

## THE ROLE OF CORE COMPETENCIES IN THE CORPORATION

*Dramatic growth will take place when we focus on the organization—  
with technology a part—rather than on technology alone.*

C. K. Prahalad

**OVERVIEW:** *The scorecard of Western firms—be it performance along dimensions such as quality, cycle time and cost, or growth and new business creation—has been less than satisfactory. We need a new approach to evaluating the value added by senior management. One such approach is outlined. It is argued that strategy must be seen as “stretch” and the critical role of senior management as creating the capacity to “leverage corporate resources.” A set of concepts that enable managers to do this is outlined. Finally, the agenda for managers during this decade is seen as profitable growth—not just restructuring.*

The debate about the competitiveness of Western firms in a wide variety of industries inevitably triggers debates about technology policy and investment levels in technology. While the preoccupation with investment in R&D and the list of “critical technologies” are important inputs to that debate, the real issue for most Western firms is internal capacity for new business development. Technology leadership is but an enabler.

Therefore, the debate on technology should benefit from a top management focus—the perspective of general management and, more importantly, that of the CEO. Such a perspective would provide a very different vantage point from which to examine the role of technology in the growth of the company; specifically, the underlying rationale and logic for growth in a globally competitive environment. The CEO perspective, as opposed to that of the chief technical officer (CTO), will allow us to put technology investment in a business perspective.

I shall illustrate my ideas with examples primarily drawn from high-volume electronics. I believe these concepts

are equally applicable to industries as diverse as agricultural processing, chemicals, and, at least in some cases, defense electronics. I do not claim that the concepts presented here apply universally to all industries. I have found them useful in a wide variety of industries.

In this article, I present the conceptual framework. A previous article, by Presbylowicz and Faulkner, described a process for operationalizing these ideas in the context of a specific firm (1).

### The Management Scorecard

It will be useful to start with a scorecard for Western top management during the last 35–40 years. If we consider the period 1950–80, immediately following World War II—in a wide variety of industries, from automotive, to semiconductors, to tires, to medical systems, to earth-moving equipment, and to reprographics—almost all the world leaders were Western companies. For example, in the automotive industry General Motors and Ford dominated the world. In the merchant semiconductor business Texas Instruments and Motorola were the leaders. However, if we consider the period 1980–1990 and ask: “Who is providing the intellectual leadership in these industries?” we come up with a very different list. For example, the intellectual leadership in the automotive industry is increasingly provided by companies such as Honda and Toyota, be it in terms of use of new technology, new features, new standards of quality, customer orientation and service, and price-performance relationships. The changing pattern of industrial leadership in a wide variety of industries is illustrated in Figure 1.

We should reflect on this change: *How did the intellectual and market leadership in so many industries shift in such a short period of time?* In view of the many advantages U.S. firms enjoyed during the period 1950–1980—such as superior technology, larger size, global distribution, reputation, and management know-how—how did the intellectual leadership slip away? If it had happened in just one industry, we could attribute the decline to a wide variety of external factors, including the role of MITI in Japan, the cost of capital, and the attitude of unions. But why and how did the U.S. lose leadership in so many industries during the 1975–1985 period?

This loss of intellectual leadership is just one part of the scorecard. Consider *internally generated growth* during

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the same period. Let us focus on the top 25 electronics companies during the decade of the 1980s. The giants of 1980 were IBM, GE, ITT, Philips, and Siemens. Most Japanese firms were small. Hitachi at around \$12 billion was about half the size of IBM. Sony at \$3 billion was one-fifth of Philips. And high-volume electronics was a "fortunate" industry during this decade. The industry overall experienced an average growth rate of 14 percent through the decade of the 1980s; but if we consider the rate of growth of various companies in this industry, we see wide variations: 12 percent for IBM, 11 for GE, 5 for Philips, 8 for Siemens. But Hitachi grew at 17 percent, Matsushita at 16, Toshiba at 15, NEC at 23. This is the annual compounded growth rate during the decade. The disparity in growth rates among firms, essentially in the same industry category, demands an explanation: Why do some firms grow at 5 percent and others at 20 percent for 10 years in the same industry?

