Mastering Virtual Teams

Strategies, Tools, and Techniques that Succeed, Revised Edition

Deborah L. Duarte and Nancy Tennant Snyder

Chapter One: Critical Success Factors

In today’s business environment, organizations adapt quickly or die. Gaining competitive advantage in a global environment means continually reshaping the organization to maximize strengths, address threats, and increase speed.1 The use of teams has become a common way of doing this.2 The formation of teams can draw talent quickly from different functions, locations, and organizations. The goal is to leverage intellectual capital and apply it as quickly as possible. The methods that organizations use to manage this process can mean the difference between success and failure.

Consider the example of a team in a global firm that produces durable goods. This product-development team, with members from around the world, had just completed the development of a new product. When the team unveiled the product to the senior staff of the organization, it included a description of the way the team worked. The presentation showed an icon of an airplane, with the entire team of twenty-two people traveling from country to country. The team members had continually moved from site to site for activities such as status reviews, design meetings, and prototyping sessions. The cost of the travel was tremendous, not only for hotels and airline tickets but also in terms of the human costs of being away from home and the lost work time and productivity.

Contrast this with the experiences of teams in organizations such as Hewlett Packard, the National Aeronautics and Space Administration (NASA), John Brown Engineers & Construction, DEC, and Rank Hovis.3 These organizations also form world-class teams to quickly address customer problems, develop products, and deliver services, but these teams often operate virtually, without the physical limitations of distance, time, and organizational boundaries. They use electronic collaboration technologies and other techniques to lower travel and facility costs, reduce project schedules, and improve decision-making time and communication.4,5 For many teams, traveling and having continual face-to-face meetings is not the most efficient or effective way of working.

Organizations that do not use virtual teams effectively may be fighting an uphill battle in a global, competitive, and rapidly changing environment. Organizations that will succeed in the next millennium have found new ways of working across boundaries through systems, processes, technology, and people.

Understanding how to work in or lead a virtual team is becoming a fundamental competence for people in many organizations. Virtual teams often are formed as a reaction to a business requirement or as a result of programs, such as telecommuting, that introduce new ways of working.6

It is not uncommon to talk with people who lead or work in virtual teams who do not have a great deal of experience working on teams in a co-located environment. Most of the large consulting firms (Anderson Consulting is one primary example) do a large majority of their work virtually. Consultants who join these firms may never have the
opportunity to work in or lead a traditional team in a co-located environment. They are immediately placed in situations that are more virtual than traditional. IBM has an entire unit in which employees telecommute, so new hires may never have a chance to work in a traditional office setting.7

People who lead and work in virtual teams need to have special skills, including an understanding of human dynamics, knowledge of how to manage across functional areas and national cultures, and the ability to use communication technologies as their primary means of communicating and collaborating.

Types of Virtual Teams

There are many different configurations of virtual teams.8 One of the central themes of this book is that the task affects how a virtual team is managed. Although virtual teams can undertake almost any kind of assignment, team leaders and members need to have a solid understanding of the type of virtual team they work in and the special challenges each type presents. What these teams have in common with all teams is that team members must communicate and collaborate to get work done and/or to produce a product. Virtual teams, unlike traditional ones, however, must accomplish this by working across distance, time, and/or organizational boundaries and by using technology to facilitate communication and collaboration. There are seven basic types of virtual teams:9

• Networked teams
• Parallel teams
• Project or product-development teams
• Work or production teams
• Service teams
• Management teams
• Action teams

Networked Teams

A networked virtual team consists of individuals who collaborate to achieve a common goal or purpose. Such teams frequently cross time, distance, and organizational boundaries. There typically is a lack of clear definition between a network team and the organization, in that membership frequently is diffuse and fluid, with team members rotating on and off the team as their expertise is needed. Team members may not even be aware of all the individuals, work teams, or organizations in the network.

Examples of this type of virtual team often are found in consulting firms and in high-technology organizations. For example, one group at Pricewaterhouse-Coopers received a request from a client to quickly research and identify a set of best practices for managing the implementation of a large supply chain reengineering project. Although the consultants did not have all the answers themselves, they were able to tap into their network of external partners and internal and external databases and provide a set of best
practices for the client by the end of the week.

