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ALIGNING NETWORKS WITH STRATEGIC VALUE PROPOSITIONS

Every day you have conversations at work with peers whose opinions you respect and whose friendships you value. It is likely that you report to a superior whom you also like and respect but often do not see for days and sometimes weeks at a time. Both interactions have impact, but the first conversation is "invisible" on most organization charts. Formal structure determines in large part who is sought out in networks: we are driven to reach out to people by virtue of the decisions they get to make, the information they hold, and the resources they dole out. But informal relationships are crucial as well: some people may lack formal authority but possess technical expertise and organizational wisdom, or they may simply be likable and dependable and so an important source of help and information.

Although these networks of both formal and informal relationships are increasingly the conduits through which value is created and innovation realized, most leaders still rely too heavily on formal structure when designing their organizations and implementing strategy. The process of moving boxes and lines around on a formal chart can make leaders *feel* as though they are driving alignment and organizational focus on strategic objectives, but in fact these formal changes often do not shift the underlying networks. The result is a disconnect between

strategic objectives and network configuration that leads organizations to underperform relative to the expertise and resources they possess, or to create unmanageable collaborative demands with efforts that indiscriminately connect people. When, however, leaders employ a network perspective, they can ensure that collaborations deep within the organization are supporting strategic objectives as efficiently as possible.

Consider the story of a $1 billion provider of information technology consulting services with ten thousand employees spread across more than seventy offices globally. In late 2005 the company launched a strategic initiative to move from a branch- and region-centric structure to a matrix organization with globally integrated business lines and vertical consulting practices working in conjunction with a regionally based sales force. The strategic reason for this change was to better focus the company on clients while also increasing scalability, reducing costs, accelerating growth, and improving career opportunities. Management had an aggressive timeline for the transformation, expecting the majority of the restructuring to be completed by mid-2006 and to be fully operational by the end of the year.

To establish a baseline of the firm's ability to work across boundaries, the senior vice president of human resources conducted an ONA of the top 250 executives and managers. The assessment, which mapped both information flow and revenue-producing collaborations, revealed a number of ways in which this network was potentially misaligned with the strategic intent of the new matrix organization. For example, the information flow network revealed that employees relied heavily on senior leaders. Those lower in the hierarchy—who had critical expertise and key relationships with clients—tended to be on the outer rings of the network and so were not bringing the best expertise of the firm to bear on client sales and project execution. These people were often the single point of contact with key accounts, and they typically had a substantial—but

to this point unrecognized—impact on revenue when they left the firm.

The ONA also revealed that several silos in the network were likely to undercut the organization's ability to realize benefits from the new matrix structure. For example, most collaboration occurred first within a region and then within a business unit. A select set of silos became a focal point for the restructuring, with the goal of ensuring that employees transcended formal structure in cross-selling and in delivering holistic solutions that could differentiate the organization in the marketplace. Beyond information flow, the ONA also made it clear that the top 250 executives were not aware of the skills and expertise available through the network that could be leveraged in client work. Raising awareness at key points in the network became a critical precursor to increasing revenue-generating collaborations, bringing the best expertise to client projects, and boosting productivity through best-practice transfers.

While the company took a range of actions to align the network with strategic objectives, special attention was paid to leaders who the ONA revealed were overly central. That is, the ten most sought-out people in the network—all but one of whom were in the top ranks of the organization—had from twenty-four to fifty-one people coming to them frequently for information. This network imbalance made it hard for many employees to gain access to these leaders. Through no fault of their own, the leaders had become bottlenecks, causing delays in decision making and slowing down projects and sales efforts. They also represented substantial susceptibilities in the network in that removing just these ten people (less than 5 percent of the top three layers in the organization) decreased the number of revenue-producing collaborations in the network by 26 percent.