Large Western firms have not fared well on the opportunity management (growth) dimension. Let us use a simple metric to evaluate the scorecard of a company's capacity to grow. Consider the period 1985–1991. If sales were 100 for the year 1985, the capacity-to-grow index during the period 1985–1991 can be computed as follows:

Capacity-To-Grow Index = (sales revenue for 1991 – acquisitions during the period 1985 to 1991 – inflation + divestments during the period 1985–1991).

By eliminating growth through acquisitions and inflation, this index measures *internal capacity to grow*. Unfortunately, for most large firms, the index is not very flattering. Top managers must ask themselves the following questions: What is the opportunity that we have lost? Why? Who is responsible for it? Who should pay the price for lost opportunities?

Let us take this analysis one step forward with a paired comparison of companies: Westinghouse, Hitachi and General Electric. Westinghouse grew from \$8.5 billion to \$12 billion during the decade. Westinghouse primarily

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divested itself of major businesses and acquired a few. GE also aggressively pursued a strategy of portfolio shuffling—acquisitions and divestments. However, Hitachi grew through internal development. This pattern is no different if we consider RCA, Sony and Matsushita, or GTE and NEC.

Paired comparisons allow us to further re-examine our scorecard. How can one company (Hitachi) grow from \$12 to \$50 billion, primarily through internal development, during a decade, while another company (Westinghouse), with a similar starting portfolio, grows from \$8 billion to \$12 billion only? The market opportunities were similar around the globe and the technological capabilities were comparable. In fact, all during the 1970s and 1980s, U.S. firms like Westinghouse led in technology in almost every field.

A reflection on this scorecard suggests that explanations must focus not on the differences in starting resource positions but on the differences in the ability of managers of firms to leverage corporate resources. We need answers to such questions as: Is our orientation to management and exploitation of technology and market opportunities appropriate? Is there a distinctly different underlying logic (as compared to the financial portfolio logic) to profitable growth? What is that logic? And what should top managers do in order to change their orientation from cost-cutting to opportunity management and growth?

### Rethinking the Scorecard

The real issue for the 1990s is *growth*. That is the agenda for top management—not down-sizing, not restructuring and de-cluttering of organizations. Restructuring without rethinking the role of management inevitably leads to further restructuring. Many large firms have restructured themselves more than once in the last ten years and the problems do not seem to go away. If growth and new business development are the real issues, *value creation* will be the scorecard for managers during this decade. This scorecard consists of two parts: 1) managing the *performance gap*; i.e., improving performance across a wide variety of dimensions such as quality, cost, cycle time, productivity, and profitability; 2) simultaneously, managers should focus on the *opportunity gap*, profitably deploying resources to create new markets, new businesses and a sense of broad strategic direction.

The twin aspects of value creation are illustrated in Figure 2. During the past decade, management attention has been primarily focused on the performance gap. It is

Industry	Leaders	Challengers
	1950-80	1980-
Automotive	GM Ford	Toyota Nissan Honda
Semiconductors	TI Motorola	NEC Toshiba Fujitsu Hitachi
Tires	Goodyear Firestone*	Michelin Bridgestone
Medical systems	GE Philips Siemens	Hitachi Toshiba
Consumer electronics	GE* RCA* Philips	Matsushita Sony
Photographic Xerography	Kodak Xerox	Fuji Canon

\* Has been acquired

Figure 1.—Industrial leadership shifted in a variety of industries during 1975–1985.

the legitimate task of the management to fix problems of profitability, cost, quality, cycle time, logistics, and productivity. Managing the performance gap, if done well, ought to create a *large investment pool*. The question for managers, then, is how to redeploy the investment pool, created by focusing on the performance gap, in the pursuit of new opportunities for growth. To create value, concerns for operational improvement (performance gap) and strategic direction (opportunity gap), must coexist.

In this article, I focus on the opportunity gap through revitalization and growth. New business development, growth, new market development, and leveraging of corporate resources are an integral part of the value creation process. So I start with the assumption that value creation is not just catching up with the performance gap; it is the active management of the opportunity gap as well. Is there an underlying logic to opportunity management?

