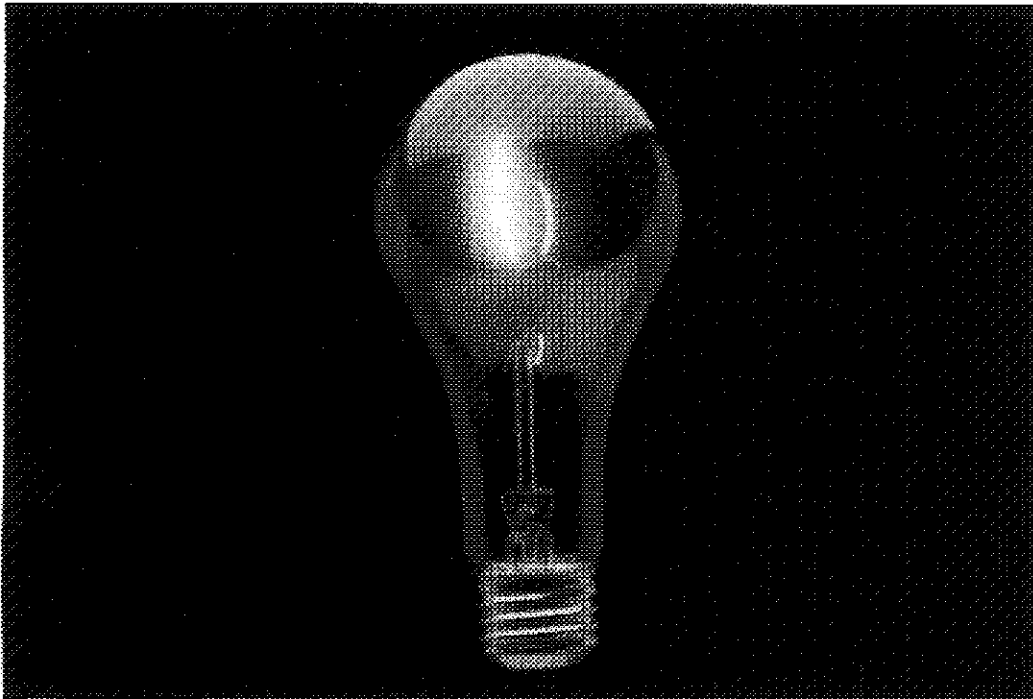


Strategy, Value Innovation, and the Knowledge Economy

W. Chan Kim ■ Renée Mauborgne



In the knowledge economy, strategy must focus on expanding existing markets or creating new ones — not beating the competition.

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For the past twenty years, competition has occupied the center of strategic thinking. Indeed, one hardly speaks of strategy without drawing on the vocabulary of competition — competitive strategy, competitive benchmarking, competitive advantages, outperforming the competition. In fact, most strategic prescriptions merely redefine the ways companies build advantages over the competition. This has been the strategic objective of many firms, and, in itself, nothing is wrong with this objective. After all, a company needs some advantages over the competition to sustain itself in the marketplace. When asked to build competitive advantage, however, managers typically assess what competi-

tors do and strive to do it better. Their strategic thinking thus regresses toward the competition. After expending tremendous effort, companies often achieve no more than incremental improvement — imitation, not innovation.¹

Consider what happened in the microwave oven and VCR industries. As a result of competitive benchmarking, product offerings were nearly mirror images of each other and, from the customer's perspective, they were overdesigned and overpriced. Most buyers had no use for most of the features and found them confusing and irritating. These companies may have outdone one another, but they

missed an opportunity to capture the mass market by offering microwaves and VCRs that were easy to use at accessible prices.

Another classic example is the battle of IBM versus Compaq in the PC market. In 1983, when Compaq launched its IBM-compatible machines with technologically superb quality at a 15 percent lower price than IBM's, it rapidly won the mass of PC buyers. Once roused by Compaq's success, IBM started a race to beat Compaq; Compaq likewise focused on beating IBM. Trying to outperform one another in sophisticated feature enhancements, neither company foresaw the emergence of the low-end PC market in which user-friendliness and low price — not the latest technology — were keys to success. Both companies created a line of overly designed and overpriced PCs, and both companies missed the emerging low-end market. When IBM walked off the cliff in the late 1980s, Compaq was following closely.

These cases illustrate that strategy driven by the competition usually has three latent, unintended effects:²

- *Imitative, not innovative, approaches to the market.* Companies often accept what competitors are doing and simply strive to do it better.
- *Companies act reactively.* Time and talent are unconsciously absorbed in responding to daily competitive moves, rather than creating growth opportunities.
- *A company's understanding of emerging mass markets and changing customer demands becomes hazy.*

Over the past decade, we have studied companies of sustained high growth and profits vis-à-vis their less successful competitors. Regardless of size, years of operation, industry conditions, and country of origin, the strategy these companies pursue is what we call *value innovation*.³ Value innovation is quite different from building layers of competitive advantages and is

Researching the Roots of Profitable Growth

Almost a decade ago, we researched the growth problems of a particular company. Our interviews with the company's managers revealed a typical story. They were suffering from bad industry conditions — stagnant growth, overcapacity, and intense competition. They could do little about these factors, so they were trying to create some advantages over the competition by improving their products, services, and cost structure. Nevertheless, their performance was not improving greatly because the competition was also moving forward.

Not long after, we studied another company with a record of sustained profitable growth despite bad industry conditions. Managers of this company told us a different story. To them, bad industry conditions were excuses for tired executives. The competition was not the reference point for their strategy because they were striving to go far beyond the competition. They were searching for new ideas that could grab the market by providing exceptional value for customers.

