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# Strategy as Stretch and Leverage

by Gary Hamel and C.K. Prahalad



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*Competitiveness is born in the gap between a company's resources and its managers' goals.*

# Strategy as Stretch and Leverage

by Gary Hamel and C.K. Prahalad

General Motors versus Toyota. CBS versus CNN. Pan Am versus British Airways. RCA versus Sony. Suppose you had been asked, 10 or 20 years ago, to choose the victor in each of these battles. Where would you have placed your bets? With hindsight, the choice is easy. But at the time, GM, CBS, Pan Am, and RCA all had stronger reputations, deeper pockets, greater technological riches, bigger market shares, and more powerful distribution channels. Only a dreamer could have predicted that each would be displaced by a competitor with far fewer resources – but far greater aspirations.

Driven by the need to understand the dynamics of battles like these, we have turned competitiveness into a growth industry. Companies and industries have been analyzed in mind-numbing detail, autopsies performed, and verdicts rendered. Yet when it comes to understanding where competitiveness comes from and where it goes, we are like doctors who have diagnosed a problem – and have even found ways to treat some of its symptoms – but who still don't know how to keep people from getting sick in the first place.

Consider the analogy. The first step in understanding competitiveness is to observe competitive outcomes: some companies gaining market share, others losing it, some companies in the black, oth-

ers bleeding red ink. Like doctors taking a patient's blood pressure or temperature, we can say whether the patient is well or ill, but little more.

The next step is to move from observation to diagnosis. To diagnose competitive problems, we rely on industry structure analysis. A company's market position – the particular market segments in which the company participates – broadly determines the potential for profitability and growth. Within any particular market segment, it is the company's relative competitive advantage that determines actual profitability and growth.

Industry structure analysis points us to the *what* of competitiveness: *what* makes one company more profitable than another. As new *whats* have been discovered, companies have been exhorted to strive for six sigma quality, compete on time, become customer led, and pursue a host of other desirable advantages. In diagnosing a specific competitive disease, we may conclude that a company is in

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an unattractive industry segment with a cost disadvantage and subpar quality. This is a bit like determining that a patient has Parkinson's disease: the diagnosis may point to a cure, but it isn't the cure itself and certainly won't prevent disease.

To find a cure, the medical researcher must unravel the workings of disease. The competitive analogy lies in studying organizational structure and process: For example, what are the administrative attributes of a speedy product-development process or a successful total quality management program? But however deeply we understand the various elements of a company's competitive advantage, we are still addressing the what of competitiveness, not the *why*.

Understanding the what of competitiveness is a prerequisite for catching up. Understanding the why is a prerequisite for getting out in front. Why do some companies continually create new forms of competitive advantage, while others watch and follow? Why do some companies redefine the industries in which they compete, while others take the existing industry structure as a given?

To answer these questions, another layer of understanding must be peeled back. If the goal of medicine is to prevent rather than simply cure disease, a doctor must search for the reason some people fall ill while others do not. Differences in life-style and diet, for instance, predispose some to sickness and others to wellness. A company's institutional environment is the industrial corollary here. Monetary and fiscal policy, trade and industrial policy, national levels of education, the structure of corporate ownership, and the social norms and

**We can analyze companies in mind-numbing detail, perform autopsies, and render verdicts, but we are still addressing the *what* of competitiveness, not the *why*.**

values of a particular nation all have an impact on how well that nation's industries will compete.

But often too much attention is paid to these factors, especially by managers eager to externalize the causes of competitive decline—and the responsibility for it. After all, we regularly see companies that fail to benefit from the inherent advantages of their institutional context and others that manage to escape the disadvantages. Why hasn't Japan, with more snow skiers than any country on earth, pro-

duced a world-class manufacturer of ski equipment? Conversely, why did Yamaha, a Japanese company, become the world's largest producer of high-quality grand pianos, which are not suited to the homes or traditional musical tastes of Japanese customers? And why do U.S. computer manufacturers, competing in an industry targeted by Japan's industrial policymakers, thrive around the world when U.S. automakers often wilt in the face of Japanese competition? Institutional factors are only part of the story.

