Chapter Twelve

The Team Working Together

Talent wins games but teamwork wins championships.
MICHAEL JORDAN[1]

A number of internal issues affect the success of cross-functional teams:

- *Conflict resolution:* the ability of the team to discuss and resolve differences
- *Openness:* the degree to which team members feel free to express their views
- *Meeting management:* the team's ability to plan and conduct effective meetings
- *Characteristics of team members:* the capabilities and styles of team members
- *Customers and suppliers:* the degree to which the team effectively partners with suppliers and customers
- *Virtual teamwork:* the degree to which the team effectively collaborates across distance, time, and organizational boundaries and uses technology to enhance team communications

It is possible to look at these issues and think that they apply equally to any type of team. And, of course, the ability to effectively manage the internal dynamics is important to the success of all teams. However, each of these areas presents special problems for

[1]Karvelas, 1998.

cross-functional teams, and each requires a solution tailored to the unique characteristics of a team composed of people from a variety of functions in the organization with a myriad of past relationships.

Conflict Management

As the traditional hierarchical organization gives way to a horizontal division of labor dominated by technical specialists, conflicts on teams will be endemic. In fact, if we define *conflicts* as simply differences of opinion, this is exactly what we want to happen. In bringing together a diverse group of experts, we expect and want these differences to surface because, in the end, we expect a better outcome to result. As McCorcle has pointed out, for cross-functional teams "a prime advantage over other types of groups is their diversity of members. Ideally, each person brings a specific set of skills and a unique perspective to the problem at hand" (McCorcle, 1982, p. 296). However, he goes on to note that this diversity can become a barrier to success. "Though such a group may have the potential to bring expertise to bear on a wide range of problems . . . it might also face serious difficulty in working as a unit. It is not because group members might refuse to work together, but because in such a group each person (or represented discipline) could have different ideas about the best way to solve a given problem" (McCorcle, p. 296). If the team is composed of people with different priorities, various team player styles, and some past negative experiences in working together, conflicts will arise.

Conflicts and Performance

These built-in conflicts can lead to poor performance. Ancona and Caldwell's study of cross-functional new-product teams suggests that "high levels of functional diversity are directly associated with lower levels of performance, particularly for management ratings of innovation and for teams' ratings of their own performance" (Ancona and Caldwell, 1991, p. 14). Assessments of performance can be deceptive. Because the use of cross-functional teams is relatively new, expectations can be high and standards of success can lack uniformity. In many situations, it was assumed that simply bringing together experts from a variety of disciplines

would produce tangible, high-quality results in less time. The power of the idea of cross-functional teamwork obscured the conflicts inherent in the design of the team. As a result, expectations were, in many cases, unrealistic. Management expected cycle time to be reduced, product quality to improve rapidly, and customer service to be upgraded immediately. And members expected a smooth-running team to happen from the very beginning. "But functional diversity does not always have positive effects on performance . . . because the advantages provided by multiple perspectives are often offset by problems generating consensus . . . and result in teams that have less flexibility, less capacity for teamwork, [and are] more open to political and goal conflicts between functions" (Lovelace, Shapiro, and Weingart, 2001, p. 2). But not all hope is lost. The key to success for cross-functional new-product teams "seems to depend on how effectively members from different functional areas integrate information and perspectives" (Sethi, 2000, p. 11).

Cross-functional teams do produce conflicts among members; we expect it and we want it. But these differences take time and skill to resolve. And rarely are teams warned about the potential for conflict and given the training to resolve the differences. Therefore, when management and team members are asked to assess performance, they are dissatisfied because their expectations are not met. They see team conflict and the time it takes to resolve it as a negative feature of the team; as a result, they are less than completely satisfied with the results. They fail to understand that conflicts are to be expected and valued, and they do not appreciate the fact that time invested up-front in exploring differences can lead to time savings and quality improvements down the line. As Elizabeth Culotta has noted in her report on cross-functional scientific teams, conflicts are seen as positive because disagreements among team members point to problems in the research that need to be fixed (Culotta, 1993).

How to Deal with Team Conflict

The unique nature of cross-functional teams requires that some actions responding to the conflict be central to the existence of any such team:

• *Team training, as suggested in Chapter Ten, must include sessions on conflict resolution.* Team members and leaders must learn that conflicts are to be expected and even valued. However, they must also learn to be open to new ideas and develop skills in listening, questioning, and consensus building.

• *Top management, as well as functional department managers, must be oriented to the characteristics of cross-functional teams.* These managers must also be helped to accept realistic expectations about the potential outcomes of cross-functional teams.