### A New Framework for Value Creation

I suggest that the logic of opportunity gap management consists of at least four interlinked parts, as shown in Figure 3.

1. How can top managers establish an aspiration level (strategic intent) for the organization? Motivation for change results from an aspiration that all employees can identify with and feel committed to. Aspirations must represent a stretch and must by definition exceed the current resources of the company. Therefore, by design, strategic intent must cause a "misfit" between aspirations and current resources and current approaches to using resources. The aspiration must focus the energies of the organization toward innovation (changing the rules of the game) in the way the firm competes.

2. A high aspiration level (compared to the resources available) leads to the need for resource leverage. The issue for managers is: How do you create the capacity in

**An internal capacity to leverage resources is a prerequisite for inventing new businesses.**

a large organization to leverage corporate resources? The process of resource leverage is accomplished through the development of a *strategic architecture* (a way to capture the pattern of likely industry evolution), identifying *core competencies* and *core products*. Reusability of invisible assets, as well as core products, in new and imaginative configurations to create new market opportunities is at the heart of the process of leverage.

3. An internal capacity to leverage resources is a prerequisite for inventing new businesses, creating *new competitive space*. This is competing for the future and requires a framework for identifying new opportunities, focusing on functionalities rather than on current products and services, and dramatically altering the price-performance relationships in an industry.

4. This new approach is not just a technical task or a senior management task—it is a task for the whole organization. The role of top management, therefore, is essentially one of energizing the whole organization—all people, at all levels, in all functions, and in all geographies. It involves developing a shared mindset and shared goals, and developing strategies for acquiring competency. Senior managers must focus on such questions as: How do we stretch the imagination of the total employee pool? How do we challenge the organization? How do we focus on individual and team motivation?

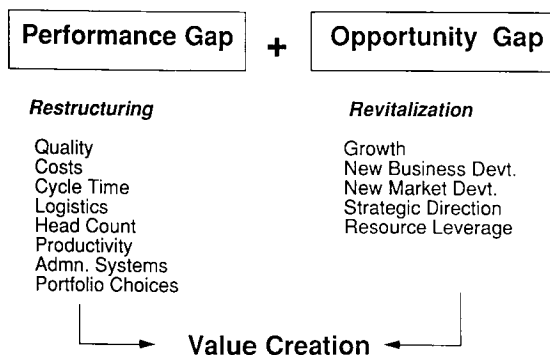


Figure 2.—Value creation is not just catching up with the performance—it is the active management of the opportunity gap as well.

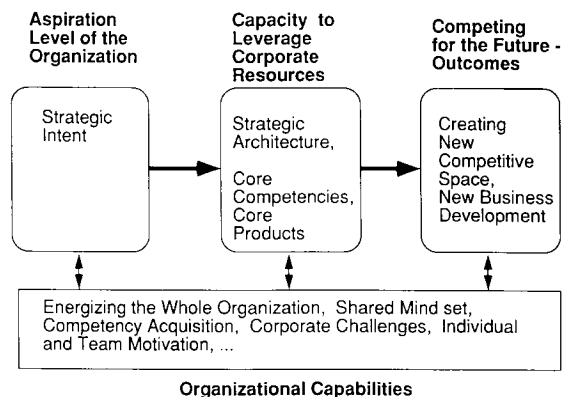


Figure 3.—Opportunity gap management begins with establishing an aspiration level (strategic intent) for the organization.

Using this framework, I will examine one building block at a time, starting with strategic intent (2).

### **An Obsession with Winning**

Strategic intent is a way of creating an obsession with winning that encompasses the total organization (all levels and all functions). It is a shared competitive agenda, sustained over a long period of time, for global leadership. Extraordinary accomplishment is often based on a clearly articulated strategic intent.

The U.S. has experienced the power of a clear strategic intent. Consider the Apollo program: "Man on the moon by the end of the decade" was a "stretch" target. It meant global leadership and the domination of space. The goal was competitively focused; Russians were the enemy. It was very clear. While the goal was clear, managers of the project had to discover the means, and a lot of new technologies had to be developed under enormous time pressure. How do we account for the inventiveness that was characteristic of the NASA efforts during the 1960s? Why is the "spirit" of the Apollo program not replicable in firms?

