

## CHAPTER 9



### VIRTUAL VALUES

#### Generating Social Capital

The world's largest center for diamond research is located in an unlikely spot: State College, Pennsylvania. There, in the early 1980s, scientists in the Materials Research Laboratory at Pennsylvania State University discovered that they could make industrial diamonds at atmospheric pressure. This finding proved so consequential to the industry that 30 competitors immediately joined the Diamond and Related Materials Consortium to explore the implications for their businesses.

"In the pre-competitive stage, it's pretty easy to do," says Rustum Roy, the physical chemist who runs the lab. "We're the leading research group, we have the equipment, and we have the people. So we say to the members, 'We're a networking center for you guys. When you come here, you learn from Penn State and each other. You'll say stuff here that you'd never say in a public meeting.'"

"Suppliers of equipment become partners of users through the glue of the lab," Roy says. Thus many of the consortium members have become customers of one Boston firm that makes diamond coating instruments. "This is what I mean by networking. What appears to be a competitive situation ends up as a complementary one."

When Roy notes that consortium members say things in the lab that they would never say in public, he is not talking about collusion. Rather

he refers to the trust that develops among the members of this virtual team. As trust grows, people confide in one another more and more. They mutually learn from the give and take.

## Trust in Teams

Virtual teams respond to the need for quicker, smarter, more flexible work groups in a sea of change. Indeed, these teams are highly adaptive social organizations that can cope with tumultuous complexity—like working with your arch competitors on projects that will benefit you both *and* allow you to compete better against each other. By learning from one another, each of the competitors becomes more skilled at what it does best.

Consider EBC Industries in Erie, Pennsylvania. It is one of small business's best examples of crossing competitive boundaries in the United States. Suffering from annual losses of \$200,000 by the mid-1980s, the company's CEO Harry Brown turned to his competitors in the small metal parts manufacturing industry to solve his business problems. Working together, some 50 firms in and around Erie have teamed up on projects that none can do alone. When they finish the projects, they then return to competing for business that they can carry out by themselves. This alternation between competition and cooperation has proved profitable for the firms involved. Brown's revenues have quadrupled, employment is up, and profits have replaced losses.<sup>1</sup>

How can competitors work together? They face even more obstacles to trust than plague virtual teams from the same organization. Yet, boundary-crossing teams overall need more trust than do collocated teams. Without daily face-to-face cues, it is at once both harder to attain and easier to lose. Mistrust slips in between the slender lines of long-distance communication stripped of the nuances of in-person interaction.

Trust is the elixir of group life. Broadly speaking, trust is the belief or confidence in a person or organization's integrity, fairness, and reliability. This "matter of faith" comes from past experience, however brief or extensive. The importance of trust cuts across a team's life cycle:

- ? A new team requires trust in order to get started.
- ? Trust is the all-purpose grease for the ongoing hard work of the team.
- ? When it ends, a team leaves a legacy of trust (or lack thereof) to the organizational environment from which it came.

A virtual team must pay special attention to building trust at each stage of its development. All other things being equal, the benefits of high trust in an organization are self-evident: Teams with higher levels of trust coalesce more easily, organize their work more quickly, and manage themselves better. Lower levels of trust make it much more difficult to generate and sustain successful cross-organizational, cross-distance groups.

Trust has always been important for groups. In the work-a-day world of the Industrial Age, it was more a “nice to have” quality than a “need to have” one.

*In the networks and virtual teams of the Information Age, trust is a “need to have” quality in productive relationships.*

### **Beyond *Integrity***

However competitive the market, the road to profit runs through the by-ways of cooperation. Businesses and the teams that comprise them function because people work together. “Trust is mandatory for optimization of a system,” wrote W Edwards Deming, the inspiring founder of the quality movement. “Without trust, there cannot be cooperation between people, teams, departments, divisions. Without trust, each component will protect its own immediate interests to its own long-term detriment, and to the detriment of the entire system.”<sup>2</sup>

Few organizations tolerate lying, cheating, and stealing. We all know the basic moral and practical costs of dishonesty. More subtle are the tokens of trust and mistrust that people convey through competence,

rewards, and information. Each of the three virtual team elements—people, purpose, and links—offers a source of trust. Each also holds a potential for mistrust that goes beyond honesty and integrity.<sup>3</sup>

### *Trusting People*

Of fundamental importance is trust in people and their competence. Task-oriented teams need more than trust in a person's integrity. If we do not trust people's competence, then we will not rely on them or the results of their work.