• *It is very important to create opportunities for members in conflict to work together on team projects.* In a study that looked at reducing conflict between engineers and marketing people, it was found that the most effective strategies for reducing the rivalry were working together on cross-functional teams and visiting customers together in the field (Yu, 2001). The study reported that when you work together on a team over a long period of time, you stop thinking of each other as "engineers" and "marketers" and start to see each other as simply teammates who have something useful to offer.

• *In some cases, teams may need expert help in team process facilitation.* Some companies use human resource professionals; other organizations use coleaders who have been trained in group process. For example, TRW in Cleveland, taps high-potential people, gives them training in facilitation skills, and then has them help facilitate teams in other areas.

OPENNESS AND TRUST

On some cross-functional teams, conflicts exist but do not surface. The culture of the team is such that members do not feel free to express their opinions and share their expertise. In some situations, the teams not only represent different functions but different management levels as well. When the corporate culture makes people "level conscious," open communication may be limited when team members include different management levels as well as nonmanagement employees. Lower-level employees are afraid to speak up because, as one person told me, "If you say the wrong thing, it is used against you." Or in another case, when I asked a cross-functional team member why she didn't disagree with a particular point, she said, "Oh, I wouldn't disagree with him; he's got too many Hay points."

Trust creates the pathway to open communication. Lack of trust can be high in cross-functional teams that are also cross-level. In her study of a cross-functional project team, Linda Loehr found that "the lack of trust among team members constrained their individual and collective voices, restricting the sharing of knowledge, experience, and opinions. . . . Indications of mistrust among nonmanagerial team members ranged from mistrust of the worth of their ideas to mistrust of the system that required their generation" (Loehr, 1991, p. 53).

Lack of communication also occurs on teams that do not have significant differences in levels. Strangers do not immediately trust each other. Antagonists from past team wars may feel they have reason not to be trusting. Others may simply take a wait-and-see attitude.

Communication Barriers

Some of the factors that lead to poor communication among cross-functional team members include

- *Lack of appreciation of the contributions of other functions.* For example, in telecommunications projects, some engineers do not value the input provided by human factors psychologists.
- *Plain old-fashioned turf battles.* Some departments play out their competitive games on the field provided by the cross-functional team.
- *Some functions simply talking a different language.* For example, line department users often do not understand the terminology and technology employed by computer programmers.
- *Members of different functions not sharing similar work orientations.* For example, researchers tend to take a long-term view and have an informal work climate; operations people are more short term and formal; salespeople are usually informal and have a short-term focus. Although one may argue with these generalizations, it is clear that each department or function develops a work style that often clashes with the styles of people from other functions.
- *Some members simply having more interest in the team's purpose and more to gain from a successful outcome.* In one government

agency, team members from one bureau have more interest in the outcome of the team because it affects their client group more than it does the other bureaus represented on the team.
- *Some members mistakenly seeing harmony as the goal of cross-functional teamwork.* As a result, they are afraid to express a contrary point of view for fear that it will destroy the positive feelings among team members. The net result is a false consensus and a less-than-satisfactory outcome.

Although these factors explain the lack of trust and communication on cross-functional teams, they do not excuse it. Members of cross-functional teams are there because they have something to contribute. They must be allowed and even encouraged to share their ideas, information, and opinions without restrictions. Open communication is an absolute requirement for successful cross-functional teamwork. The concept of the team is that the outcome—the product, the system, the service—will be better because it has been created by the combined sharing of expertise from people representing a variety of functions. It is this viewing of the problem or issue from many vantage points that is the strength of the cross-functional team. However, the value of divergent views can only be realized when there is a free flow of information. As Helena Gordon of Penn National Insurance points out, "This is a major issue for our team. As a team leader, it's important that I allow people to bring up issues, even if I don't think they're issues" (interview with the author, October 2001).

Communication Norms

Team norms are usually associated with members' perceptions of a highly successful team (Cohen, Ledford, and Spreitzer, 1996). In addition, Jehn (1995) found that norms that encourage open communication enhanced the positive effect of task-based conflict because members felt they were able to express their ideas freely. When working with cross-functional teams, we encourage the establishment of norms or guidelines on communication and trust. A team's list of norms often includes, for example, "all ideas are given a fair hearing," "everyone will have an opportunity to contribute information and opinions," "open and honest opinions

are welcome," "members are expected to actively listen to each other," and "rank does not have its privilege."

In Figure 12.1, you will find communication norms developed by a cross-functional team at a major telecommunications company.

Figure 12.1. Communication Norms.

