

---

# Matrix Management: Not a Structure, a Frame of Mind

by Christopher A. Bartlett and Sumantra Ghoshal



Harvard Business Review

Reprint 90401

# Matrix Management: Not a Structure, a Frame of Mind

by Christopher A. Bartlett and Sumantra Ghoshal

Top-level managers in many of today's leading corporations are losing control of their companies. The problem is not that they have misjudged the demands created by an increasingly complex environment and an accelerating rate of environmental change, nor even that they have failed to develop strategies appropriate to the new challenges. The problem is that their companies are organizationally incapable of carrying out the sophisticated strategies they have developed. Over the past 20 years, strategic thinking has far outdistanced organizational capabilities.

All through the 1980s, companies everywhere were redefining their strategies and reconfiguring their operations in response to such developments as the globalization of markets, the intensification of competition, the acceleration of product life cycles, and the growing complexity of relationships with suppliers, customers, employees, governments, even competitors. But as companies struggled with these changing environmental realities, many fell into one of two traps—one strategic, one structural.

The strategic trap was to implement simple, static solutions to complex and dynamic problems. The bait was often a consultant's siren song promising to simplify or at least minimize complexity and discontinuity. Despite the new demands of overlapping industry boundaries and greatly altered value-added chains, managers were promised success if they

would "stick to their knitting." In a swiftly changing international political economy, they were urged to rein in dispersed overseas operations and focus on the triad markets, and in an increasingly intricate and sophisticated competitive environment, they were encouraged to choose between alternative generic strategies—low cost or differentiation.

Yet the strategic reality for most companies was that both their business and their environment really *were* more complex, while the proposed solutions were often simple, even simplistic. The traditional telephone company that stuck to its knitting was trampled by competitors who redefined their strategies in response to new technologies linking telecommunications, computers, and office equipment into a single integrated system. The packaged-goods company that concentrated on the triad markets quickly discovered that Europe, Japan, and the United States were the epicenters of global competitive activity,

---

*Christopher A. Bartlett is a professor of general management at the Harvard Business School, where he is also chairman of the International Senior Management program. Sumantra Ghoshal is an associate professor who teaches business policy at the European Institute of Business Administration (INSEAD) in Fontainebleau, France. This article is based on their recent book, Managing Across Borders: The Transnational Solution (Harvard Business School Press, 1989).*

with higher risks and slimmer profits than more protected and less competitive markets such as Australia, Turkey, and Brazil. The consumer electronics company that adopted an either-or generic strategy found itself facing competitors able to develop cost and differentiation capabilities at the same time.

In recent years, as more and more managers recognized oversimplification as a strategic trap, they began to accept the need to manage complexity rather than seek to minimize it. This realization, however, led many into an equally threatening organizational trap when they concluded that the best response to increasingly complex strategic requirements was increasingly complex organizational structures.

The obvious organizational solution to strategies that required multiple, simultaneous management capabilities was the matrix structure that became so fashionable in the late 1970s and the early 1980s. Its parallel reporting relationships acknowledged the diverse, conflicting needs of functional, product, and geographic management groups and provided a formal mechanism for resolving them. Its multiple information channels allowed the organization to capture and analyze external complexity. And its overlapping responsibilities were designed to combat parochialism and build flexibility into the company's response to change.

In practice, however, the matrix proved all but unmanageable—especially in an international context. Dual reporting led to conflict and confusion; the proliferation of channels created informational logjams as a proliferation of committees and reports bogged down the organization; and overlapping responsibilities produced turf battles and a loss of accountability. Separated by barriers of distance, language, time, and culture, managers found it virtually impossible to clarify the confusion and resolve the conflicts.

In hindsight, the strategic and structural traps seem simple enough to avoid, so one has to wonder why so many experienced general managers have fallen into them. Much of the answer lies in the way we have traditionally thought about the general manager's role. For decades, we have seen the general manager as chief strategic guru and principal organizational architect. But as the competitive climate grows less stable and less predictable, it is harder for one person alone to succeed in that great visionary role. Similarly, as formal, hierarchical structure gives way to networks of personal relationships that work through informal, horizontal communication channels, the image of top management in an isolated corner office moving boxes and lines on an organization chart becomes increasingly anachronistic.

Paradoxically, as strategies and organizations become more complex and sophisticated, top-level gen-

eral managers are beginning to replace their historical concentration on the grand issues of strategy and structure with a focus on the details of managing people and processes. The critical strategic requirement is not to devise the most ingenious and well-coordinated plan but to build the most viable and flexible strategic process; the key organizational task is not to design the most elegant structure but to capture individual capabilities and motivate the entire organization to respond cooperatively to a complicated and dynamic environment.

