

INTRODUCTION

You're in a start-up or a dorm, an old brick-and-mortar or a high-flying tech company, your own attic or a garage; working your e-business with people here, there, and everywhere, on the phone, in e-mail, trading URLs like Pokémon cards.

We know that the people you work with often are more than 50 feet away, which means distance causes you problems. You work with people in other organizations all the time. These boundaries pose problems, too: Who decides what and when?

With these problems come new possibilities—and a chance to change the world.

Change

Imagine radically improving your ability to team. Improve our collective capabilities and we improve everyone's ability to solve their own problems. With better virtual teams, we can accept challenges with others that are impossible alone. This is true for all of us, regardless of where we sit in our own little worlds. Executive teams guiding multinationals, IPO-bound kids, or product development teams working for customers. It's true whether you are only a few entrepreneurs in a virtual network or a participant in a multicountry NGO working on sustainability.

This book is about people like you who work across boundaries of all kinds everywhere. You do so with the help of and in response to technol-

ogy. In the years since we began our research, writing, and practice of networked organizations, the technologies to connect them have become ubiquitous. Evidence is plain in the new address that exists nowhere in physical space:

www.virtualteams.com

Technology extends our capabilities, but organizing to do things together is only human. The most profound change of the new millennium is in the way we're organized. Trends thousands of years old suddenly shift as a literal new universe with its own civilization materializes in thin air right in front of us.

Society established the bigger-is-better trend in organizational design long ago. At the dawn of the agricultural era, the average size of human groups suddenly grew from a multimillion-year-old pattern of 20-person camps to farming towns of hundreds and cities of thousands. "Bigger" has had a largely uninterrupted run for 12,000 years—until right now. In a comparative nanosecond of evolutionary time, centralization and hierarchy have slammed into global limits. We've decentralized our work, distributing into perpetually re-forming groups.

Communication technologies and computer networks underwrite this pregnant moment. The Internet and the web, astonishingly enough, are bringing individuals, small groups, and chosen communities back to center stage.

As more people interconnect online, we increase our capacity for both independence and interdependence. Competition and cooperation both thrive in our new culture. The global Internet fosters numberless combinations of groups of every size, sponsoring mass individuality and massive participation. Cyberspace is a vast new civilization, containing both places of commerce and an already deep social life mirrored in countless conversations.

In time, virtual teams will become the natural way to work, nothing special. Virtual teams and networks—effective, value-based, swiftly reconfiguring, high-performing, 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 together weave our future.

The twenty-first-century trend is “smarter together.” Smarter teams are the cells of larger intelligently networked organizations. Ignite intelligence and we change the world.

The dictionary reminds us what this word actually means. *Change*, likely Celtic in origin, derives from the Latin *cambiare*, meaning “to exchange, barter.”¹ “Give and take reciprocally,” the word *change* implies.

From the Source

Since the days of the acoustic-coupler, 300-baud modem, we’ve been talking to and working with the people who’ve literally developed the Internet and to those who are developing the capacity to use it organizationally. The subject of our conversations? Organizations of the future, “networked communities,”² virtual teams.

As writers, researchers, consultants, speakers, and software designers, we have known and been part of many different organizations. From engagements that lasted only a few hours, to projects of a few days, to multiyear programs, we have acted as “drop-in” outside experts, involved facilitators, core members, and leaders of customer teams. We have worn corporate badges, received passwords to internal computer systems, and occupied offices within our clients’ buildings. We have even worn the badges of our customers’ customers.

We’ve been at this a long time, so long that our babies are now the age of the dot-commers.

Indeed, we’ve been writing this book for 21 years.

In 1979, we began to contact people and gather information for our first book. *Networking* (Doubleday, 1982) was condensed, rewritten, and published in England as *The Networking Book* in 1986.³ Grassroots, nonprofit, and intergovernment organizations are the database for that

work. Since then, we've received vast amounts of material from all around the world, heard from people in most of the world's countries, and visited with networkers from every continent, including Antarctica.