- Communicate with my teammates as if their ideas, suggestions, and opinions are valued.
- Communicate with my teammates that I understand their message.
- Allow my teammates to express their ideas freely.
- Disagree with my teammates without putting the person down.
- Avoid doing things that inhibit others from contributing.
- Do not interrupt teammates while they are expressing an idea, suggestion, or opinion.
- Do not make remarks that are demeaning to the ethnic or cultural background of anyone.
- Keep teammates fully informed of relevant issues.
- Listen openly and carefully to teammates' ideas, even if I have a different opinion.
- Ask questions if I do not understand something presented by a teammate.
- Respond to all requests from teammates within twenty-four hours.
- Respond with an explanation if a prompt response is not possible.
- Do not push my ideas after a consensus has been reached.
- Do not work behind the scenes to undermine a decision after a consensus has been reached.

Meeting Management

As noted in Chapter Ten, effective meetings are especially important for cross-functional teams. When you bring together a group of people who have different skills, diverse experiences, a variety of work styles, and conflicting priorities, the process of managing the interactions can be tricky at best. As much as we hate meetings, they are still the principle vehicle for team actions and the most visible aspect of a team's operation. Meetings are where the conflicts and communication discussed in the previous sections of this chapter get played out.

Meeting Malpractice

Cross-functional team meetings seem to be susceptible to what might be called unprofessional behavior or malpractice.

Too Many Meetings

There is an erroneous belief that the only place to get teamwork done is in a meeting. Wrong! This belief is the chief contributor to the anti-teamwork backlash that exists in some organizations. Because many meetings are poorly conducted and people associate bad meetings with teamwork, they are quick to conclude that teamwork isn't working. The best way to eliminate this form of malpractice is simply to eliminate those unnecessary meetings. Here's how:

- Adopt the view that not everything requires a face-to-face meeting or a meeting of the full team. Successful teams use small task groups that are subsets of the full team.
- Only meet if there is a clear purpose for the meeting. The regular weekly team meeting may not be necessary this Monday if there is no reason to meet. The simple rule is: no purpose, no meeting!
- Only meet when the time is right. Although you may have a clear purpose, the time may not be right because
  - Not all of the required information or equipment is available.
  - Not all of the key players are available.
  - An appropriate meeting facility is not available.
  - An important organizational change is about to be announced.

- Consider other possible alternatives. If the purpose of your meeting is to communicate information, why not consider other alternatives such as voice mail, e-mail, fax, or even one-on-one meetings with each team member.
- Ask yourself, What if the meeting is not held? If the answer is "no problem" or "there would be a loud cheer throughout the organization," then you may have your answer.

Meetings Too Long

There are several reasons meetings last too long:

- The agenda contains too many items.
- We don't include time allocations for each agenda item.
- We don't follow the agenda and the time limits.

The best way to keep the length of the meeting reasonable is good, solid premeeting planning. Begin by clarifying the purpose of the meeting and then include only those items that pertain to the purpose. Delete other items by using nonmeeting methods to communicate progress reports and similar information that requires no discussion. Then add time limitations to each agenda item. During the meeting, remind team members about the time limits and try to stay within the limits. If you are going over the limits, either refer the item to a subgroup or ask the team if they want to take more time and eliminate other agenda items.

Too Many People at Meetings

Cross-functional teams seem particularly susceptible to this malpractice. Many of the teams are either just too large or they allow too many visitors and observers to attend team meetings. One way to reduce the number is to have the meeting notice designate "required" attendees and "optional" attendees. At the meeting, seat the required or core team members around the table to facilitate discussion and decision making. Ask the other people to sit around the perimeter.

Not Enough Gets Done at Meetings

This is the most frustrating problem of cross-functional team management. Because expectations are high and so much seems to be riding on the meeting, lack of action is especially detri-

mental to team morale. The management of the meeting requires good group process skills, which many cross-functional team leaders do not possess. As we have said, good process skills are needed because a cross-functional team brings together people with little experience in working together and with different working styles. We have suggested providing either training for team leaders or an experienced facilitator to assist the leader. In the absence of either approach, here are some useful tips for conducting a team meeting:

- Start on time. Need we say more?
- Open the meeting with brief statement of purpose and a review of the agenda and time limits.
- Follow the agenda. Begin the discussion with, "We've allocated thirty minutes to this item." Intervene during the discussion with, "Let's move on; we only have ten minutes more for this subject." If someone wants to bring up another subject, ask that it be held until the item is discussed later in the meeting, made an agenda item at the next meeting, or given to a subgroup for consideration.
- Manage the discussion. Use facilitative comments or questions that move the team along:
  Ask for opinions: "How do you react to . . . ?"
  Involve participants: "Can marketing live with this new approach?"
  Clarify ideas: "In other words, you feel we should talk directly to the customer."
  Explore differences: "At this point, the operations folks feel that . . . while engineering can only do . . . "
  Stay focused: "We were discussing data collection. What other approaches can we use?"
  Summarize: "OK, it looks like the feedback is telling us that . . . "
  Test for consensus: "We seem to be saying that we want to."
  Take action: "We have agreed to . . . What steps do we need to take to get started?"
- Summarize the meeting. When the agenda has been completed, the leader should close the meeting by briefly summarizing the key decisions and next steps.