## Breaking the Managerial Frame

To understand why some people contract a disease while others do not, a medical researcher must finally confront genetics. Just as genetic heritage manifests itself as a susceptibility to some diseases and an ability to resist others, managerial frames of reference—the assumptions, premises, and accepted wisdom that bound or “frame” a company's understanding of itself and its industry and drive its competitive strategy—determine in large part which diseases a company will fall prey to and which it will avoid.

Managers acquire their frames of reference invisibly from business school and other educational experiences, from peers, consultants, and the business press, and, above all, from their own career experiences. But invisible as the frames themselves may be, their consequences are visible at every turn in how a company's senior managers understand what it means to be “strategic,” in their choice of competitive stratagems, in their relationships with subordinates. In this sense, managerial frames, perhaps more than anything else, bound a company's approach to competitive warfare and thus determine competitive outcomes.

Failure to reckon with managerial frames was understandable as long as competition took place mostly between companies whose managers graduated from the same universities, hired the same consultants, subscribed to the same trade journals, and job-hopped among the same few companies. After all, it wasn't Ford that challenged GM's long-held managerial precepts, nor Thomson that compelled Philips to discard once-sacrosanct organizational tenets. Today such blindness is inexcusable. Just as the health of biological species depends, over time, on genetic variety, so it is with global companies: long-term competitiveness depends on managers' willingness to challenge continually their managerial frames.

The term “head-to-head competition” is literal. Global competition is not just product versus product, company versus company, or trading bloc versus trading bloc. It is mind-set versus mind-set, managerial frame versus managerial frame.

## From Fit to Stretch

A good place to begin deconstructing our managerial frames is with the question, “What is strategy?” For a great many managers in large Western companies, the answer centers on three elements: the concept of fit, or the relationship between the company and its competitive environment; the allocation of resources among competing investment opportunities; and a long-term perspective in which “patient money” figures prominently. From this perspective, “being strategic” implies a willingness to take the long view, and “strategic” investments are those that require a large and preemptive commitment of resources—betting bigger and betting earlier—as well as a distant return and substantial risk.

This dominant strategy frame is not wrong, only unbalanced. That every company must ultimately effect a fit between its resources and the opportunities it pursues, that resource allocation is a strategic task, and that managers must often countenance risk and uncertainty in the pursuit of strategic objectives all go without saying. But the predominance of these planks in corporate strategy platforms has obscured the merits of an alternative frame in which the concept of stretch supplements the idea of fit, leveraging resources is as important as allocating them, and the long term has as much to do with consistency of effort and purpose as it does with patient money and an appetite for risk.

To illustrate the effects of these opposing frames, imagine two companies competing in the same industry. Alpha, the industry leader, has accumulated a wealth of resources of every kind—human talent, technical skills, distribution access, well-known brands, manufacturing facilities, and cash flow—and it can fund just about any initiative it considers strategic. But its aspirations to remain atop its present perch, to grow as fast as its industry, and to achieve a 15% return on equity are modest. “Where do you go,” Alpha’s managers ask themselves, “when you’re already number one?”

Beta, its rival, is a relative latecomer to the industry. It is much smaller than Alpha and has no choice but to make do with fewer people, a smaller capital budget, more modest facilities, and a fraction of Al-

pha’s R&D budget. Nevertheless, its ambitions belie its meager resource base. Beta’s managers have every intention of knocking Alpha off its leadership perch. To reach this goal, they know that they must grow faster than Alpha, develop more and better products than Alpha, and build a worldwide brand franchise and a presence in every major market, all while expending fewer resources. The misfit between Beta’s resources and its aspirations would lead most observers to challenge the feasibility of its goals, if not the sanity of its managers.

But consider the likely effects of Alpha’s abundance and Beta’s ambition on how the two companies frame their competitive strategies and marshal their resources.

Clearly, Alpha is much better placed to behave “strategically”: to preempt Beta in building new plant capacity, to outspend Beta on R&D, to buy market share through aggressive pricing, and so on. Alpha’s managers are likely to rest easily, confident

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**Abundant resources alone won't keep an industry giant on top when its hungrier rival practices the strategic discipline of stretch.**

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that they can overpower their smaller rival in any confrontation. They are also likely to approach their battles with a mind-set reminiscent of World War I trench warfare—“Whoever runs out of ammunition first is the loser”—however resource-inefficient this approach may be.