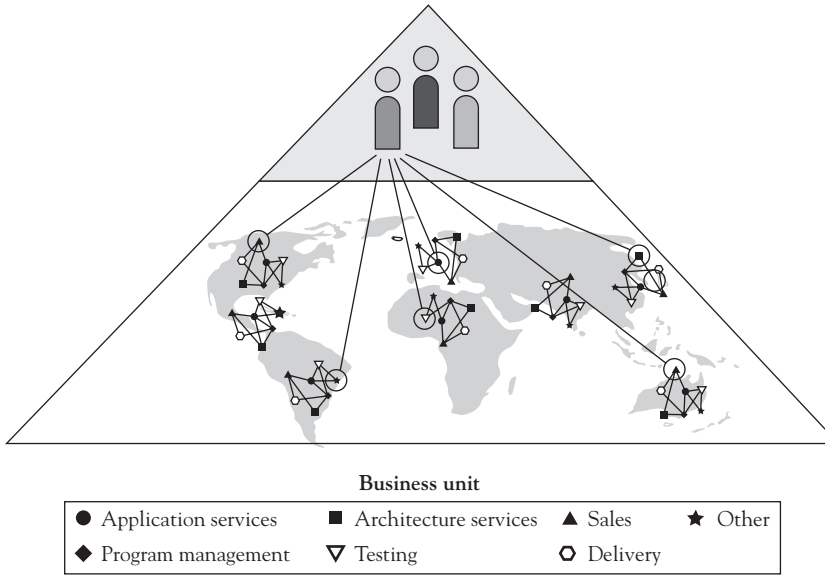
Clearly, the excessive demands made on this small set of leaders needed to be reduced in order for the organization to succeed in the new matrix structure. As a result, the company initiated

four specific actions. First, the chief information officer implemented an expertise locator to help people find resources across the organization and established global solution teams so that subject-matter experts were leveraged across regional boundaries. Second, the chief financial officer redefined dollar thresholds so that pricing decisions could be made by lower-level employees. For instance, a team one level below the vice presidents was given decision rights regarding solutions and pricing, a move that dramatically reduced the time and effort it took to approve relatively small, low-risk projects. Third, educational sessions were held on such topics as service offerings, delivery experience for service offerings, and rules of engagement between regions and business lines in order to facilitate understanding across the organization about how to work in the new matrix structure (see Figure 1.1). Finally, the senior team worked to develop a culture of responsiveness and increased information flow down and across the hierarchy by encouraging people to return calls and e-mails within twenty-four hours regardless of the seeker's title or position.

Although the firm took care to alleviate some of the relational demands on those at higher levels, it also realized that these highly connected leaders, given their influence, could help drive change. For example, as the leader of the newly formed Application Services unit, one of the largest global groups, Peggy Smith was well connected. Yet even within her own group's network, she saw that people were not collaborating across regions. Instead of creating committees among those in certain positions within the formal structure—a common approach to repairing such collaboration problems—Peggy used the ONA results to identify highly connected people in various regions and then forged ties among them. This helped Peggy and her direct reports to rapidly and efficiently build awareness across regional boundaries of who knew what.

A second ONA, conducted six months later, showed that the network had become much more closely aligned with the strategic

Figure 1.1. Facilitating a Matrix Structure Through Targeted Connectivity



objectives set out for the matrix structure. First, collaboration was more evenly distributed and employees were able to get information they needed and decisions approved much more rapidly. Second, the group as a whole was getting greater leverage from its peripheral members, many of whom were in key client-facing roles. For example, the second ONA revealed a 17 percent increase in ties to and from account managers who had previously been on the network's periphery. Not surprisingly, these new relationships had had a positive impact on client-service and account-penetration measures. Third, the network was now better integrated across functions and regions, an improvement crucial to the success of the matrix structure (see Figure 1.1). Specifically, employee collaborations across functions had increased by 13 percent and resulted in numerous examples of improved client service, sales, and best-practice transfer at these junctures.

In sum, ONA accelerated the company's transformation from a branch-centric to a global operation. One highly central vice president indicated that "the ONA was helpful in realizing why we lacked nimbleness and quick turnaround times for RFPs or unsolicited proposals. Creating points of contact and information conduits across business lines and regions helped us assemble teams with needed skills, knowledge, and experience more efficiently, enabling faster time to market." Results from the second ONA showed a 27 percent increase in sales collaborations of up to $500,000, a 15 percent increase in sales between $500,000 and $2 million, and a 9 percent increase in client sales between $2 million and $10 million. In aggregate, these results boosted the firm's revenue by nearly 10 percent on an annualized basis.

What made this transition such a success was that leaders attended to both informal and formal structure. The network analysis played a crucial role in helping leaders—such as Peggy—build bridges much more rapidly to well-connected experts throughout the global organization. Equally important, it helped the organization see what would happen if key account managers left, and how to get better leverage out of high-end experts who had drifted to the fringe of the network.