- Confirm action items. As part of the meeting, the action items should be confirmed. Each action item should specify the (1) action required, (2) person responsible, and (3) due date.

CHARACTERISTICS OF TEAM MEMBERS

Teamwork starts with you and me. It begins with the individual—the team player. You cannot have effective teamwork without effective team players and, more important, a *diverse* group of effective team players. As many organizations reorganize into permanent cross-functional teams and make greater use of ad hoc project teams, the opportunity to select the best mix of team players is presented. What characteristics of team members are especially relevant to cross-functional teams?

Has Technical Expertise

There is no getting around the need for people who "know their cookies." The team needs information, skill, and expertise to solve problems and make decisions. However, there is more to the story. Technical expertise must be coupled with the willingness and ability to share the expertise. This is the key characteristic of the team player type I call the Contributor (Parker, 1996; see also Chapter Four for a discussion of team player characteristics). Although the willingness to share expertise may seem obvious, it is not universally practiced. Some experts see their knowledge as a source of power and a factor that differentiates them in the organization. As a result, they either withhold information or make it difficult for others to use it. The effective Contributor, however, freely shares the information in a form easily understood by others and is willing to serve as a mentor and trainer of team members from other areas.

Technical expertise should be linked with an ability to communicate with team members in other disciplines and those who lack the same technical background. It is not enough to know your subject; effective teamwork requires an ability to communicate it in a form that can be easily understood by other team members.

I recently overheard a team member say, "I didn't realize that you were not 'technical.'" This was a not-so-subtle put-down deliv-

ered to another team member who had asked questions during a presentation. My reaction to that comment is that it's the presenter's responsibility to communicate effectively with nontechnical team members. I know some very good technical experts who are able to communicate with just about anyone because they understand the audience and can translate their ideas into analogies and other forms that are easily understood.

Is Open to New Ideas

Cross-functional teams bring people from a variety of disciplines together. As a team member, you must be able to do more than just share your ideas; you must be willing to listen to and consider the views of others, even when those views differ from yours. The willingness to be open to new and different ideas is critical because it is the behavior that allows the team to take advantage of the unique nature of the cross-functional team. In other words, there is no sense bringing together all these people with different ideas if we are not going to give adequate consideration to their ideas.

I refer to this type of team player as the Communicator (Parker, 1996). This person should also have the ability to help the team synthesize the various points of view.

Is Willing to Ask Tough Questions

Because we value the need for open communication on a cross-functional team, we need to have team members who will raise questions about the team's work and disagree with other team members, including the team leader. I call this team player style Challenger (Parker, 1996). In Loehr's study of a cross-functional project team, the failure of team members to disagree in a constructive manner during team meetings greatly diminished the team's effectiveness (Loehr, 1991). Team members had opinions, which they shared with the researcher in private interviews, but were reluctant to express them during team meetings. Although the team has to establish and enforce norms about open communication, it is helpful to stock the team with effective Challengers.

Can See the Big Picture

Because the cross-functional team can get bogged down in the details of data, studies, field trials, and other day-to-day things, the team needs someone who can provide the vision: a Collaborator. This is the team-player style of a person who helps the team set overarching goals and put its work into the proper organizational context (Parker, 1996). Periodically, the team needs to remember why it exists and where it is heading.

Is Aware of Cultural Diversity

Increasingly, team members have to able to work with people from other cultures. Cross-functional teams are increasingly cross-cultural, too. As the population of the United States changes such that women and people from other cultures become a larger percentage of the workforce, the composition of cross-functional teams reflects these changes. In addition, global companies are, of course, using global teams composed of members from many countries around the world. In Chapter Ten, I described a recent team-building intervention with a scientific team of six team members; four were born outside the United States. Many of the conflicts on the team stemmed from members' lack of knowledge of each other's culture and its impact on team participation. As team members discussed their family and cultural background, it helped explain their current behavior on the team and led to improved interpersonal communication.