Beta, on the other hand, is likely to adopt the tactics of guerrilla warfare in hopes of exploiting the orthodoxies of its more powerful enemy. It will search for undefended niches rather than confront its competitor in well-defended market segments. It will focus investments on a relatively small number of core competencies where management feels it has the potential to become a world leader. It might even find itself compelled to invent lean manufacturing with an emphasis on doing more with less.

The argument here is substantially more subtle than the oft-made point that small companies are more nimble. What distinguishes Beta from Alpha is not Beta’s smaller resource base but the greater gap that exists between Beta’s resources and its aspirations. In contrast, Alpha’s problem is not that it is large—there’s no inherent virtue in being small—but that it has insufficient stretch in its aspira-

tions. Alpha's managers will not think and behave as if they were in a small, resource-restrained company. What bedevils Alpha is not a surfeit of resources but a scarcity of ambition.

The products of stretch—a view of competition as encirclement rather than confrontation, an accelerated product-development cycle, tightly knit cross-functional teams, a focus on a few core competencies, strategic alliances with suppliers, programs of employee involvement, consensus—are all elements of a managerial approach typically labeled “Japanese.” But as the less than sterling performance of Japan's well-endowed banks and brokerage houses reminds us, there is no magic simply in being Japanese. Indeed, so-called Japanese management may have less to do with social harmony and personal discipline than it does with the strategic discipline of stretch. Companies like NEC, CNN, Sony, Glaxo, and Honda were united more by the unreasonableness of their ambitions and their creativity in getting the most from the least than by any cultural or institutional heritage. Material advantages are as poor a substitute for the creativity stretch engenders in Japan as they are in the United States or Europe. Creating stretch, a misfit between resources and aspirations, is the single most important task senior management faces.

## From Allocation to Leverage

“If only we had more resources, we could be more strategic.” Every experienced manager will recognize that lament. Yet it is clear that copious resources cannot guarantee continued industry leadership. Tens of billions of dollars later, no one can accuse GM of not being “strategic” in its pursuit of factory automation. If anything, GM was *too* strategic. The company's ability to invest outpaced its ability to absorb new technology, retrain workers, reengineer work flows, rejuvenate supplier relationships, and discard managerial orthodoxies.

Conversely, if modest resources were an insurmountable deterrent to future leadership, GM, Philips, and IBM would not have found themselves on the defensive with Honda, Sony, and Compaq. NEC succeeded in gaining market share against AT&T, Texas Instruments, and IBM despite an R&D budget that for most of its history was more modest in both absolute and relative terms than those of its rivals. Toyota developed a new luxury car for a fraction of the resources required by Detroit. IBM challenged Xerox in the copier business and failed, while Canon, a company only 10% the

size of Xerox in the mid-1970s, eventually displaced Xerox as the world's most prolific copier manufacturer. CNN in its adolescence managed to provide 24 hours of news a day with a budget estimated at one-fifth that required by CBS to turn out 1 hour of evening news. Performance like this isn't just lean manufacturing; it's lean everything.

Allocating resources across businesses and geographies is an important part of top management's strategic role. But leveraging what a company already has rather than simply allocating it is a more creative response to scarcity. In the continual search for less resource-intensive ways to achieve ambitious objectives, leveraging resources provides a very different approach from the downsizing and delayering, the restructuring and retrenchment that have become common as managers contend with rivals around the world who have mastered the art of resource leverage.

There are two basic approaches to garnering greater resource productivity, whether those resources be capital or human. The first is downsizing, cutting investment and head count in hopes of becoming lean and mean—in essence, reducing the buck paid for the bang. The second approach, resource leveraging, seeks to get the most out of the resources one has—to get a much bigger bang for the buck. Resource leverage is essentially energizing, while downsizing is essentially demoralizing. Both approaches will yield gains in productivity, but a company that continually ratchets down its resource base without improving its capacity for resource leverage will soon find that downsizing and restructuring become a way of life—until investors locate a new owner or demand a management team with a better track record. Indeed, this is happening in the United States and in Europe as an increasing share of human and physical capital falls through acquisition, joint venture, and surrender of market share to competitors who are better at getting more from less.

## The Arenas of Resource Leverage

Management can leverage its resources, financial and nonfinancial, in five basic ways: by *concentrating* them more effectively on key strategic goals; by *accumulating* them more efficiently; by *complementing* one kind of resource with another to create higher order value; by *conserving* resources wherever possible; and by *recovering* them from the marketplace in the shortest possible time. Let us look, one by one, at some of the components that

make up these broad categories and ask the questions that managers must ask to assess the scope within their company for further resource leverage.