Organizations that develop technological products also can use networked virtual teams. The National Aeronautics and Space Administration (NASA) uses a networked team for the Space Station Freedom Program. Team members come from over a dozen different nations and all NASA centers and include a large number of external suppliers, scientists, and corporate partners. Team members from different organizations come in and out of the network as their expertise is needed to make recommendations on the design and utilization of the Space Station.

Parallel Teams

Parallel virtual teams carry out special assignments, tasks, or functions that the regular organization does not want or is not equipped to perform. Such teams frequently cross time, distance, and organizational boundaries. A parallel team is different from a networked team because it has a distinct membership that identifies it from the rest of the organization. It is clear who is on the team and who is not. The members of a parallel team typically work together on a short-term basis to make recommendations for improvements in organizational processes or to address specific business issues. Virtual parallel teams are becoming a fairly common way for multinational and global organizations to make recommendations about worldwide processes and systems that take into account a global perspective.

Whirlpool Corporation used a virtual parallel team to make specific recommendations for a global customer-loyalty system. Team members came from around the world and were supplemented by participants from an external consulting organization. After its recommendations were made to the CEO, the team dissolved. Much of the work of this team involved data collection and analysis by individual team members. The collaborative work was often accomplished in audio conferences at 7:00 a.m. Eastern standard time (to accommodate people from all time zones) and by using e-mail to communicate and pass on information. Like many people who work in parallel teams, the team members had other projects and accountabilities. As a result, they often participated in meetings while they were in automobiles or airplanes on their way to other assignments.

Parallel teams also are used domestically when expertise does not reside in one location or in one organization. The Federal Aviation Administration is using a virtual parallel team to recommend a set of common flight-certification standards. Team members are drawn from flight-certification and standards offices across the United States. Expert external consultants and team members from other governmental agencies supplement the team.

Project or Product-Development Teams

Virtual project and product-development teams also can cross time, distance, and organizational boundaries. Team members conduct projects for users or customers for a defined, but–typically–extended, period of time. Their tasks usually are nonroutine, and the results are specific and measurable. A typical result is a new product, information system, or organizational process. The difference between a project team and a parallel team is that a project team usually exists for a longer period of time and has a charter to make decisions, not just recommendations. A project team is similar to a networked team in that team members may move on and off the project as their expertise is needed. It is different from a networked team in that membership is more clearly delineated from the
rest of the organization, and a final product is clearly defined.

NORTEL used a virtual product team to develop a common platform for a world telephone. The outside of the phone looks the same in every country, but its displays are capable of being modified by the consumer to meet almost any language requirement. The project team that created the new Boeing 777 jet was virtual, with participation by external design firms, suppliers, and vendors. The engineering design was facilitated by common access to design documents by partners and suppliers.

Work or Production Teams

Virtual work teams and production teams perform regular and ongoing work. Such teams usually exist in one function, such as accounting, finance, training, or research and development. They have clearly defined membership and can be distinguished from other parts of the organization. Many work or production teams are now beginning to operate virtually and to cross time and distance boundaries. Work teams in the Information Systems Division of NORTEL operate virtually; team members do not see one another on a daily basis. Many even telecommute. They have access to workflow processes over the firm’s intranet, which allows them to work as a group on systems-development activities. The Survey Department at the Federal Highway Administration, Federal Lands Highway, also works virtually to survey new roads. Team members work individually to survey in remote locations and share data through electronic communication and collaboration technology with map makers and design crews in other remote locations. Team members meet face to face once per year for a conference. The members of the Organizational Development Division at MCI also work virtually. Consultants are located around the United States, and team members may rarely see one another face to face. At Peoplesoft, most employees in all functions telecommute.11

Service Teams

Service teams are now beginning to be distributed across distance and time. Network support at Anderson Consulting is a continuous operation, with technicians located around the world taking turns dealing with network problems and upgrades.12 The technicians “follow the sun” and are situated so that one team always is operational. Each team works during its members’ daylight hours and transitions work and problems to the next designated time zone at the end of the day.