In another organization, the new-product development teams include representatives from at least three different countries. The language barriers are among the easiest hurdles to overcome; cultural differences present the biggest challenges. Team members from France come from what are called high-context cultures, whereas members from the United States typically represent low-context cultures (Halverson, 1992). Americans like to move quickly to get down to work, move things along fast, and make decisions in the meeting. The French like to take time to build relationships and trust before proceeding to the business at hand. Therefore, cross-functional, cross-cultural teams need to adjust some of their meeting-management techniques to accommodate the needs of all team

members. For example, earlier in this chapter we recommended starting meetings on time, getting right down to business, and sticking to the agenda. This approach favors people from low-context cultures but does not meet the needs of high-context team members who might want to spend time at the beginning of the meeting (or over coffee prior to the meeting) socializing with their colleagues.

Customers and Suppliers

As organizations begin to see work as a process with suppliers at one end and customers at the other, teamwork with suppliers and customers becomes the most natural thing to do. In addition, as companies experiment with the certification of suppliers, reduce the number of suppliers, and go to single-source suppliers, it makes sense to include supplier representatives as cross-functional team members. And as companies define *quality* as satisfying the customer, the next most logical step is to include customer representatives on your cross-functional quality improvement and product development teams.

There is a practical payoff to the involvement of suppliers and customers in the work of cross-functional teams: it can result in more creative and innovative solutions. For example, a study of the factors that contribute to higher levels of creativity in new-product development concluded, "Leading customers, technology suppliers, and other contributors to environmental uncertainty are defined as insiders, interdependent with the organization and capable of being trusted and engaged in the new product development processes. New ideas emerging from marketing or production groups, or directly from customers, receive as much credence and support as those that emerge from R&D" (Jassawalla and Sashittal, 1999, p. 8).

Involving Suppliers

Once companies woke up to the fact that supplier quality is inextricably linked with their product and service quality, they jumped to involving (some might say pressuring) suppliers to conform to certain quality standards. Motorola shook things up a bit by telling its six thousand suppliers that they had to apply for the Malcolm

Baldrige National Quality Award if they wanted to keep doing business with Motorola. Ford, Xerox, and Florida Power and Light Company also brought suppliers into their quest for quality: "Common elements of these new relationships include cross-functional vendor review and development teams, which often include personnel from purchasing, quality assurance, and end-user organizations. They work so closely with suppliers that they often come to seem like a part of the suppliers' own organizations" ("Vendor Certification Improves Buyer/Supplier Relationships," 1990, p. 2).

As suppliers join the cross-functional team, they have to be seen as true partners in the overall team process. Once a supplier has been certified or is on a "preferred" list, it should not be used to simply leverage a lower price. The focus should be on performance and on how the suppliers' input on the team can improve product quality, service quality, and overall project performance. And the goal should be to build a long-term relationship that leads to cost savings, performance excellence, improved quality, and more business for everyone. For example, one of the key goals of the U.S. Coast Guard's Deepwater Program is to "leverage partnerships" both internally and externally with a so-called system integrator—a major industry supplier who will provide the expertise necessary to guide this multibillion-dollar effort to replace or renew all Coast Guard assets.

Gaining Customer Participation

Every cross-functional team should have a customer for its output, whether it is a tangible product such as a part, a service such as generating data, a new computer system, or even a report recommending a corporate reorganization.

As organizations come to see the customer as a partner and not an adversary, customers are becoming regular members of the team. As described in Chapter One, systems development teams almost always include user representatives on the team to ensure that the system meets their needs and is user-friendly. Car manufacturers are even including dealers on their cross-functional design teams to get instant data about how the customer likes the product instead of waiting for formal survey results. Car rental companies are involving customers on process improvement teams

to solve key customer complaints. And the rest of us who rent cars are reaping the benefits. For example, one of the biggest customer complaints concerns the time between getting off the plane and actually getting on the road in a rental car. Customers complain that it takes too long to wait in line, fill out the forms, get to the car, and get out of the parking lot. At one major car rental company, a cross-functional team, which included customers, came up with a system that reduced the transaction time dramatically. As you might suspect, these changes not only result in satisfied customers but also increase employee satisfaction; employees have to deal with fewer unhappy customers.

Virtual Teamwork

As the number of quality and teamwork initiatives increases, the number of meetings also increases. And with the increasing number of meetings, we can expect a backlash against more and more meetings. Once more we will hear, "I can't get my work done; I'm always in a meeting." The backlash against meetings will turn to a backlash against the quality and teamwork efforts. What to do? First, we need to improve the productivity of meetings using the methods described earlier in this chapter. Second, we need to carefully assess the value of a face-to-face meeting for accomplishing certain goals. We need to look at the costs versus the benefits of a team meeting. For example, we recently calculated the cost of a one-hour team meeting at approximately $1,000. The question for the team is, Did we get $1,000 in benefits from the meeting, or could the time have been better spent elsewhere?