People demonstrate competence over time. Consequently proficiency can take longer to establish in virtual reality than it does face-to-face. Because we are just learning the skills of presenting information online, we are still in a period of skeptical acceptance of what others have to say. A person whose words read well on the screen may or may not appear to be knowledgeable in person. Likewise, proficiency can be more difficult to verify at a distance. If you can drop by someone's office, see first-hand examples of prior work, and talk with other colleagues, you can more easily evaluate their proficiency.

Occasional online interaction is just one step up from reading someone's resume. What may read well on paper may not translate into knowing someone in person. Reputation, recommendations, and resumes loom larger when people must establish relationships quickly through narrow channels. Likewise, online proficiency is easier to demonstrate in organizational cultures that support it, such as Buckman Laboratories (see Chapter 2), where the highly technical work of the company depends upon the virtual exchange of expertise.

"Trust comes from performance," says Lee Sproull, professor of management at Boston University, who has been following the development of trust and relationships in online environments for many years. "If I see this person is going to do a first-rate job with the information I provide, that [s]he won't undercut it, won't embarrass me, then I'm more likely to trust [that person]."<sup>4</sup>

Core-R.O.I., which specializes in developing labor-management partnerships, change management, and organization redesign, has operated as a virtual team since its inception in 1982. Its members are in New Mexico, Texas, Washington, DC, Iowa, and North Carolina. George

Gates, a consultant and partner, reports that the group intentionally meets at least four times a year. Initially, the group devoted most of its face-to-face time to reviewing the financial aspects of their business. Today, they spend most of their time talking about their practices and what they are learning. “We get together just to get together,” Gates says. “You can use as much whiz bang technology as you want, sending parts of your head around on the Internet but you can’t send parts of your heart. We all know how to type little smiley figures on the end of our sentences, but great, what does that really say?”<sup>5</sup> Gates’ point is that by coming together, the group renews its basic trust and belief in one another, and reinforces the values that have held them together for 15 years. Icons on a screen do not a relationship make.

### *Trusting Purposes*

The second way that people generate trust is by their commitment to a unifying purpose with shared rewards. Conversely, nothing provokes mistrust faster than a mismatch between a team’s goals and the system that rewards it. Many companies ask people to work toward cooperative goals then evaluate and reward them on the basis of their individual performances. This often arouses suspicion and provokes people to act competitively. People have highly developed fairness detectors, particularly when their employers do not recognize or, worse, violate the relationship between contribution and reward.

A large pharmaceutical firm commissioned a cross-organizational virtual team to study cost reduction but the steering committee provided very little direction. “All they said they wanted were ‘deliverables,’” reported the team leader. “It was very frustrating.” With no objective measures of their success and no reward in sight for a job well done, team members were reluctant to give their unbridled support to the project.

### *Trusting Links*

Third, people must trust information and their information channels. Because virtual teams are information-intensive, they rely heavily on the quality, quantity, and availability of information, making it a prime source of trust and mistrust. People expect to have what they believe is the best-available information to do their job. Organizations must keep

some information private, such as salary and other personnel matters. Within the common space, however, partial, incorrect, misleading, and late sources of information are all potentiators of mistrust.

Open-book management<sup>6</sup> that advocates providing essential information to everyone in the organization is one way to contribute trust to the environment. If the company's financial information is available to people at all levels of the firm, then people regardless of their position are likely to feel a greater sense of trust among one another. By removing the privilege of private access to information, such companies elevate everyone's feeling of being on the inside.