Management Teams

Management teams can be separated by distance and time. Today, many management teams are dispersed across a country or around the world but work collaboratively on a daily basis. Although these teams often cross national boundaries, they almost never cross organizational boundaries. Companies such as Eli Lilly and Whirlpool have executive team members who hold a number of different passports and live in many parts of the world. Like many other top-management teams in other global or multinational organizations, they collaborate on a regular basis by means of audio conferences or video conferences about the achievement of corporate goals and objectives. The United States Army’s chief of staff operates his staff (of 350 general officers located around the world) as a virtual team. Staff members communicate regularly via e-mail and use a chat room on an Internet Web-based network to discuss important issues as they arise.13

Action Teams
Action teams also can work virtually. Such teams offer immediate responses, often to emergency situations. They cross distance and organizational boundaries. A weather team at a television station in Huntsville, Alabama, is a good example of a virtual action team. During a weather emergency, action team members are distributed in the field. The weather person at the television station uses NEXRAD radar information to tell him where tornadoes may be forming and directs field-crew movement toward those locations. He analyzes the data that the crews send back and, using National Weather Service information, communicates the results and possible implications immediately to his viewers.

The way in which NASA works during a mission is an excellent example of a virtual action team. During a flight, mission operations, usually located in Houston, collaborates with the astronauts; with tracking stations around the globe; and with experts, such as engineers and scientists, in different locations, in order to ensure that the mission proceeds nominally.

How Being Virtual Adds Complexity

It is easy to characterize the types of virtual teams using the same categories as traditional teams. They can, however, be much more complex. The two primary categories of variables that make virtual teams more complex are (1) they cross boundaries related to time, distance (geography), and organization and (2) they communicate (share information) and collaborate (work together to produce a product) using technology. (We use the term technology to denote electronic communication and collaboration technology.)

As the distance between team members increases, so do differences in time zones. This makes communicating and collaborating at the same time problematic. Working across national boundaries complicates the situation because differences in language, culture, and access to technology impede effective communication and collaboration.

As members from different organizations join a virtual team, integration of work methods, organizational cultures, technologies, and goals make communication and collaboration more difficult. Partners and suppliers often have conflicting goals and organizational cultures. This even holds true when team members come from different functional areas within the same organization. For example, people from functional areas such as marketing and human resources frequently operate with a different set of processes than those from more technical areas, such as engineering and information systems.

Finally, complexity is increased by the number of different choices for team interaction. Traditional teams typically interact face to face, at least some of the time. Virtual team interactions, however, are almost always mediated by electronic communication and collaboration technology. Interactions fall into four categories: (1) same time, same place (like face-to-face meetings); (2) same time, different place (such as an audio conference or video conference); (3) different time, same place (such as using a chat room or a shared file on a network); and (4) different time, different place (such as exchange of e-mail or voice mail messages). The selection of technology and choice of interaction vary according to factors such as the type of team, the nature of its task, and the members’ access to technology.

Checklist 1.1 provides a way to categorize your virtual team and to determine the number of factors that affect complexity. Understanding the type of team you work on and its
complexity will assist you in getting the most out of the remaining chapters of this book.

Critical Success Factors for Virtual Teams

The business justification for virtual teams is strong. They increase speed and agility and leverage expertise and vertical integration between organizations to make resources readily available. Virtual teams also lessen the disruption of people’s lives because the people do not have to travel to meet. Team members can broaden their careers and perspectives by working across organizations and cultures and on a variety of projects and tasks.

Although the effective use of electronic communication and collaboration technologies is fundamental to the success of a virtual team, virtual teams entail much more than technology and computers. When virtual teams and their leaders are asked about successes and failures, they rarely mention technology as a primary reason for either. Bill Davidow, a former executive with Intel and Hewlett Packard, comments: "Information and communication technology provides an infrastructure for the corporation to communicate with customers and deliver information necessary for decision making. . . . If management insists on maintaining a purely functional organization or does not empower workers, information systems will add little value.”

There are seven critical success factors for virtual teams, of which technology is only one. Others are human resource policies, training and development for team leaders and team members, standard organizational and team processes, organizational culture, leadership, and leader and member competencies. These are discussed in more detail later in this chapter.

Of course, all the critical success factors do not have to be in place for virtual teams to succeed. The implementation of virtual teams within an organization can actually push toward the attainment of critical success factors. Successful virtual teams seem to demand certain conditions, and the existence of the teams will, over time, help to create the infrastructure conditions that make them work.

NORTEL’s Information Systems Group implemented virtual teams before it had attained many of the critical success factors. The teams immediately recognized that they needed certain things to succeed, such as high levels of autonomy to do their jobs, standard team-initiation processes, structured communication plans, and appropriate electronic communication and collaboration technologies for all team members. They also recognized that they needed to reeducate their customers about what to expect from a virtual team work environment.