**Convergence: Have we created a chasm between resources and aspirations that will compel creative resource leverage? Have we been loyal to our strategic goals and consistent in their pursuit?**

*Concentrating Resources: Convergence and Focus.* Leverage requires a strategic focal point, or what we have called a strategic intent, on which the efforts of individuals, functions, and businesses can converge over time. Komatsu's goal of "encircling Caterpillar," President Kennedy's chal-

lenge to "put a man on the moon by the end of the decade," British Airway's quest to become the "world's favorite airline," and Ted Turner's dream of global news all provided a strategic intent.

Yet in many, probably most, companies there is neither a strategic focal point nor any deep agreement on the company's growth trajectory. As a result, priorities shift constantly. Resources are squandered on competing projects. Potentially great ideas are abandoned prematurely. And the very definition of core business changes often enough to confuse both investors and employees. It is hardly surprising then that in many companies there is little cumulateness to month-by-month and year-by-year strategic decisions.

Compare NEC's relentless pursuit of "computers and communication" with IBM's on-again, off-again affair with telecommunications. While NEC was first a telecommunications equipment manufacturer and IBM first a computer maker, both have long recognized that the two industries are converging. Yet IBM's Satellite Business Systems, dalliances with MCI and Mitel, and the acquisition of Rolm have come and, for the most part, gone, while its communications business remains a poor relation to its computer business. NEC, on the other hand, is the only company in the world that is a top-five producer of both computer and communications equipment. NEC achieved this not by outspending IBM but rather through its strategic focus. In the mid-1970s, management established the goal of becoming a leader in both computers and communications; next it elaborated the implications of that goal in terms of the skills and capabilities it would require; and finally, it pursued its ambition unswervingly for the next decade and a half.

As NEC's experience suggests, convergence requires an intent that is sufficiently precise to guide decisions. Converging resources around an amorphous goal—becoming a \$100 billion company, growing as fast as the industry, achieving a 15% return on equity—is difficult if not impossible.

Resource convergence is also unlikely if strategic goals fail to outlive the tenures of senior executives. Even with a high degree of resource leverage, the attainment of worldwide industry leadership may be a ten-year quest. Recasting the company's ambition every few years virtually guarantees that leadership will remain elusive. The target has to sit still long enough for all members of the organization to calibrate their sights, take a bead on the target, fire, adjust their aim, and fire again.

If convergence prevents the diversion of resources over time, focus prevents the dilution of resources at any given time. Just as a general with limited forces must pick his targets carefully, so a company must specify and prioritize the improvements it will pursue. Too many managers, finding their companies behind on cost, quality, cycle time, customer service, and other competitive metrics, have tried to put everything right at the same time and then wondered why progress was so painfully slow. No single business, functional team, or department can give adequate attention to all these goals at once. Without focused attention on a few key operating goals at any one time, improvement efforts are likely to be so diluted that the company ends up as a perpetual laggard in every critical performance area.

Consider Komatsu. Starting with products that were judged only half the quality of Caterpillar's, Komatsu won Japan's highest quality award, the Deming Prize, in three years. Many other companies have been wrestling with quality for a decade or more and still cannot lay claim to world-class standards. What accounts for this difference? When Komatsu initiated its total quality control program, every manager was given explicit instructions to vote quality in a choice between cost and quality. Although quality may be free in the long run, Komatsu's managers recognized that the pursuit of quality is anything but free in the short run. Thus Komatsu focused almost exclusively on quality until it had achieved world standards. Then, and only then, did it turn successively to value engineering, manufacturing rationalization, product-development speed, and the attainment of variety at low cost. Each new layer of advantage provided the foundation for the next.

Dividing meager resources across a host of medium-term operational goals creates mediocrity on a broad scale. Middle managers are regularly blamed for failing to translate top-management initiatives

**Focus: Have we clearly identified the next competitive advantage that we must build? Is top management's attention focused firmly on the task until it is accomplished?**

into action. Yet middle management often finds itself attempting to compensate for top management's failure to sort out priorities, with the result that mixed messages and conflicting goals prevent a sufficient head of steam from developing behind any task.