## BUILDING AN ORGANIZATION

Although business thinkers have written a great deal about strategic innovation, they have paid far less attention to the accompanying organizational challenges. Yet many companies remain caught in the structural-complexity trap that paralyzes their ability to respond quickly or flexibly to the new strategic imperatives.

For those companies that adopted matrix structures, the problem was not in the way they defined the goal. They correctly recognized the need for a multidimensional organization to respond to growing external complexity. The problem was that they defined their organizational objectives in purely structural terms. Yet the term *formal structure* describes only the organization's basic anatomy. Companies must also concern themselves with organizational physiology—the systems and relationships that allow the lifeblood of information to flow through the organization. They also need to develop a healthy organizational psychology—the shared norms, values, and beliefs that shape the way individual managers think and act.

The companies that fell into the organizational trap assumed that changing their formal structure (anatomy) would force changes in interpersonal relationships and decision processes (physiology), which in turn would reshape the individual attitudes and actions of managers (psychology).

But as many companies have discovered, reconfiguring the formal structure is a blunt and sometimes brutal instrument of change. A new structure creates new and presumably more useful managerial ties, but these can take months and often years to evolve into effective knowledge-generating and decision-making relationships. And because the new job requirements will frustrate, alienate, or simply overwhelm so many managers, changes in individual attitudes and behavior will likely take even longer.

As companies struggle to create organizational capabilities that reflect rather than diminish environmental complexity, good managers gradually stop

searching for the ideal structural template to impose on the company from the top down. Instead, they focus on the challenge of building up an appropriate set of employee attitudes and skills and linking them together with carefully developed processes and relationships. In other words, they begin to focus on building the organization rather than simply on installing a new structure.

Indeed, the companies that are most successful at developing multi-dimensional organizations begin at the far end of the anatomy-physiology-psychology sequence. Their first objective is to alter the organizational psychology—the broad corporate beliefs and norms that shape managers' perceptions and actions. Then, by enriching and clarifying communication and decision processes, companies reinforce these psychological changes with improvements in organizational physiology. Only later do they consolidate and confirm their progress by realigning organizational anatomy through changes in the formal structure.

No company we know of has discovered a quick or easy way to change its organizational psychology to reshape the understanding, identification, and commitment of its employees. But we found three principal characteristics common to those that managed the task most effectively:

1. They developed and communicated a clear and consistent corporate vision.
2. They effectively managed human resource tools to broaden individual perspectives and to develop identification with corporate goals.
3. They integrated individual thinking and activities into the broad corporate agenda by a process we call co-option.

## BUILDING A SHARED VISION

Perhaps the main reason managers in large, complex companies cling to parochial attitudes is that their frame of reference is bounded by their specific responsibilities. The surest way to break down such insularity is to develop and communicate a clear sense of corporate purpose that extends into every corner of the company and gives context and meaning to each manager's particular roles and responsibilities. We are not talking about a slogan, however catchy and pointed. We are talking about a company vision, which must be crafted and articulated with clarity, continuity, and consistency. We are talking about clarity of expression that makes company objectives understandable and meaningful; continuity of purpose that underscores their enduring importance; and consistency of application across business units and

geographical boundaries that ensures uniformity throughout the organization.

**Clarity** There are three keys to clarity in a corporate vision: simplicity, relevance, and reinforcement. NEC's integration of computers and communications—C&C—is probably the best single example of how simplicity can make a vision more powerful. Top management has applied the C&C concept so effectively that it describes the company's business focus, defines its distinctive source of competitive advantage over large companies like IBM and AT&T, and summarizes its strategic and organizational imperatives.

The second key, relevance, means linking broad objectives to concrete agendas. When Wisse Dekker became CEO at Philips, his principal strategic concern was the problem of competing with Japan. He stated this challenge in martial terms—the U.S. had abandoned the battlefield; Philips was now Europe's last defense against insurgent Japanese electronics companies. By focusing the company's attention not only on Philips's corporate survival but also on the protection of national and regional interests, Dekker heightened the sense of urgency and commitment in a way that legitimized cost-cutting efforts, drove an extensive rationalization of plant operations, and inspired a new level of sales achievements.

The third key to clarity is top management's continual reinforcement, elaboration, and interpretation of the core vision to keep it from becoming obsolete or abstract. Founder Konosuke Matsushita developed a grand, 250-year vision for his company, but he also managed to give it immediate relevance. He summed up its overall message in the "Seven Spirits of Matsushita," to which he referred constantly in his policy statements. Each January he wove the company's one-year operational objectives into his overarching concept to produce an annual theme that he then captured in a slogan. For all the loftiness of his concept of corporate purpose, he gave his managers immediate, concrete guidance in implementing Matsushita's goals.