As we pondered these two companies, we became interested in further developing and testing our initial observations on firm growth. Since a company's profits must

support its growth to be sustainable, we targeted companies with sustained high growth in both revenues and profits. Through our professional and personal network, we systematically identified national and global growth champions from many industries and built strategic, organizational, and performance profiles of them. During this process, we also identified their less successful competitors. We targeted companies in more than thirty industries; their diversity ranges from hotel, cinema, retailing, airline, energy, computer, broadcasting, home construction, automobile, to steel manufacturing. We then interviewed managers from profitable high-growth companies and those from their less successful competitors. We also spoke with investment and private research group analysts, who track these companies regularly, to gain further insight into their strategic approaches.

We first examined whether industry or corporate characteristics could explain the distinction between these two groups. Are certain industry or corporate characteristics common to companies with high profitable growth, distinguishing them from their less successful competitors? We failed to find any systematic differences. Robust profitable growth was achieved by small and large companies, by young and old man-

agers, by companies in high- and low-growth industries, by new entrants and established incumbents, by private and public companies, and by companies of diverse national origins.

Next, we decided to explore our original insights on possible divergent approaches to strategy. We analyzed the content of managers' remarks about their strategic approach to the market. We analyzed comments from interviews, speeches to analysts or shareholders, and statements gleaned from print media to find examples of implicit and explicit strategic thinking. To further validate our analyses, major business launches (as manifestations of strategic thinking) were reviewed for consistency with management statements and real actions in the marketplace. As we searched for convergence within each group and divergence across the two groups, we found that the focus of corporate strategy differed. Less successful companies were racing to beat the competition; highly successful companies did not use the competition as their strategic reference. Rather than building advantages over their competitors, companies with high profitable growth aimed to make competition irrelevant by providing buyers with a quantum leap in value. We have come to call their way of strategic thinking *value innovation*.

Emphasis on value places the buyer, not the competition, at the center of strategic thinking.

not about striving to outperform the competition. Nor is value innovation about segmenting the market and accommodating customers' individual needs and differences. Value innovation makes the competition irrelevant by offering fundamentally new and superior buyer value in existing markets and by enabling a quantum leap in buyer value to create new markets. (For details of our research process, see the *sidebar*: "Researching the Roots of Profitable Growth.")

Take, for example, Callaway Golf, the U.S. golf club manufacturer, which in 1991 launched its "Big Bertha" golf club. The product rapidly rose to dominate the market, wresting market share from its rivals and expanding the total golf club market. Despite intense competition, Callaway did not focus on its competitors. Rival golf clubs looked alike and featured sophisticated enhancements, a result of attentive benchmarking of the competitors' products. In the meantime, Callaway pondered the "country club" markets of golf and tennis. Many people play tennis because they find the task of hitting a little golf ball with a little golf club head too daunting. Recognizing a business opportunity, Callaway made a golf club with a larger head that made playing golf less difficult and more fun. The result: not only were new players drawn into the market, but Callaway captured an overwhelming share of existing players as well.

Similar examples of value innovation arise in diverse industries. Consider Enron in energy, CNN in news broadcasting, Wal-Mart in discount retailing, Compaq in computers (after its turnaround), Kinopolis in cinema, IKEA in home products retail, Charles Schwab & Co. in investment and brokerage account management, Home Depot in home improvement retail, SAP in business application software, Barnes & Noble in book retailing, Southwest Airlines in short-haul air travel, and others. Their steady growth and high profits are not a consequence of daring young organizational members, of being a small entrepreneurial start-up, of being in attractive industries, or of making big commitments in the latest technology. Instead, the superperforming companies that we studied are united in their pursuit of innovation outside a con-

ventional context. That is, they do not pursue innovation as technology, but as value. The companies cited above created quantum leaps in some aspect of value; many have nothing to do with new technology. This is why we call these companies value innovators.⁴

Many high achievers excel despite bad industry conditions. Instead of falling victim to industry conditions, these value innovators focus on creating opportunities in their fields. They ask, "How can we offer buyers greater value that will result in soaring profitable growth irrespective of industry or competitive conditions?" Because they question everything about a particular industry and their competitors, they explore a far wider range of strategic options than other companies. This broadens their creative scope, allowing them to find opportunities where other companies can see only constraints imposed by external conditions.⁵

To achieve sustained profitable growth, companies must break out of the competitive and imitative trap. Rather than striving to match or outperform the competition, companies must cultivate value innovation. Emphasis on value places the buyer, not the competition, at the center of strategic thinking; emphasis on innovation pushes managers to go beyond incremental improvements to totally new ways of doing things.

Consider a recent study of the profitable growth consequences of more than a hundred new business launches.⁶ We found that while 86 percent of these business launches were "me too" businesses or businesses with value improvements over the competition, they generated only 62 percent of total revenues and 39 percent of total profits. In contrast, the remaining 14 percent of the business launches — those that were value innovations — generated 38 percent of total revenues and a whopping 61 percent of total profits. The performance of value innovators far exceeds that of companies focusing on matching or beating their competitors. Companies pursuing value innovation are on the rise. Value innovation fuels small companies to grow profitably and regenerates the fortunes of big companies.

Shifting the Basis of Strategy

Why has competition been the key building block of strategy in theory and practice? Think of the competitive penetration of Japanese companies into U.S.

industries that awakened U.S. companies to the reality of global competition. After a period of denial, U.S. companies vigorously responded, making competition the centerpiece of their strategic thinking. Concurrently, under the strong influence of old economics — especially in the form of industrial organization — academics were comfortable with competition-based strategy too.⁷ In neoclassical economics, firms and innovations are treated as “black boxes.” What firms do is determined by market conditions because market conditions are assumed to be beyond the influence of individual companies.⁸ In such a setting, innovations are random events exogenous to firms. If market conditions and innovations are treated as given sets of the external environment, a firm strategically chooses a distinctive cost or differentiation position that best fits with its internal systems and capabilities to counter the competition in that particular environment. In such a situation, innovation is not endogenous to its system, so cost and product performance are seen as trade-offs.