**Extraction: Are we willing to apply lessons learned on the front line, even when they conflict with long-held orthodoxies? Have we found a way to tap the best ideas of every employee?**

*Accumulating Resources: Extracting and Borrowing.* Every company is a reservoir of experiences. Every day, employees come in contact with new customers, learn more about competitors, confront and solve technical problems, and discover better ways of doing things. But some companies

are better than others at extracting knowledge from those experiences. Thus what differentiates companies over time may be less the relative quality or depth of their stockpile of experiences than their capacity to draw from that stockpile. Because experience comes at a cost, the ability to maximize the insights gained from every experience is a critical component of resource leverage. Being a "learning organization" is not enough; a company must also be capable of learning more efficiently than its competitors.

Take Mazda, for example. The Japanese automaker has launched a fraction of the new models created by Ford or GM, yet it seems capable of developing new products in a fraction of the time it takes the other two and at a fraction of the cost. Mazda's experience mocks the experience curve because it suggests that the rate of improvement in a company's capabilities is determined not by some lockstep relationship with accumulated volume but by the relative efficiency with which the company learns from experience. The smaller a company's relative experience base, the more systematic its managers must be in searching for clues to where and how improvements might be made.

The capacity to learn from experience depends on many things: employees who are both reflective and well schooled in the art of problem solving; forums (such as quality circles) where employees can identify common problems and search for higher order solutions; an environment in which every employee feels responsible for the company's competitiveness; the willingness to fix things before they're broken; continuous benchmarking against the world's best practice. But learning takes more than the right tools and attitudes. It also requires a corporate climate in which the people who are closest to customers and competitors feel free to challenge long-standing practices. Unless top man-

agement declares open season on precedent and orthodoxy, learning and the unlearning that must precede it cannot begin to take place.

"Borrowing" the resources of other companies is another way to accumulate and leverage resources. The philosophy of borrowing is summed up in the remark of a Japanese manager that "you [in the West] chop down the trees, and we [in Japan] build the houses." In other words, you do the hard work of discovery, and we exploit those discoveries to create new markets. It is instructive to remember that Sony was one of the first companies to commercialize the transistor and the charge-coupled device, technologies pioneered by AT&T's Bell Laboratories. Increasingly, technology is stateless. It crosses borders in the form of scientific papers, foreign sponsorship of university research, international licensing, cross-border equity stakes in high-tech start-ups, and international academic conferences. Tapping into the global market for technology is a potentially important source of resource leverage.

At the extreme, borrowing involves not only gaining access to the skills of a partner but also internalizing those skills. Internalization is often a more efficient way to acquire new skills than acquiring an entire company. In making an acquisition, the acquirer must pay both for the critical skills it wants and for skills it may already have. Likewise, the costs and problems of integrating cultures and harmonizing policy loom much larger in an acquisition than they do in an alliance.

NEC relied on hundreds of alliances, licensing deals, and joint ventures to bolster its product-development efforts and to gain access to foreign markets. Alliances with Intel, General Electric, Varian, and Honeywell, to name a few, multiplied NEC's internal resources. Indeed, NEC managers have been forthright in admitting that without the capacity to learn from their partners, their progress toward the goal of computers and communication would have been much slower.

Borrowing can multiply more than technical resources. Companies such as Canon, Matsushita, and Sharp sell components and finished products on an OEM basis to Hewlett-Packard, Kodak, Thomson, Philips, and others to finance their leading-edge research in imaging, video technology, and flat-screen displays. Almost every Japanese company we have studied had a bigger share of world development spending in core competence areas and

**Borrowing: Are we willing to learn from outsiders as well as from insiders? Have we established borrowing processes and learning goals for employees working within alliances and joint ventures?**

a bigger share of world manufacturing in core components than its brand share in end-product markets. The goal is to capture investment initiative from companies either unwilling or unable to invest in core competence leadership, in order to gain control of critical core competencies. Think of this as borrowing distribution channels and market share from downstream partners to leverage internal development efforts and reduce market risks.

In leveraging resources through borrowing, absorptive capacity is as important as inventive capacity. Some companies are systematically better at borrowing than others are, not least because they approach alliances and joint ventures as students, not teachers. Suffice it to say, arrogance and a full stomach are not as conducive to borrowing as humility and hunger. Captives of their own success, some companies are more likely to surrender their skills inadvertently than to internalize their partners' skills. We might call this negative leverage!