Even when a company has the best of intentions, it can inadvertently create mistrust by not releasing enough information. A publishing firm with several thousand employees decided to hold an all-company meeting, the first of its kind in its history. Its purpose was to build greater communication channels among the ranks of the organization. For weeks before the meeting, rumors abounded that the company was being sold and that massive layoffs loomed. A simple memo from senior management prior to the event addressing the rumors directly could have saved the company hundreds of hours of time wasted on false speculation.

Trust is part of that difficult-to-grasp, nonmaterial world of relationships. Yet, relationships are increasingly being recognized as having true economic value. Indeed, relationships store a new form of productive capital.

## **Social Capital**

Teamwork, whether collocated or virtual, generates a double bottom-line:

- ? Task success, the value of the results; and
- ? Social success, the value of the relationships.

Management invariably evaluates teams on the basis of their performance goals and the quality of their outcomes. Management also needs to evaluate teams on the quality of their interactions and the enduring relationships among members. Why does this matter? It matters because

every small group leaves a legacy in the larger organization. It either adds to or depletes the existing stock of “relationship resources.” The legacy of relationship success accrues as *social capital*.

All organizations have relationships based on past experience, ongoing interactions, and expectations for the future. Thus, all organizations, large and small, have some social capital that is continuously growing and diminishing, a hidden source of wealth or a deficit that may presage a disastrous weakness.

### ***What Is Social Capital?***

*Social capital is “the structure of relations between and among actors,”<sup>7</sup> individual or organizational.*

It is easy to demonstrate the value of social capital. Can you recall a friendship or professional relationship that you established in one team or small group that later proved to be a valuable connection in another context? Can you remember deciding to do business with an external partner, vendor, or customer because of its pre-existing organizational reputation?

Imagine the potential in your organization for better, faster, smarter relationships based on a rich network of pre-established lines of trust. Each strong relationship has a multiplier effect built into it: The “friends of friends of friends” are potentially accessible through social networks of trust. The old adage, “it’s not what you know but who you know,” portrays the colloquial acknowledgment of social capital.

The negative side of social capital also pertains. Do you recall cautioning others about people whom you came to distrust as a result of working with them? Did a team experience leave a “bad taste in your mouth” that affected other situations or opportunities? Have you seen previously good relationships between people or companies strained or snapped to the detriment of both? A bad experience also has a multiplier effect. People pass along news of mistrust, diminishing the capacity for collaboration within and between organizations.

*It is better not to team at all than to team badly.*

Social capital is a seminal idea that has been growing at the intersection of economics and sociology since its 1988 introduction in a paper by University of Chicago sociologist James Coleman.<sup>8</sup> For the most part, the idea flies below the radar of public consciousness but one mass media peek came in a 1996 ABC *World News Tonight* segment. It reported on Harvard government professor Robert Putnam's disturbing thesis that social capital is dangerously eroding in the U.S. society as a whole. Putnam illustrates his point by many measures of declining participation in civic and social events. Among them is the telling observation that while more Americans are bowling than ever before, they are "bowling alone" rather than in once-popular bowling leagues.<sup>9</sup> His influential 1993 book *Making Democracy Work* details how stocks of social capital a thousand years old were the best predictors of governmental and economic success and failure among Italian provinces in the 1970s and 1980s.<sup>10</sup>

### ***How to Create Social Capital***

It is easier to form, launch, and sustain virtual teams in an environment rich in "the features of social organization... that facilitate coordination and cooperation for mutual benefit," namely:

- ? Trust
- ? Norms of reciprocity; and
- ? Dense social networks.

Putnam and his team of researchers identified these three factors as components of social capital. To work with people you rarely or never meet, you need some basis to believe in their expertise and trustworthiness. Clearly, a norm that supports dishonesty in some relationships rubs off on other relationships as the level of suspicion rises. The fragile sphere of virtual relationships requires a much higher level of trust

than do conventional hierarchically controlled settings. Top-down control can mandate people to work together whether they want to or not. Virtual teams have only their shared trust in one another as their guarantee for the success of their joint work.