Competition-based strategy, however, has waning power in today's economy in which, in many industries, supply exceeds demand. Competing for a share of contracting markets is a marginal and “second best” strategy. Such a zero-sum strategy is cutthroat and does not create new wealth. A “first best” strategy in today's economy stimulates the demand side of the economy. It expands existing markets and creates new markets.⁹ Such a non-zero-sum strategy generates new wealth and has high payoffs. In regard to profitable growth, creating shareholder value, and generating new jobs and wealth for society, companies pursuing the first-best strategy through value innovation far outperform companies following the second-best strategy. In our studies, we see this happening in the business world today.

During the past two decades, for example, we have seen a rapid change in the *Fortune* 500 list — both in rankings and those who qualify for the list; some 60 percent have disappeared from the list. Value innovators are now among the most rapidly growing companies. In less than forty years, a value innovator like Wal-Mart, for example, has become the world's eighth largest company in revenues and the world's second largest employer (825,000 people).

Shareholder value and wealth created by value innovators are equally compelling. The market value of SAP, for example, exceeds that of 150-year-old

Siemens; Microsoft's market value towers over the combined values of General Motors and Ford. In 1995, with \$6 billion in revenues and \$7 billion in assets, the market value of Microsoft was 1.5 times that of GM with \$168 billion in revenues and \$217 billion in assets.

Knowledge and ideas are infinite economic goods that can generate increasing returns through their systematic use.

Why do value innovators such as SAP have such high market valuations despite their much smaller physical and fiscal assets? What do investors value in these companies that is not reflected on their balance sheets? As far as the market is concerned, their high stock of *knowledge* portends tremendous wealth-creating potential despite their much smaller sizes. In creating wealth, knowledge is increasingly taking a front seat to the traditional factors of production, that is, physical and fiscal assets.¹⁰ The gap between a company's market value and its tangible asset value is widening; the key variable explaining this gap is a firm's stock of knowledge. Unlike land, labor, and capital — the economist's traditional, finite factors of production — knowledge and ideas are infinite economic goods that can generate increasing returns through their systematic use, as SAP and Nintendo prove.

What we observe in the real world of business is consistent with the theory of new economics. New economics proposes endogenous growth theory, in which growth and innovation come from within a system.¹¹ While its unit of analysis is primarily the nation-state, the principal argument in endogenous growth theory is applicable to the firm. The theory informs us of the arrival of the knowledge economy and argues that innovations are no longer exogenous and can be created with the ideas and knowledge within a system.

In a world in which industry conditions no longer dictate corporate well-being because companies can transcend these conditions through the systematic pursuit of innovation, a firm need not compete for a share of given demand — it can create new demand. Moreover, low cost and differentiation do not have to be an either-or choice because innovation can be a sustainable strategy.¹² In fact, to innovate in this

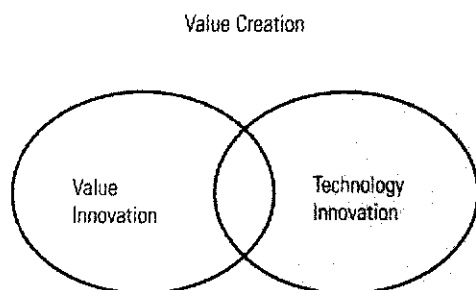
knowledge economy, companies employing the first best strategy often pursue low cost and differentiation simultaneously. Indeed, our field observations support the prediction of new growth theory. Rising companies, small or large, that have achieved sustained high growth and profits are those that have pursued value innovation. Their strategic focus was not on outcompeting within given industry conditions, but on creating fundamentally new and superior value, making their competitors irrelevant. They went beyond competing in existing markets to expanding the demand side of the economy.

Value and Innovation

Value innovation places equal emphasis on *value* and *innovation*. Value without innovation tends to focus on improving the buyer's net benefit or value creation on an incremental scale. Innovation without value can be too strategic or wild (by betting on a company's long-term industry foresight) or too technology-driven or futuristic (shooting far beyond what buyers are ready to accept). Value innovation anchors innovation with buyer value. Hence, value innovation is not the same as *value creation*. Value creation as a concept of strategy is too broad because no boundary condition specifies the direction a company should follow to bring about successful strategic actions. Value creation on an incremental scale, for example, still creates some value but is not sufficient for high performance.

Value innovation also differs from *technology innovation*. As previously mentioned, technology innovation is not a requisite for value innovation; value innovation can occur with or without new technology. Moreover, technology innovation does not necessarily produce value innovation. For example, although

Figure 1
Relationships among Value Creation, Value Innovation, and Technology Innovation



Value innovators are not necessarily first entrants to their markets in technological terms.

Ampex innovated video recording technology in the 1950s, the company failed to convert this new technology into a value innovation cheap enough for mass buyers. As a result, later value innovators, such as Sony and JVC, profited greatly by unlocking the mass market at almost 1 percent of Ampex's initial price. Value innovators are not necessarily first entrants to their markets in technological terms. In this sense, they are not necessarily technology pioneers, but they are value pioneers.

Value innovation links innovation to what the mass of buyers value. To value innovate, companies must ask two questions: (1) Are we offering customers radically superior value? (2) Is our price level accessible to the mass of buyers in our target market? High-growth companies understand that offering a new and superior product or service at a price that most buyers cannot afford is like laying an egg that other companies will hatch. (See *Figure 1* for the relationships among value creation, value innovation, and technology innovation.)

While technology innovators such as Ampex failed to capture profits for themselves, their technological discoveries often benefited the overall economy because later value innovators eventually use these technological discoveries successfully. In light of this, the distinction between technology innovation and value innovation may not be relevant to economists whose main concern is a theory of growth at the macro level. Such a distinction, however, is important to those whose interest is in building a theory of firm growth. Who will capture the profit is a pertinent and critical issue to individual firms.