Borrowing can take a myriad of forms: welding tight links with suppliers to exploit their innovations; sharing development risks with critical customers; borrowing resources from more attractive factor markets (as, for example, when Texas Instruments employs relatively low-cost software programmers in India via a satellite hookup); participating in international research consortia to borrow foreign taxpayers' money. Whatever the form, the motive is the same, to supplement internal resources with resources that lie outside a company's boundaries.

**Blending: Have we created a class of technology generalists who can multiply our resources? Have we created an environment in which employees explore new skill combinations?**

*Complementing Resources: Blending and Balancing.* By blending different types of resources in ways that multiply the value of each, management transforms its resources while leveraging them. The ability to blend resources involves several skills: technological integration, functional

integration, and new-product imagination.

It is possible that GM or Ford could outspend Honda in developing engine-related technologies like combustion engineering, electronic controls, and lean burn—and perhaps even attain scientific leadership in each area—but still lag Honda in terms of all-around engine performance because the U.S. companies were able to blend fewer technologies. Blending requires technology generalists, systems thinking, and the capacity to optimize complex technological trade-offs. Leadership in a range of technologies may count for little and the resources expended in such a quest may remain un-

derleveraged if a company is not as good at the subtle art of blending as it is at brute-force pioneering.

Successfully integrating diverse functional skills like R&D, production, marketing, and sales is a second form of blending. Where narrow specialization and organizational chimneys exist, functional excellence is rarely translated into product excellence. In such cases, a company may outinvest its competitors in every functional area but reap much smaller rewards in the marketplace. Again, what is required is a class of generalists who understand the interplay of skills, technologies, and functions.

The third form of blending involves a company's ingenuity in dreaming up new-product permutations. Sony and 3M, for example, have demonstrated great imagination in combining core technologies in novel ways. Sony's "Walkman" brought together well-known functional components—headphones and an audiotape playback device—and created a huge market if not a new life-style. Yamaha combined a small keyboard, a microphone, and magnetically encoded cards to create a play-along karaoke piano for children. In these cases, the leverage comes not only from better amortizing past investments in core competencies but also from combining functional elements to create new markets.

Balancing is another approach to complementing resources. To be balanced, a company, like a stool, must have at least three legs: a strong product-development capability; the capacity to produce its products or deliver its services at world-class levels of cost and quality; and a sufficiently widespread distribution, marketing, and service infrastructure. If any leg is much shorter than the others, the company will be unable to exploit the investments it has made in its areas of strength. By gaining control over the missing resources, however, management can multiply the profits extracted from the company's unique assets.

To illustrate, consider the situation EMI faced in the early 1970s when it invented computerized axial tomography, or the CAT scanner. Although the British company had a ground-breaking product, it lacked a strong international sales and service network and adequate manufacturing skills. As a result, EMI found it impossible to capture and hold onto its fair share of the market. Companies like GE and Siemens, with stronger distribution and manufacturing capabilities, imitated the concept and captured much of the financial bonanza. As for EMI, it ultimately abandoned the business.

**Balancing: Have we pursued high standards across the board so that our ability to exploit excellence in one area is never imperiled by mediocrity in another? Can we correct our imbalances?**

Today many small, high-tech companies are unbalanced the way EMI was. While they can enter partnerships with companies that have complementary resources, the innovators are likely to find themselves in a poor bargaining position when it comes to divvying up profits. This imbalance explains why so many Japanese companies worked throughout the 1980s to set up their own worldwide distribution and manufacturing infrastructures rather than continue to borrow from their downstream partners. They realized they could fully capture the economic benefits of their innovations only if they owned all complementary resources. Today, in contrast, Japanese companies are acquiring innovators to complement their strong brand and manufacturing skills. Of the more than 500 small, high-tech U.S. companies sold to foreign interests between 1988 and 1991, Japanese companies bought about two-thirds.

Whatever the nature of the imbalance, the logic is the same. A company cannot fully leverage its accumulated investment in any one dimension if it does not control the other two in some meaningful way. Rebalancing leads to leverage when profits captured by gaining control over critical complementary assets more than cover acquisition costs.

