

Teams and Networks: Communication and Collaborative Work

As a global economy fueled by advances in communication technology emerged in the late twentieth century, the nature of organizing underwent five key changes. We have already discussed two of them: (1) the development of flatter organizational structures and (2) the birth of the “customer-supplier” revolution, propelled by the demand for organizations of all kinds to work together to provide ever-improving quality in products and services to a demanding global marketplace. This chapter addresses the final three changes: (1) the new global demand for increased participation in decision making; (2) new models of collaboration between and among managers and workers; and (3) a change from traditional bureaucratic “top-down” models of communication and management to team-, group-, and network-based models. Central to all of these new ways of working together is the need for new forms of organizational communication.

The combined interest in greater participation and increased collaboration reflects a broader trend toward greater **workplace democracy**. The democratization of work means less reliance on top-down decision making and more emphasis on engaging multiple stakeholders both in setting direction and in developing operational tactics and plans.

▣ DEMOCRACY IN THE WORKPLACE

Organizational scholar Stan Deetz’s (1995) multiple-stakeholder model provides a useful way to think about the value of increased participation and democracy in the workplace. The **multiple-stakeholder model** asserts that organizations ought to

TABLE 8.1

Twelve Dimensions of Employee Engagement

1. I know what is expected of me at work.
2. I have the materials and equipment I need to do my work well.
3. I have the opportunity to do what I do best every day.
4. In the past seven days, I have received recognition for doing good work.
5. My supervisor or someone at work seems to care about me as a person.
6. There is someone who encourages my development.
7. My opinions seem to count.
8. The company's mission makes me feel that my job is important.
9. My fellow employees are committed to doing quality work.
10. I have a best friend at work.
11. In the past six months, someone has talked to me about my progress.
12. This past year I had opportunities at work to learn and grow.

Source: Wagner, R., & Harter, J. (2006). 12: The elements of great managing. New York, NY: Gallup Press, p. xi-xii.

Considered more generally, the idea of sharing information and authority through the development of more democratic structures often involves creating collaborative teams and networks. The desire to organize this way comes from the realization that no single individual (or, for that matter, no pair of individuals) is sufficient to achieve complex organizational goals. In the following sections, we build on the previous discussion of participation and democracy by addressing communication that occurs in teams and networks. Today, most work that goes on inside organizations utilizes a team approach, whereas work that takes place outside organizations (e.g., entrepreneurship, outsourcing, or consulting) relies more heavily on networks and networking. If knowledge is power, it is a kind of power that is inevitably exercised in webs of relationships and in the creation of robust and resilient communication networks.

■ COMMUNICATING IN TEAMS

Most U.S. employees now work in some form of *team-based organization* where, in addition to their individual responsibilities, they also serve as members of one or more working groups. The importance of teamwork has long been appreciated in business. Filene's, a Boston-based department store (bought by Macy's), introduced the concept of teamwork in the United States in 1898. However, today's emphasis on teams goes far beyond the original meaning of teamwork, which is

simply working together. A **team-based organization** is one that has restructured itself around interdependent decision-making groups, not individuals, as a means to improve work processes and provide better products and services to customers.

Team-based organizing differs sharply from bureaucratic forms of organizing. First, consistent with the human resources approach, in team-based companies every employee is seen as possessing valuable knowledge that must be widely shared for the benefit of the whole. **Teams** are groups of employees with representation from a variety of functional areas within the organization (e.g., sales, manufacturing, engineering) to maximize the cross-functional exchange of information. In a bureaucracy, a hierarchical chain of command distinguishes managers (as “thinkers”) and workers (as “nonthinkers”), emphasizing the need for division of labor and close supervision. Team-based organizations, in contrast, encourage informal communication and view all employees as capable of making decisions about how to manage work tasks. In the most progressive team-based organizations, supervisory work is conducted by *self-managed* work teams. In these settings, employees are “knowledge workers” dedicated to self-improvement, positive results, and productive collaboration:

In the conversion to post-bureaucratic organizations, teams form the basic unit of empowerment, small enough for efficient high involvement and large enough for the collective strength and the synergy generated by diverse talents. Within teams, people can take wide responsibility for one another, for the organization, and for the quality of their products and services. (Pinchot & Pinchot, 1993, p. 194)

The hiring philosophy at Google exemplifies this trend. On their website, they say that they are seeking “smart, team-oriented people who can get things done.” More specifically, they go on to say that they are looking to see “how you’ve flexed different muscles in different situations in order to mobilize a team. This might be by asserting a leadership role at work or with an organization, or by helping a team succeed when you weren’t officially appointed as the leader.”

In the sections that follow, we’ll examine several important dimensions of teams, including types of teams, communicative dimensions of teamwork, and team learning. We’ll also consider a retreat from teams as well as positive collaboration.

□ Types of Teams

Despite widespread enthusiasm for team-based organizing, definitions of what constitutes a team remain ambiguous. Not every identifiable group in an organization demonstrates a sufficient degree of interdependence to be classified as a team. A simple collection of people working together in some capacity might be classified as a committee, a task force, or an ad hoc group. Teams, in contrast, generally fall into three categories: project teams, work teams, and quality-improvement teams. Depending on the location of its members, any of these types of teams may also be classified as a virtual team.

Project Teams

Project teams, which help coordinate the successful completion of a particular project, have long been used by organizations in the design and development of new products or services. For example, a project team at a computer company might include software and hardware engineers, programmers, and other technical specialists who design, program, and test prototype computers. A project team might also be assigned to address a specific issue or problem. A savings and loan recently charged a project team made up of representatives from all the major areas of the bank with the task of developing ways to bring in new business.

Project teams may struggle because people lack the communication skills needed to collaborate across significant functional divides. Collaborative behaviors are hard to learn; while many project teams are formed with great optimism, they face considerable challenges, and few succeed (Jassawalla & Sashittal, 1999; Love, Fong, & Irani, 2005). Management must expend great effort to foster real collaboration, which can result in an increased commitment to team decisions and a deeper level of caring about team outcomes and accomplishments. A new model of how to create positive collaboration is described later in this chapter.

A special type of project team exists within **matrix organizations**, which are characterized by dual reporting relationships. Imagine a large matrix (like an expanded tic-tac-toe board) where the vertical columns represent organizational functions like research and development, sales, production, and information services. Imagine too that the horizontal rows represent particular projects or product lines, like shampoo, conditioner, and hair mousse. In a matrix organization, people's "home" departments are their functions (e.g., a chemical engineer would reside in research and development), but they are also assigned to a project team responsible for producing a particular product. This results in most employees reporting to two different supervisors. Although this form of organizing was very popular over the last few decades, it is somewhat less common today due to the tensions that can result when employees have multiple supervisors.

Work Teams

A **work team** is a group of employees responsible for the entire work process that delivers a product or service to a customer. One such work team at a California aerospace company is responsible for all metallizing of components in the company. The team resides together, outlines its own work flow (e.g., the steps for applying metal coatings to parts), and is engaged in making ongoing improvements in the work process (e.g., making the metal coating as thin and light as possible).

Such teams have been found to improve an organization's efficiency. FedEx, General Electric, Corning, General Mills, and AT&T have all recorded significant productivity improvements after incorporating work teams (Van Tien, Moseley, & Dessinger, 2012; Wellins, Byham, & Wilson, 1991). Texas Instruments Malaysia managed to boost employee output by 100 percent and cut production time by

50 percent after moving to a team-based approach. Teams have an especially positive history in manufacturing. In comparing his company to some based in the United States, the president of Toyota explained his company's relative success by saying, "Detroit people are far more talented than people at Toyota. . . . But we take averagely talented people and make them work in spectacular teams" (cited in Evans & Wolf, 2005, p. 104). Teamwork is the basis of Toyota's high-performance organization.