Consider some specific company examples, such as NEC's goal of *C&C* (computers and communications) or Kodak's strategic intent: to remain a *world leader in imaging*, not just chemical or electronic imaging, but the creative combination of both. Once *imaging* is accepted as the strategic intent, debate inside the company on whether chemical imaging is superior to electronic or vice versa, dies down. The focus shifts to creating new hybrids—products and services that creatively combine both capabilities. In Komatsu, the strategic intent was to encircle Caterpillar. Strategic intent may be stated in different ways in different firms—from *C&C* to Leadership in Imaging. But in all cases, it must represent an agenda for the whole company, not just for a function—be it manufacturing, marketing, top management, technologists, or sales.

Strategic intent provides a basis for stretching the imagination of the total organization and a focus for developing "barrier-breaking" initiatives.

### **Framework for Leverage**

Once we have developed a shared aspiration, we need a framework for leveraging corporate resources that is consistent with the strategic intent. We start with a strategic architecture, which is a way of developing a point of view regarding the evolution of an industry. How will the interface with customers change? What are the new technological possibilities? How are our current and future competitors positioning themselves to approach this industry? Strategic architecture is a *distillation of a wide variety of information*. It is a way of capturing major discontinuities and trends in the industry. It does not attempt to identify a specific product or business opportunity, but captures the direction and major likely milestones. It provides a framework for focused resource allocation over a long

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period, allows managers to maintain consistency in their efforts, and provides a logic for managing linkages across business units in a large company.

Strategic architecture can be used to identify targeted acquisitions, and alliance partners. Most important of all, it is a useful framework for effectively managing innovation. The underlying assumption is that innovation is a line job and not a staff job. Further, innovation cannot be left to skunk works or "off-line activities" such as internal entrepreneurship or internal venture teams. *Innovation is the fundamental job of a general manager*. We need to develop a framework in which innovation can be planned and managed. Strategic architecture provides one such framework for proactively managing the innovation process.

An example of strategic architecture is NEC's concept of *C&C*, or the convergence of computing and communications, shown in Figure 4. The evolution of computing driven by the need for decentralized processing as a trend, coupled with the changes in communication and component technologies, lead to the convergence called *C&C* (3). Obviously, in this architecture, there are no specific product plans, but the basic milestones are obvious. Accomplishing the aspiration of *C&C* is a stage-managed process. For over 15 years, the broad framework of *C&C* represented by the strategic architecture was used as an organizing idea. The value of such a framework to provide consistency and direction to technical resource allocation is obvious.

The fact is that anyone in this industry could have drawn this picture. However, even though all of us could visualize *C&C*, why didn't other companies use it as the organizing and stage-setting concept for mobilizing the efforts of the total company? Why did *C&C* not provide a logic for resource allocation? These are the critical questions. It is not enough for a small group of technical people to have a bold concept. There has to be widespread agreement and understanding of the concept. An architecture, such as *C&C*, can be easily developed by the technical community. But to get agreement among several levels of managers inside a company is an entirely different task. It is an effort that takes time and patience.

What is the benefit of this approach? Consider R&D expenditures. NEC's R&D budget, during the period 1980–1990, was considerably smaller than either IBM or AT&T. But NEC generated a 23 percent per year growth record, for over a decade, on significantly less investments in R&D. NEC supplemented its investments in R&D by a series of carefully targeted alliances. Between 1965 and 1987, it was involved in more than