The leaders of the virtual teams independently created team processes and standards, communication plans, and empowerment guidelines for team members. They put together customer-education packages. The training organization created a virtual team Web site and collected and placed the processes and lessons learned on the intranet for new virtual team leaders and members. Over time, NORTLE took a more deliberate approach to moving toward an infrastructure that would support virtual teams. Many of the processes it formally institutionalized got their start through the "bootstrap" approach of its first virtual teams.

This book is not specifically about preparing the organization for virtual teams. Its focus is on tools and techniques for team leaders and team members. However, team leaders and members influence the implementation of critical success factors that are associated
The next part of this book outlines a set of critical success factors for organizations. Complete the diagnostic tool that follows prior to reading about the factors. Your results on the diagnostic tool can direct your attention to the categories of success factors that affect your situation. Although you may not be able to influence all of them, the results can serve to direct your actions when it is possible or help you to develop a case to present to management for virtual team resources.

Seven Critical Success Factors

Seven factors affect the probability of a virtual team’s success:

- Human resource policies
- Training and on-the-job education and development
- Standard organizational and team processes
- Use of electronic collaboration and communication technology
- Organizational culture
- Leadership support of virtual teams
- Team-leader and team-member competencies

The following discussion describes the seven factors and tells how team leaders can help to create the conditions that lead to success.

Human Resource Policies. Human resource policies should support working virtually. Systems must be integrated and aligned to recognize, support, and reward the people who work in and lead virtual teams.

Career-Development Systems. Team leaders can help to support virtual team members by providing career opportunities and assignments that are comparable to those in traditional team settings. Applying promotion and career-development policies and actions fairly to people who work in virtual settings helps to reinforce the perception that working virtually is an accepted career option. Virtual team members often mention that they fear that they will be looked over for promotional opportunities because they are not seen every day. This fear is not unfounded. Managers who lose visual and verbal proximity to their employees often put up the strongest resistance to alternative work and team arrangements. Virtual team leaders must ensure that the members of virtual teams have the same career-development opportunities as the members of traditional teams.

Rewarding Cross-Boundary Work and Results. Organizational reward and recognition systems often favor individual and functional work. Virtual team members, however, frequently operate in a cross-functional and/or cross-organizational environment. Changes must be made in the ways in which people are recognized and rewarded. Leaders must develop performance objectives for team members that include working
across boundaries and sharing information to support virtual teamwork.

In addition, performance measures must be adapted to reward results. In a traditional office environment, where people are seen putting in effort every day, it is relatively easy to at least partially reward people for effort as well as for results. In a virtual environment, effort is more difficult to discern. When IBM went to a virtual environment, a shift to a reward structure that was based more on results than effort was a major part of the transition.20

The use of formal and informal public recognition of virtual teamwork through "on the spot" awards, bonuses, and other mechanisms can reinforce the perception that working virtually is valued. You can use Web-based technology, such as setting up a site for virtual team "best practices" and advertising team successes and performance, as a way to publicly recognize people in a virtual setting. You also can use examples of your virtual team’s success in speeches, presentations, and discussions with other team leaders and with management.

Providing Resources and Support for Working Virtually. Create and support policies that provide your team with technical support for working remotely. All team members should have equal and immediate access to electronic communication and collaboration technology, training, and technical support. Many virtual team leaders set a standard for technology and make certain that everyone has access to the same hardware, intranet and Internet connections, and applications. They ask the information systems group to assist in the implementation. NORTEL helps virtual team members who are telecommuters to set up "home bases" to ensure that they have access to the best and latest technology.

Training and On-the-Job Education and Development. Formal training in using technology is vital for success. For example, team leaders at the World Bank believed that underfunded technological training for team leaders and team members was one reason that their efforts to implement groupware did not fully succeed. Money was spent on the technology–machines, applications, and compatibility–but not on teaching people how to effectively utilize it.21

In addition to a formal training curriculum, make certain that the team members have access to continual on-line training and technical support. Ask your training department about the feasibility of creating and implementing these types of systems. For example, Federal Express provides many of its technical and leadership classes through its intranet, so people can select when and where they want to learn. NASA provides a Web site for its project managers so that they can receive help in learning how to select, access, and use the appropriate electronic communication and collaboration tools. In both cases, the training, tools, and support are upgraded on a regular basis to ensure that they are state of the art.

Learning how to use technology is not enough to guarantee success. Team leaders should make certain that they get the training and support they need to be adept at facilitating meetings using technical and nontechnical methods. Training in facilitation skills should be an integral part of a development curriculum for team leaders and team members.