Many innovation and creativity studies have focused on improving or redefining solutions to problems with technology as a central component of the discussions. Researchers attempted to explain how an organization develops technological solutions to customers' problems.¹⁵ Because technologies are seen as solutions to problems, most innovation studies have been solution driven.¹⁴ Unlike technology innovation, value innovation focuses on redefining the problems

themselves. This is how value innovation makes the competition irrelevant. By redefining the problem an industry focuses on, a value innovator shifts the performance criteria that matter to customers. This creates new market space. To redefine customers' problems, market insights are needed to discover existing but "hidden" demand or to create totally new demand. Value innovation is a consequence of such market insights gained from creative strategic thinking.¹⁵

Callaway Golf, for example, created its Big Bertha golf club after redefining the consumer's need, that is, a desire to hit the ball more easily. Rivals focused on offering better solutions to hitting the ball farther — some were cost leaders and some were differentiators in solving this particular problem. By addressing a redefined problem, Big Bertha expanded the total market by attracting new customers who had not previously played golf. The company gained this market insight by thinking in terms of alternative industries — golf versus tennis — as opposed to thinking in terms of its industry competitors. Its main strategic question was why people choose tennis over golf in the country club market; Callaway Golf did not concentrate on how to outperform other golf club manufacturers by offering a better solution to the conventional goal of hitting the ball farther.

Value innovation can occur in any organization and at any time in a sustainable manner with the proper process.

The concept of value innovation is consistent with the Schumpeterian notion of "creative destruction" in the sense that it is about creating fundamentally new and superior value, hence making existing things and ways of doing things irrelevant.¹⁶ But whereas the entrepreneur is the major input in creating Schumpeterian innovation, knowledge and ideas are the major inputs for value innovation. Whether an executive or a factory worker, anyone can have a good idea; value innovation can occur in any organization and at any time in a sustainable manner with the proper process. In contrast, the realization of Schumpeterian innovation is subject to the availability of entrepreneurs who are in short supply. Hence, while an understanding of entrepreneurship and the entrepreneur as an economic hero are critical to Schumpeterian innovation, it is not with value innovation.

Unlike the old economics in which monopoly power is the enemy of economic development, both new growth theory and Schumpeter argue for the importance of the innovators' monopoly profits to bolster future discovery that stimulates economic growth.¹⁷ They argue that monopolies must be tolerated to a degree. Value innovators in the new knowledge economy, however, act quite differently from the typical monopolists portrayed in economics.

Market Dynamics of Value Innovation

Consider Enron, the Houston-based energy company. Enron's roots are traceable to one of the oldest, capital-intensive commodity industries in the world — gas and utilities. Yet, for three consecutive years, *Fortune* has ranked Enron the most innovative company in the United States. During the past fifteen years, Enron has struck upon repeated value innovations, lowering the cost of gas and electricity to customers by as much as 40 percent to 50 percent. Enron did so while dramatically reducing its own cost structure by, for example, creating the first national spot market for gas in which commodity swaps, future contracts, and other complex derivatives effectively stripped the risk and volatility out of gas prices. Today, Enron has as many traders, analysts, and scientists — including a rocket scientist from the former Soviet Union — employed at Enron's headquarters as gas and pipeline personnel. Enron exemplifies the transition from the production to the knowledge economy. The proportion and value of knowledge to land, labor, and capital — even in this most basic industry — are rising dramatically. Think also of IKEA in furniture, Starbucks in coffee, Wal-Mart in discount retail, or Borders and Barnes & Noble in bookstores — all are offering buyers fundamentally new and superior value in traditional businesses through innovative ideas and knowledge.

The transition from a production to a knowledge economy has two new consequences. First, it creates the potential for increasing returns.¹⁸ This is easy to understand in the software industry in which, for example, producing the first copy of the Windows 95 operating system cost Microsoft millions, whereas subsequent copies involved no more than the near trivial cost of a diskette. In capital-intensive businesses such as Enron's, after paying the fixed cost of developing sophisticated risk management financial tools, the company can apply the tools to infinite transactions at insignificant marginal cost. Second, it

creates the potential for free-riding. This relates to the nonrival and partially excludable nature of knowledge, a discussion of which follows.¹⁹

The use of a *rival good* by one firm precludes its use by another. So, for example, Nobel Prize-winning scientists employed by IBM cannot simultaneously be employed by another company. Nor can scrap steel consumed by Nucor be simultaneously consumed for production by other minimill steel makers. In contrast, the use of a *nonrival good* by one firm does not limit its use by another. Ideas fall into this category. So, for example, when Virgin Atlantic Airways launched its "Upper Class" value innovation — a new concept in business class travel that essentially combined the huge seats and leg room of traditional first class with the price of business class tickets — other airlines could apply this idea to their own business class service without limiting Virgin's ability to use it. This makes competitive imitation not only possible but less costly, as the cost and risk of developing the innovative idea is borne by the value innovator, not the follower. This challenge is exacerbated when the notion of *excludability* is considered.

Excludability is a function of both the nature of the good and the legal system. A good is excludable if the company can prevent others from using it due to, for example, limited access or patent protection. So, for example, Intel can exclude other microprocessor chipmakers from using its manufacturing facilities through property ownership laws. Starbucks Coffee can prevent coffee chain start-ups from using its coffee beans by refusing to sell to would-be copycats, that is, by strategically limiting access. However, Starbucks cannot exclude others from walking into any store, studying its layout, atmosphere, and product range, and mimicking the chic coffee bar concept in which exotic coffee is sold by the cup in elite locations. The highest value-added element of Starbucks' formula is not excludable. Once ideas are "out there," knowledge naturally spills over to other firms. This lack of excludability reinforces the risk of free-riding.