Successful work teams are supported by a commitment to employee engagement and empowerment. Because they are given the discretion and autonomy to make decisions and to solve problems, empowered teams are not frustrated by a lack of authority to implement their ideas and solutions. More generally, a group can do a better job of managing its resources when it understands the big picture, has the authority to adapt to changing work conditions, and feels that its work is meaningful and has an impact (Kirkman & Rosen, 1999). Unfortunately, these conditions are not yet the norm.

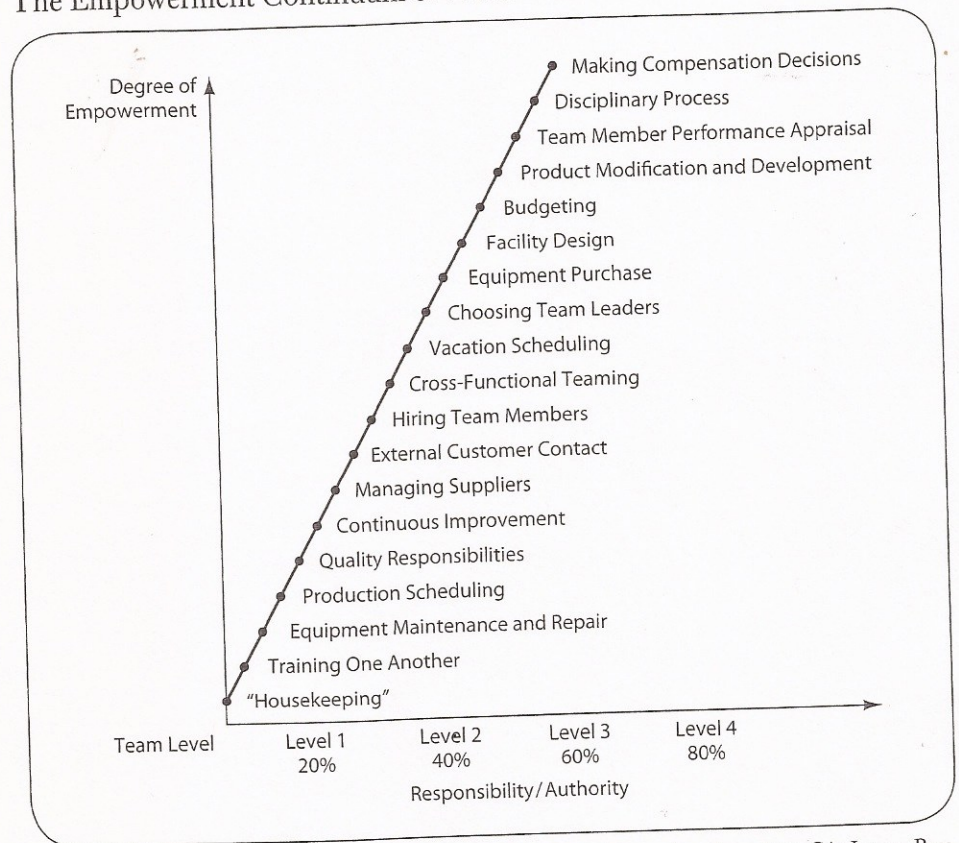
Work teams differ in degree of empowerment, as indicated in Figure 8.2. As empowerment increases, the team assumes responsibility for the continuous improvement of work processes, the selection of new members, the election of a team leader, and capital expenditures. At the highest level of empowerment, the self-directed work team is also responsible for performance appraisals, disciplinary measures, and compensation (Wellins et al., 1991).

For teams of all kinds to succeed, the company reward system must recognize the contributions of both the team and its individual members. Organizations continue to struggle with the challenges posed by evaluating and rewarding teams whose members contribute unequally. (If you have ever had a class where the teacher assigned a grade for a group project, you understand this frustration!) Similarly, differences in the knowledge and skills of team members can cause some members to work harder than others and therefore be more deserving of rewards for their efforts. The empowerment process may involve an employee stock ownership program (ESOP) to encourage team members' motivation and dedication to the team approach: "I will be motivated to do my best because the fruits of my labor are now visibly mine." ESOPs vary in structure—stock may be purchased by employees or given as a benefit—but they all share a common principle, which is getting shares of the company in the hands of its employees. Many employees at Home Depot and Microsoft, to offer two examples, have become wealthy from employee stock. Companies create ESOPs with two very different purposes. The first approach is limited to seeing the stock as a financial benefit but is not tied to increased opportunities for employee participation in company decision making. The second approach is ideologically motivated, with greater employee involvement accompanying equity (stock) participation. Not surprisingly, it is this latter form of ESOP—stock plus greater employee involvement—that has the most positive effects on employee motivation, identification, and commitment (Harrison, 1994).

Managers sometimes resist the move to empower autonomous, self-directed work teams (Tjosvold & Tjosvold, 1991). For managers and supervisors, team-based

FIGURE 8.2

The Empowerment Continuum of Work Teams



Source: Wellins, R., Byham, W., & Wilson, J. (1991). *Empowered teams*. San Francisco, CA: Jossey-Bass, p. 26.

organizing requires a fundamental change in their role, from operational expert or overseer to coach or facilitator. The ability to oversee an empowered work team has become an increasingly important leadership skill. It requires the supervisor overseeing a team to

- Act as a facilitator to keep the group on track while respecting a free exchange of ideas.
- Be hard on rules, agendas, goals, and accountability but soft on the means by which the team chooses to organize itself and do its work.

- Communicate extensively with others to keep the team informed of the work of other teams and of the organization as a whole.
- Be willing to admit that the team's ideas may be better than your own. For example, a nurse manager we know recalls her initial skepticism about a decision her team made, only to discover later that it was much better than what she had planned to do before receiving their input.

Effective managers of work teams create a climate for honest and supportive dialogue and possess the necessary communication skills to do so. The considerable challenges involved in such an undertaking are reflected in *What Would You Do?* on page 234.

Quality-Improvement Teams

Popular in organizations in the 1980s, informal problem-solving groups called *quality circles* met voluntarily each week to address work-related issues (Kreps, 1991). Quality circles have since been replaced by **quality-improvement teams**, whose goals are to improve customer satisfaction, evaluate and improve team performance, and reduce costs. Such teams are typically cross-functional, drawing their members from a variety of areas to bring different perspectives to the problem or issue under study. In theory, a quality-improvement team uses its diverse talents to generate innovative ideas.

Monsanto formed such a team several years ago in response to a problem reported to it by the Ford Motor Company. Ford told Monsanto that there was a problem with one of its products, Safflex, which was used to make laminated windshields. The dimensions of the materials changed between the time the products left Monsanto's plants and when they arrived at Ford's facilities. Monsanto immediately assembled a quality-control group. Within two months, the team traced the problem to packaging, designed a new prototype, tested it, and implemented a new packaging process. Monsanto's response satisfied Ford.

Another example of a quality-improvement team is a program called Work-Outs at General Electric, which was initiated by CEO Jack Welch in 1989. At General Electric, management selects up to one hundred employees to attend a three-day conference (Stewart, 1991). A facilitator divides the employees into five or six smaller groups, and each group works independently for two days to identify problems with the company and to prepare a presentation to senior management proposing changes. On the third day, the panel of senior managers views the presentations, and the managers must agree or disagree with each proposal or ask for more information (in which case, the group agrees to supply it by a specified date). One vice president describes the experience in this way: "I was wringing wet within half an hour. . . . They had 108 proposals, and I had about a minute to say yes or no to each one" (Kiechel, 1994, p. 70). This is a dramatic example of how organizations are using teams to encourage creativity and to open the dialogue between managers and employees.

WHAT WOULD YOU DO?

The Dilemmas of Participative Management at a University

Joan Brittle is the new president of a large public university in the Midwest. Recently, she attended a workshop for new university presidents where she learned that most successful educational institutions today have adopted participative, team-based structures. While she has little formal education in management (she is a physicist by training), the team approach makes sense to her and fits with her personality and management style, which is all about cultivating strong relationships.