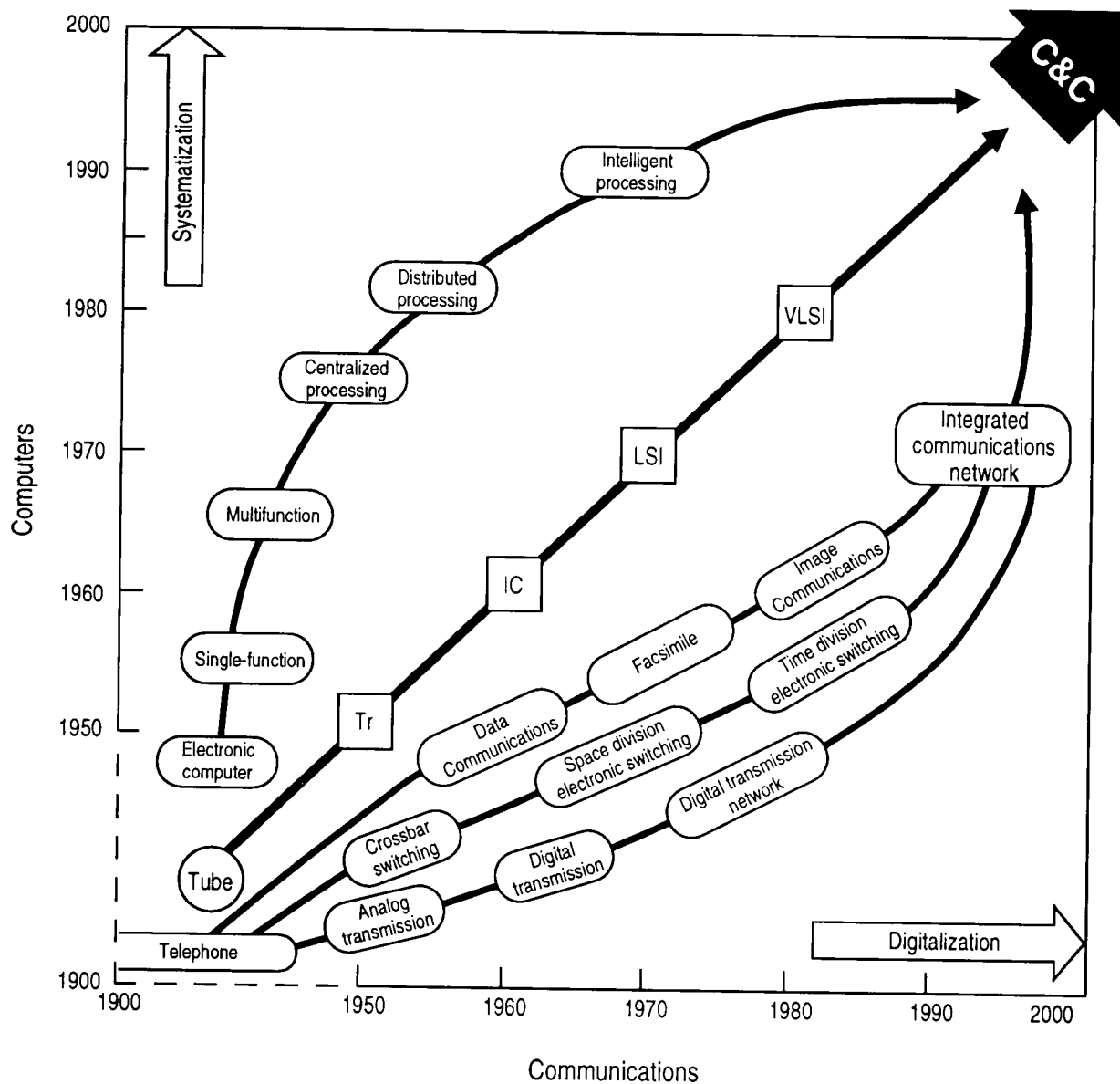


Figure 4.—NEC's strategic architecture is its concept of Computers & Communications (C&C). From Koji Kobayashi, *Computers and Communications*.

130 alliances. The logic for this network of alliances can be derived from the strategic architecture. In fact, one can track all the alliances between 1965 and 1987 and position them in the overall strategic architecture of the company. The strategic architecture also provided the motivation to learn from these alliances. It is important to recognize that NEC used its alliance partners as multipliers to its internal resources. NEC used its architecture not only as an organizing framework inside the firm but as a way of communicating to the rest of the world what it was all about. NEC's advertisements embodied the C&C theme.

The NEC portfolio encompasses enormous product variety. However, there is no problem in understanding the logic behind that diverse portfolio. They are all

derivatives of C&C. This consistency—in strategic intent, architecture, alliance strategies, and businesses—contributed to NEC's ability to leverage its resources. NEC, in 1990, occupied one of the top five positions in telecom, computing and semiconductors worldwide. And it was a \$3 billion company in 1980!