When Buckman Laboratories (see Chapter 2) began to expand into global markets, questions of integrity immediately arose. Among the concerns that employees raised was whether to pay bribes. The issue prompted the development of a code of ethics that has become central to the Buckman community. Among the 10 points in the code is this one:

“That we must use the highest ethics to guide our business dealings to ensure that we are always proud to be a part of Buckman Laboratories.”

The larger organizations that house good teams almost always have strongly expressed values embodied in codes, philosophies, and principles. They invariably include trust along with integrity, teamwork, and a commitment to the value of the individual. “The Eastman Way,” a pillar of Eastman Chemical Company’s corporate culture, declares, “Eastman people are the key to success. We must treat each other fairly and with respect, based on values and principles: honesty and integrity, fairness, trust, teamwork, diversity, employee well-being, citizenship, winning attitude.”

The norm of reciprocity—you do something for me and I will do something for you—recognizes that a favor received will somehow be repaid in the future. The oft-used phrase, “I owe you one,” speaks precisely to the value of a reciprocal relationship. Business is awash in these sorts of “owe-sies”: People either barter directly—I will give you this piece of business if you give me that—or they bank obligations for the future. “We will all benefit later by working together now” underscores a belief in deferred gratification.

Dense social networks, Putnam’s third component of social capital, are a hallmark of healthy communities and businesses. According to his research, the more involvements people have in community life, the stronger the economies of their regions. The same idea applies to business. The more activities that people engage in together, the greater their commitment to one another. Company picnics that include employees’ families, online chat rooms where people can talk about their hobbies,

and corporate support for community involvement all build social capital inside the company as well as outside.

*Social capital is both an enabler and an outcome of good teaming.*

### **Scaling Up**

The idea that relationships of trust and cooperation can have productive benefits has sparked a revolution in the field of economic development. Social wealth, valuable in the business world, offers a powerful new development resource for people with limited human and physical capital.

At the United Nations Development Programme (UNDP), the decades-old vision of large-scale development projects has shifted to a new vision of “sustainable human development.” The core of UNDP’s strategy is to build social capital. Its mission is “the enlargement of people’s choices and capabilities through the formation of social capital so as to meet as equitably as possible the needs of current generations without compromising the needs of future ones.” Social capital “places not just the human being at the center but, above all, the *relations* among human beings., because they constitute the basis on which moral communities are built. Human capital seeks to improve the ability of an individual to make decisions; social capital seeks to improve the ability of a collectivity to make decisions.”

The UNDP represents a large-scale application of relationship wealth, literally to whole continents. One example of UNDP’s country-spanning effort to create social capital is the African Management Development Network, where the purpose is to strengthen management capacity in both public and private sectors throughout Africa.

Far from UNDP outposts around the world, in Silicon Valley, California, social capital has been rapidly accumulating thanks to the pioneering efforts of Joint Venture Silicon Valley Network (JVSVN). Since

1988, leaders in business, government, education, and nonprofit organizations have been working together to address the overall problems of the Silicon Valley community, spawning projects that often make headlines. NetDay, for example, the effort to wire public school classrooms in California, which became a national effort, was the brainchild of Smart Valley,<sup>2</sup> one famous offspring of JVSVN.<sup>3</sup>

In her ground-breaking book, *Regional Advantage*,<sup>4</sup> AnnaLee Saxenian describes the culture of Silicon Valley as one that promotes collaboration across business and sectoral lines. She contrasts this “social capital building” environment with that of Boston’s Route 128 region. There leaving one company to go to a competitor can be regarded as an act of heresy. From an economic standpoint, Saxenian observes that the recession of the late 1980s quickly reversed in Silicon Valley while the Route 128 region was still suffering well into the 1990s.<sup>5</sup>

JVSVN’s work has inspired similar efforts in other communities that are profiled in *Grassroots Leaders in the New Economy: How Civic Entrepreneurs Are Building Prosperous Communities*. Such attempts to consciously build social capital are often the work of individual business people like Harry Brown of EBC Industries. Such entrepreneurs look beyond the traditional needs of their businesses—markets, employees, and funding—to the larger environment that makes it possible to maintain and capitalize on those resources. They recognize that unless there are highly trained people with the right skills coming out of universities, the local labor pool will top out and growth in the knowledge-based economy will stifle. Issues like this concern civic entrepreneurs and their colleagues in regional economic development collaboratives.<sup>6</sup>