Following the workshop, she returns to her campus and enthusiastically charges a team of her top faculty to design a series of strategic initiatives for the school that both capitalize on the existing strengths of the institution and are responsive to emerging social trends. To ensure that she does not impede their dialogue, she does not join the team but asks one of the more senior faculty members whom she trusts to lead the team and provide her with periodic updates. She is confident that "many heads are better than one" and anxiously awaits the team's report, which she believes will affirm and extend her ambitious vision for the future of the institution. She feels that both the opportunity and the optimal path to greatness for the university are fairly clear.

The strategic initiatives team attacks the new challenge with enormous energy and enthusiasm. In three short months, they develop a comprehensive plan featuring five initiatives for the school to pursue over the next ten to twenty years. When President Brittle receives their report, she is both stunned and disoriented. Based on her beliefs and perspectives, she assumed that the team would come back with a plan that was responsive to changing environmental conditions and apparent opportunities in the state. Instead, their proposal is mostly an (admittedly ambitious) extension of current faculty interests and offerings but does not suggest any kind of new direction or breakthrough. She wonders: How could this superb group be so far off base? From her perspective, the initiatives are too internally focused, reflecting faculty interest and expertise, and are out of touch with the needs and desires of the board of trustees, the legislature, and the community. In addition, they do not represent any of her personal and professional interests in health and the life sciences.

DISCUSSION QUESTIONS

1. How did the group wind up with initiatives that differed so much from President Brittle's expectations? What steps could President Brittle have taken to avoid the polarity of this outcome?

2. What does this situation tell you about the risks and pitfalls of encouraging employee participation in decision making?
3. Based on your reading about teams, what would you advise the president to do now? Why?

Virtual Teams

In response to a dynamic global economy, most large organizations and many smaller ones have found it advantageous to maximize their geographic reach and become immersed in a wide range of local cultures. Companies ignore cultural differences at their own peril. Unfortunately, the geographic distribution of employees creates predictable communication difficulties associated with time and space, often resulting in serious misunderstandings. Fortunately, a range of technologies (think Skype and beyond) have evolved to support groups of people who work together around the world in what are called **virtual teams**.

A superficial analysis of virtual teams can identify likely problems to watch out for, such as language barriers and differences in cultures, religions, work customs, and work habits. But deeper consideration reveals that all virtual teams engage in a developmental process that builds a negotiated order—a shared set of practices or “micro-cultures” that emerge among members (Gluesing, 1998). Some of the items that are typically up for negotiation include division of labor, sequencing of activity, and the nature and regularity of outcome assessment. In addition, virtual teams must work out more mundane but still vexing issues surrounding the use of e-mail lists, intranets, and telepresence. This team-development process is highly social (though largely through electronic media) and involves the development of mutual respect and trust (Baba, 1999). The development of virtual teams has increased exponentially with the development of more realistic telepresence technology and the absorption of younger people who are digital natives into the work. On the technology side, Cisco and others have developed extraordinary high-definition cameras and monitors to simulate face-to-face interactions. From an employee perspective, members of the millennial generation are much more comfortable than their predecessors with multitasking and multiple, mediated forms of communication.

Pamela Shockley-Zalabak (2002), an organizational communication scholar and chancellor of the University of Colorado at Colorado Springs, conducted an important study of an international, self-managing, virtual team created by a technology company seeking to do a better job of meeting customer needs. She describes the functioning of this team over a two-year period as “protean,” constantly changing in structure and form. Her research revealed some of the challenges associated with these kinds of structures. Two years into this experiment, while the members of this team did not want to return to a hierarchy, they did express a strong desire for more structure in the form of better processes and clearer work rules. While the

idea of geographic boundaries was no longer relevant, a new kind of boundary was important to the team. Specifically, they wished for "boundary as guide, sense of place, commitment, relationship, and shared meaning [amidst continuous change]" (p. 249). Future studies of virtual teams will no doubt shed more light on the pragmatics of succeeding with this new organizational form. One important factor that team members must consider in a global world is how cultural influences may affect communication among virtual team members. Some of these cultural influences are described in Table 8.2.

TABLE 8.2

Cultural Influences on Global Virtual Teams	
VARIABLE	IMPLICATION FOR MULTICULTURAL TEAMS
Individualism vs. Collectivism	• Individualistic team members will voice their opinions more readily, challenging the direction of the team. The opposite is true of collectivists. Collectivists will want to consult colleagues more than individualists before making decisions. • Collectivists don't need specific job descriptions or roles but will do what is needed for the team, ideally together with other team members. Individualists will take responsibility for tasks and may need to be reminded that they're part of the team. • Individual-oriented team members will want direct, constructive feedback on their performance and rewards that are closely tied to their individual performance. Collectivists, however, might feel embarrassed if singled out for particular praise or an individual incentive award. • Collectivists prefer face-to-face meetings over virtual ones.
Power Distance	• Team members from cultures that value equality (i.e., low power distance) expect to use consultation to make key decisions. From the viewpoint of a team member from a higher power distance culture, however, a team leader exercising a more collaborative style might be seen as weak and indecisive. • Members from high power distance cultures will be very uncomfortable communicating directly with people higher in the organization.
Uncertainty Avoidance	• In a culture where risk taking is the norm or valued, team members tend to be comfortable taking action or holding meetings without much structure or formality. Members who are more risk averse need a clearer, prepared meeting structure, perhaps with formal presentations by all members of the team. They're unlikely to take an active part in brainstorming sessions. • Members from lower uncertainty avoidance cultures will not respond well to "micromanagement." They may also be more willing to use new technologies.
Task/Relationship Orientation	• Team members from relationship-oriented cultures want to spend extra social time together, building trust, and may have problems interacting smoothly with short-term members.

Source: Goodbody, J. (2005, February/March). Critical success factors for global virtual teams. *Strategic Communication Management*, 9, 20.

□ Communicative Dimensions of Teamwork

Simply calling a group a “team” does not make it one. A group becomes a team through the kinds of communication it displays over time and the resulting feelings (if it works!) of trust and interdependence. More specifically, there are five communicative elements of team interaction that are essential to consider: roles, norms, decision-making processes, management of conflict and consensus, and cultural diversity. The following sections address each of these elements.

Roles

Inherent in effective teamwork is the need to achieve a balance between the goals of individual members and those of the team. While individual behavior can vary significantly, team members tend to adopt predictable **communication roles**, which are consistent patterns of interaction within the team (Goodall, 1990a). According to the classic typology, the three broad types of communication roles are task, maintenance, and self-centered (Benne & Sheats, 1948).

In performing the **task role**, the team member summarizes and evaluates the team’s ideas and progress or initiates the idea-generating process by offering new ideas or suggestions. In the **maintenance role**, the team member’s communication seeks to relieve group tension or pressure (e.g., by telling jokes or by changing the subject of a conversation) or to create harmony in the group (e.g., by helping to reconcile conflict or disagreements) (Shockley-Zalabak, 1991). A team member in the **self-centered role** seeks to dominate the group’s discussions and work or to divert the group’s attention from serious issues by making them seem unimportant. Unlike the positive effects of task and maintenance roles, the self-centered role is always considered inappropriate and unproductive.

H. L. Goodall (1990a) has identified two other roles: the prince and the facilitator. The **prince role** is exhibited by group members who fancy themselves to be brilliant political strategists and see the world as a political entity. In the **facilitator role**, a team member focuses exclusively on group process (e.g., following an agenda and maintaining consensus in decision making) for the benefit of the team, while refraining from substantive comments on issues.

Some people both serve on teams and seek to facilitate team communication, playing different roles at various moments. A training manager, for example, may act as a facilitator if, during a team meeting, the conversation drifts off topic. At the same time, the manager may suspend the facilitator role by offering information or opinions relevant to the discussion.