Certain team activities seem to require a face-to-face meeting such as developing a team vision, mission or goal, or debating strategy or making a key decision. However, other activities can be accomplished electronically. In addition, the increasing globalization of business, the consolidation brought about through mergers and acquisitions, and the improvements in communications technology have all contributed to the significant increase in the number of so-called virtual teams (Lipnack and Stamps, 1997; Duarte and Snyder, 1999). Virtual cross-functional teams are similar to traditional cross-functional teams except that they must reach their goals "by working across distance, time and/or organizational

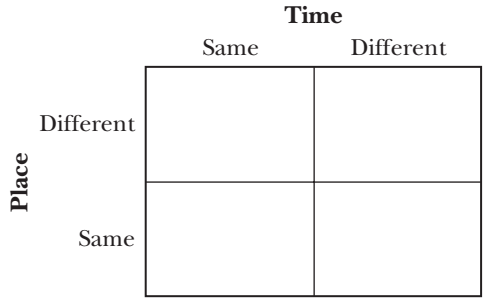
boundaries and by using technology to facilitate communication and collaboration" (Duarte and Snyder, pp. 4–5).

One of the best ways of looking at communications technology support for virtual teams comes out of the literature of groupware (Ciborra, 1996). The model involves the interaction of time and place. Various teamwork tools fit into one or more of the boxes (see Figure 12.2). In the following section I describe each of the tools, including an analysis of their advantages and disadvantages.

Same Time, Different Place

In this category, you find typical synchronous tools such as video teleconferencing, desktop video teleconferencing, audio teleconferencing, electronic whiteboard, and electronic chat. Although many companies are using video teleconferencing for cross-functional team meetings, the results are, at best, mixed. Although it does save travel time and expense, it does not eliminate team meetings. In most cases, some team members are in a company meeting room in one location while others are in a similar room in another location. The technology usually allows team members to view the same documents in both rooms on the video screen. The medium received a big push during the Gulf War and again after the terrorists' attacks on 9/11 when all business travel was severely restricted. However, many of the limitations of the technology became more apparent during these periods. For example, it is often difficult to hear comments from anyone but the few people

Figure 12.2. Teamwork Technologies Spanning Time and Place.



seated near the head table. It is also hard to see everyone. In general, the discussions lack an easy, informal flow.

More recently, with the advent of desktop videoconferencing systems, it's become possible for team members to have face-to-face interactions with their teammates located in multiple locations throughout the organization while each person is sitting in his or her own office. The value of this technology is that not everybody has to go to a dedicated videoconferencing meeting room. These special videoconferencing rooms are quite expensive to set up and maintain. However, a typical desktop workstation system costs less than $1,000 per station (Townsend, DeMarie, and Hendrickson, 1998). For example, with Microsoft's NetMeeting, coupled with their Whiteboard and Chat capability, team members can send messages, including graphics, video clips, and real-time video images and voice to other members around the building or around the world. Members of a new-product team can look simultaneously at an engineering drawing, test results charts, or marketing data and then comment and even edit the document on-line. *Chat* even allows members to have classic "side conversations" because they can send text messages to one person or a subgroup during the meeting.

Another product that often works in conjunction with *NetMeeting* is Lotus *Sametime,* which fosters informal communication outside of formal team meetings. This communication system includes three components:

1. *Awareness.* Members are aware when other members are on-line.
2. *Conversation.* Once a member is aware that another member is on-line, he or she can send an instant message or launch a chat session.
3. *Sharing of objects.* The use of application sharing or whiteboard sessions allows members to share word files, spreadsheets, drawings, and other text material designed to enhance conversations.

Different Time, Different Place

In this category, you find typical asynchronous tools such as e-mail, voice mail, discussion lists, and calendars or program schedules. In our experience, e-mail is still the communication medium of

choice for virtual teams. It is fast, efficient, and cheap. When combined with audio teleconferencing for synchronous communication, a team can be extremely successful, as evidenced by the IBM PdxT Team, as described in the Case Study Two. However, as many observers have pointed out, "You must have agreed upon procedures for communicating via e-mail. It may appear informal, but it must not be used thoughtlessly. Otherwise, with a single press of a button, a person can wreak organizational havoc" (Merrick, 1996, p. 40). Katzenbach and Smith (2000) agree that every virtual team should develop their own "netiquette" by discussing how they expect to apply technology to help complete their task and, when possible, agree on the selection of the groupware that the team will employ. Lotus Notes and other groupware platforms provide teams with a shared space where members can engage in synchronous text chats related to team issues. Groupware platforms such as Xerox's proprietary *DocuShare* software allow a geographically dispersed team to establish a secure, shared space where members can post documents relevant to a project that can be viewed and even edited by all members of the team at different times and in different locations. Calendar programs allow team facilitators to plan formal team meetings and team members to schedule ad hoc subgroup meetings. Calendar programs help virtual teams with information about different holidays, local events, time zone differences, and site meetings that affect meeting planning. In the automobile industry, for example, design and communication technologies are minimizing delays in new-model design due to differences in geographical location among design team members (Lockwood, 2001).

