data processing, knew what their problems were, knew how to help them solve those problems and look good to their bosses. IBM assisted them with applications planning and technology architecture. It

helped them fight for budgets and, through its executive education programs, get their bosses to appreciate technology. IBM's central value proposition was delivering a total solution in a customer-intimate fashion.

Customer-intimate companies consider the customer's lifetime value, not just the profit and loss on a few transactions. Their employees make sure that each customer gets exactly what he or she really wants. These companies have designed operating models that allow them to produce and deliver a much broader and deeper level of support. They tailor their mix of services or customize the products, even if it means acting as a broker to obtain these services and products from third parties or co-providers.

Cable & Wireless Communications, based in Vienna, Virginia, has worked for years to become a customer-intimate organization. It is the world's largest long-distance company devoted entirely to business customers. Cable & Wireless attributes its 20 percent annual growth rate in the number of long-distance customer minutes to its striving continuously to serve its customers better than its bigger competitors—such as MCI.

Cable & Wireless executives knew long ago that their long-distance operation couldn't compete on price with the Big Three, AT&T, MCI, and Sprint. So they sought to differentiate themselves by providing the best ongoing customer support in the industry, along with direct sales consultation that gives the sales force an intimate knowledge of what makes its customers successful. The result is that Cable & Wireless has turned itself from a mundane commodity business peddling long-distance service into a sophisticated telemanager, a partner with its customers. Does the customer need 800 service that routes calls, blocks calls, or captures data? Cable & Wireless supplies the expertise and information systems. "The product is conceived at the customer's office," says president and chief operating officer Gabriel Battista.

Cable & Wireless pins its success on choosing the customers it can serve best—small to medium-size businesses with monthly billings of \$500 to \$15,000. In such small businesses, Cable & Wireless's 500 U.S. salespeople, working out of 36 regional offices, can actually act like telecommunications managers. Corporations too small to hire their own telecom gurus value the advice and expertise Cable & Wireless people can offer.



Cable & Wireless then goes on to segment its small to medium-size business market vertically. By refining its market segments, it can appeal to specific customers with specialized services that no other company can begin to provide. One of its customer segments is the legal profession. Cable & Wireless is developing features and functions that have tremendous appeal to lawyers, such as innovative ways to track and segment billing of calls linked to specific client accounts. "We want to sell products that fit the legal industry like a glove," says Battista.

Cable & Wireless then takes the next step and fine tunes its services to each customer. If that means something as simple as printing its bills on both sides of the paper, Cable & Wireless obliges. The company wants customers to feel they're getting the support of not just the sales force but of the entire company.

Cable & Wireless empowers all employees who work with customers to make the most sophisticated decisions possible. Pricing was once the domain of corporate pricing gurus. No longer. Each of the 50 local managers has his or her own pool of funds to structure pricing. The same thing goes for promotional, advertising, and trade-show money. The corporate center doesn't hog the budget and issue edicts. The local managers allocate money as they see fit. They prepare budgets and send them up the corporate ladder.

Do Cable & Wireless managers run amok with so much authority? It can happen, Cable & Wireless executives concede. But if so, they figure that the occasional screwup is worth it. Executives go on to audit all decisions and practices to both catch blunders and help the front lines learn from them.

All of these practices help Cable & Wireless people build very tight relationships with customers. The result is extremely high customer retention rates: Cable & Wireless loses only 2 percent of long-distance minutes billed each month, compared to an industry standard of 3 percent to 5 percent.

Of course, only through those high retention rates can the company continue to fund its high level of support. One hundred percent of the sales force is dedicated to the dual objectives of providing ongoing help to customers and bringing in new customers. For large accounts, the company also assigns strategic support representatives, to whom the customer can turn at any moment for hand-holding. Cable &

Wireless also has what the company calls a "retention day," during which salespeople will sit down with large accounts to go over every aspect of service.

The company holds out a big carrot to keep its people focused on customer retention—it compensates its sales force based on how long a customer remains with the company. In addition, unlike competitors that pay salespeople according to the number of accounts landed and the dollars billed, Cable & Wireless compensates people based on their ability to retain existing accounts. Salespeople don't hesitate to suggest that customers switch to more appropriate services, even if the new services bring in less money. The result once again: happier, more loyal customers.