But these and other changes to the network would be only temporary if not accompanied by changes to formal structure. Annual planning processes, project start-up practices, human resource processes, and technology—to name just a few—were all aspects of the formal organization that were shifted to create a context in which the right collaborations were more likely to occur and flourish over time. In this instance, the appropriate aspects of formal structure to consider were those that helped in the transition to a more client-centric, matrix-based structure. In other organizations—for example, those that thrive on process excellence and efficiency—very different structural elements must be in place to promote the right network configuration.

Network Archetypes and Value Propositions

Networks enable organizations to do two things: recognize opportunities and challenges, and coordinate appropriate responses. But the kind of network an organization needs in order to be most effective and efficient will depend on its value proposition, its strategic objectives, and the nature of its work. Through our work in a wide range of industries, we have identified two network archetypes that characterize the two ends of the spectrum: the customized response network and the routine response network. These two kinds of networks are each suited for a specific value proposition and demand certain investments.

Customized response networks. These networks develop in order to define a problem or an opportunity rapidly and coordinate relevant expertise in response. They are "custom" in that the value of these networks derives from both the framing of a problem and the creation of an innovative resolution. Organizations obtaining value from customized response networks include strategy consulting firms, high-end investment banks, new-product development consultancies, and early-stage drug development.

Routine response networks. These networks operate best in environments where both problems and solutions are fairly well defined and predictable, and the work is standardized. Value is delivered through efficient and consistent responses to established problem domains. Insurance claims processing, call centers, and late-stage drug development, for instance, all require low-cost and reliable coordination of expertise to solve commonly occurring problems.

In Table 1.1 we have outlined both salient network characteristics and organizational decisions that must be made to support each kind of network. We now turn to case descriptions of both archetypes.

Table 1.1. Designing Value-Based Networks

	Customized Response	*Routine Response*
Context	**Solving Ambiguous Problems**	**Solving Established Problems**
	Unknown Problem	Known Problem
	Unknown Response	Known Response
Value Proposition	Rapid definition of problem or opportunity space and coordination of relevant expertise to solve problem. Value is delivered both in the framing and then in the innovative resolution of the problem space.	Low-cost and reliable coordination of relevant expertise to solve routine or known problems. Value is delivered through efficient and consistent response to a set of established problem domains.
Network Features		
Connectivity		
Internal	Dense and redundant connectivity within and across boundaries	Connectivity focused on process flow of defined problem
External	Diverse external connectivity to sense opportunities and respond	Limited and targeted external connectivity
Formal structure	Formal structure plays minimal role in dictating collaboration	Formal structure focuses collaboration on inputs and outputs
Relational capital	(1) trust in others' expertise, (2) generalized reciprocity	(1) trust in process execution, (2) accountability to perform role
Locating experts	Ability to identify dispersed expertise quickly	Predefined by process flow
Strategic Decisions		
Pricing	Premium pricing allows reinvestment in social capital	Commodity pricing

	Customized Response	*Routine Response*
Structure	Permeable boundaries (inside and outside); decentralized decision rights and information access	Defined internal and external boundaries; defined and embedded decision rights and information access
Work management	Planning focuses on general markets and expertise; controls focus on output rather than coordination	Planning focuses on offerings; controls focus on efficiency and reliability of delivery
HR practices	Hire, develop, and reward T-shaped skills and collaborative behaviors	Hire, develop, and reward for specific task execution
Technology	Expertise locators and portals	Work-management systems and artificial intelligence
Culture and leadership	Collaborative within and across organizational lines, norms of generalized reciprocity	Centralized decision making, focused on standardization and task accountability
Examples	High-end investment banks, consulting firms, corporate R&D, early-stage drug development	Insurance claims processing, call centers, late-stage drug development

Customized Response Case Study: Novartis

Novartis, a Swiss pharmaceutical company, won Federal Drug Administration approval in May 2001 for Gleevec, a breakthrough medication that arrests a life-threatening form of blood cancer, chronic myeloid leukemia (CML). Gleevec, a tiny orange capsule, enjoyed the fastest approval ever granted by the FDA for a cancer drug and is considered revolutionary because of the way it treats CML. Traditional cancer therapies combat the disease through surgery or a combination of toxic drugs and radiation that destroy cancer cells as well as some normal cells. As a result, often patients are left feeling extremely weak and suffering from severe side effects. Gleevec is the first cancer drug

that targets a cancer-producing molecule and fixes the genetic malfunction without harming healthy cells. "Our hope is to turn cancer into a chronic but treatable disease," says Alex Matter, formerly head of Oncology Research at Novartis, who discovered the drug with his team of scientists.