**Continuity** Despite shifts in leadership and continual adjustments in short-term business priorities, companies must remain committed to the same core set of strategic objectives and organizational values. Without such continuity, unifying vision might as well be expressed in terms of quarterly goals.

It was General Electric's lack of this kind of continuity that led to the erosion of its once formidable position in electrical appliances in many countries. Over a period of 20 years and under successive CEOs, the company's international consumer-product strategy never stayed the same for long. From building locally responsive and self-sufficient "mini-GEs" in each market, the company turned to a policy of developing low-cost offshore sources, which eventu-

ally evolved into a de facto strategy of international outsourcing. Finally, following its acquisition of RCA, GE's consumer electronics strategy made another about-face and focused on building centralized scale to defend domestic share. Meanwhile, the product strategy within this shifting business emphasis was itself unstable. The Brazilian subsidiary, for example, built its TV business in the 1960s until it was told to stop; in the early 1970s, it emphasized large appliances until it was denied funding, then it focused on housewares until the parent company sold off that business. In two decades, GE utterly dissipated its dominant franchise in Brazil's electrical products market.

Unilever, by contrast, made an enduring commitment to its Brazilian subsidiary, despite volatile swings in Brazil's business climate. Company chairman Floris Maljers emphasized the importance of looking past the latest political crisis or economic downturn to the long-term business potential. "In those parts of the world," he remarked, "you take your management cues from the way they dance. The samba method of management is two steps forward then one step back." Unilever built—two steps forward and one step back—a profitable \$300 million business in a rapidly growing economy with 130 million consumers, while its wallflower competitors never ventured out onto the floor.

**Consistency** The third task for top management in communicating strategic purpose is to ensure that everyone in the company shares the same vision. The cost of inconsistency can be horrendous. It always produces confusion and, in extreme cases, can lead to total chaos, with different units of the organization pursuing agendas that are mutually debilitating.

Philips is a good example of a company that, for a time, lost its consistency of corporate purpose. As a legacy of its wartime decision to give some overseas units legal autonomy, management had long experienced difficulty persuading North American Philips (NAP) to play a supportive role in the parent company's global strategies. The problem came to a head with the introduction of Philips's technologically first-rate videocassette recording system, the V2000. Despite considerable pressure from world headquarters in the Netherlands, NAP refused to launch the system, arguing that Sony's Beta system and Matsushita's VHS format were too well established and had cost, feature, and system-support advantages Philips couldn't match. Relying on its legal independence and managerial autonomy, NAP management decided instead to source products from its Japanese competitors and market them under its Magnavox brand name. As a result, Philips was unable to build the efficiency and credibility it needed to challenge Japanese dominance of the VCR business.

Most inconsistencies involve differences between what managers of different operating units see as the company's key objectives. Sometimes, however, different corporate leaders transmit different views of overall priorities and purpose. When this stems from poor communication, it can be fixed. When it's a result of fundamental disagreement, the problem is serious indeed, as illustrated by ITT's problems in developing its strategically vital System 12 switching equipment. Continuing differences between the head of the European organization and the company's chief technology officer over the location and philosophy of the development effort led to confusion and conflict throughout the company. The result was disastrous. ITT had difficulty transferring vital technology across its own unit boundaries and so was irreparably late introducing this key product to a rapidly changing global market. These problems eventually led the company to sell off its core telecommunications business to a competitor.

But formulating and communicating a vision—no matter how clear, enduring, and consistent—cannot succeed unless individual employees understand and accept the company's stated goals and objectives. Problems at this level are more often related to receptivity than to communication. The development of individual understanding and acceptance is a challenge for a company's human resource practices.

## DEVELOPING HUMAN RESOURCES

While top managers universally recognize their responsibility for developing and allocating a company's scarce assets and resources, their focus on finance and technology often overshadows the task of developing the scarcest resource of all—capable managers. But if there is one key to regaining control of companies that operate in fast-changing environments, it is the ability of top management to turn the perceptions, capabilities, and relationships of individual managers into the building blocks of the organization.

One pervasive problem in companies whose leaders lack this ability—or fail to exercise it—is getting managers to see how their specific responsibilities relate to the broad corporate vision. Growing external complexity and strategic sophistication have accelerated the growth of a cadre of specialists who are physically and organizationally isolated from each other, and the task of dealing with their consequent parochialism should not be delegated to the clerical staff that administers salary structures and benefit programs. Top managers inside and outside the human resource function must be leaders in the recruit-

ment, development, and assignment of the company's vital human talent.