To move quickly in responding to customers, Cable & Wireless maintains state-of-the-art software capabilities, both to customize services such as billing, and to design and assemble its own switches. The company also operates an integrated information system so that, with a few keystrokes, anyone can bring up all pertinent information on a customer, from orders to billing. Cable & Wireless has worked hard in recent years to reengineer its processes to assure greater customer intimacy than any competitor can provide. "Ultimately," says Battista, "we see our competitive edge as our ability to look at our customers' needs and to customize our products and services to fit these needs exactly and uniquely, so they can reduce operating expenses, increase their competitive position, or become more productive."

Again, the operating model of the customer-intimate company is very different from that of businesses pursuing other disciplines. Its features include:

- An obsession with the core processes of solution development (i.e., helping the customer understand exactly what's needed), results management (i.e., ensuring the solution gets implemented properly), and relationship management.
- A business structure that delegates decision-making to employees who are close to the customer.
- Management systems that are geared toward creating results for carefully selected and nurtured clients.
- A culture that embraces specific rather than general solutions and thrives on deep and lasting client relationships.

THE DISCIPLINE  
OF OPERATIONAL  
EXCELLENCE

## THE DISCIPLINE OF OPERATIONAL EXCELLENCE

Henry Ford knew about operational excellence. In fact, he practically invented it. The motor mogul built his manufacturing empire around a single notion—efficient production—and infused his whole company with that idea.

Today we would call the early Ford Motor Company a paragon of operational excellence, because the founder's business model was tuned to a single purpose: delivering an acceptable product at the lowest possible price. As Ford's costs fell, the retail price of the Model T car fell too, from \$850 to \$290.

Henry Ford's singular focus on achieving efficiency is the same idea that drives operationally excellent market leaders today. These companies—like Wal-Mart and Southwest Airlines—wave one bright banner high above the teeming marketplace: the promise of lowest total cost.

Lowest total cost? It *can* mean lowest price, but it doesn't always. What it does mean is that when all the costs to the customer of owning and using the company's product or service are added up—costs such as price, time spent at the checkout counter, the inconvenience of untimely repair—nobody else's deal is likely to be any better.

Some of today's operationally excellent companies could teach Henry Ford a thing or two. That's because while Ford focused solely on selling at the lowest price, many operationally excellent companies today focus on multiple tangible and intangible costs. To be sure, price remains the focus of most operationally excellent companies—prices so low that customers sometimes marvel: "How do they do it?" Wal-Mart and PriceCostco, for instance, continually surprise customers with prices

their competitors wouldn't dream of offering. Service companies like Southwest Air and AT&T Universal Card Services similarly prompt customers to wonder, "Why don't they keep some of that money in their own pockets instead of giving it to us?"

When operationally excellent companies talk of low—or lowest—prices, they mean prices that are consistently low. Anybody can hold a fall clearance sale, an anniversary promotion, or a Presidents' Day extravaganza. Operationally excellent companies trumpet their low prices every day, 365 days a year.

When operationally excellent companies boast of their lowest *total cost*, they may, however, be emphasizing product reliability and durability, which lower customers' future costs of ownership. Toyota ads, for instance, show its products running on and on—for 200,000 miles, 300,000 miles, and more. Maytag touts its Rip Van Winkle repairman, whose sleep has been undisturbed for years. Timex used to boast its watches could "take a licking and keep on ticking." These companies' customers cherish the dependability they get along with the low price. The prices they paid look lower and lower as the trouble-free years roll on.

Another element of cost that operationally excellent companies stress is convenience—the absence of tangible or intangible costs stemming from annoyance and irritation. The strength of these companies lies in the delivery of swift, dependable service—the kind you get from, for instance, 800-Flowers, which accepts telephone orders from anywhere and ships flowers anywhere. It couldn't be easier or involve less total cost.

And Saturn Corp.—which may be closer to Henry Ford's idea of a car company than today's Ford—has brought the lowest total cost into its showrooms by eliminating one of the chief costs of buying a new car: the confrontation with the salesperson. Furthermore, Saturn's dealers' service-delivery system makes the shop visit almost a pleasure.