Norms

Norms are the informal rules that “designate the boundaries of acceptable behavior in the group” (Kreps, 1991, p. 170). For example, team members may be expected to attend meetings on time, prepare for meetings in advance, and distribute the meeting’s agenda by an agreed-on deadline. Norms about conflict may express

varying degrees of tolerance for disagreement. Some observers attribute Motorola's success to its norm about conflict, which encourages team members to engage in loud debates at meetings (Browning, 1992). Taking a different tack, one software company CEO insists that no one should ever kill a new idea. He instead encourages "idea angels" who are charged with saying *something* positive about every new idea that is introduced. 3M's success has often been attributed to a similar approach to innovation. 3M lives and dies by a norm that says, in effect, "When in doubt, try it." Team norms, which are shaped by the national and organizational culture as well as by personal agendas, strongly affect member roles. For example, a large U.S. insurance company emphasizes positive employee relations so much that the organizational culture is largely intolerant of conflict. As a consequence, work teams tend to avoid conflict at all costs and hence fail to deal with key performance issues.

Decision-Making Processes

As a general rule, teams make better decisions than individuals. Teams get more people involved in the process and generate more information and ideas. In addition, the simple act of participating in decision making makes team members more aware of important issues, more likely to reach a consensus, and better able to communicate about the issues.

In a departure from the classical management approach (which separates the tasks of making decisions from implementing them), the team-based approach gives employees more control over decisions that affect their work and decreases job stress. Moreover, "the more complex and challenging the issues under evaluation, the more powerful the outcomes of decisions, and the greater the number of people affected, the better groups are for making the decisions" (Kreps, 1999, pp. 173–174).

Team decision making also poses a number of problems. In what is called the "risky shift phenomenon," a team may tend to make decisions that involve more risks than decisions made by individuals do because of perceived safety in numbers (Cartwright, 1977). In addition, strong-willed or verbose team members may dominate conversations, intimidate others, or manipulate team decisions to benefit themselves in an effort to gain power or to improve their image. **Groupthink**, a well-known problem associated with team decision making that was initially identified by psychologist Irving Janis (1971), occurs when team members go along with rather than critically evaluate the group's proposals or ideas.

A number of strategies for dealing with groupthink are consistent with the ideal of promoting organizational dialogue and greater employee engagement:

- Encourage team members to voice their objections and to critically evaluate others' ideas.
- Use more than one group to work on a problem to generate a variety of proposed solutions.

- Encourage team members to discuss the team's deliberations with people outside of the group to obtain feedback.
- Invite outside experts into the group to obtain their input and feedback.
- Make one team member responsible for ensuring that the team explores all sides of an issue.
- Divide the team into subgroups that work independently on a problem and then report back to the team.
- Arrange a special meeting after a consensus has been reached to give team members the opportunity to discuss any remaining doubts or concerns (Gibson & Hodgetts, 1986).

Decision making by teams also requires team members to face the challenge of sorting through multiple interpretations of a problem or issue to find the single best recommendation or course of action. Members who are intolerant of others' perspectives may find this task especially challenging. For this reason, extensive research has been conducted on identifying effective decision-making strategies.

Small group communication scholar Aubrey Fisher's (1980) model of group decision making sees decisions as the product of four stages: orientation, conflict, emergence, and reinforcement.

In the orientation stage, the members of a newly formed team get to know and trust one another. Their communication focuses on clarifying the team's purpose and function and on reducing tension and uncertainty. After the orientation stage, communication about tasks inevitably initiates the conflict stage, as team members express and debate different ideas, perspectives, positions, styles, and world-views, forming alliances and coalitions in the process. A team that manages the conflict stage well will emerge with a diverse assortment of perspectives and valuable information that it uses to move toward a single position. In the emergence stage, coalitions give way to a working consensus as a delicate balance of compromise and negotiation is worked out. Emergence involves moving toward action and determining how to implement the decision. Finally, the reinforcement stage is marked by a strong spirit of cooperation and accomplishment among team members (Fisher, 1980).

Teams that skip the orientation phase may never truly feel comfortable as a group, inasmuch as members know one another only as roles, not as people. They may also lack direction. Teams that avoid the conflict stage—mainly through cowardice in the face of difficult conversations—run a risk of groupthink (i.e., of agreeing on a course of action before exploring all the available information or alternatives). Teams lacking in communication skills often fall apart at the emergence stage, as group members find it impossible to work together and agree on a common direction. Many teams don't even survive to experience the reinforcement stage.

Other studies of team decision making challenge the stage models proposed by Fisher and others by suggesting that most teams follow a less defined path toward

decision making. These writers believe that group decision making is more varied and complicated (e.g., Poole, 1983; Poole & Roth, 1989). From their perspective, teams experience periods of order and disorganization that are unpredictable; they tend to go through cycles and to repeat stages multiple times, and they may engage in activities (e.g., managing tasks and establishing work relationships) in a haphazard rather than a coordinated fashion. In many cases, stages do not occur in an orderly or predictable pattern.

Finally, in a sustained effort to apply communication technology to group decision making, group-decision support systems (GDSSs) are used to give teams access to various decision-making tools (Poole & DeSanctis, 1990). For example, software that creates an electronic display for input and accepts input from all group members, and software for problem solving, decision analysis, and expert systems, can help teams make better decisions (Contractor & Seibold, 1992). This kind of technology is increasingly available to assist in the operation of all kinds of teams, both geographically copresent and virtual. Power (2007) provides a useful chronology of these electronic meeting support systems.

Management of Conflict and Consensus

Conflict occurs among members of organizations and teams because people pursue different interests. In this discussion we are concerned with teams as sites of conflict and with team-based strategies for achieving consensus. Team conflict may occur among members hailing from different fields or professions, such as in a cross-functional project team, or between line workers (who work directly with the product or service) and staff teams (who provide behind-the-scenes support). It may also occur as a result of perceived inequities in group member status or productivity, personality differences, or other work-related problems.

Conflict is defined by organizational communication scholars Linda Putnam and Marshall Scott Poole as "the interaction of interdependent people who perceive opposition of goals, aims, and values, and who see the other parties as potentially interfering with the realization of these goals" (1987, p. 552). In organizations, conflict most often arises from the acquisition and use of resources. Like other types of communication, conflict changes or evolves over time and is unpredictable. It also takes place in the interdependent relationships among people who rely on one another to some extent for resources.

Attitudes toward conflict in U.S. organizations have changed significantly since the 1950s, when overt conflict was viewed as counterproductive and always to be avoided. By the 1970s, some recognition of the benefits of conflict had emerged, such as its role in generating different ideas and perspectives (and thereby helping avoid groupthink) as well as in facilitating a greater sharing of information. Studies have found that some degree of team conflict is essential to achieving high levels of productivity and effective communication (Franz & Jin, 1995). An absence of conflict over an extended period of time is more likely a sign of group stagnation



or fear than of effectiveness. The constructive role of conflict is mostly understood today, although it always remains difficult to realize in practice.

Research on conflict in organizations includes classical management studies that view conflict as a breakdown of communication (Hunger & Stern, 1976) and cultural studies that define it as a dispute over different perspectives of organizational realities (Smith & Eisenberg, 1987). Most research on the cycles and escalation of conflict has been approached from a systems perspective (Putnam & Poole, 1987), whereas critical theorists view conflict as reflecting deep imbalances of power in the organization and society (Mumby, 1993).

Because team conflict is inevitable, we are concerned with how team members handle it. Broadly distinguished as emphasizing either a "concern for self" or a "concern for others," conflict style is also marked by degrees of assertiveness and cooperation (Kilmann & Thomas, 1975). Collaboration, which is generally seen as the most effective conflict style, emphasizes high assertiveness combined with high levels of cooperation. In contrast, compromise is considered less effective in resolving conflicts because neither party's preferred solution is adopted. Collaboration is more likely to lead to a novel solution that satisfies both parties. In addition, accommodation may at times be effective, but in most conflict situations, it is counterproductive because it causes stress for the team member who accommodates others and it undermines the team's ability to generate creative ideas.