**Recruitment and Selection** The first step in successfully managing complexity is to tap the full range of available talent. It is a serious mistake to permit historical imbalances in the nationality or functional background of the management group to constrain hiring or subsequent promotion. In today's global marketplace, domestically oriented recruiting limits a company's ability to capitalize on its worldwide pool of management skill and biases its decision-making processes.

After decades of routinely appointing managers from its domestic operations to key positions in overseas subsidiaries, Procter & Gamble realized that the practice not only worked against sensitivity to local cultures—a lesson driven home by several marketing failures in Japan—but also greatly under-utilized its pool of high-potential non-American managers. (Fortunately, our studies turned up few companies as shortsighted as one that made overseas assignments on the basis of *poor* performance, because foreign markets were assumed to be “not as tough as the domestic environment.”)

Not only must companies enlarge the pool of people available for key positions, they must also develop new criteria for choosing those most likely to succeed. Because past success is no longer a sufficient qualification for increasingly subtle, sensitive, and unpredictable senior-level tasks, top management must become involved in a more discriminating selection process. At Matsushita, top management selects candidates for international assignments on the basis of a comprehensive set of personal characteristics, expressed for simplicity in the acronym SMILE: specialty (the needed skill, capability, or knowledge); management ability (particularly motivational ability); international flexibility (willingness to learn and ability to adapt); language facility; and endeavor (vitality, perseverance in the face of difficulty). These attributes are remarkably similar to those targeted by NEC and Philips, where top executives also are involved in the senior-level selection process.

**Training and Development** Once the appropriate top-level candidates have been identified, the next challenge is to develop their potential. The most successful development efforts have three aims that take them well beyond the skill-building objectives of classic training programs: to inculcate a common vision and shared values; to broaden management perspectives and capabilities; and to develop contacts and shape management relationships.

To build common vision and values, white-collar employees at Matsushita spend a good part of their first six months in what the company calls “cultural

and spiritual training.” They study the company credo, the “Seven Spirits of Matsushita,” and the philosophy of Konosuke Matsushita. Then they learn how to translate these internalized lessons into daily behavior and even operational decisions. Culture-building exercises as intensive as Matsushita's are sometimes dismissed as innate Japanese practices that would not work in other societies, but in fact, Philips has a similar entry-level training practice (called “organization cohesion training”), as does Unilever (called, straight-forwardly, “indoctrination”).

The second objective—broadening management perspectives—is essentially a matter of teaching people how to manage complexity instead of merely to make room for it. To reverse a long and unwieldy tradition of running its operations with two- and three-headed management teams of separate technical, commercial, and sometimes administrative specialists, Philips asked its training and development group to de-specialize top management trainees. By supplementing its traditional menu of specialist courses and functional programs with more intensive general management training, Philips was able to begin replacing the ubiquitous teams with single business heads who also appreciated and respected specialist points of view.

The final aim—developing contacts and relationships—is much more than an incidental byproduct of good management development, as the comments of a senior personnel manager at Unilever suggest: “By bringing managers from different countries and businesses together at Four Acres [Unilever's international management-training college], we build contacts and create bonds that we could never achieve by other means. The company spends as much on training as it does on R&D not only because of the direct effect it has on upgrading skills and knowledge but also because it plays a central role in indoctrinating managers into a Unilever club where personal relationships and informal contacts are much more powerful than the formal systems and structures.”

**Career-Path Management** Although recruitment and training are critically important, the most effective companies recognize that the best way to develop new perspectives and thwart parochialism in their managers is through personal experience. By moving selected managers across functions, businesses, and geographic units, a company encourages cross-fertilization of ideas as well as the flexibility and breadth of experience that enable managers to grapple with complexity and come out on top.

Unilever has long been committed to the development of its human resources as a means of attaining durable competitive advantage. As early as the 1930s, the company was recruiting and developing local employees to replace the parent-company managers who had been running most of its overseas subsidiar-

ies. In a practice that came to be known as “-ization,” the company committed itself to the Indianization of its Indian company, the Australization of its Australian company, and so on.

Although delighted with the new talent that began working its way up through the organization, management soon realized that by reducing the transfer of parent-company managers abroad, it had diluted the powerful glue that bound diverse organizational groups together and linked dispersed operations. The answer lay in formalizing a second phase of the -ization process. While continuing with Indianization, for example, Unilever added programs aimed at the “Unileverization” of its Indian managers.