Transactions that are easy, pleasant, quick, accurate—market leaders make sure they're so uncommon as to be remarkable. Occasional mistakes happen, of course, but operationally excellent market leaders make sure they're so uncommon as to be remarkable. When mistakes do happen, most recover with such panache that customers are left even more impressed than they would have been had the foul-ups never occurred.

But no matter what their formula for combining price, reliability, and hassle-free service to deliver lowest total cost, operationally excellent companies deploy an operating model based on a set of design principles handed down from Henry Ford. Ford's business was highly regimented, proceduralized, rule-driven. There was only one way—the efficient way—to do everything. Complex work was divided into simpler repetitive tasks and combined, via the assembly line, into an integrated process. The result: efficiency of effort *and* efficiency of coordination. Current thinking on business reengineering owes a debt to Ford. He built low-cost, no-frills factories. He aggressively pursued automation to minimize labor and to lower variable costs. The result was that he could design manufacturing processes and work procedures that demolished former standards of cost and performance.

Today, standardized assets and efficient operating procedures are the backbone of every operationally excellent company. It's not by accident that all Wal-Mart stores look alike, that all Southwest Airlines jets are similarly configured 737s, that all J.B. Hunt long-haul trucks are identical, and that all Taco Bell restaurants are as alike as their tacos. Every operationally excellent company that operates over a wide geography has built a network of no-frills, standardized assets that form the basis for efficient operating procedures.

But achieving and sustaining operational excellence requires more than cloning hyper-efficient assets. Today, as in Henry Ford's era, variety kills efficiency. Ford maintained a very narrow product line. He didn't introduce a variant of the Model T until millions of units of the basic model had been produced. As for variety in color, he left posterity his legendary remark: "Any color you want as long as it's black." Operationally excellent companies reject variety, because it burdens the business with cost. They produce no-frills products for the middle of the market where demand is huge and customers are more interested in cost than in choice.

Undisciplined companies, on the other hand, let products and services proliferate. They create a variant in response to one customer or operational demand, then create another to fill a different niche.

Since they can't be all things to all customers, operationally excellent companies work at shaping their customers' expectations. If price is their strong point, price is what they stress, and they make virtues of their apparent limitations. Schwab for example, crow's about not having

its own investment research and advisory services. Cut out the “biased” research and pocket the savings, the company tells customers. PriceCostco’s product selection is slim, but its prices on category leaders are unbelievably low. Southwest Airlines doesn’t offer meals, baggage handling, or advanced seating, but it lures short-haul business travelers with its frequent departure schedule and super-low prices.

Henry Ford maintained rigid, centralized control as his business grew because he was determined to capture the benefits of standardized procedures and economies of scale. His control system was based on detailed measures of every element of his operation. Ford sweated the details, and his management systems reflected it.

Today, Ford’s principles of operational excellence are applied in industries as diverse as retail, brokerage, transportation, credit cards, and of course, manufacturing. Wal-Mart, for example, has built a supply process that integrates product flow from the supplier’s factory all the way through to the store shelf. Wal-Mart, Charles Schwab, Southwest Airlines, FedEx, Taco Bell, and AT&T—all icons of operational excellence—know their activity-based costs and their transaction profitability. Their discipline is evident in their value propositions to the customer and in their operating models, illustrated in Figure 6.