Of course, were it possible to get a patent and formal legal protection for innovative ideas, the risk of free-riding would be considerably lower. Pharmaceutical companies, for example, have long enjoyed the benefit of formal patent protection to prevent the free-riding of other drug companies on their scientific discoveries for a specified time. But, how do you patent

a radically superior concept for a coffee store such as Starbucks, which has tremendous value but in itself consists of no new technological discoveries? It is the arrangement of the items that adds fundamentally new value, that is, the way they are combined, not the items themselves. While collectively this represents a new, creative, and explosive concept, little about the Starbucks concept is scientifically new and, hence, patentable and excludable. Starbucks, like The Body Shop, Home Depot, Schwab, Virgin Atlantic Airways, Amazon.com, Borders, and Barnes & Noble, is not about patentable technology innovation, but value innovation.

The ideas that contain the real value are usually not excludable or only partially so.

Even value innovations in software run the risk of free-riding. Although computer software companies can obtain copyrights to prohibit others from copying program code, the look, feel, and functionality of software is not patentable.²⁰ Thus, any successful program can be copied. Competing firms need only write their own code; the software functionality, the structure of the internal programming components, and the software's look and feel can be imitated, as Netscape painfully learned. The same can be said for Wal-Mart's valuable inventory replenishment system. In other words, the ideas that contain the real value are usually not excludable or only partially so.

The question is how best to maximize profits from value innovation ideas that have the potential for both increasing returns and free-riding. Should value innovators follow the conventional practice of technology innovators: set high prices, limit access, initially engage in price skimming to earn a premium on the innovation, and only later focus on lowering price and costs to retain market share and discourage imitators?

In a world of nonrival and nonexcludable goods that are imbued with the potential of economies of scale, learning, and increasing returns, the importance of volume, price, and cost grows in unprecedented ways. From the outset, the aim is to capture the mass of buyers and expand the size of the market by offering radically superior value at price points accessible to a mass market. This means that value innovators should not follow conventional practices for maximiz-

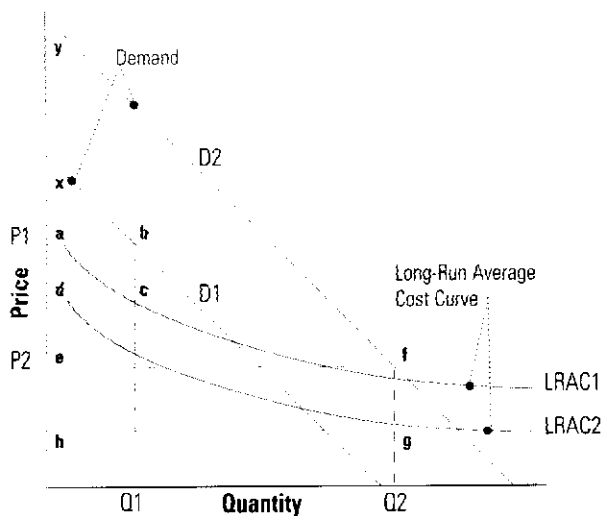
ing profits. First, by charging a high premium and restricting supply, unmet demand combined with a high price ceiling is a huge incentive for others to free-ride to undercut the price of the innovator and capture the market. Second, high prices and limited volume that create an image of exclusivity and uniqueness do not allow the innovator to exploit either economies of scale and learning or the potential for increasing returns. This undermines the innate profit advantage of knowledge-intensive goods.

In our studies, we observed successful value innovators using a distinctly different market approach from that of conventional monopolists. Their approach has two components:

- *Strategic pricing for demand creation.* Strategic pricing leads to high volume and rapidly establishes a powerful brand reputation.
- *Target costing for profit creation.* Target costing leads to attractive profit margins and a cost structure that is hard for potential followers to match.

Consider how Nicholas Hayek, the chairman of SMH, used this new market approach with the launch of the Swatch, a value innovation that revived the Swiss watch industry. The Swatch transformed the wristwatch from a functional item used to tell time to a mass-market fashion accessory. The company innovated the concept of a watch by combining mechanical punctuality with creative designs that conveyed a powerful emotional message.

Figure 2
Market Dynamics of Value Innovation



Recognizing the nonrival and partially excludable nature of its innovative good, the value innovator strategically prices the product to capture a mass market.

To profit from this value innovation, Hayek set up a project team to determine the strategic price for the Swatch. At the time, cheap (about \$75), high-precision quartz watches from Japan and Hong Kong were capturing the mass market. To entice these customers and to quickly build a strong brand name, SMH aggressively set the Swatch's price at \$40, a price at which customers could buy several Swatches as fashion accessories. The low price left no profit margin for Japanese or Hong Kong-based companies to copy Swatch and undercut its price. Directed to sell the Swatch for that price and not a penny more, the SMH project team had worked backwards to arrive at the target cost, which involved determining the margin SMH needed to support marketing and services. On this basis, the project team then devised a suitable production system. SMH was compelled to innovate the design of the Swatch's mechanics, production, and assembly, which produced an unbeatable cost structure in the worldwide watch industry.

How can a value innovator like Swatch sustain its profitable growth over time? Value innovation radically increases the appeal of a good, shifting the demand curve from D1 to D2 (see Figure 2). However, recognizing the nonrival and only partial excludable nature of its innovative good, the value innovator strategically prices the product from the outset to capture the mass of buyers in the expanded market, in the case of Swatch shifting the price from P1 to P2. This increases the quantity sold from Q1 to Q2 and builds strong brand recognition for unprecedented value. The value innovator, however, engages in target costing to simultaneously reduce the long-run average cost curve from LRAC1 to LRAC2 to expand its ability to profit and to discourage free-riding and imitation. Hence, buyers receive a quantum leap in value, shifting the consumer surplus from *axb* to *eyf*. And the value innovator earns a leap in profit and growth, shifting the profit zone from *abc* to *efg*. The rapid brand recognition built by the value

innovator as a result of the unprecedented value offered in the marketplace combined with the simultaneous drive to lower costs makes the competition near to irrelevant and hard to catch up as economies of scale, learning, and increasing returns kick in. Hence, the emergence of the new phenomena such as category killers and winner-take-most markets where companies earn dominant positions while customers simultaneously come out big winners.