In addition to bringing 300 to 400 managers to Four Acres each year, Unilever typically has 100 to 150 of its most promising overseas managers on short- and long-term job assignments at corporate headquarters. This policy not only brings fresh, close-to-the-market perspectives into corporate decision making but also gives the visiting managers a strong sense of Unilever’s strategic vision and organizational values. In the words of one of the expatriates in the corporate offices, “The experience initiates you into the Unilever Club and the clear norms, values, and behaviors that distinguish our people—so much so that we really believe we can spot another Unilever manager anywhere in the world.”

Furthermore, the company carefully transfers most of these high-potential individuals through a variety of different functional, product, and geographic positions, often rotating every two or three years. Most important, top management tracks about 1,000 of these people—some 5% of Unilever’s total management group—who, as they move through the company, forge an informal network of contacts and relationships that is central to Unilever’s decision-making and information-exchange processes.

Widening the perspectives and relationships of key managers as Uni-lever has done is a good way of developing identification with the broader corporate mission. But a broad sense of identity is not enough. To maintain control of its global strategies, Unilever must secure a strong and lasting individual commitment to corporate visions and objectives. In effect, it must co-opt individual energies and ambitions into the service of corporate goals.

## CO-OPTING MANAGEMENT EFFORTS

As organizational complexity grows, managers and management groups tend to become so specialized and isolated and to focus so intently on their own immediate operating responsibilities that they are apt to respond parochially to intrusions on their

organizational turf, even when the overall corporate interest is at stake. A classic example, described earlier, was the decision by North American Philips’s consumer electronics group to reject the parent company’s VCR system.

At about the same time, Philips, like many other companies, began experimenting with ways to convert managers’ intellectual understanding of the corporate vision—in Philips’s case, an almost evangelical determination to defend Western electronics against the Japanese—into a binding personal commitment. Philips concluded that it could co-opt individuals and organizational groups into the broader vision by inviting them to contribute to the corporate agenda and then giving them direct responsibility for implementation.

In the face of intensifying Japanese competition, Philips knew it had to improve coordination in its consumer electronics among its fiercely independent national organizations. In strengthening the central product divisions, however, Philips did not want to deplete the enterprise or commitment of its capable national management teams.

The company met these conflicting needs with two cross-border initiatives. First, it created a top-level World Policy Council for its video business that included key managers from strategic markets—Germany, France, the United Kingdom, the United States, and Japan. Philips knew that its national companies’ long history of independence made local managers reluctant to take orders from Dutch headquarters in Eindhoven—often for good reason, because much of the company’s best market knowledge and technological expertise resided in its offshore units. Through the council, Philips co-opted their support for company decisions about product policy and manufacturing location.

Second, in a more powerful move, Philips allocated global responsibilities to units that previously had been purely national in focus. Eindhoven gave NAP the leading role in the development of Philips’s projection television and asked it to coordinate development and manufacture of all Philips television sets for North America and Asia. The change in the attitude of NAP managers was dramatic.

A senior manager in NAP’s consumer electronics business summed up the feelings of U.S. managers: “At last, we are moving out of the dependency relationship with Eindhoven that was so frustrating to us.” Co-option had transformed the defensive, territorial attitude of NAP managers into a more collaborative mind-set. They were making important contributions to global corporate strategy instead of looking for ways to subvert it.

In 1987, with much of its TV set production established in Mexico, the president of NAP’s consumer

electronics group told the press, "It is the commonality of design that makes it possible for us to move production globally. We have splendid cooperation with Philips in Eindhoven." It was a statement no NAP manager would have made a few years earlier, and it perfectly captured how effectively Philips had co-opted previously isolated, even adversarial, managers into the corporate agenda.

## THE MATRIX IN THE MANAGER'S MIND

Since the end of World War II, corporate strategy has survived several generations of painful transformation and has grown appropriately agile and athletic. Unfortunately, organizational development has not kept pace, and managerial attitudes lag even farther behind. As a result, corporations now commonly design strategies that seem impossible to implement, for the simple reason that no one can effectively implement third-generation strategies through sec-

ond-generation organizations run by first-generation managers.

Today the most successful companies are those where top executives recognize the need to manage the new environmental and competitive demands by focusing less on the quest for an ideal structure and more on developing the abilities, behavior, and performance of individual managers. Change succeeds only when those assigned to the new transnational and interdependent tasks understand the overall goals and are dedicated to achieving them.

One senior executive put it this way: "The challenge is not so much to build a matrix structure as it is to create a matrix in the minds of our managers." The inbuilt conflict in a matrix structure pulls managers in several directions at once. Developing a matrix of flexible perspectives and relationships within each manager's mind, however, achieves an entirely different result. It lets individuals make the judgments and negotiate the trade-offs that drive the organization toward a shared strategic objective.