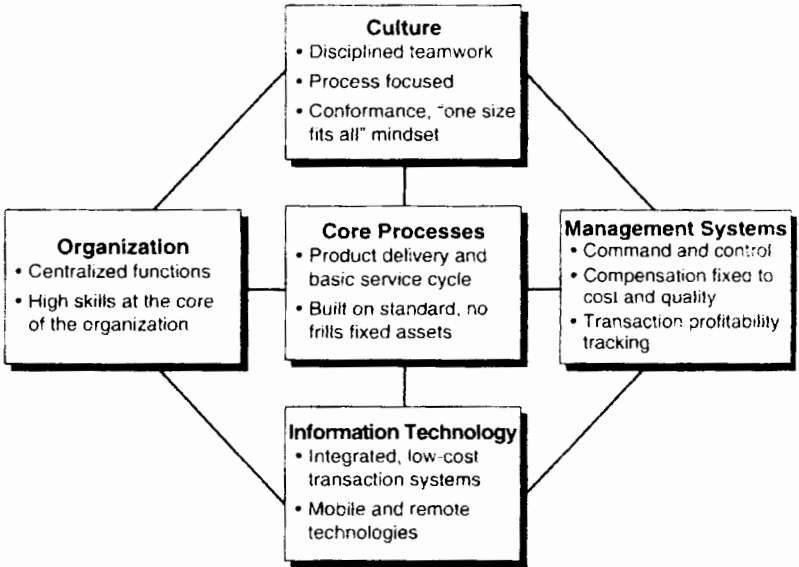


FIGURE 6 THE DISCIPLINE OF OPERATIONAL EXCELLENCE

If Henry Ford were to run an operationally excellent company today, he would have to update his principles somewhat. For all the pluses of his operating model, he would now have to take into account today's enlightened employees, efficient transactions, information technology, and service intensive work. Let's look at each area in turn.

### THE MANAGEMENT OF PEOPLE

Operationally excellent companies run themselves like the Marine Corps: The team is what counts, not the individual. Everybody knows the battle plan and the rule book, and when the buzzer sounds, everyone knows exactly what he or she has to do.

The heroes in this kind of an organization are the people who fit in, who came up through the ranks. They're dependable, like the FedEx driver who delivered the Denver-bound package before 10 A.M. in spite of the snowstorm that forced the plane off the runway and the truck into a drift. For the operationally excellent company, a promise is a promise. For the company's employees, dedication is paramount.

These companies aren't looking for free spirits. They want people who are trainable. They'll hire them and teach them the Wal-Mart—or FedEx, UPS, or Southwest—way of business. At McDonald's, the store manager knows and takes pride in the fact that the company president rose up through the ranks. He started, just as the manager did, flipping burgers and scooping fries. At McDonald's, as in most operationally excellent companies, what's important is not who you are but what the company will make out of you.

The employee of the year? That would be the best team player, who will get his or her name added to the plaque in the employee lunchroom. Peer recognition is the best compliment one can get and the plaque itself—inexpensive, inclusive, and public—symbolizes much about the company's culture. Avoiding waste is what the operationally excellent company is all about.

When Michael Dell visited the headquarters of Compaq, his principal competitor in the PC market, he walked around and looked at all the marble in the building lobby, all the rich furnishings. Then he went home and told his staff, "We can beat these guys." One look at the Dell headquarters and you know this PC company hasn't wasted any of its capital on office space. Similarly, Nucor Steel takes pride in the thrift



signaled by its having sited its corporate headquarters in a Charlotte, North Carolina strip mall.

The point is that people at operationally excellent companies don't feel deprived by eating at restaurants without white linen tablecloths. They don't expect expense accounts to include a night at the Ritz—Motel 6 is more their style. They disapprove of ostentation. That's why operationally excellent companies can reward their employees not with big cash awards or broad empowerment, but by putting people in the limelight—often accomplished with an instant photo glued to that cheap plaque. The visible pat on the back goes a long way toward cultivating a workforce that is highly motivated and dedicated to the value proposition of the organization.

#### EFFICIENT TRANSACTIONS

Since the time of Henry Ford, the impact of technology has been immense. Information technology, for example, has automated routine tasks and coordinated activity through better communications. The impact on manufacturing productivity has been awesome—to the point that in many industries transaction costs, administrative expenses, and overhead have dwarfed production costs. As a result, every operationally excellent company strives for low overhead, with efficient, reengineered business processes. A revolution in transaction efficiency has swept nearly all businesses. This has caused a major revision of one of Henry Ford's guiding design principles.

The founding Ford believed deeply in building tightly integrated processes for the production of automobiles. He linked auto assembly to subassembly manufacturing, which was linked to component manufacturing, which in turn was linked to materials production. Eventually, this logic led Ford to almost complete vertical integration—steel mills, glass factories, even rubber plantations in Brazil—all to create a single-threaded manufacturing process. Ford used his management hierarchy to coordinate all of these activities, which coincidentally lowered transactions costs between activities.