### ***Starting Small***

Social capital affects every level of human organization and society:

- ? Every virtual team member whom we interviewed—whether in a group of 5 or 50—affirmed the singular significance of trust within and between teams;

- ? The half-decade-old multidivision team developing Hewlett-Packard's worldwide distributed product information management system (PIM System) gains long-term value from trust and relationships;
- ? Companies like Eastman and Buckman Labs show the value of trust for growth and profit at the enterprise level;
- ? Saxenian draws conclusions about the value of relationship riches within states or regions in her comparison of high-tech industries in California's Silicon Valley and Massachusetts' Route 128 high-technology business beltway;
- ? Putnam and his colleagues documented the impact of stored trust at the country level through the example of Italy; and
- ? The UNDP illustrates the value of relationship capital that reaches across countries.

Great efforts begin with small ones. Small groups, constituting the “cells” of all larger organizations, fundamentally comprise human societies at all scales in all sectors.<sup>17</sup> Trust originates in teams as well as in other small groups—families, friendships, and myriad formal and informal associations based on shared interests and common concerns.

Even with its vast global purview, the UNDP recognizes that the formation of social capital starts small. “It gives the edge to small scale [as] it is in such contexts that social capital is most effectively formed.”<sup>8</sup>

*To grow trust, small is beautiful.*

For goal-oriented, task-based business organizations, *teams* are the “cells.” At work, we interact with others for largely task-oriented purposes. We cannot avoid teaming. We can only team well or badly, consciously or unconsciously.

Thus, we will accrue or deplete our corporate social capital with every small group in the organization, whether we consciously acknowledge the value of relationships or not.

## Capital over the Ages

Virtual teams include features from all the eras of human organization. Success demands both ancient skills of small group interaction and co-operation *and* emerging skills of communications and knowledge development. Virtual work brings human beings on a great return to their earliest roots—as small groups that cross “family” lines.

The 21st-century return to our many-millions-year-old-roots carries a quiver of new collaborative tools of awesome power. Social capital is an old form of wealth, albeit largely unacknowledged. Suddenly, however, we have new ways to create and magnify it outside the confines of physical spacetime limits. With the ability to reach across great distances without having to travel them physically, we are able to build communities of high trust that circle the globe.

Unlike human and physical capital, individuals cannot possess social capital. It lies in the web of relationships among us and mingles with other means of generating wealth.

### ***The Evolution of Capital***

Capital—physical, human, or social—facilitates productive activity. Forms of capital have accumulated over the great eras of human civilization:

- ? *Human capital* is a concept developed in the 1960s as a way to describe the value of the people part of the work equation, the skills and knowledge of individuals. The oldest form of capital, reaching back to the earliest societies, it is rooted in people’s ability to survive in the world around them. As environmental challenges change, so do the attributes of survival and success that make up human capital. Thus, new knowledge-based skills that people need in the Information Age replace many of those required in the Industrial, Agricultural, and Nomadic eras.
  - ? *Social capital* is the complement of human capital, reflecting the community skills that have co-evolved with individual skills. People working together generate webs of social capital.
- Hunters

and gatherers compensated for resource scarcity by pooling their communal smarts. Today, people can form social capital abundantly and omnipresently, no longer constrained by space and time.