> Programs such as CAD/CAM permit global data sharing among designers, engineers, suppliers, partners, and even customers. . . . The better and faster the engineers' access to design ideas, the sooner they can suggest necessary adjustments and the more time they will have to figure out how to work within the proposed design. Chrysler's CATIA systems allowed engineers to identify and resolve more than 1,500 interference, fit and design issues prior to the building of the first prototype vehicles for the Intrepid and the Concorde. This was a major contributor in the reduction of cycle times for design and engineering form 39 to 31 months [pp. 3–4].

Same Time, Same Place

Included in this category are face-to-face meetings of the team where all members are together at the same time in the same conference room. Hybrid same-time-same-place meetings include sessions in which most members are in a conference room and a few members are in remote locations connected to the room via technology. The most typical scenario uses audio teleconferencing capability, with the telephone speaker set up on the table in the conference room. In the best of all possible worlds, the members in remote locations have copies (in hand or on-line) of all documents being discussed so they can fully participate in the discussions and decisions. Desktop videoconferencing also supports this situation because members in remote locations can simultaneously work on documents with their colleagues in the conference room. Figure 12.3 lists some considerations when planning a teleconferencing meeting.

Same Place, Different Time

Very few situations fall into this category. A common meeting room where members working on different shifts can interact via in-room communication is one variation. For example, a permanent team collaboration facility allows team members to leave messages, files, and documents for review by members using the same place at a different time.

Issues for Virtual Cross-Functional Teams

Hardware and Software Are Not Substitutes for Peopleware

Although the systems described here can support a virtual team, "proficiency in groupware is not the critical factor in virtual team performance. In fact, it is clearly secondary to the basics of team discipline. If the people in your group get this wrong, they will e-mail themselves straight into a nonperformance booby trap: relying on technology to elevate performance when the real problem is undisciplined behavior" (Katzenbach and Smith, 2000, p. 17).

Figure 12.3. Guidelines for Audio Teleconference Meetings.

- Prior to the meeting, send each person a copy of the agenda and the reading material.
- Ask for volunteers for the roles of scribe and timekeeper.
- Begin by asking each person to identify him- or herself.
- If time permits, ask each to indicate where he or she is calling from, what the weather is there, and other brief icebreakers. Asking team members to say a few words at the beginning makes it easier to identify them when they speak.
- Refer to the agenda, review the items, and state the overall purpose of the meeting.
- Review the norms, especially the one about no multitasking (doing other work during the meeting).
- At the beginning, ask members to identify themselves before they speak and, if necessary, to specify to whom their remarks are directed.
- If some people do not speak on an issue, call their name and ask if they have an opinion.
- Summarize all decisions and action items as they are completed during the meeting.
- When conflicts arise, carefully state or get the members to state both sides of the issue. Recognize that it is more difficult to resolve conflicts during a teleconference meeting. Resolution may require some off-line discussions.
- Because not all members can see a flip chart or projector, be careful to summarize key items at the end of the meeting.

Building Trust Is More Difficult But Essential

In a virtual team, there is only one way to build trust and that is through delivering on your commitments. The first step is a willingness by members to take on tasks or action items, followed by the more important step of completing the assignment in a timely fashion. More specifically, trust is built on a foundation of responses to queries from other members of the team. Because electronic communication does not involve nonverbal cues as to interest or involvement, a rapid and complete response is all the more critical for the development of trust.

Interesting and useful is the concept of so-called "swift trust" (Myerson, Weick, and Kramer, 1996). Swift trust occurs when team members assume all team members have been screened for competence and therefore they are willing to forgo much of the "testing" that takes place in the normal forming stage of a team. We assume these are good folks who can be trusted to do a good job and deliver on their commitments. For example, to record the onscreen narration for a video with CRM Films, *Team Building II,* a crew showed up at the studio for the taping in the morning. Although a few of the people knew each other from past projects, the full team had never worked together. However, each person arrived at 8 A.M., ready to do whatever it took to complete the taping in the time allocated, with the assumption that their teammates were willing and able to do the same. Swift trust took place within minutes, as each person knew his or her role and just did it. One additional factor is the importance of the first actions taken at the first few meetings of a team. Or as I often say to a team, "The way you start is a good predictor of how you will finish." This factor is akin to making a good first impression. If members volunteer for assignments and respond to requests and honor those early commitments, the team has a good chance of building trust in a virtual environment.