Unfortunately, there is often a significant gap between individuals' expressed or preferred conflict style and how they actually behave across a variety of conflict situations. For example, while supervisors' strategies for dealing with problem employees reflect their styles when the conflict first surfaces, over time they tend to use more coercive strategies regardless of their *expressed* conflict style (Fairhurst, Green, & Snively, 1984).

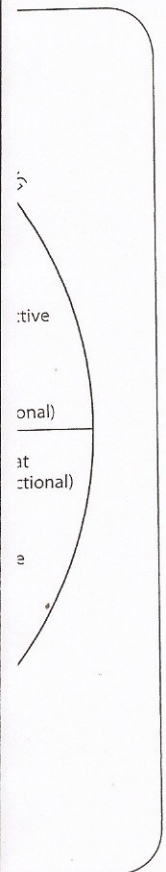
Notably, consensus does *not* mean that all team members agree with a decision, but instead that they feel the team has adequately considered their views. "If there is a clear alternative which most members subscribe to, and if those who oppose it feel they have had their chance to influence, then a consensus exists" (Schein, 1969, p. 56). Naturally, people agree to a group consensus with the understanding that their point of view will be accepted at least some of the time; otherwise they would most likely leave the group. **Consensus** reflects an overarching belief that in the long haul, "all of us are smarter than any one of us." Effective conflict management through consensus thus means accepting the inevitability of differences and remaining committed to an ongoing dialogue that is open to alternative perspectives and that encourages creative decision making.

As organizations make greater use of intercultural teams in response to global competition, researchers are increasingly concerned with the effects of cultural

Skip to p. 245

the skills of
ing" (p. 352).
unication:

asking ques-
work) with
y nor advo-
ifies various



re fieldbook. New

2. *Bring tacit assumptions to the surface of team dialogue.* Senge and colleagues suggest that because "we live in a world of self-generating beliefs which remain largely untested" (1994, p. 242), our beliefs appear to be the truth, the truth seems obvious to us, and the evidence for our beliefs is limited to the data we select from our experience. A team that learns to question these assumptions moves down the "ladder of inference," revealing the motivations behind our beliefs (Figure 8.4). As the team brings tacit assumptions to the surface of its dialogue, it discovers the role of those assumptions in the development of beliefs and conclusions.
3. *Become aware of the assumptions that inform conclusions.* Once assumptions have surfaced, it is beneficial for teams to reflect on how these particular beliefs give rise to interpretations of events that support specific conclusions about work processes, employees, or customers. Making these connections explicit makes them easier to change. Conclusions, then, are filtered through members' assumptions and beliefs, which are unobservable and highly personalized. This is what makes the generation of new ideas challenging. However, by counteracting these abstract influences on the thought process, teams can promote creative thinking.

Dialogue is important to team learning. According to Senge and colleagues' (1994) model of the "evolution of dialogue" (Figure 8.5), team dialogue moves initially from invitation to conversation to deliberation. From deliberation, the dialogue may follow a path to discussion or to suspension and dialogue. Team learning thus encourages members to think about dialogue as allowing the "free flow of meaning," unencumbered by logical analysis (e.g., skillful discussion) or debate.

People from Western cultures may find it difficult to learn the speaking and listening skills associated with this type of dialogue because of the value they are accustomed to placing on advocacy and rational argument. In addition, such dialogue challenges many of the assumptions of traditional communication in organizations. In dialogue, the objective is not to argue a point effectively but to balance inquiry with advocacy in ways that contribute to the knowledge of the team as a whole. In the transition to a team-based approach, therefore, the organization not only must help employees cope with change, but also must help them learn new ways of communicating. This is a formidable challenge that requires a constant commitment to training and team learning.

☐ A Retreat from Teams?

Ideally, self-directed work teams help contemporary organizations deal with the pressures of global competition and help promote autonomy, responsibility, democracy, and empowerment in the workforce. In practice, however, the ideals of the team-based approach are often not realized by organizations.

In one recent case, a small airline tried to implement self-directed work teams but found that decision making was hindered by disagreements among team members. For example, the mechanics were frustrated by the unwillingness of other groups to defer to them on all safety issues. This company's experience reveals the importance of the following factors in successful team formation:

1. Teams are only as good as their members; the careful selection of members is thus essential.
2. Teams must be trained in group decision making and communication.
3. Only decisions involving a significant challenge and an outcome that affects many people should be assigned to teams. Simple tasks with limited impact are best assigned to individuals.
4. Some members of a team have more expertise and experience than do other members; therefore, all members do not contribute equally.

At various times in the past, companies like Ford, Procter & Gamble, and Honda have found that teams take too long to make decisions and tend to shield their members from responsibility (Chandler & Ingrassia, 1991). Because team-based organizing really does represent a different, often foreign way of working, traditionally minded employees tend to view them with skepticism, at least initially. If employees feel empowered by the team approach, they often become strong advocates. More often, however, management does not follow through on its promise of empowerment, and teams fail. Teams also fail when they believe that they haven't reached their goals or that their productivity hasn't been enhanced by teamwork (Coopman, 2001). Finally, teams fail when management neglects to define the types and functions of the teams it seeks to establish (Drucker, 1992b). As a result, teams do not have a clear understanding of their function in the organization. *A highly empowered, cross-functional team that does not receive strong leadership support is almost certain to fail.*

☐ Positive Collaboration

Much of what we have said about effective teamwork applies equally well to collaboration more generally. Some people have trouble appreciating ideas that originate from a different worldview, while at the same time they hesitate to share their own good ideas for fear of losing credit or control. Fostering collaboration begins with the articulation of a common goal, something that diverse individuals and groups can agree on as a shared aspiration (Lencioni, 2002). In large organizations, it is especially important that the senior leadership team "walk the talk" and model collaboration for the organization. Next, both training programs and incentives must be aligned to support leaders who simultaneously aspire to excel in their own area *and* seek out opportunities for successful collaborations with others outside their unit. Hansen (2009) calls this balanced approach "T-shaped management." Finally,

individual leaders must engage in sustained self-reflection to identify barriers to collaborative leadership within themselves—barriers that are closely connected to their willingness to learn by engaging others in dialogue.

■ COMMUNICATING IN NETWORKS

We observed earlier that contemporary organizational communication has shifted from an emphasis on face-to-face teams to virtual networks of people across multiple locales organized for a common purpose. Although networking has always been key to business success, specific **communication networks**—groups of individuals who communicate regularly—are a primary mode of organizing in the new economy. Networks are emergent, informal, and somewhat less interdependent than teams. Networks matter because regular contact between identifiable groups of people, whether scientists or political action groups, can play an important role in establishing access to information and in the quality and direction of decision making.

Within organizations, the concept of a network has emerged as a result of researchers' enduring interest in the structure of organizational groups. Human relations theorists recognized that small groups do much of the important work in organizations. Many factors affect the pattern of communication among group members, called the group's *communication structure*. For example, management may design a group in a way that hinders its communication, or employees with low status in a group (e.g., newcomers) may be less willing to communicate freely than those with high status. Formal lines of authority and rules about communication may also restrict the flow of information in a group. These investigations into communication structures have led to the idea of communication networks.

In this section, we examine communication networks in more detail, focusing on small-group networks, emergent communication networks, analyses of communication networks, interorganizational communication networks, and the digital networked society.