More recently, however, companies have found ways to achieve even greater efficiency—not by vertically integrating, but by *virtually* integrating. Today, operationally excellent companies view themselves and

their suppliers and distributors not as discrete, allied entities, but as members of a single product supply team. Streamlining the connections among team members eliminates duplications, delays, and even payment complications that come from arms-length handoffs. Customers consult with suppliers to ask: Why do we both inspect product quality—outgoing in your plant and incoming in ours? Why do my accounts payable people and your accounts receivable people duplicate each other's work? Why do I spend so much money on distribution centers, trucks, logistics, and warehousing capabilities, when you have them as well? Can't we cut those expenses in half? Why don't we figure out a way to make product flow freely, with maximum efficiency, from your company to ours?

Supplier Procter & Gamble and retailer Wal-Mart asked one another those questions, and then they turned purchasing and supply tradition on its head. Now product flows from P&G to Wal-Mart more smoothly than between internal departments in many companies. The agreement Wal-Mart made with P&G set new standards for every retailer's logistics arrangement with its suppliers.

Like Wal-Mart, other operationally excellent companies have redesigned the transaction process between themselves and their suppliers. Purchase authorizations, purchase orders, and backorder notices have become nearly extinct in new, continuous-replenishment processes. Bills of lading, receipt notifications, and shipping manifests, which add unnecessary costs to the flow of goods between companies, have disappeared, along with paper invoices and many of the clerks who processed them.

This continuous-replenishment concept is a simple one: Suppliers assume the responsibility for managing customer inventories, which, in return, allows them to smooth the flow of goods and lower their own end-to-end costs. Everyone wins. The operationally excellent company purchases lower-cost products and unburdens itself of much unnecessary work.

Wal-Mart, a pioneer in creating these cost-cutting relationships, today uses an electronic data-interchange system to send daily sales data to suppliers. The suppliers' computers integrate this data with, for instance, warehouse inventory information and sales forecasts to generate a new order, if one is necessary.

It's not just paper and its processing that such new arrangements cut. They slash distribution and transportation costs as well. The goal of integrated logistics, as the concept is broadly called, is to move product from maker to user in a single step. It treats the outbound logistics system of the supplier and the inbound logistics system of the customer as a single, integrated system. No time or motion is wasted—and no money either—on moving products in and out of intermediate warehouses. The philosophy: Product that isn't moving isn't being distributed.

Again, Wal-Mart offers an admirable example. It has developed a system of cross-docking in which two sets of trucks—one coming from supplier factories and the other set heading for stores—arrive simultaneously at a company loading dock. Workers move the product from the first set of trucks into the second, avoiding lengthy warehouse storage altogether. The product then heads to its final destination with no costly rest stops along the way. This concept is known as flow-through or one-stop logistics.

Tupperware Home Parties has similarly revamped its logistics operation, eliminating the distributors who warehoused inventories for dealers, who in turn ordered and picked up product for Tupperware party hosts, who only then delivered customer orders taken weeks earlier. With today's integrated logistics, dealers place orders by dialing with modem-equipped PCs into Tupperware's mainframe computer. Factories then ship via UPS directly to the dealer, party host, or customer.

The last step in the buying process between customer and supplier is billing and payment, and here, too, operationally excellent companies are exploring a new notion: invoiceless payment. In other words, they're eliminating the bill.

Again, let's look at Wal-Mart. When a customer buys something at their stores, the checkout counter can record the sale and then use that info to order a credit to the supplier. There's no need for intermediate steps.

Ford uses a similar process. When a supplier shipment arrives at a Ford assembly plant, no one at the dock checks to make sure the freight matches the invoice, because there is no invoice. Instead, a receiving clerk at the dock checks a computerized database of purchase orders issued by Ford. If the shipment corresponds to an outstanding purchase order, the clerk accepts the shipment and enters a confirmation in the

database. The computer automatically cuts a check, which is sent to the supplier. Payment authorization takes place at the dock, not in accounts payable. As a result, Ford has been able to reduce by 20 percent the number of clerks in its accounts payable department.

As remarkable as these achievements might seem if viewed from, say, five years back, today's leading-edge practitioners of operational excellence have moved way beyond just reducing transaction costs. Imagine, for instance, that you're in the cereal business, and you get a call like this one from a major nationwide retailer: "About this cereal of yours," the caller says, "we've got some questions for you. We've examined the box and done a cost analysis of the contents. It looks to us like we're paying \$3 for about 20 to 30 cents worth of product. Packaging might add another dime, which makes a total of 40 cents. We're wondering where the \$2.60 difference is going? We don't understand. So we'd like to sit down with you to see if we can figure out how to kill the monster in your operation that's swallowing so much cash."