Provide training and support for your team in working collaboratively across organizational, cultural, and functional boundaries. Many organizations provide direct consulting support and training to virtual teams in this area. Johnson & Johnson’s Learning Services offers support to virtual team leaders in enhancing collaboration skills in cross-cultural and functional interactions, using what it calls the Team Performance
Create and implement systems for sharing knowledge across functions, projects, and organizations. Shared lessons, databases, knowledge repositories, and chat rooms are used in organizations that embrace virtual teamwork. NASA’s Web site for project managers contains a place where “lessons learned” are stored. It also has a bulletin board where project managers can ask questions and receive suggestions from other project managers. In many cases, these knowledge-sharing projects were created by virtual teams themselves.

Standard Organizational and Team Processes. Consider developing and implementing standard team processes. The use of standard processes reduces the time needed for team startup and may eliminate the need for unnecessary reinvention of operating practices each time a team is chartered. Practices need to be flexible, however, to promote adaptation to a particular virtual team’s situation. Common standard technical processes, especially for parallel, project, or network teams include:

- Definitions of requirements
- Estimates of costs
- Procurement
- Team charters
- Project planning
- Documentation
- Reporting
- Controlling

It also is a good idea to define the preferred software for each of these major processes. Many organizations use standard project-management software packages so that any team, virtual or co-located, is familiar with and trained in using that package. Also have agreed-on team processes in “soft” areas, such as the establishment of team norms, conflict-resolution procedures, and communication protocols. Experienced virtual teams prepare team charters that delineate suggested team norms and communication standards. They use these as starting points to create processes suitable for their unique situations. Reinforce and expect the use of both technical and soft processes from the team.

Electronic Collaboration and Communication Technology. As a virtual team leader, you will need to select electronic collaboration and communication technology that meets the needs of your team. You also will need to ensure that the organization is ready to support your technical needs. Introducing the electronic communication and collaboration technology needed for virtual teamwork, such as desktop video conferencing or groupware, requires that three primary organizational conditions be in place:

1. The organization has a well-funded, respected, and established information systems staff, whose members are experienced in installing and supporting
electronic collaboration technologies in many different locations.

2. There is commitment by the organization to keep personal computer systems as up-to-date as possible, regardless of a person’s title or duties. When systems fall behind, the costs of upgrades and the time to introduce them mounts quickly. Productivity also may fall as people spend time attempting to fix their equipment or work around it.

3. The organization has a well-maintained corporate network that has room to expand to meet the needs of more complex systems and users.

If your organization is lacking in any of these three areas, you might consider adopting a less complex suite of technology than if they are in place. In either case, it is important to select a reasonable set of standards for your team in electronic communication and collaboration technology. Standards should meet the business needs of the team and match its mission and strategy. A global team that needs to communicate and work collaboratively, for example, must have a minimum set of standards for technology. For communication, this includes touch tone telephones, audio conferencing equipment, voice mail, fax capability, and access to a common e-mail system that allows people to send messages and exchange files. Video conferencing, scheduling, real-time data conferencing, electronic meeting systems, collaborative writing tools, and whiteboards can be added if the strategy calls for intensive collaborative work or if sufficient information systems resources exist to make the technology work reliably. Make certain that external partners and suppliers have access to compatible communication and collaboration technologies if they are considered part of the team.

Ensure that skill in using the electronic communication and collaboration technology is equally distributed among team members from different functional areas, geographic locations, and partner organizations. Often skill in, access to, and use of electronic communication and collaboration technology is more prevalent in technical functions, such as engineering and information systems, than in less technical areas, such as marketing, human resources, and finance. If this is the case, there is a risk that team members from less technical areas, if they are not able to use the technologies well, may be perceived by other teammates as having less status.

Ensure that the technology used by each virtual team is available to all team members, wherever they are located. One team leader ran into trouble when some of her team members in China did not have access to touch tone telephones and their word-processing software was outdated. The Chinese managers were using technology to signify status and intentionally did not upgrade the team members’ equipment. Of course, these actions put the team members at a disadvantage relative to their teammates and decreased productivity.

Finally, factor electronic collaboration hardware and software directly into the team’s budget. It is important to recognize that the benefits of technology grow over time. Virtual teams do reduce costs, but often there is an up-front and long-term investment for technology and training to make them work effectively. The more people and teams work virtually, the more quickly these business practices will translate into savings.