Other firms such as Vickers (a division of TRINOVA), Sharp, Colgate-Palmolive, Kodak, and others have developed similar strategic architectures to guide their managerial actions.

#### Identifying Core Competencies

A strategic architecture allows managers to identify what core competencies we have and what we need to get.

## ***Core competency results when firms learn to harmonize multiple technologies.***

Core competencies are an important link in the process of leverage. The concept of core competencies tends to be confused with core technologies and/or capabilities. Core technologies are a component part of core competencies. Core competency results when firms learn to *harmonize multiple technologies*. For example, consider miniaturization, which has been the unique signature of Sony. Miniaturization requires core technologies, such as microprocessors, miniature power sources, power management, packaging, and manufacturing. It certainly also requires knowledge and understanding of user-friendly design and a knowledge of ergonomics. In addition, miniaturization is a result of deep sensitivity to emerging life styles. A core competency does not represent just technical capabilities in microprocessors, or packaging, or passive components; it also means understanding how to exploit life style knowledge using electronics. The point I want to stress is that it is not just technical capabilities that matter. What matters is the *creative bundling* of multiple technologies and customer knowledge and intuition, and managing them as a harmonious whole.

A core competency can be identified by applying three simple tests: 1) Is it a significant source of competitive differentiation? Does it provide a unique signature to the organization, like miniaturization for Sony, or user-friendliness at Apple? 2) Does it transcend a single business? Does it cover a range of businesses, both current and new? 3) Is it hard for competitors to imitate? It is hard for someone to visit Matsushita or Sony and come back and outline why they are good at manufacturing or miniaturization, respectively. Competence permeates the whole organization, and it represents tacit learning in an organization.

The difference between technology and competence is that technology can be stand-alone (e.g., design of very-large-scale-integration). Competence, on the other hand, is getting consistently high yields in VLSI. This transcends design capabilities. The process of converting good designs into high yields requires that multiple levels (e.g., shop floor to product development engineers) and multiple functions (e.g., application engineers and manufacturing groups) work very closely. A lot of the understanding and learning is tacit. And the recognition that competence represents tacit as well as explicit learning and is the cumulative knowledge base involving a large number of people is critical to understanding core competence. Technical capabilities, as stand-alone skills, are not the key to understanding core competencies. Competence is embedded in the whole organization.

Miniaturization at Sony, network management at AT&T, billing at the regional Bell operating companies, user friendliness at Apple, and high-volume manufacturing at Matsushita, are examples of core competencies.

Often, core competencies are confused with capabilities. Capabilities are, in some cases, prerequisites to being in a business. For example, "just-in-time" delivery is a prerequisite to be a Tier 1 supplier to the auto industry. It is the price one has to pay to get into the game. If one

is a gambler, one may call it "table stakes." Capability is crucial for survival but, unlike a core competency, does not confer any specific differential advantage over other competitors in that industry.

### **Competence Is Governance Too**

The key to understanding competence is that although it incorporates a technology component, it also involves the *governance process* inside the organization (the quality of relationships across functions, across business units), and *collective learning* across levels and functions) inside the company. We may conceptualize competence as follows:  $\text{Competence} = (\text{Technology} \times \text{Governance Process} \times \text{Collective Learning})$ .

We can examine the implications of this view with a hypothetical example. Consider a typical U.S. firm. The assumption is that if we pour a lot of money into technology the competitiveness problems will go away. Using the expression above, let us consider this hypothetical firm to be rich in technology, say 1,000 units of technology. However, let us assume that the various businesses within this corporation do not work together; Let's give them 20 units for the governance process—capability to work across business and functional unit boundaries. Let us also assume that in this firm the capacity for collective learning is low. So let us give it 5 units for this dimension. Using the formula above, we now have an overall competence score of 100,000 units.