Gleevec is the product of a customized response network. Alex Matter and his team challenged the traditional treatment of CML and created something new based on cutting-edge developments in gene therapy and the selective targeting of cancer-producing cells. The breakthrough drug that resulted from their efforts required what Dan Vasella, CEO of Novartis, described as *innovation management*—calling on a wide variety of internal and external expertise to define and solve the problem, challenging assumptions by engaging scientists across disciplines, and taking creative risks in both drug discovery and delivery.

The networks that created Gleevec were nowhere apparent on Novartis's formal organization chart—in fact, diverse connections external to Novartis were altogether pivotal to the success of Gleevec. Before Novartis even existed, Matter worked at Ciba-Geigy in Switzerland and had been considering ways that kinases, or enzymes, might affect cancer growth by inhibiting cell proliferation. At the time, no one was pursuing the idea of inhibiting kinases as a type of treatment—most scientists thought it would be impossible.

But Matter persisted in seeking out scientists who could point the way to diseases that his team might target. He relied heavily on his external contacts—including Brian Druker and Tom Roberts at the Dana Farber Cancer Institute in Boston—to keep abreast of cutting-edge ideas in fields relevant to cancer treatment. Druker, a medical oncologist, knew that CML was the most promising cancer for research using the approach that Matter was contemplating. It was the only cancer in which the genetic cause had been scientifically established. Druker's research interests overlapped with Matter's and provided fertile territory for exploring a new way to treat cancer. Later, when Matter and his team were at Novartis and had discovered and

tested in animal trials a compound effective against CML, external connections became critical in identifying the hospitals where the first patients would receive the drug in trials.

Extensive internal connections at Novartis were also critical at each stage of the drug development process. Effective internal networks—which crossed the boundaries of traditionally distinct scientific disciplines such as chemistry and biology—allowed fertile brainstorming in drug development. Similarly, other internal collaborations were critical to manufacturing success. Once the drug was approved, the company undertook a new manufacturing approach. Rather than making small quantities of the new drug in the Basel, Switzerland, plant and then moving to the company's sites in Ireland for mass production, Novartis decided to move directly from technical development to one of the Ireland sites—a change that shaved a year off the normal production schedule. Dense and trusted networks across geographic boundaries were essential to this approach.

Of course, the networks that led to the production of Gleevec didn't develop overnight. Many Novartis executives questioned the unusual and high-risk approach. Crucial to the success of Matter's team, however, was the unwavering support of the CEO. Vasella trusted Matter's competence and judgment and gave him both the freedom and the political support to develop a new approach to cancer treatment and coordinate the right network of collaborators. He also helped this global network rise to the challenge of cutting a year off the normal production schedule and accelerating FDA approval by rearranging priorities within Novartis. Vasella's trust was well placed: one day after the drug won approval from the FDA, it was ready to ship. Gleevec was available in retail pharmacies three days later.

Customized Response: Success Factors

The network characteristics that enabled Matter and his team to define a novel approach to a complex problem and assemble the right expertise to develop an innovative solution did not

arise on their own. Management made strategic decisions that enabled such a network to develop. Novartis's organizational structure was deliberately designed to allow internal and external boundaries to be crossed. As Matter points out, "We bring together different disciplines, functions, and geographies to try to break up silos." The global oncology business unit reaches across different geographies in their marketing, sales, and research functions. Novartis also has decision boards that cross technologies and facilitate collaboration between groups that are often segregated in other companies.

Novartis takes a markedly different approach in their planning processes as well, pushing executives to consider ways that the unique packaging of expertise—both within and outside the organization—could help the company create and respond to market opportunities. The organization forms alliances with industry partners and academic institutions to develop products, acquire platform technologies, and access new markets. Its Disease Area Strategy, which focuses on alliances and acquisitions for key disease areas and on indicators expected to be growth drivers for Novartis, is but one example.

This collaborative environment is also supported by carefully considered leadership and human resource practices. Managers are encouraged to take risks and to help younger scientists reach out to colleagues with unique expertise in order to consider breakthrough innovations. In the course of developing Gleevec, Matter was at the hub of a network that connected Novartis employees with researchers, administrators, and patients in medical establishments throughout the world.

Core to Novartis's success is their ability to produce while still encouraging experimentation. When we wrote this case study, Novartis had seventy-eight projects in clinical development or registration, had received seven major approvals for drugs during 2003, and had launched eleven new medicines in the United States since 2000. This high productivity helped to engender collaboration. Novartis's pharmaceutical products

pipeline is among one of the broadest in the industry, and employees are encouraged to reach out and respond to requests for help through both formal and informal mechanisms such as team awards and public recognition for the successful screening of compounds.