We've had to keep our "kook-a-lator" handy, as Lisa Kimball, founder of Caucus Systems (and the person whom Howard Rheingold, author of *The Virtual Community*, calls "The greatest networker I know"), names it. When you're looking at the future, errant life forms appear. People have told us about their plans to solve the global bandwidth problem by bouncing signals off the millions of meteors orbiting the earth; we have for a dozen years received occasional snail mail from someone in California who signs notes only with a J; and then there is the "mail art" network from Japan.

The shift is everywhere. Soon after the release of our 1982 study of 1,600 grassroots networks, we found that the leading edge of change to networked organizations was ironically shifting to big business as the impact of technology on teaming accelerated. Our consulting practice has grown there ever since.⁴ In 1992, we began a trilogy of new books drawing primarily on our research and experiences in business: *The TeamNet Factor* in 1993, *The Age of the Network* in 1994, and *Virtual Teams* in 1997.

With *Virtual Teams*, we come close to the heart of our personal experience. We have always worked in small groups across distances and organizational boundaries. We ourselves are a core group: a married twosome who are also parents, friends, coauthors, and business partners.

Our experience as a team of two began long ago at the dawn of our relationship in 1968. We met as students at Oxford University—Jessica, an undergraduate from Antioch College (and Pottstown, Pennsylvania), and Jeff, a Fulbright Scholar (from Gilford, New Hampshire).

In 1972 we married and moved with our first "personal computer"⁵ into the house we're still living in. We began working life as independent entrepreneurs with a consulting business based on software, in the process writing a book to help states and municipalities assess the viability of cable television systems in their communities.⁶

Working in networks and virtual teams has always been a way of life for us. We've partnered with thousands of people on a wide range of projects for clients in every sector—from Shell Oil to the Presbyterian Church

(U.S.A.) to the United Nations. Working on the Internet has been a way of life since 1980 when we joined Murray Turoff, Starr Roxanne Hiltz, and others online as part of Electronic Information Exchange System (EIES), an early ARPANET experiment in virtual communities.

Networks have also been a way of thought for us. Since our first book, we've worked to link our evolving conceptual framework to general systems theory. Systems theory is about principles and patterns of organization that apply across disciplines—notoriously difficult boundaries to cross. Jeff's 1980 book (and doctoral dissertation), *Holonomy: A Human Systems Theory*,⁷ came out the day we received our very first networking-book contract.

Systems principles have helped us recognize common patterns in the awesome variety of the newly emerging forms of human organizations. They underlie a powerful conceptual model of networks: people, purpose, links, and time. We've been testing variations on this model ever since we got started.

Good theory is very practical. It enables quick adaptation of shared learning to always-unique circumstances. Theory also provides a consistent, shareable, knowledge-based approach to develop and manage virtual teams. This is a way to test ideas and improve practical applications for collaborative work.

*With the net and the web, practice explodes and now
drives theory toward a new science of human interaction.*

Failure

Everything that goes wrong with in-the-same-place teams also plagues virtual teams—only worse.

Egos, power plays, backstabbing, hurt feelings, low confidence, poor self-esteem, leaderlessness, and lack of trust all harass virtual teams. When communication breaks down, people must take measures to repair it. It is just that much more difficult to communicate across distance and organizations using tenuous electronic links.

Virtual teams are not a panacea for teams that do not work. We are not cheerleading for this gee-whiz-it's-a-new-and-better-way-to-do-things approach. Rather, our goal is to understand networks and help people succeed in virtual teams. Virtual teams are already prevalent and will be only more so in the years ahead.

Teams that do not recognize they are virtual are likely to fail.

Many of the problems that virtual teams face are ancient in nature. Millennia of face-to-face exchanges inform most of our collective experience, tools, techniques, and lore. Methods that work to correct problems that arise in face-to-face teams are only the starting points for virtual teams.