□ Small-Group Communication Networks

Early research on communication structure focused on examining **small-group communication networks**—groups of five people—to determine the effects of centralized versus decentralized networks on decision making. Four types of small-group communication networks were typically studied: circle, wheel, chain, and all-channel (Figure 8.6). The circle and all-channel networks are highly decentralized, whereas the chain and wheel are centralized. It was found that centralized networks are more efficient than decentralized networks, as reflected in the speed with which they can complete a task (Leavitt, 1951). Further investigations, however, reveal that centralized networks are not necessarily superior to decentralized networks:

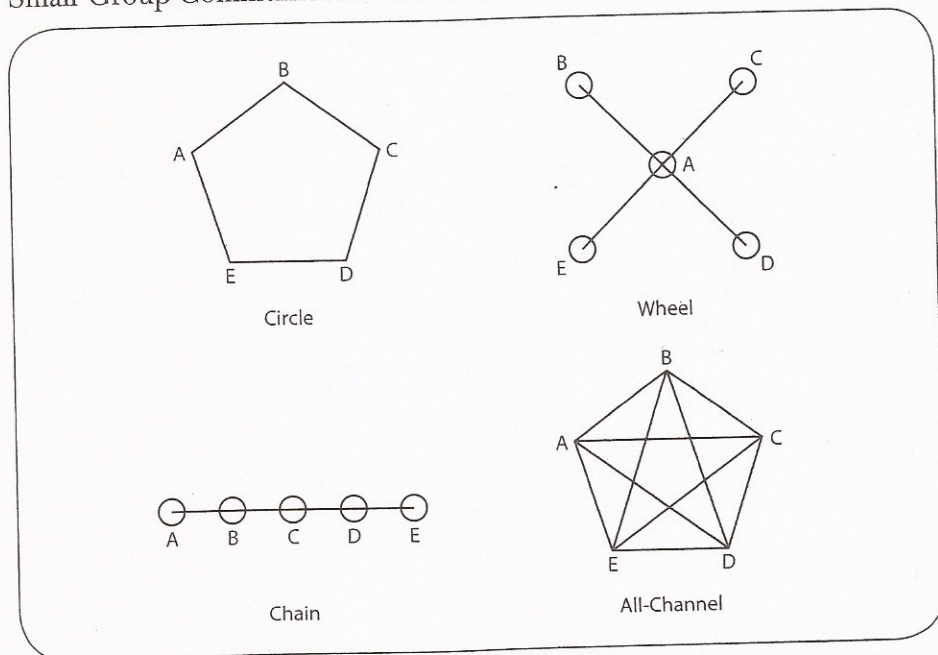
As tasks become more complex or ambiguous, decentralized net[works] are usually superior to centralized structures. . . . Formal hierarchies aid the performance of tasks requiring the efficient coordination of information and routine decision-making whereas they interfere with tasks presenting very complex or ambiguous problems. . . . Specifically, hierarchies impede work on the latter by stifling free interactions that can result in error-correction, by undermining the social support necessary to encourage all participants to propose solutions, and by reducing incentives for participants to search for solutions. (Scott, 1981, pp. 149–150)

This early research also yielded some interesting findings about small-group decision making. For example, when a group faces a routine task or a tight deadline, participation by and input from all members is not expected. In contrast, when a group faces more complex issues or problems, a more open dialogue promotes member satisfaction and better solutions.

However, many critics argued that the experimental small-group networks studied had little in common with actual groups in organizations (Farace, Monge,

FIGURE 8.6

Small-Group Communication Networks



Source: Scott, W. R. (1981). *Organizations: Rational, natural, and open systems*. Englewood Cliffs, NJ: Prentice Hall, p. 8.

& Russell, 1977). In fact, research interest has recently turned toward what have been dubbed "bona fide groups" in organizations, groups that really function that way "in the wild." Bona fide groups have real histories and come together to solve real organizational and social problems. Early research suggests that these real embedded groups act in more contradictory and disorderly ways than were anticipated by laboratory studies (Sunwolf & Seibold, 1998).

□ Emergent Communication Networks

The most powerful groups within organizations are those that emerge from formal and informal communication among people who work together. These groups are referred to as **emergent communication networks**.

The current focus on communication networks in organizations stems from a general acceptance of systems theories, which emphasize the connections between people and the relationships that constitute an organization. In terms of communication networks, researchers examine those relationships that emerge naturally within organizations as well as the groups and member roles associated with them (Rogers & Kincaid, 1981). Formal networks and emergent networks coexist in organizations, and each is best understood in the context of the other (Monge & Contractor, 2001; Monge & Eisenberg, 1987). For example, although new employees may rely on a copy of the formal organizational chart to understand reporting relationships and the structure of departments, over time they realize that the actual communication relationships among employees do not mirror the organizational chart. Departments with no formal connections may nonetheless communicate in order to manage the work flow, and salespeople working on different product lines may share common experiences at lunchtime. A great deal can be learned about an organization's culture by identifying the discrepancies between informal emergent networks and the formal organizational chart.

Early research on emergent communication networks investigated the so-called organizational grapevine. The term *grapevine* dates to the Civil War, when telegraph wires strung through trees resembled grapevines (Daniels & Spiker, 1991). This term has since come to mean the persistent informal network in an organization, sometimes referred to disparagingly by management as the "rumor mill." In reality, the rumors are usually true, and important information travels quickest through informal channels. Building on American business executive and public administrator Chester Barnard's (1968) observations about the value of informal communication, Keith Davis (1953) argued against the standard party line, which encouraged managers to suppress the rumor mill. He instead supported the importance of such communication to the health of an organization, both as a source of information and for bolstering a sense of belonging. Subsequent research has shown that informal communication through the grapevine is as a rule more efficient and accurate than the formal dissemination of information (Hellweg, 1987).

□ Analyses of Communication Networks

Analyses of communication networks are used to examine the structure of informal, emergent communication in organizations, reflecting the tendency of individuals to forge new linkages that are separate from formal rules or boundaries. Informal communication in organizations is fluid and in a constant state of change. Whereas formal reorganizations may occur only infrequently, informal reorganizations occur continuously (Monge & Contractor, 2001). In studying emergent communication networks, we are concerned mainly with overall patterns of interaction, communication network roles, and the content of communication networks.

Patterns of Interaction

A number of informal groups or cliques emerge as a result of communication among people in organizations, both within and across departments or functions. Communication networks vary widely in density, which is determined by dividing the number of communication links (reported communication contacts) that exist among all organizational members by the number of possible links if everyone knew everyone else. For example, a professional association is a low-density network because communication among its members is infrequent, but the kitchen crew of a restaurant is a high-density network in which most or all members communicate regularly with one another. Similarly, formal hierarchies are less dense than more progressive organizations that encourage employee participation in decision making.

Research suggests that the density of organizational networks has considerable influence over whether other employees adopt a new idea or technology. In a study of elementary schools and administrations, it was found that personal relationships play a key role in the development and acceptance of new ideas when cliques form to focus on those ideas (Albrecht & Hall, 1991). These close connections help people overcome feelings of uncertainty and make them more likely to adapt to change.

The density of an organizational communication network can have some less obvious implications for organizational effectiveness. For example, we get less new information from people we work with every day than we do from people we know but contact less often. These infrequent contacts, called *weak ties*, can be very helpful for uncovering new perspectives and helpful people, as often happens in job hunting or recruiting (Granovetter, 1973). More recent research reveals that these same dynamics may apply globally; people in all cultures make use of their personal and professional networks in seeking new opportunities (Gao, 2006).

Some researchers use what they call a "network approach to participation" to redefine empowerment (Marshall & Stohl, 1993). According to this view, empowerment is a "process of developing key relationships in the organization in order to gain greater control over one's organizational life" (p. 141). An employee's personal communication network affects the experience of empowerment, involvement, and participation at work.