Consider another company that is not blessed with as much technology. It qualifies for not more than, say, 200 units, using the same formula we used in considering the previous firm. However, this firm has fostered the capacity to work across organizational boundaries and is fully focused on organizational learning. Let us give it 100 units for governance and 500 for collective learning, leading to a competence of 10 million. The message is clear: Investments in technology, if they are not, in tandem, accompanied by investments in *governance* and *creation of a learning environment* at all levels in the organization will remain under-leveraged. So, the logical point of leverage for Western firms resides in investments to improve the *quality of organization*.

Honda has been an example of this kind of thinking. Honda's multiple businesses are built on the basis of a competence in engines. If every one of those business units, be it power tillers or lawn mowers, behaved as if it were a discrete and stand-alone business, and each business unit only focused on (and was willing to pay for) the functionalities it needed, Honda's engine

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competence could be easily compromised. For example, in power tillers, managers may demand and be willing to pay for a light and robust engine. However, noise reduction is not a major priority for power tiller managers as they target their products for use in villages in the developing world. On the other hand, the business unit manager developing lawn mowers for sale in the United States may need not only a light and robust engine but one with low noise level as well. Business unit managers can uniquely define the functionalities that they need. But if each one of them tends to optimize their needs without maintaining a perspective on the implications of their parochial approach for the protection and development of an overall competence—in this case, engines—the skill base will be eroded. Often, a single-minded focus on SBU (strategic business unit) structure without checks and balances can destroy the very basis of nurturing and exploiting core competencies.

If the only model we use represents the company as a portfolio of businesses, then cost reduction within those businesses appears to be the primary task, sometimes followed by focus on product line extensions. When we model the corporation as a portfolio of core competencies, we tend to focus on new application opportunities. This perspective enhances the focus of management on new business development.

The portfolio of businesses at Sharp, Sony and Canon makes the case for focus on core competencies. But in order to focus on growth based on core competencies, we need to create a new set of managerial capabilities—one where sharing knowledge and components across organizational boundaries is relatively routine and painless. For example, Canon has a wide variety of businesses (end products) like copiers, laser printers, FAX, cameras, and camcorders. But those business units are fed by core products, such as lens systems, laser engines and miniature motors. These core products are supported by core competencies such as miniaturization, mechatronics and so on. Each business has an independent identity. It focuses on a specific set of customers and markets. But underlying that is a structure of shared core products and core competencies. As a result, within the firm, there is an opportunity for gaining economies of scale, an ability to provide new functionalities, and leverage.

Core products are often the physical embodiment of one or more core competencies. Compressors in Matsushita and laser printer engines in Canon are examples of core products. Canon not only uses its laser printer engine in several businesses, it also markets it outside. Firms such as Canon distinguish between their market share of end products (e.g., copiers), manufacturing share (e.g., share of market gained by providing manufactured products under private label to others), and share of core products (e.g., laser printer engines sold to others). Canon has gained a significant market share of over 85 percent worldwide in laser printer engines. It remains a small player in laser printers—the end product, worldwide. There is a market that is developing for core products. And we need to recognize that competition for

core products is distinctly different from competition for end products and services.

We need to go beyond market share for end products. Consider the color television business, for example. In order to succeed, firms must have access to core products such as picture tubes, signal processing ICs, tuners, and line output transformers. If we disaggregate businesses at the core product level—be it TVs, VCRs, Camcorders, or laptop computers—we find very few Western firms that dominate worldwide. This perspective allows us to evaluate competitive outcomes differently. For example, with this perspective we can explain why Matsushita and JVC won the battle for VCRs. Their combined market share for VHS VCRs was only 24 percent. However, manufacturing share was 41 percent, format share through licensing was 80 percent, and core product share for decks was 85 percent. Eight-five percent of the world's requirements for decks were made by one company!

We underestimate the power that accrues to these companies because they dominate core products. Managers tend to underestimate the power of core product dominance. The issue is who controls critical technologies. Technological superiority without competence may represent a hollow victory.

The emerging competitive picture should force senior managers to ask themselves such questions as: How long can this erosion of core product capability in the West be sustained? Who are the custodians of the technical virtuosity of our companies? While business unit managers have no natural inclination to concern themselves with core product share or competencies, should group and sector executives transcend the concerns of the business units and play a role in protecting the basis for long-term competitiveness of our firms? Who should protect the disciplines that require multiple business units to work together?