That kind of discussion is going on throughout the business world. Operationally excellent customers are invading their suppliers' domains. McDonald's, Ford, and Wal-Mart, among others, are bent on achieving efficiency throughout the entire product supply process—even when it means stepping into someone else's fiefdom. If you do business with one of these companies, you'll achieve operational excellence in your own corporation—with their help—or you won't get their business.

What makes operational excellence necessary is the new competition. What makes it *possible* are the new computer information systems and networks, which play a vital enabling role in the creation of operationally excellent processes. Companies exploit today's low-cost, high-performance technology to increase coordination and control over their entire system and to speed and streamline individual tasks. Information systems have become not only the nervous system but also the backbone of their operations.

#### INFORMATION TECHNOLOGY

Because technology is so important in operationally excellent companies, one usually has to look inside the companies' computer systems to understand their core business processes. The systems—and related databases and applications—are so highly automated that they

don't just track the process, they *contain* and *perform* it. For example, at FedEx anyone who deals with the movement of a package—driver, sorter, customer-service agent—uses the same package record to coordinate the work. At Hertz, the service agent at the airport counter, the technician readying a car for rental, and the agent who checks the car back into the parking lot all enter and extract data from the same system.

The power of information technology is especially evident in industries like securities brokerage. Charles Schwab has brought to that business an entirely different operating model, built on a sophisticated base of information systems. As a result, Schwab's cost structure is so much lower than Merrill Lynch's or Smith Barney's that it can make high margins while charging less than half the price for stock transactions. Further, because its systems communicate buy and sell orders directly to the floor of the stock exchange, they can execute trades and confirm prices while the customer is still on the phone. Traditional brokers are probably still writing your orders down on slips of paper. They'll have to get back to you.

It's not that Merrill Lynch and Smith Barney don't want systems like Charles Schwab's. Goodness knows they've spent enough money trying to build them. It's just that these companies don't adapt well to the organizational demands that information technology makes. Without organizational discipline, or centralized, regimented, and standardized structure, a state-of-the-art computer system won't give a company comparable success.

The information contained in integrated computer systems is useful not just in the core operating processes. Operationally excellent companies are passionate about measuring and monitoring to ensure rigorous quality and cost control. They generate detailed data with which to make management decisions.

Operationally excellent companies have aggressively pursued mobile technologies to extend their control and to improve customer service. The hand-held computers used by Hertz, FedEx, and UPS employees are examples. Companies like L.L. Bean and Lands' End have driven teleservices technology to new levels of sophistication. What these companies find at the leading edge of technology is better operational efficiency and control.

### CUSTOMER SERVICE

Today's operationally excellent companies have revolutionized their business in another dimension that Henry Ford never imagined—customer service. Poor service can add substantially to a customer's total cost through wasted time and frequent errors. Operationally excellent companies return this lost time to customers.

Most companies that buy from other companies maintain large accounts payable staffs not because they can't redesign the process to automate payables, but in essence to insure themselves against the inaccuracy of their suppliers' invoices. Consumers, too, maintain the habit of always spending some portion of their busy lives correcting others' mistakes. The rule for operationally excellent companies is: If you truly want to have the lowest total cost, make sure your service is effortless, flawless, and instantaneous.

To do this, operationally excellent companies have redesigned the customer-service cycle, aggressively streamlining the selecting, ordering, receiving, paying for, and maintaining of a product. Just think of how much easier the car rental process is today than even a few years ago. Hertz #1 Club Gold members record their car rental preferences only once. When they place an order, either through Hertz or with a travel agent, all the information Hertz needs is already entered. Club members encounter no lines or delays at the airport. They get right on the bus and are dropped at their cars. Hertz automatically bills their accounts at the end of the rental. No fuss, no hassle. That's the standard of basic service in an operationally excellent company.

One of the main keys to achieving operational excellence in customer service is the same as in manufacturing: Do it one and only one way. Here again, variety kills efficiency.