**Recycling: Do we view core competencies as corporate resources rather than the property of individual businesses? Have we created lateral communication to ensure that ideas aren't trapped?**

*Conserving Resources: Recycling, Co-opting, and Shielding.* The more often a given skill or competence is used, the greater the resource leverage. Sharp exploits its liquid-crystal-display competence in calculators, electronic pocket calendars, mini-

TVs, large-screen-projection TVs, and laptop computers. Honda has recycled engine-related innovations across motorcycles, cars, outboard motors, generators, and garden tractors. It is little wonder that these companies have unmatched R&D efficiency. The common saying in Japan is, "No technology is ever abandoned, it's just reserved for future use." Honda and Sharp are proof of that maxim.

Recycling isn't limited to technology-based competencies. Brands can be recycled too. Familiarity with a high-quality "banner" brand can predispose customers at least to consider purchasing new products that bear the "maker's mark." Think of the leverage Sony gets when it launches a new product, thanks to the relatively modest incremental cost of building credibility with retailers and consumers and the implicit goodwill with which the product is imbued simply because it carries the Sony brand.

Banner branding cannot turn a loser into a winner. In fact, a lousy product will undermine the most respected brand. And in companies such as Unilever and Procter & Gamble, with a long history of product branding, it would be foolish to abandon well-loved brands for an unknown corporate banner. Yet even these companies are more and more apt to use their corporate monikers along with well-known product brands. For example, in working to build a strong presence in Japan, P&G recognized the added oomph its efforts would receive from a judicious use of its corporate name. Building brand leadership in a new market is always a slow and expensive process. But it becomes even more so when advertising budgets and customer awareness are fragmented across multiple brands.

Walk through an international airport and note the billboards bearing the corporate logos of Japan's and Korea's industrial giants. For these companies, brand building is a corporate responsibility. No one expects each business to bear the costs of building global share of mind. A few years ago, a major U.S. company took what, for it, was an unusual step. It erected an illuminated billboard at Heathrow with its logo and a slogan. The billboard didn't stay up long, however; none of the business units was willing to pay for the sign. A few days later, that piece of English sky belonged to a Japanese competitor.

Opportunities for recycling hard-won knowledge and resources are manifold. The ability to switch a production line quickly from making widgets to making gadgets, known as flexible manufacturing, is one. Others include sharing merchandising ideas across national sales subsidiaries, transferring operating improvements from one plant to another, using the same subsystem across a range of products, quickly disseminating ideas for better customer service, and lending experienced executives to key suppliers. But recycling will not occur without a strong organizational foundation. It requires a view of the corporation as a pool of widely accessible skills and resources rather than a series of fiefdoms.

Co-option provides another route to conserving resources. Enticing a potential competitor into a fight against a common enemy, working collectively to establish a new standard or develop a new technology, building a coalition around a particular legislative issue – in these and other cases, the goal is to co-opt the resources of other companies and thereby extend one's own influence. In borrowing resources, management seeks to absorb

**Co-option: Have we identified the industry players who are dependent on us for some critical skill or for their very livelihood? Do we understand how to enroll others in the pursuit of our goals?**

its partners' skills and make them its own; in co-opting resources, the goal is to enroll others in the pursuit of a common objective.

The process of co-option begins with a question: "How can I convince other companies that they have a stake in my success?" The logic is often, "My enemy's enemy is my friend." Philips has a knack for playing Sony and Matsushita against each other, enrolling one as a partner to block the other. Being slightly Machiavellian is no disadvantage when it comes to co-opting resources.

Sometimes co-option requires a stick as well as a carrot of common purpose. Typically, the stick is control over some critical resource, and the unstated logic here is, "Unless you play the game my way, I'll take my ball and go home." Fujitsu's relationship with its partners in the computer business is a good example. Each of these partners—ICL in Britain, Siemens in Germany, and Amdahl in the United States—shares a common objective to challenge the dominance of IBM. That is the carrot. The stick is the substantial, in some cases almost total, dependence of these companies on Fujitsu's semiconductors, central processors, disc drives, printers, terminals, and components.

**Shielding: Do we understand competitors' blind spots and orthodoxies? Can we attack without risking retaliation? Do we know how to explore markets through low-cost, low-risk incursions?**

To understand shielding, the third form of resource conservation, think about military tactics. Wise generals ensure that their troops are never exposed to unnecessary risks. They disguise their true intentions. They reconnoiter enemy territory before advancing. They don't attack heavily fortified

positions. They feint to draw the enemy's forces away from the intended point of attack. The greater the enemy's numerical advantage, the greater the incentive to avoid a full frontal confrontation. The goal is to maximize enemy losses while minimizing the risk to one's own forces. This is the basis for "resource shielding."