We address the problems of *virtual* teams as directly as possible and recount what people we know are doing to solve them. We encourage you to draw on what you already know about working in groups. What do you do if a virtual team member is not participating? The same thing you do if a face-to-face team member is not participating. Communicate with that person by any and every means possible, find out what is preventing participation, and solve the problem. A body of detailed knowledge and techniques is accumulating rapidly in virtual organizational development (virtual OD).

We do not go into detail about *why* companies and other kinds of organizations form virtual teams. So far as we can tell, people create distributed groups for myriad reasons—such as when things go wrong, when the people required to do a project are spread out, and when networking is just the most effective, flexible, or only way to get things done in a particular instance.

Our purpose here is to present excellent examples of virtual teams and our thinking about how these new types of groups *can* excel. Thus, this is a book that shares best practices, not one that critically examines corporate behavior. In time, as the body of information grows, critical analysis will be essential to secure the foundations of network knowledge.

Reader Options

This book has five sections:

- Here and in Chapter 1 we discuss introductory material and the need for virtual teams.
- Chapters 2 to 5 put networks and virtual teams into larger contexts of organizational evolution, discussing trust, and the importance of place.
- Chapters 6 to 9 expand on each of the four parts of the model—time, purpose, people, and links.
- Chapters 10 to 12 offer practice and theory.
- Chapters 13 and 14 stretch our thinking ahead.

But people do not necessarily read books sequentially by chapter.

People have different ways of learning. Some prefer stories based on experience, some theory, others need practical ideas, and most of us need some vision. Readers of our previous books will recognize how we develop material for these four cognitive styles⁸:

- Vision (insight)
- Stories (experience)
- Principles (theory)
- How-to (practice)

While we have written a traditional book crafted with loving care to flow from beginning to end, we also offer choices. Some of you will begin at the end, some in the middle, still others will skim.

Key ideas in the book are in pullout quotes that look like this.

- See Chapter 1, “Why?,” for an introduction to virtual teams, a definition, some examples, a sense of the big picture, and a taste of the principles.

- For those who wish to begin with the “Future,” go straight to Chapter 14 at the end. Skim your way there for a quick overview of the book. Read the headings, look at the illustrations, and note the pullout quotes.
- If you prefer stories, turn to the opening sections of the chapters. There you will find case studies of Sun, Shell Oil, Buckman Labs, Motorola, Eastman Chemical, and Pfizer, among others, with impressive and sometimes astonishing virtual teams, some historical stories, and one scenario of team life on the web.
- Do you prefer concepts and models? Read the ends of the chapters. There you will find an integrated framework to understand and manage this new form of organization. We include important contributions from other writers and researchers. For deep divers, go to Chapters 11, “Navigate,” 12, “Theory,” and 13, “Think.”
- Want to apply ideas immediately and practically? Get going in Chapter 10, “Launch,” with a seven-step process for starting and launching virtual teams.

More? Click Here

We are still amazed it happened so fast. Need more information than we can possibly include between the covers of this book? Care to practice some of the things we write about? Check out our web site at www.virtualteams.com. That short script is all you need. And if you're reading this while connected to the net, that link and all the others are hot, so just click and go.

This book fits together with our own virtual team space on the web. On our site you will find information about the following:

- How to launch and sustain virtual teams
- How to design networked organizations
- Where to find the community of virtual team practitioners
- Our network of partner organizations, who, with us, provide the “people operating system™” for twenty-first-century work

As in our previous books, we provide extensive endnotes so that you can go directly to our sources and learn more for yourself. The abundance of material available through the web makes it easy for us to track down many facts and locate specific sources. We include the web addresses in the book references, old style. Online, new style, these references are only a click away.

Online web books will rapidly become a common complement to printed ones. To join this vanguard, just point your browser to our site—and connect.

*www.virtualteams.com reflects our vision of a world
that works collaboratively.*