Another key is getting customers to adapt to the operationally excellent company's way of doing business. McDonald's provides the classic example. Your mother couldn't get you to clear your dishes, but McDonald's did. When underneath the Golden Arches, you expect to follow some implicit rules: Bus your own table. Stand in line to give your order. Know what you want when you get to the front of the line. Don't ask cashiers to hold the pickle—take it off yourself. McDonald's has built a whole system of social norms that patrons readily enforce

among themselves. Of course, customers comply only because they get low prices and efficiency in return.

Likewise, Southwest Airlines makes a selling point of not providing food, advance check-in, and baggage handling. It explains that such frills preclude low prices and impede reliable service. Customers have bought the message and adapted their behavior accordingly. Going on a trip? Pack light, says Southwest, because you'll be carrying it. Hungry? Grab a bite before the flight. Just arrived? Step into line for a boarding pass.

Why are operationally excellent companies uniquely qualified to deliver superior basic service? Because they enjoy three advantages. The first is focus, making hassle-free basic service a key part of their unmatched value proposition. Second, their operating models support efficient, zero-defect service. The practices of operationally excellent companies are part of the rule book for zero-defect service. Third, they have effectively exploited information technology to redesign basic service tasks. Information technology has made service available anywhere at any time. It is the catalyst of the service revolution.

#### **EXPLOITING THE VALUE LEADERSHIP ADVANTAGE**

As operationally excellent companies create an unmatched value proposition of best total cost, the question comes up: What's in it for them? There is only one answer—growth. Other market leaders might raise prices to exploit their product advantage, but such a tactic runs counter to the operational excellence strategy.

Wal-Mart could raise its prices a measly 1 percent tomorrow in an effort to add \$800 million to the bottom line. But it won't. If it raised prices to exploit its current advantage, it would merely be stealing from its future success. Higher prices mean less value leadership. Less leadership means lower growth and, ultimately, shrinking margins.

Operationally excellent companies obtain their growth in three coordinated ways. They work to assure a constant, steady volume of business so as to keep their assets continually working; they find new ways to use their existing assets; and they replicate their formula in other markets. Let's take these growth generators one by one.

Having invested heavily in stores, plants, airplanes, or other fixed assets, operationally excellent companies know that using those assets

as many hours as possible every day boosts both revenues and financial returns. They also know they must smooth out demand fluctuations as much as possible to avoid inefficiencies that come from a boom-and-bust cycle of volume. Consequently, they strive for large, consistent volume throughout the day, the week, and the year. Demand peaks and valleys become operational problems to be "managed," because nothing undermines efficiency—and hurts low unit costs—faster than slack in a system. Machines sputter to a stop; workers cool their heels. In short, fixed costs keep adding up, while no product flows to pay for them.

Two pitfalls, however, plague demand management aimed at keeping capacity utilization both high and steady. The airline industry illustrates one. Yield management has introduced so much complexity into that industry that it may be increasing costs, not lowering them. The airlines hurt themselves by using different kinds of aircraft for different kinds of routes, and by offering different fares to attract different kinds of customers. Remember, variety, even variety in price, destroys efficiency. The second pitfall is that using price and promotion to shift demand can teach customers to withhold buying pending a special deal. When that happens, demand actually becomes lumpier. Wal-Mart sidesteps this pitfall by rejecting promotional spending in favor of everyday low prices. Promos, ads, and sales are the brainchildren of product-marketing people who don't understand the monkey wrench they can throw into retail operations. No wonder companies like Kellogg, General Mills, and General Foods rank far down the list for operational excellence. Their behavior saps efficiency.

A second way that operationally excellent companies fuel growth is by finding different markets to penetrate with their existing assets.

Recall how McDonald's created a breakfast market. Aware that much higher profitability would flow from filling its restaurants at more than the lunch and dinner hours, it launched a campaign to convert the hamburger crowd to born-again breakfast eaters. The idea was to get customers to drop by first thing in the morning for a cup of coffee and an Egg McMuffin. With the success of the campaign, McDonald's boosted the utilization of its fixed assets—its restaurants and equipment—to 10 to 12 hours a day from just six or eight. This doubling slashed unit costs and overhead and gave a big lift to the bottom line.