Organizational Culture. Organizational culture includes norms regarding the free flow of information, shared leadership, and cross-boundary collaboration. Help to create organizational norms and values that focus on collaboration, respecting and working with people from all cultures, keeping criticism constructive, and sharing information. The organization’s culture sets the standard for how virtual team members work together. An
adaptive, technologically advanced, and nonhierarchical organization is more likely to succeed with virtual teams than is a highly structured, control-oriented organization.24

The success of virtual teams is related to how the organization fosters or impedes trust between itself and its external partners. Treating partners as less than equal, hoarding information, forgetting to share data or results in a timely manner, and using competitive or proprietary information inappropriately can erode trust quickly. For example, many Australian firms report that they have abandoned virtual partnering structures because of issues of trust and control.25

If the organization is multinational or global, norms must honor different ways of doing business if they are to be effective. Create policies about how to do business in different cultures. Be aware that legal issues, such as who owns the copyright to product designs, can become murky when teams are working across national boundaries.26

Many virtual team leaders cannot affect organizational culture with the same clout as senior managers. It is possible, however, to create a "microclimate" that supports effective norms and values. Team leaders who act in a conscious manner to build trust across boundaries and to share information and power create environments in which this type of culture can grow from the ground up.

Leadership. For virtual teams to succeed, the organization’s leadership must establish a culture that values teamwork, communication, learning, and capitalizing on diversity. The key to establishing an organizational culture that promotes virtual teamwork is that managers and virtual team leaders at all levels must be open to change and must support virtual teamwork. Richard Karl Goeltz, vice chairman and chief financial officer of American Express, notes, "It’s important to have a multifunction team of [senior] managers promoting and supporting a virtual office initiative right from the start."27

Virtual team leaders and members can help managers to develop supportive behaviors. They can offer specific suggestions to management regarding the four categories of leadership behaviors that encourage virtual team performance: communicating, establishing expectations, allocating resources, and modeling desired behaviors.

First, it is critically important to communicate throughout the organization that working across time and distance and with organizational partners is not just a temporary fad but a new way of doing business, one that leverages knowledge and skills and capitalizes on diversity. This includes assigning virtual teams important and high-visibility tasks and projects and reporting the benefits and results of their work so that virtual teamwork is respected in the organization.

Second, it is important to establish clear expectations about how virtual teams work. Procedures and goals must be clear, so that virtual team members know how they are to work and what their objectives are. With all the new things they must learn about operating in a virtual team, the team members need clear guidelines and objectives to steer by. The other members of the organization also need to understand how virtual teams operate and that the teams’ end goals are aligned with organizational objectives and are, in effect, the same as those of co-located teams. Setting high expectations for performance also strengthens the perception that virtual teams deliver results.

It also is important to gain the support of customers and other important stakeholders by helping them to see the benefits of virtual teamwork. This includes establishing expectations about the virtual work environment and how virtual teamwork is going to affect their contacts with team members. Leaders must stress the benefits, such as lower
costs and what the stakeholders have to gain, and find ways to make customers part of the change. One best practice is to invite external customers who work with virtual teams to team kickoff sessions in which norms and communication plans are discussed. Customers and other stakeholders also can be offered training in team technology. Customers can be provided with software to "sit in" on team meetings. This helps customers who are unsure of the virtual team approach to become more comfortable with it.

Leaders also can work with stakeholders such as leaders and managers from other functions, or suppliers who interface with the teams, to help them to understand and support the virtual team concept. They can make it clear to peers and to other managers in the organization that virtual teams work as hard and as productively as co-located teams. Leaders can become adept at providing evidence, including schedule and cost data, to sway more skeptical stakeholders. Finally, they can help to establish reasonable expectations about the time it takes to realize a return on the investment. The paradox is that the complexities of working across time and distance can, in the short run, lead to increased costs and longer cycle times because of difficulties with operating procedures and startup issues.28

Third, leaders who allocate resources for training, technology, and travel send strong signals that bolster the message that virtual teams are important. Chartering virtual teams to work in an underfunded environment is a prescription for failure. Time and money must be allocated for training for virtual team members in areas such as cross-cultural work, project management, and technology. Time and money must be allocated for team leaders to travel for face-to-face meetings with team members at the beginning of the team’s life and then when necessary. Resources also must be dedicated to acquiring and maintaining the technology needed to facilitate the team’s work.