- ? *Land capital* harks back to the economic basis of the Agricultural Era. With farming and herding, people used land in an entirely new way to provide a relatively predictable food supply. In domesticating aspects of nature, human beings took a dramatic leap in scale and civilization. In humanity's earliest period, people prized but did not individually own the land and its bounties. In the next era, the hierarch, whether high priest or warrior, possessed the land. Herein lie the origins of ownership.
- ? *Machine capital* became the great engine of economic growth in the Industrial Era. Technology rolled on with the laws of motion, remaking the world from hand tools to locomotives. People generated new fortunes with productive machinery, but fields remained fertile. Land did not cease to have value as machines became dominant. Even at the end of the 20th century, people still perceive technology as the most potent force in economic growth.
- ? *Knowledge capital*, as an organizational source of productive capacity, resides in all the shared repositories of information and learning. Digital cyberspace offers a vast new domain for this old source of wealth that is newly powerful and available in historically novel ways. At the millennium's turn, information products and services spur growth and hope for an expanding economic future for all.

The recognition of knowledge capital and its value are at the competitive cutting edge of the global marketplace.

*Shared knowledge will be the dominant productive source of 21st-century economics with consequences we cannot now even imagine.*

## ***Accumulating Capital Virtually***

Virtual teams possess human capital *in* their members, and social capital *between* their members. They utilize physical capital that is *outside* people through their meeting facilities and communication infrastructures.

Cross-boundary groups also generate knowledge capital that exists in all three forms: *inside* people in memory and internal cognitive models; *outside* people in commonly accessible information such as databases; and *between* people as they connect parts and pools of knowledge together and develop enduring understandings.

All virtual teams, whatever their specific tasks, can increase human, social, and knowledge capital in particular. By working with more people in more places, human capital increases as individuals meet new challenges and acquire new competencies. Social capital accumulates as virtual team members vastly expand the number and diversity of their relationships. Because of their physical separation, virtual teams have an obligation to make knowledge capital explicit and accessible.

By stretching the bounds of human capability, virtual teams offer value far beyond their immediate functions: They stretch the reach of the social capital they generate outside their immediate physical locales. Although many of their elements have ancient roots, today's virtual teams look out over vistas of virtual places never before seen by human eyes.

The new frontier is not far away; it is everywhere.

## **At the Frontier**

*Cyber frontier:* We and other writers have perhaps too often used the frontier analogy with respect to cyberspace. Thus, it is worth listening to someone who has been to “the end of the earth” for a reminder of just how really appropriate it is.

John Lawrence, who organized a World Wide Web site for the 1995 United Nations Fourth World Conference on Women in Beijing (see Chapter 7), is a fascinating character among those involved in the creation of electronic places. At one time a geological explorer for the New Zealand Antarctic Research Programme (Lawrence Peaks, which is part

of the Transantarctic Range in Victoria Land, Antarctica, is named for him), he says today: “One simply trades one form of frontier for another. I know the feeling of stepping out onto land that no human in recorded history has stepped on. It was a feeling very similar to what cyber people are feeling now as they go out into this peculiar virtual world.”

Lawrence continues, “There’s an adrenaline rush as one goes over new surfaces, seeing completely new vistas that have never before been seen by the human eye. It’s incredibly exciting and each person has his and her own way of coding all that. But this is different and more intriguing because explorers have gone out into new territory in physical space for hundreds of years. That particular adrenaline rush has been described for generations. But this new one has barely been described for a generation and that’s a rush in itself.”

Of course, cyber explorers can be anywhere.

### ***Protecting Prairies with a Screwdriver***

Sitting in Fergus Falls, Minnesota, population 12,000, Peter Buessler is a pioneer in the use of virtual teams. He is a key node in the Great Plains Partnership (GPP), the initiative of 13 western states, three Canadian provinces, two Mexican states, numerous federal and local agencies, American Indian tribes, environmental and agricultural organizations, businesses, and landowners concerned with the viability of the Great Plains.<sup>9</sup> He is also “Webmaster”<sup>20</sup> of the GPP World Wide Web site.

“How am I protecting prairies while I’m going around with a screwdriver in my pocket?” asks Buessler, Minnesota’s State Prairie Biologist, and friend to many Minnesotans who are trying to get online. “We’re in a rural part of the country here and e-mail is not much available. I’m often involved in helping people I need to work with find out what kind of access is available to them. I talk to the telephone companies for them, and then take my screwdriver with me to their offices or homes to attach their modems.”