While value innovators do not always exercise low strategic pricing as Swatch did, attracting a mass of buyers is, in many respects, at odds with the tactics of conventional monopolists.²¹ In the production economy, firms with dominant market positions have been associated with two social welfare loss activities. First, to maximize their profits, companies set high prices, which prohibited the mass of customers who, though desiring the product, could not afford it. Second, lacking viable competition, firms with monopolistic positions did not focus on efficiency and hence consumed more of society's resources.

The focus shifts from restricting output at a high price to creating new aggregate demand through a leap in value and an accessible price.

However, in the knowledge economy, innovative companies engage less in the exorbitant price skimming common in the production economy. The focus shifts from restricting output at a high price to creating new aggregate demand through a leap in value and introduction at an accessible price. This creates a strong incentive to reduce costs to the lowest possible level. Perhaps this explains why the antitrust actions against Microsoft proceed slowly despite its dominant market position. Microsoft is not acting as a monopolist in the traditional sense; customers are winning, and innovation in its industry has not slowed but is accelerating as others strive to capture the powerful profitable growth consequences of being a market leader in the knowledge economy.

Shifting Strategy Focus

The underlying foundation of business is shifting in unprecedented ways. Consider the emergence of the

Internet, the rise of multimedia, the speed of globalization, and the advent of the euro. The rate of change seems to increase as new knowledge, idea creation, and global diffusion accelerate. This new reality requires new strategic responses. Companies that continue to focus on the competition, on leveraging and extending their current capabilities, and on retaining and extending their existing customers are off the mark.²² As has been argued, the competition provides a sticky starting point for strategic thinking. A focus on matching and beating the competition leads to reactive, incremental, and often imitative strategic moves — not what is needed in a knowledge economy. The irony of competition is this: intense competition makes innovation indispensable, but an obsessive focus on the competition makes innovation difficult to attain.

At the same time, thinking beyond a company's boundaries is necessary. Since the field of strategy emerged, its focus has been on building and leveraging a company's strengths. The basic argument here is that firms possess unique resources, reputation, and skills — capabilities that should be nurtured and leveraged to guide their strategic decisions. Extended and refined over time, this basic argument persists in theory and practice. An inwardly driven focus on capabilities within a company, however, significantly limits a company's opportunity horizon and introduces resistance to change if the market is evolving away from a company's forte.²³ As we enter an era of the modular society in which networks become more prevalent, companies can increasingly pursue strategic relations with other firms to capture emerging opportunities on the basis of their respective strengths.

The central quest of a value innovator's strategic mind-set is to create radically new and superior value. The conventional focus on retaining and better satisfying existing customers tends to promote hesitancy to challenge the status quo for fear of losing or dissatisfying existing customers.²⁴ However, companies must focus on capturing the mass of buyers, even if that means losing some existing customers. Value innovators monitor existing customers but, more importantly, follow noncustomers closely because they provide deep insights into trends and changes.

After radically superior value is discovered, value innovators deploy capabilities that exist both inside

and outside their companies to actualize an opportunity. Value innovators often have a network of partners that provide complementary assets, capabilities, products, and services.

The strategic responses of value innovators illustrate how the three basic building blocks of strategy — competition, customers, and corporate capabilities — must shift to thrive in this rapidly changing knowledge economy (see Figure 3).

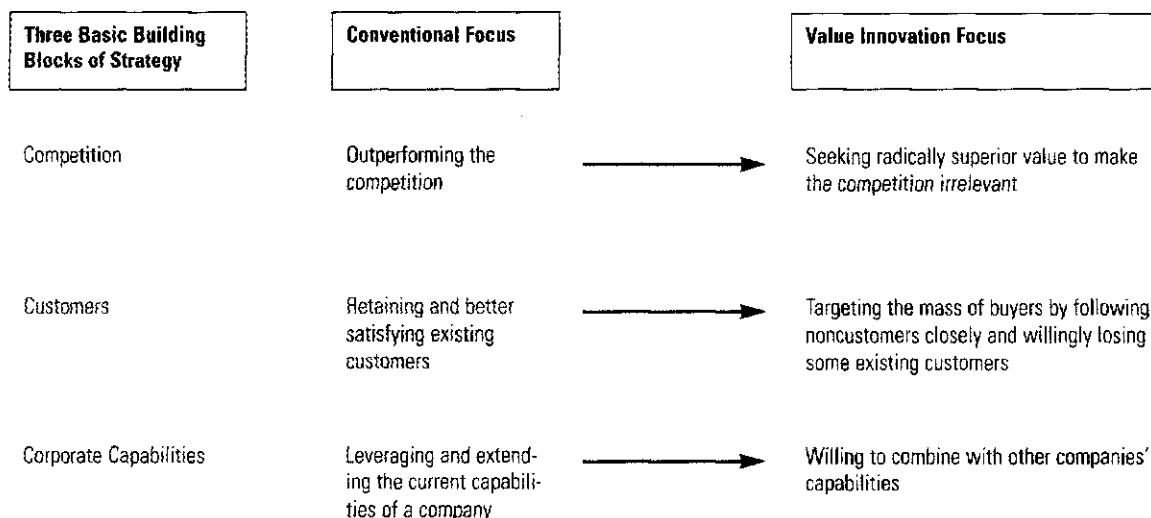
SMH's innovative Swatch idea did not originate with the competition. The company did not have a core competency in mass-market watches, in plastic molding, or in contemporary design. At the time of the Swatch introduction, the young mass-market customers were not SMH customers. What did SMH have in its favor? Hayek had a relentless desire to offer buyers radically superior value, an idea (to create a watch exuding *joie de vivre*), and the insight to create, buy, or borrow the expertise needed to produce the watches. Likewise, SAP possessed no core competencies or distinctive resources. At the time of its founding more than twenty-five years ago, SAP did not own computers to use in writing its software. Yet, SAP not only created its first value innovation, R/2 business application software for the mainframe environment, but repeatedly launched value innovations, including R/3, client-server business application software. As Hasso Plattner, SAP cofounder, put it: "The only resource we had was our brains and the idea of how to build pow-

erful software." Later SAP leveraged the resources and capabilities of others, including Andersen Consulting, which served as SAP's marketing and implementation arm; Oracle, which supplied the necessary sophisticated database; and IBM, which supplied hardware. SAP has continuously renewed its customer base by moving aggressively from mainframe users, to client-server users, and to midsized and small companies to capitalize on emerging market opportunities. "Noncustomers often offer the greatest insights into where the market is moving and what we should be doing fundamentally differently," remarked Plattner. "We never look at what the competition is doing." As a result, SAP is the global leader in business application software.