Team Size Is Very Important

Keeping the team small (under ten) helps facilitate the building of trust and clear communication. Although developing an effective team in a large organization is very difficult, a large virtual team makes the task even more daunting. The trade-off here is that

although you add expertise to the talent bank of the team, you also have the difficulty of tapping into that talent in a virtual environment. "Having more and more skilled and expert contributors can provide the talent you need, but the need is to put that talent to work. Integrating larger and larger numbers of people can be costly. Too many contributors can create communication and integration nightmares" (Katzenbach and Smith, 2000).

Face-to-Face Meetings Are Needed

When possible, hold an in-person kickoff meeting in which members can get to know each other and put a face with the name. Then have periodic milestone meetings—celebrations or project reviews where members can interact in person with their teammates.

Create a Common Team Culture

If face-to-face meetings are not possible, create symbols of a team culture (Carmel, 1999). Some possible ideas:

- Create a real name with input from team members to replace the bureaucratic name given to the team (for example, Release 4.2 team or R287 Project Team).
- Create a team logo, saying, or slogan.
- Develop team norms.
- On the shared space, scan in photos of team members, including a picture of them outside of work, with family or engaged in their hobby.
- On the shared space, post short biographies of each team member that include work experience as well as nonwork activities.
- Have a virtual party to celebrate milestones.
- Create a place on the shared space for funny stories, unusual events, or situations that other members may find interesting.

Select the Right People

Some people are better suited than others for work on virtual teams. Some characteristics to look for include

- *Dependable:* has a track record of delivering on commitments.
- *Independent:* is a self-starter who does not need a lot of direction.
- *Empowered:* is willing to get things done without being told.

- *Strong communicator:* works hard to deliver a clear message and understand the messages of others.
- *Technically adept:* can use communication technology with ease.

There is an ongoing debate about the comparative advantages of face-to-face meetings and so-called virtual meetings (Schmidt, Montoya-Weiss, and Massey, 2001). It is also important to distinguish between meetings using synchronous versus asynchronous communications technology. In synchronous meetings using same-time-different-place technology, for example, the frequency of communication among members is less than in same-time-same-place technology, but the messages are more task-focused. In other words, there is not a lot "shmoozing." In addition, some studies have shown that the use of communication technology in these meetings tends to equalize participation and lessen status differences because inhibitions among members decrease; research also shows that it reduces cultural differences among members. In an even more fascinating conclusion, it was found that "dispersed, asynchronous teams generated more diverse perspectives, conducted more in-depth analysis, and produced higher quality decisions than face-to-face groups. However, due to coordination challenges, asynchronous teams may need more time to reach a decision and have more difficulty achieving a consensus" (Schmidt, Montoya-Weiss, and Massey, 2001, p. 5).

The Importance of Internal Team Dynamics

Group dynamics has always been an important ingredient in the success of a team. However, as the new organizations of the future create flat, more horizontal team structures, internal dynamics will still be important but with a different focus. Teams will need adaptable members and flexible leaders who can come together quickly to learn how to value and incorporate the contributions of people from different functions and cultures and use their expertise to gain a competitive advantage. Teams will need to get better at quickly establishing trust, creating open communication, resolving conflicts, and making better use of meeting time and communications technology.

Even though all these internal team factors are necessary, they are not sufficient for the sustaining of effective cross-functional

teamwork. The leadership of the organization must work to create a culture that encourages and supports cross-functional collaboration. Chapter Thirteen provides specific advice for senior-level managers who are serious about creating a team-based organization.

Looking Back: Some Issues to Consider

1. There is some evidence that cross-functional teams produce too much conflict that may, in fact, derail a team. What are some ways a team can gain the benefits of functional diversity without the downside of debilitating conflict?

2. As a leader of a cross-functional team, what is the first thing you should do to establish a climate of trust among team members?

3. In your experience, what is the biggest cause of a breakdown in team dynamics on a cross-functional team?

4. What are the advantages and disadvantages of including customers and suppliers on a cross-functional team? Are customers and suppliers included on cross-functional teams in your organization? To what extent and in what ways does it help or hinder team effectiveness?

5. What types of communications technology do cross-functional teams in your organization use? Which communications tools are the most and least effective?