Fourth, and most important, effective leaders model the behaviors they expect. They align cross-functional and regional goals and objectives. They work with other managers across geographic and cultural boundaries. They solicit team members’ input and demonstrate trust in their judgment, particularly in the members’ functional areas of expertise. Effective team leaders show flexibility, changing as business conditions dictate. They do not expect behaviors from others that they do not engage in themselves.

Team-Leader Competencies. The challenges that virtual team leaders face are immense. Many report that they feel as if they are the “glue” that holds their teams together. They have to establish trust in an environment with little or no face-to-face contact or feedback. These challenges necessitate the development of an additional set of competencies that complement the skills for leading traditional teams. These competencies are as follows:

1. Coaching and managing performance without traditional forms of feedback
2. Selecting and appropriately using electronic communication and collaboration technologies
3. Leading in a cross-cultural environment
4. Helping to develop and transition team members
5. Building and maintaining trust
6. Networking across hierarchical and organizational boundaries
7. Developing and adapting organizational processes to meet the demands of the team

Team leaders can champion their own development by deliberately undertaking training and on-the-job assignments that build competence in these areas. Each competence is covered thoroughly in Chapter Four.

Team-Member Competencies. The people who work as virtual team members have to develop their own competencies. First, virtual teamwork is not for everyone. Serving on a virtual team may seem too transitory for some individuals who need face-to-face interaction and stability in a work environment. Without the structure of a co-located setting and day-to-day contact with team members, they may feel lonely or left out.

All members of traditional and virtual teams need solid grounding in their respective disciplines. However, virtual team members need new competencies. Team leaders can help to facilitate competence development by working with team members to create learning plans that use training and on-the-job assignments. The definitions of team-member competencies will vary, depending on the team’s type, mission, and composition. There is, however, a relatively stable set of six critical competencies:

1. Project-management techniques
2. Networking across functional, hierarchical, and organizational boundaries
3. Using electronic communication and collaboration technologies effectively
4. Setting personal boundaries and managing time
5. Working across cultural and functional boundaries
6. Using interpersonal awareness

Over time, most people can develop the competencies that are needed to work virtually. Adequate training, education, and leadership support and feedback can speed development. More detail about team-member competencies is provided in Chapter Six.

Implementing Pilot Projects

Less than optimal results on the diagnostic tool may indicate the need for a pilot project that can assess how virtual teams perform in a controlled and manageable environment. A pilot project is a good idea in an organization in which virtual teamwork is new and untried. If you do decide to create your own pilot test with your team or to orchestrate a larger pilot project, you may use the guidelines offered here.

First, select a problem to work on that is highly visible and difficult to solve traditionally.29 Set expectations that the pilot will take extra time and attention from
management, staff, consultants, and information systems. It will include some expenses for equipment, software, and travel. Ask for executive sponsorship; find an upper-level manager who has a vested interest in the pilot and ask him or her to help in obtaining resources and stakeholder support.

Second, don’t make it overly complicated. Begin the pilot with two or three teams in a function or area that makes sense, such as sales, telemarketing, project engineering, or consulting. Most employees in these functions already are used to working remotely. For example, American Express began its pilot project in 1993, with virtual sales teams that were accustomed to working on the road.

Third, check on the team leader’s and team members’ progress on a regular basis. Make sure that they understand the performance objectives and the ways in which results will be measured. Most people who work in a co-located team can meet with their teammates or leader in impromptu moments and ask for advice. Plan new ways for team members to exchange information and receive feedback in order to ensure that they are receiving the support they need to perform well. These ways might include mandatory Monday-morning telephone conferences to discuss performance or documentation of interim deliverables with feedback from the customer and the team leader.

Fourth, assign a dedicated (not necessarily full-time) member of the information systems staff to assist the team with equipment, software, and operations.

Fifth, evaluate the effort with multiple measures. “Hard” measures include the costs of equipment, software, travel, and consultant time. “Soft” measures include how people feel about the arrangement, the problems they encounter, and the feeling of cohesiveness on the team.

Points to Remember

1. Virtual teams are more complex than traditional teams because of factors associated with working across time, distance, and organizational boundaries and the need to use technology to communicate and collaborate.

2. There are many different types of virtual teams.

3. There are seven critical success factors associated with success, and virtual team leaders and members can influence them.

0-7879-5589-2