Attacking a competitor in its home market, attempting to match a larger competitor strength-for-strength, accepting the industry leader's definition of market structure or "accepted industry practice" are strategies akin to John Wayne taking on all the bad guys single-handedly—and they work better in Hollywood than they do in global competition. In business, judo is more useful than a two-fisted brawl. The first principal in judo is to use your opponent's weight and strength to your own advantage: deflect the energy of your opponent's attack; get him off balance; then let momentum and gravity do the rest.

Dell Computer, America's fastest growing personal computer company, could never have matched Compaq's dealer network or IBM's direct sales force, so the company chose to sell its computers by mail. Computer industry incumbents have found it almost impossible to match Dell, not because they don't have the resources but because these companies face powerful constituents who have a big stake in the status quo. Critical success factors become orthodoxies when a competitor successfully changes the rules of engagement. Such competitive innovation is an important way of shielding resources.

Searching for underdefended territory is another way to shield resources. Honda's success with small motorbikes, Komatsu's early forays into Eastern Europe, and Canon's entry into the "convenience" copier segment all failed to alert incumbents whose attention was focused elsewhere. Understanding a competitor's definition of its "served market" is the first step in the search for underdefended competitive space. The goal is to build up forces just out of sight of stronger competitors. This may be one reason why Toyota chose to launch the Lexus, its challenge to Mercedes Benz, not in Germany but in California, where buyers are technologically sophisticated, value conscious, and not overly swayed by brand loyalty.

*Recovering Resources: Expediting Success.* The time between the expenditure of resources and their recovery through revenues is yet another source of leverage—the more rapid the recovery process, the higher the resource multiplier. A company that can do anything twice as fast as its competitors, with a similar resource commitment, enjoys a twofold leverage advantage. This rudimentary arithmetic explains, in part, why Japanese companies have been so intent on accelerating product-development times. Consider the effects of the two-to-one development-time advantage Japanese automakers traditionally held over their U.S. and European rivals. This lead not only allowed them to recoup investments more quickly but also gave them more up-to-date products and gave customers more excuses to abandon their brand loyalties.

But fast-paced product development is only one way of expediting recovery time. A company that has built a highly esteemed global brand will find customers eager to try out new products. This predisposition to buy can expedite recovery dramati-

**Recovery: Have we shortened product-development, order-processing, and product-launch times? Have we built global brands and distribution positions that allow us to preempt slower rivals?**


cally, since recovery time is measured not from product concept to product launch but from product concept to some significant level of world-market penetration.

## Stretch Without Risk

The essential element of the new strategy frame is an aspiration that creates by design a chasm between ambition and resources. For many managers, great ambition equals big risk. If managers at Ford, for instance, were simply to extrapolate past practices, they might believe that developing a car five times as good as the Escort (a potential Lexus beater, say) would require five times the resources. But stretch implies risk only when orthodox notions dictate how the ambition is to be achieved.

Stretch can beget risk when an arbitrarily short time horizon is set for long-term leadership goals. Impatience brings the risk of rushing into markets not fully understood, ramping up R&D spending faster than it can be managed, acquiring compa-

nies that cannot be digested easily, or rushing into alliances with partners whose motives and capabilities are poorly understood. Trouble inevitably ensues if resource commitments outpace the accumulation of customer and competitor insights. The job of top management is not so much to stake out the future as it is to help accelerate the acquisition of market and industry knowledge. Risk recedes as knowledge grows, and as knowledge grows, so does the company's capacity to advance.

The notion of strategy as stretch helps to bridge the gap between those who see strategy as a grand plan thought up by great minds and those who see strategy as no more than a pattern in a stream of incremental decisions. On the one hand, strategy as stretch is strategy by design, in that top management has a clear view of the goal line. On the other hand, strategy as stretch is strategy by incrementalism, in that top management must clear the path for leadership meter by meter. In short, strategy as stretch recognizes the essential paradox of competition: leadership cannot be planned for, but neither can it happen without a grand and well-considered aspiration. 

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