Making Value Innovation Happen

To make value innovation happen, top management must clearly communicate the company's commitment to value innovation as the key strategy component by articulating its underlying logic.²⁵ The aim is to drive out of the organization conventional competition-based thinking that usually leads to only incremental market improvements. The CEO and his or her top management team play a critical role in initiating this change.²⁶ Through strategic retreats, corporate communications, and by continuously challenging proposed strategic plans on the basis of value innovation, staff members will gradually orient themselves toward the principles of value innovation.²⁷ Five key questions, which contrast conventional com-

Figure 3
Shifting Strategy Focus



petition-based logic with that of value innovation, can serve as a guide to reframing strategic thinking toward the new mind-set (see Table 1).

What type of organization best unlocks the ideas and creativity of its employees to achieve this end? In our studies, two structural characteristics are common to value innovation companies:

- *Small autonomous units or teams focusing on a common business or product goal* rather than organization on the basis of function, region, or channel type.²⁸ Although top managers must clearly specify that the strategic goal is to value innovate (as opposed to benchmarking the competition), teams must freely explore how to achieve these objectives. Some degree of freedom heightens a sense of ownership among team members, promotes creativity, and ensures that individual expertise is fully exploited.²⁹
- *Team members of diverse backgrounds and perspectives.* This seems most conducive to higher levels of creativity.³⁰

When putting value innovation strategies into action, structural conditions create only the *potential* for individuals to share their best ideas and knowledge. To *actualize* this potential, a company must cultivate a corporate culture conducive to willing collaboration.

How to promote voluntary cooperation among orga-

nizational members is critical to value innovation efforts. An organization must supply and create knowledge and ideas effectively, because these are the primary inputs for value innovation. Unlike traditional production factors, such as land, labor, and capital, knowledge and ideas are intangible assets locked in the human mind. Even in ideal organizational conditions, creating and sharing knowledge — intangible activities — cannot be supervised or forced: they happen only when individuals cooperate voluntarily.

The distinction between compulsory and voluntary cooperation is worth noting. Compulsory cooperation is in accordance with organizational rules, regulations, and acceptable standards, whereas voluntary cooperation goes beyond the call of duty: individuals exert effort, energy, and initiative to the best of their abilities on behalf of the organization.³¹ Companies can mandate compulsory cooperation by using organizational force; voluntary cooperation is not achievable without trust and commitment that can only be cultivated purposefully. Compulsory cooperation alone cannot effectively supply and generate the knowledge required to formulate value innovation plans.³²

Voluntary cooperation is also essential because effectively executing planned value innovation usually involves major changes in how a company functions. This often requires behavioral changes. The collaborative initiative and spontaneity that is characteristic of voluntary cooperation are key to adapting to change.

Table 1
Five Key Questions to Reframe Strategic Thinking

	Conventional Logic	Value Innovation Logic
Question 1	Does your company allow industry conditions to dictate the realm of what is possible, probable, and profitable?	Does your company challenge the inevitability of industry conditions?
Question 2	Does your company focus on outpacing the competition?	Does your company focus on dominating the market by introducing a major advance in buyer value?
Question 3	Does management start by considering current assets and capabilities?	Does management consider starting anew?
Question 4	Does your company focus on customer segmentation, customization, and retention?	Does your company search for key value commodities that can unlock the mass market even if some existing customers will be lost?
Question 5	Does your company strive to improve the products and services of your industry?	Does your company think in terms of a total customer solution even if this pushes beyond the industry's traditional offerings?

As we studied successes and failures in this area, one central theme repeatedly emerged whether we were working with senior executives or shop floor employees: individuals are most likely to share ideas and cooperate voluntarily when the company acknowledges their intellectual and emotional worth. Individuals are gratified when the company solicits and thoughtfully considers their ideas and shares opinions with them. Recognizing individuals as human beings worthy of respect regardless of hierarchical level rather than "labor," "personnel," or "human resources" engenders loyalty and willingness to collaborate for the welfare of the company.

We found that exercising *fair process* — fairness in the process of making and executing decisions — is a powerful way to recognize people's intellectual and emotional worth.⁵³ Fair process brings forth trust and commitment, whereas treatment perceived as unfair elicits idea hoarding and foot dragging. The three bedrock principles of fair process are: (1) *engaging* people in decisions that affect them, (2) *explaining* final decisions, and (3) *establishing clear expectations* of actions and deliverables. Fair process is a key organizational practice for effectively conceiving and executing any strategy, but is particularly efficacious when companies wish to break from the status quo to value innovate.

Consider the recent successes of Compaq Computer. In 1991, Compaq saw tremendous opportunity in the low-end PC market. Because its existing production systems and logistics had neither the cost dynamics

To induce knowledge creation and voluntary cooperation between individuals, companies must go beyond fair outcome to fair process.