Finally, Novartis invests in technology, such as globally validated databases, to help manage the vast sea of knowledge relevant to research and commercial functions, creating a privileged knowledge environment for its scientists. In keeping with its commitment to create a collaborative and productive environment, Novartis recently announced plans to convert its headquarters in Basel from an industrial complex to a facility that emphasizes innovation and provides employees and visitors with an environment of intensive levels of communication and work. The new campus will have buildings with open designs and meeting places that encourage spontaneous exchanges.

In January 2004, *Fortune* magazine voted Novartis one of the top ten European companies to work for—the only health care company on the list. Employees value the collaborative nature of the organization and the networks that individuals form and come to rely on across hierarchical, geographic, and organizational boundaries. As the Gleevec success highlights, effective networks in companies such as Novartis deliver value by framing and then solving problems in new ways, which is essential to innovation in a highly competitive market. Creating a context that supports this kind of work requires appropriate investments in infrastructure, organizational design, and leadership.

Routine Response Case Study: Sallie Mae

Sallie Mae, America's leading provider of education loans, owns or manages approximately $100 billion in student loans for more than seven million borrowers. Deborah Bragg, who runs the call center, states the organization's mission: "Our goal is to resolve a customer's question on the first contact while minimizing

service expense to the company." This is no small task. With nearly seven million calls each year, Deborah and her team must make sense of an enormous jumble of calls and questions from customers, a process that requires both formal and informal collaborations. Internal connections must focus on creating process flows that can work across a variety of requests, such as questions about a new product. Whereas at Novartis internal connections need to be dense, spontaneous, and boundary spanning, Sallie Mae requires a more efficient network defined by process flows.

The call center's management team consistently identifies changes in customer input to address problems so that the output is improved customer service. For example, repeat-call trends (customers who have to call multiple times to have their problems solved) are analyzed at least monthly to identify reasons for higher volume. If the reason has to do with another part of the company, internal feedback is provided. Or if a new loan product is unclear to customers, a system is in place to alert the group responsible for the new product. As Deborah explains, "Focused collaboration allows us to deliver clearer information to our customers and, in turn, reduces repeat and additional calls, improves customer service, and contains costs."

Process flows help define whom to go to for internal expertise. The center has an interdepartmental referral process which ensures that call center agents can quickly direct customers to the appropriate person and department. So if, for example, a parent who already has a loan through Sallie Mae calls the center because he or she needs a loan for another child, the call center agent can quickly direct the call to the person who handles new loan approvals. And if an individual agent doesn't have expertise in the caller's area, Sallie Mae has a call-escalation process in which an agent refers a call up a hierarchy of specialists who have more experience, usually longer tenure, and more decision-making authority.

At the same time, process flow must be balanced with good customer service—what Deborah Bragg calls *nimble servicing*—to

prevent the network from taking over and becoming both too consuming and more ad hoc. To this end, Sallie Mae uses a process called *hot topics*, in which agents write an online summary of recurring issues, provide examples, and apply e-mail management so the issue can be assigned for review and resolution. Once a resolution is determined, the topic is turned into a Knowledge Tool, a user-friendly, online resource available to agents in real time. After typing in a key word based on a caller's question, an inexperienced agent receives a document with all the information he or she needs—information that represents the call center's collective experience and expertise.

Routine Response: Success Factors

Deborah Bragg and her colleague Debra Walsh have made several strategic decisions related to structure, work management processes, human resource practices, and technology to support the efficient coordination of expertise and reduce the need for expensive, unproductive interactions in the call center network. In short, they have facilitated the development of network patterns consistent with the call center's core value proposition of consistency and efficiency in handling customer inquiries. The operation's structure is designed to incorporate expertise into the processes, tools, and technologies with well-defined internal and external boundaries.

For example, Sallie Mae uses work management processes that emphasize the reliable delivery of service to customers through approaches such as coaching for best practices, calibration exercises, and peer review. Calibration exercises are designed to identify issues that will lead to better outcomes. Every week, supervisors, trainers, and quality assurance staff review and score agents' calls. They discuss variances, identify gray areas, and develop best practices. These practices are then used to enhance training and update the Knowledge Tool. Management also continually evaluates the call escalation process to see which agents are escalating the most calls (and

therefore might need help or more training) and whether the specialists are able to respond. All of these approaches continually and systematically help to keep work from creeping into the network and resulting in inefficiencies and inconsistent responses across agents.