It is important to recognize that competition today takes place on multiple planes. First, there is competition for end product markets and services; that is, price-performance competition represented by market share battles for today's market. Managers have to fight in that arena. There is also a less visible battle for dominance in core products that create the capacity to lead in the development of new functionalities. Finally, there is competition for competence—the capacity to create new businesses. The three levels of competition are shown in Figure 5. We need to learn to compete on all three levels.

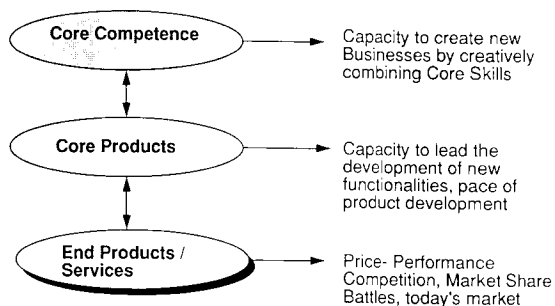


Figure 5.—We need to learn to compete on all three levels of competition.

### Creating New Competitive Space

How can firms create totally new products and services? Consider new businesses such as personal FAX, Global Positioning Satellites for hikers, photo CD, and camcorders. I believe the *opportunity list* for the next decade in high-volume electronics could be five pages long. The question for consideration by senior managers is: What do we have to do to capture our share of new business development?

I believe we need to develop a new mindset that is characterized by the following:

1. *Challenging existing price-performance assumptions.*—Why can't we create a color FAX for \$200? Why should it be \$5,000? Canon in copiers, and Lexus or Honda in the luxury car segment are good examples of firms dramatically challenging the existing price-performance assumptions in the industry.
2. *Understanding the "meaning of customer-led."*—In most firms, this means listening to customers and giving them what they ask. That's important, but it is also important to lead customers. As customers, many of us may not have anticipated our emerging dependence on a FAX in our home 10 years ago. Being customer-led is important, but leading customers is what competing for the future is about: understanding functionalities and needs, and creating products with a price performance that makes it attractive for people to buy.

3. *Escaping the tyranny of the "served market" orientation among managers.*—A served market orientation puts too much emphasis on current businesses, and reduces the capacity to foresee new opportunities, especially opportunities that fall between two or more current business units. If we want to re-fire corporate imagination, we need to do the following:

We must de-emphasize the served market orientation and emphasize an orientation that focuses on the opportunity horizon. Managing the served market is important, but exploiting the opportunity horizon is

what leads to profitable growth. We must not just defend markets, but create markets. Instead of incrementalism in price-performance there must be stretch price-performance goals; instead of simply benchmarking, currently popular in many firms, we must outpace the competition. We want to move from satisfying needs to anticipating needs; from being close to customers to leading customers; from thinking in terms of products to focusing on functionality and rapid market incursions; from focusing on core business to diversifying around core competencies. This is a very different mindset.

Managers have traditionally focused on current customers, product-markets, and corresponding business units. My research has convinced me that there is something beyond understanding business units and customers. We need to start with a *strategic intent, create a strategic architecture, understand core competencies and products*, such that there is a logic for business units, both current and new, and that leverage is based on continuous reconfiguration of these competencies.

To realize both the stretch and the leverage that this set of ideas promotes, we need to develop a set of values and beliefs that are consistent with this orientation to profitable growth. What is the unit of analysis for resource allocation? How do we manage inter-business unit linkages, inter-functional linkages? How do we create organizational capabilities, such as global-local capability or cycle time? And then, how do we think about administrative processes such as budgeting or planning?

The next challenge for senior management is: How do you connect individual employees' motivation and contribution with customers through a transparent process inside the company, where everybody understands what the shared aspirations are and how the various businesses interlink with each other, and the logic for nesting individual products and new initiatives? That, to me, is the next round of challenge.

I conclude with the following thoughts: 1) Growth is the agenda—not restructuring. 2) Dramatic growth will not take place if we focus on technology; it will take place when we focus on the organization, with technology as a part of it. 3) Dramatic growth requires a radical rethinking of current management paradigms. ☺

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