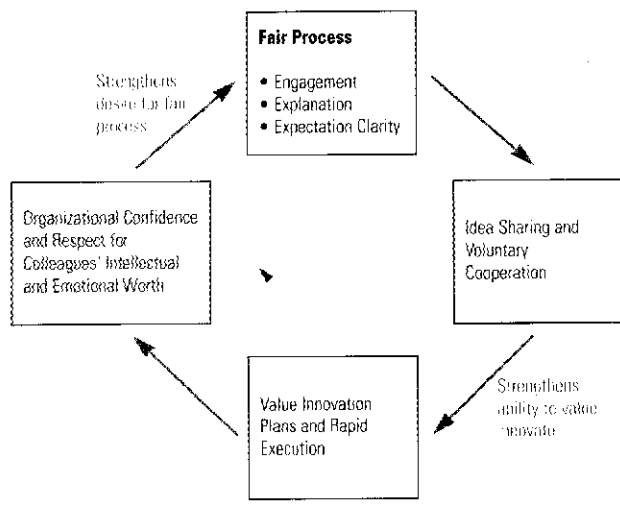
nor distribution reach to capture this burgeoning market, Compaq swiftly reinvented itself to serve the low-end PC market. In several months, for example, the company moved from 3,000 value-added resellers to more than 30,000 dealers, including mass-market merchandisers like Wal-Mart and Circuit City. In six years, its sales increased from \$3 billion to \$25 billion, and it is the world's top-ranked desktop computer maker, sporting a world-class line of portables, servers, and workstations. Compaq Chairman Eckhard Pfeiffer clearly articulated and never wavered from his intention to value innovate. Beyond autonomous teams populated with diversity, use of fair process methods defined a working mode that built trust and voluntary cooperation around the corporation's strategic goal.

Fair process and value innovation create a positively reinforcing cycle (see Figure 4). Each success in implementing a general value innovation strategy based on fair process strengthens group cohesiveness and people's belief in the process, which perpetuates the collaborative and creative modes inherent to value innovation.

Most companies strive to deliver *fair outcomes* without distinguishing this concept from fair process. Delivering fair outcomes ensures that individuals receive power, resources, or material rewards in exchange for compulsory cooperation.⁵⁴ To induce knowledge creation and voluntary cooperation between individuals, however, companies must go beyond fair outcome to fair process.

People possessing knowledge are the key resource of companies pursuing value innovation; this cherished resource is independent and mobile. Today's knowledge economy trafficks actively in this key resource. As a result, companies must meet fair outcome expectations *and* fair process expectations to produce fulfilling work environments. This is how many successful value innovation companies, such as SAP, retain their talented employees. In an industry notori-

Figure 4
The Positively Reinforcing Cycle of Fair Process



ous for its lack of employee loyalty, the annual staff turnover rate of SAP, for example, is 4 percent — about half the industry average.

Value Innovation as Strategy

In the coming decade, what is the key strategic agenda for corporate giants like Microsoft, Intel, Compaq, Enron, SAP, Procter & Gamble, Johnson & Johnson, Motorola, Chrysler, SMH, 3M, Sony, Toyota, and Samsung? For example, Procter & Gamble's strategic goal for the next decade is to double its \$35 billion business through assertive efforts to achieve business breakthroughs. As we participated in, heard, and read about their management training, strategic planning discussions, and executive retreats, we unfailingly noted that all these companies aspire to attain breakthroughs in their markets.

We believe that value innovation is the essence of strategy in the knowledge economy. It must be supported by the proper tactics to prolong and maximize an innovation's profit-making potential, distancing it from emulators. After a value innovation is created, business line extensions and continuous improvements can maximize profits before another value innovation is launched. However, these business and operational improvements are not strategies; they are tactics.⁴⁵ Value innovation as strategy creates a pattern of punctuated equilibrium, in which bursts of value innovation that reshape the industrial landscape are interspersed with periods of improvements, geo-

graphic and product line extensions, and consolidation.

In some industrial and regional sectors of the economy, however, many companies will still be successful on the basis of competition-driven strategy without spurts of value innovation. We predict that these dormant sectors of the economy will increasingly dwindle as value innovation and its globalization penetrates farther into the economy. Nevertheless, other successful strategies exist. Along with value innovators, cost leaders and differentiators can achieve profitable growth. In markets where value innovation occurs, however, the space for success of cost leaders and differentiators narrows as value innovators occupy the core of markets by attracting the mass of buyers. For example, since Wal-Mart has grown to dominate the discount retail market by capturing its core, successful cost leaders and differentiators in this market are those pursuing a rock-bottom pricing strategy (Dollar General, Family Dollar, Dollar Tree) or targeting high-end segments (specialty stores). As value innovation further penetrates into markets, strategies of cost leadership and differentiation are likely to succeed best at the low end (cost leaders) and the high end (differentiators). As happened in discount retailing, cost leaders and differentiators may become peripheral players relative to value innovators that emerge to capture the core of expanded markets. It is important to note here that value innovators do capture the core of the market not at the direct expense of other market players since they expand the market by creating new demand.

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It is worth noting that both Arrow and Romer limited their discussions of nonrival and nonexcludable goods to technological innovations as is the tradition of economics. When the concept of innovation is redefined as value innovation, which is more relevant at the microeconomic firm level, the importance of the nonrival and nonexcludable notion is even more striking. This is because technological innovation often has a greater excludable component due to the possibility and relative ease of obtaining patent protection.

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its price relatively high while still capturing the mass of buyers. Although the vacuum cleaner was priced higher than the competition, it was a leap in value and within the economic reach of the mass of buyers. In this instance, Dyson did not use the conventional monopolist's practice of restricting supply by establishing a high price.

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■ 27. This is consistent with the work of Amabile (1988), who argues that the most important elements of motivating innovation are concise and compelling articulation of the value of innovation, orientation away from the status quo, and activating an offensive leadership strategy aimed at the future, rather than simply trying to protect an organization's past.

■ 28. Kanter (1996) also argues for the importance of smaller units organized around common business objectives as a catalyst for innovative thinking in organizations.

■ 29. The important work on creativity conducted by Amabile clearly establishes the importance of autonomy in achieving strategic goals to foster creativity. See:

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Reprint 4034