Call centers have also installed human resource practices that emphasize hiring, training, and rewarding agents for superior service. These human resource practices are consistent with the company's leadership and culture, which emphasize accountability as one of the core values. Encouraging individual accountability for tasks helps facilitate a network that is highly focused on inputs and outputs and in which internal connectivity does not become overly dense. To improve service, Sallie Mae moved to performance-based scheduling, in which an agent's performance-based score is determined by the quality of his or her work, attendance, and productivity. "Those with higher scores have the option to work the more desirable shifts," Deborah explains, which provides incentives for performance. Compensation and career advancement are also tied to the performance-based score.

Sallie Mae fosters individual training for agents to help cultivate a sense of accountability. When agents begin working at Sallie Mae, they spend six weeks in a classroom setting learning basic tools and technologies and the quality assurance review process. These agents then focus on developing different skill sets, depending on the type of calls they will be handling. To complement classroom training, Debra Walsh, who is responsible for technical and "soft skills" training, deploys computer-based training to allow agents to learn new skills, such as how to handle a new repayment option, at their own pace. This approach avoids having to pull agents into the classroom and away from the customer. It also provides consistent training among the call center's three sites and gives agents immediate feedback on their individual skill development. The program is flexible, agents like it, and it saved Sallie Mae more than $300,000 in its first year.

Finally, Sallie Mae employs several technologies to help agents obtain the expertise they need without reaching into the network. The Knowledge Tool is one example. Managers also use a quality-monitoring system that allows them to hear and evaluate agents' performance. And to better serve the customer, Sallie Mae has updated its web-payment service, allowing for smaller call-center volume and happier customers. In this case the hot topics forum revealed that the service on this site was not as user friendly as it could be, resulting in more calls from customers. Deborah's management team worked with a cross-functional group within the organization responsible for the site to deploy a more robust product. Within three months, call-center volume for issues related to bill payment fell more than 75 percent, from more than twenty thousand to less than five thousand calls per month.

By maintaining and continually updating the routine response network, Sallie Mae avoids the inefficiencies of a large, dense network. According to an independent research firm that benchmarks the average score for the financial services industry at 74 percent, 88 percent of Sallie Mae customers were satisfied with their most recent calls to the center. Embedding information and knowledge in processes when work can be standardized has significant advantages. In a context like Sallie Mae's, this approach avoids the high transaction costs and service-inconsistency issues that arise when each employee must find someone who can help answer customers' questions. "We want no error, no issue that would impair our customer service mission to go undetected," Deborah says, "and for us that means targeted collaboration."

Conclusion

Work and innovation are inherently collaborative endeavors, but as the need for collaboration increases, the demands on people's time skyrocket. The answer is not more and more layers of a matrix structure or yet another collaborative technology.

Rather, what's required is a more nuanced and strategic view of collaboration on the part of leaders as designers of their organization. Instead of mandating collaboration or assuming that more connectivity is better, leaders need to focus on the core network components that will deliver value and on the few high-leverage organizational design variables that will support these networks. They need to recognize that networks take different forms and require different support depending on the goals of a given business unit or of an entire organization.

This chapter has shown leaders how to determine which network characteristics can deliver on specific value propositions and what investments in formal structure will help nurture appropriate connectivity. Four steps are important in this process:

1. Define the core value proposition of a network either as a product of how it supports strategic objectives of the organization or through that network's ability to enable the organization to sense and respond to key market opportunities and threats.
2. Identify the critical relationships that must exist for the network to support strategic objectives. These relationships will always be unique and depend on strategic goals, but the dimensions discussed in this chapter provide a guide to the key network categories that leaders should always consider.
3. Conduct an organizational network analysis to assess existing collaborations and alignment between the current network and the ideal network needed to support strategic objectives. Comparing the current and ideal network defines targeted investments that leaders must make to both delayer points where excess connectivity is reducing efficiency and build collaborations at targeted junctures where integration of expertise can improve performance or innovation.

4. Put in place an organizational context—using the design elements presented in Table 1.1—that enables the right networks to flourish and develop over time. Although leaders rarely have the ability to influence all aspects of organizational design, often they do have the latitude to modify four to five dimensions that, if not corrected, will drive networks back into unproductive tendencies.