Ten years ago, Buessler could not even type. Since then he has turned himself into “a little techie,” he says, in order to be able to reach the people he needs to work with. “It’s a lot easier for me to do it than

for them to wait three months if they made the same request from their data centers. It builds a relationship that is not as structured. We can ask each other for things that we might not think to ask each other. It's a barn-building type of arrangement which gets at the core of my work." We conducted our interview with Buessler, along with two of his colleagues, Brian Stenquist, a senior planner in Minnesota's Division of Fish and Wildlife, and Susen Fagrelus, who consults to the state's Department of Natural Resources, via conference call, naturally, as the three of them were 300 miles apart and we were in Boston. At one point Buessler said, "I am sitting here mentally doodling spider webs which are held together and anchored at key strategic points all the way around. But the material that it takes to hold them together is pretty minor. It's both very delicate and incredibly strong at the same time. A spider can walk across it but other insects that try to walk across get entangled."

Buessler clearly draws the analogy to the network that each virtual team spins—at once fragile but strong, unique yet constantly changing, dependent on its environment that it reconfigures to its best advantage.

"You can tell the species of a spider by the pattern of its web. Each is different and no spider will ever make the same web twice. It's always dependent on the environment. Is it using a twig or a doorway? In the morning, it is beautiful and glistening, but it is in constant need of repair and demands a lot of upkeep. Its design is always contextual, always aware of its environment and drawing its elements together." The same is true for virtual teams.

### ***Changing the World***

Visions of the future are replete with new technologies, mostly extensions of the current state-of-the-art, and their impact on business and everyday life. The most profound change in the next few decades, however, may well be organizational as a trend thousands of years old suddenly reverses.

Society established the "bigger is better" trend in organizations long ago. At the dawn of the Agricultural Era, the average size of camps suddenly grew from a nomadic 20 to a farming community of 200. "Bigger"

has had a largely uninterrupted run for 12,000 years until the end of the 20th century. In a comparative nanosecond of evolutionary time, centralization has reached global limits. Expanding information access has rendered hierarchical control both difficult and unnecessary.

The 21st-century trend will be that “smarter is better.” Smarter teams and small groups of all types are the cells of more intelligent organizations of every size and sector, from family to humanity as a whole.

Imagine kicking our ability to team up a level. Improving our collective capabilities of teaming improves everyone’s ability to solve their own problems. With more effective working groups we also can take up challenges with others that are currently impossible to achieve. This is true whether the scale is a few entrepreneurs who form a flexible business network or a group of countries who organize to meet the challenge of global warming.

Communication technologies and computer networks—in particular the Internet—are underwriting this moment of pregnant potential. Astonishingly enough, the possibility of a leap in social capability will bring individuals and small group relationships back to center stage.

Americans enshrine their personal freedom and independence in their Bill of Rights, the first right being that of free speech. In its 1996 opinion extending First Amendment rights to cyberspace, a three-judge U.S. federal panel wrote:

*The Internet may be fairly regarded as a never-ending worldwide conversation. The government may not, through the [Communications Decency Act], interrupt that conversation. As the most participatory form of mass speech yet developed, the Internet deserves the highest protection from governmental intrusion.<sup>2</sup>*

As more people become interconnected through computers, our human capacity for both independence and interdependence increases. We are creating new environments where both competition and cooperation

thrive. The global Internet is a way to foster innumerable combinations of groups of every size, while also sponsoring mass individuality and participation. Cyberspace is a vast new marketplace, containing both places of commerce and an already rich social life reflected in countless conversations.

We are only just beginning to learn about virtual teams and the world(s) they populate. The people who spoke to us for this book—CEOs, team leaders, and public servants alike—are harbingers of the world of work of the future—crossing space, time, and organizations.

In time, virtual teams will become the “natural way,” nothing special. Virtual teams and networks—effective, value-based, swiftly reconfiguring, high performance, cost sensitive, and decentralized—will profoundly reshape our shared world. As members of many virtual groups, we will all contribute to these ephemeral webs of relationships that weave together our future.