Extraorganizational networks—contacts from the industry or community—may be particularly important resources for employees in historically marginalized groups who have difficulty finding mentors and other supports in positions of power within the organizations (see *Everyday Organizational Communication* on page 254). For example, among African American women, networking and building informal coalitions and communities with other African Americans within and outside their employing organization is a key strategy for upward mobility (Bell & Nkomo, 2001; Parker, 2003). Such networks serve as a means of maintaining a “collective identity” even “as they ascend the corporation with what might otherwise become an individualistic quest for success” (Bell & Nkomo, 2001, p. 183). That such networks often maintain an explicit attention to empowerment is evidenced by a gathering of African American members of corporate boards of directors, a group that is still woefully small in number. At their meeting, directors were reminded of their obligation to continue to bring up issues of diversity in their board meetings; otherwise, issues of diversity, inclusion, and empowerment are not likely to be part of the boards’ conversations. One member of the group commented, “This is a group of African Americans whom CEOs listen to. That’s why developing this network is so important” (Cora, 2004, p. 43).

Communication Network Roles

Communication network roles—or the location individuals occupy in the flow of interaction—affect employees’ experience of work and their degree of influence on others. Well-connected individuals in an organization tend to be the most influential and the least likely to leave (Brass, 1984). Four types of communication roles occur in networks: the isolate, group member, bridge, and liaison. *Isolates* have little contact with others in the organization; they work alone either by choice or because their jobs require them to be structurally or geographically isolated from other employees (e.g., salespeople or service technicians who travel constantly). *Group members* communicate mainly within an informal clique, which may at times involve communication with a departmental, professional, or demographic grouping (e.g., an accounts receivable specialist or a member of an advertising team). *Bridges* (who are also group members) have significant communication contact with at least one member of another informal group (e.g., a human resources representative dedicated to serving a particular department), and *liaisons* have connections with two or more cliques but are not exclusive members of any one group (e.g., mediators or facilitators who are not themselves part of a team; some senior managers specializing in cross-functional initiatives like quality or strategy).

Recent developments in information technology have reduced the felt isolation of many jobs by connecting them through various forms of electronic communication. Research by organizational scholars Jennifer Waldeck, David Seibold, and Andrew Flanagin (2004) questions whether these types of connections can substitute for face-to-face contact, though some research does indicate that face-to-face

EVERYDAY ORGANIZATIONAL COMMUNICATION

Networking on Campus: Communication, Identity, and Empowerment

As research by communication scholars Elizabeth Bell and Stella Nkomo (2001) and Patricia Parker (2003) indicates, extraorganizational networks benefit historically marginalized groups by providing mentors and support as well as a “collective identity” in professional settings. But such networking opportunities can begin even before entering into a profession. Most colleges and universities, for example, have developed identity-based groups—from lesbian, gay, bisexual, transgendered, and queer (LGBTQ) coalitions to the Muslim Students Association—to provide students with a space in which to congregate, share resources, and network with other students, faculty members, and professionals both on and off campus.

For example, at our home campus (Arizona State University), the Hispanic Business Students Association (HBSA) defines its mission as follows: “The mission of the Hispanic Business Students Association is to prepare our members to be future leaders, serve our communities, promote diversity and create a progressive learning environment” (HBSA, 2013). To achieve its goals, HBSA sets out clear objectives, such as increasing the number of Hispanic students receiving a professional degree, developing leadership and business skills among Hispanic students regardless of college major, utilizing technology as a form of communication and education, promoting Hispanic culture, and providing interaction among all students at the university (HBSA, 2013). As such, the organization provides numerous opportunities for networking with alumni as well as corporate sponsors, allowing students to meet potential mentors and future employers and learn more about their professional options after graduation. In addition, the organization stresses volunteerism and encourages members to give back to their community.

DISCUSSION QUESTIONS

Consider what you have read about networks, as well as your own experience with networking on campus, and answer the following questions.

1. Are you a member of a student organization dedicated to the support and empowerment of a particular group, whether social, cultural, religious, or even major-based (e.g., English or Business Honor Society)? If you are not, visit your university’s website and take a look at the variety of organizations

available, or speak with a friend who is an active member of such an organization.

2. If you are a member, describe why your organization exists. In other words, what are the conditions, within the university and beyond, that encouraged your group to form?
3. What are your organization's goals? How does your organization work to achieve those goals? Do you anticipate that you will need a group like this once you leave the university? If so, why?
4. How does your group help you network and form ties with other students, faculty members, or outside professionals who support the organization's goals? How have you benefited from such opportunities? How might you benefit from such networking in the future?

is still the preferred and most effective mode of communication for some tasks, including organizational socialization. In our experience, some people are more likely to seek out and even thrive under relatively solitary conditions. Moreover, isolation within the organization does not necessarily mean a lack of connection in the field or profession; in the new economy, a person's network of connections outside the organization (both personal and professional) may be more important than internal organizational communication networks.

While we often think of networking as a means to develop and exploit one's connections for personal gain, for some these networks are necessary strategies for balancing work and family concerns. African American women have historically formed communities of "othermothers" who helped one another care for children and families. In contemporary culture, poor, working-class African American women continue to develop networks in which they often act as "border guards" who bridge boundaries between work and family, home and street. "In their roles as border guards, these women employed collective forms of empowerment that included shared resources among families trying to keep their children and homes safe in neighborhoods riddled with violence and drug use" (Parker, 2003, p. 268). Networks are clearly instrumental both within and outside organizational life.

Within organizations, liaisons can be the dominant interpreters of the organizational culture. As key communicators with tremendous influence on the direction of the company, they are able to transform any message into an interpretation that is consistent with their beliefs and to pass that interpretation quickly throughout the company (and at times to customers and the community). When organizational improvement efforts fail, it is most often a result of the improper mobilization of liaisons.

Any attempt to analyze communication network roles in an organization may be a sensitive issue for employees, who do not always perceive their degree of communication contact with others in the same way. For example, a subordinate might report having daily contact with a superior, whereas the superior may claim to have no communication with the subordinate. Differences in status or perception may also cause employees to respond in ways that reflect not actual but expected communication roles, reporting contact only with people they think they *ought* to communicate with at work. In addition, employees may be reluctant to participate in a network analysis because the results may reflect negatively on them. For example, in our analysis of network roles in a professional association, a department head who was identified by his subordinates as an isolate was subsequently dismissed from the organization. Consequently, it is critically important to collect and handle network analysis data with an awareness of the political implications of various findings. Network structures should not be shared with top management or the public without first considering the possible impact on employees who participated in the study.

Content of Communication Networks

Emergent communication networks develop around specific topics, or content areas, of communication (Farace et al., 1977). Each content area is regarded as defining a separate network; for example, a bank may have a social network for communication about personal matters and a task network for discussion of work duties. An isolate in one network may be a bridge or a group member in another. We all know people who are "well connected" when it comes to gossip but much less so with regard to business updates and company strategy.

Moreover, the identification of multiple types of communication content contributes to our understanding of the relationships between people in networks. For example, two people who communicate only about work are said to have a uniplex relationship, whereas people who communicate about two or more topics—say, personal issues, task issues, and new ideas—are said to have a multiplex relationship. Multiplex linkages have been identified as significant sources of social support and organizational innovation (Albrecht & Hall, 1991; Ray, 1987).

The content of communication networks takes on added significance when we consider it in terms of the sense-making process. In an attempt to extend the cultural approach to organizations, Peter Monge and Eric Eisenberg (1987) suggested that analysis of "semantic" networks (in which people hold similar interpretations of key organizational symbols or events) may be useful. The same network measures may be applied (e.g., isolate, group member, bridge, and liaison), but in this case they would refer not to the presence or absence of communication, but to overlapping interpretations of key cultural symbols.

Individuals who are in the mainstream with regard to employee values and beliefs would be group members; those holding radically different interpretations would be isolates. Measures of network density would also apply. In a dense semantic network, for example, there is shared meaning about major organizational

issues. This approach has been successfully applied to the analysis of perceptions of organizational missions and value statements (Contractor, Eisenberg, & Monge, 1992; Peterson, 1995).

□ Interorganizational Communication Networks

Employees communicate with coworkers within the organization as well as with customers, suppliers, and others in different organizations or institutions. In an advertising agency, for example, account managers interact with people from various newspapers and television stations, and in a university, the gifts and development staff communicates with alumni, accountants, attorneys, and local officials. Communication networks thus cross organizational boundaries.

Interorganizational communication networks are the enduring transactions, flows, and linkages that occur among or between organizations. Such networks vary in terms of their openness, density, and interdependence. Tightly coupled or highly interdependent interorganizational networks are sensitive to environmental jolts that affect whole industries (e.g., in the deregulated airline industry, a minor change introduced by one carrier, such as reduced fares, significantly affects all others).

As discussed in Chapter 4, open systems theory assigns great significance to an organization's environment. Some researchers regard organizational environments as consisting mostly of networks of other organizations. The complexity of this network of interorganizational relations varies, and highly complex interorganizational environments require great vigilance and skill to manage. Put differently, an organization's environment is a kind of "nested box problem," where each network exists within a larger network, ranging from the division and the industry to the nation and the world (Perrow, 1986).

Organizations participate in interorganizational communication networks in various ways. Two organizations are said to be vertically integrated when one builds parts or provides services that the other needs for its delivery of a product or service. For example, Pratt & Whitney manufactures aircraft engines for sale to Boeing. In contrast, two or more companies are horizontally integrated when their customers are passed from one to the other in the service cycle. An example of this is the connections between a cancer-screening clinic, a hospital, and a hospice center.

Eisenberg and colleagues (1985) developed a typology of interorganizational communication that is useful in sorting out different kinds of linkages. Specifically, there are three types of network linkages for the exchange of materials and information: institutional, representative, and personal. An institutional linkage occurs without human communication, as in the automatic transfer of data between companies. A representative linkage exists when people from various organizations meet to negotiate a contract, plan a joint venture, and the like. A personal linkage occurs when members of two organizations communicate privately. However, it may be difficult to distinguish between personal and representative linkages when people meet informally without any intentions of discussing business but do discuss business with significant results. The various types of linkages may also change over

members—with potentially disastrous consequences (Corman, Trethewey, & Goodall, 2008).

The explosion in online communication technology is changing every aspect of how we live, and the increasing power and capabilities of smartphones mean that we live a nearly constantly connected life. That said, the mere existence of these connections says little about their quality. Just as research on multitasking shows a general degradation in the quality of work given distributed effort, greater amounts of connectivity may not indicate greater levels of collaboration or meaningful communication. Moreover, greater connectivity greatly increases the vulnerability of systems and networks, which are only as strong as their weakest component. For example, a recent security breach in Java software provided a back door for hackers to attack any system on which the software was installed. Tightly connected systems are easier to defeat than loose, distributed ones, because a blow to one part can affect the whole. Similarly, dense communication networks can be sites of significant diversity of opinion but also of groupthink, as members police each others' postings and "defriend" those who feel differently. Much more research is needed for us to develop a more fine-grained understanding of the possibilities and problems associated with the unprecedented ease of instantaneous global communication.

From an organizational perspective, new communication technologies in general and social media in particular can appear to be disruptive technologies that challenge traditional business models (Christensen, 2011). For example, in the education and health-care industries, information technology is now the leading driver of change. In higher education, an explosion in access to free online education (largely through massive open online courses, or MOOCs) is both creating unprecedented educational opportunities worldwide and challenging the control that colleges and universities have over the granting of degrees and other forms of certification (Skorton & Altschuler, 2013). In health care, the evolution of sophisticated electronic health record systems could provide real coordination of care and could grant individuals greater control over their health information. In both cases, technology with the potential to create new levels of connectivity is presenting a major threat to traditional industry models and assumptions.

In both of these examples—and in many other industries—it pays to remember that the mere existence of these technologies does not in and of itself result in greater transparency, collaboration, or engagement. A number of research and consulting groups have developed recently that seek to define the conditions under which digital and social media as well as mobile media more generally are most likely to be successful (cf, the Altimeter Group, altimetergroup.com/research/reports). Common to all of the consultants' recommendations is the idea that the technical integration of communication media continues to get easier, while many of the cultural and interpersonal issues surrounding the uses of technology remain unresolved. There is significant research yet to be done in this area, including, for

example, the effect of smartphones on intimate relationships and the influence of Skype on the effectiveness of job interviews and meetings.

■ CREATIVITY AND CONSTRAINT IN TEAMS AND NETWORKS

Team-based organizations face the challenges of balancing creativity and constraint in group relationships and of productively dealing with diverse interpretations. The members of a newly formed team are typically anxious about their role, and they struggle to find a voice for themselves in the context of the group. This can be a formidable challenge during the orientation phase of a team's development.

During the conflict and emergence stages, members attempt to articulate their perceptions creatively, but their efforts are heavily weighted with constraints (e.g., "We tried that, and it didn't work" or "Management will never take our proposal seriously"). Other constraints can be useful in promoting team effectiveness, such as meeting times and places, agendas, and problem-solving procedures. In general, however, team members' ability to function as a group depends on their skill in balancing the creative contributions of individual members with the constraints imposed by the group as a whole.

Networks both within and among organizations are notable for the speed with which creative new ideas can be diffused among large groups of people. Mostly independent of the usual constraints, such as formal positions and hierarchy, informal communication networks encourage innovation and collaboration. Nevertheless, over time networks may acquire a relatively stable structure that can act to constrain future communication. In some countries (particularly in Asia), informal connections among large corporations largely dictate the flow of business among these companies.

SUMMARY

Collaboration between and among employees and managers can occur in various ways and to varying degrees; employee participation in decision making is both natural and desirable. The ideal of a democratic workplace is one in which organizations concern themselves with the interests of many different individuals and groups (not just the stockholders). The multiple-stakeholder model and a focus on employee engagement promote the type of participation necessary to achieve this ideal.

Teams and networks are now common organizational forms for collaborative work. The drive to organize in such a manner comes from the realization that no single individual—or pair of individuals—is sufficient to achieve complex goals.

In team-based organizations, employees from a variety of organizational functions serve as members of one or more working groups. These employees might work in one of several different types of teams, such as project teams that help coordinate the successful completion of a particular project; work teams that are responsible for a "whole" work process that delivers a product or service to a customer; quality-improvement teams that meet to improve customer satisfaction, evaluate and improve team performance, and reduce costs; and virtual teams that achieve goals and complete tasks across time and space. All types of teams, however, grow through five essential communicative elements: roles, norms, decision-making processes, management of conflict and consensus, and cultural diversity. Positive collaboration can be achieved through the development of shared goals and a disciplined approach to balancing individual achievement with the need to reach out to others.

Communication networks, or groups of individuals who share regular lines of communication, have emerged as a primary mode of organizing in the new economy. Networks are emergent, informal, and somewhat less interdependent than teams. They matter because regular contact between identifiable groups of people (e.g., scientists or political action groups) can play an important role in accessing information and in the quality and direction of decision making. In organizations, types of small-group networks include circle, wheel, chain, and all-channel. The more powerful emergent types of networks (grapevines, cliques, and loosely coupled networks) emerge from formal and informal communication among people in organizations. Interorganizational types of networks include institutional, representative, and personal linkages. Network communication is affected by patterns of interaction, communication network roles, and the content of communication networks.

Thanks in great part to advances in computer networks and online technology, our understanding of what constitutes a network has changed considerably. What was once a connection among people within a single organization is now a connection among people in an entirely global society. As advances in technology continue to expand, especially the growth of mobile media and social media sites like Facebook, we will see additional significant changes in communication behaviors, particularly in the areas of information seeking and relational development.

QUESTIONS FOR REVIEW AND DISCUSSION

1. What is meant by employee participation in decision making?
2. What is Stan Deetz's ideal for democracy in the workplace? How does the multiple-stakeholder model challenge accepted ideas about effective organizational communication?
3. What are the benefits associated with an organization's attempts to increase levels of employee engagement? What would be the main challenges to doing so?