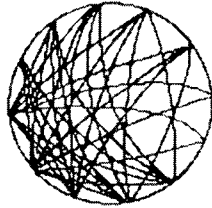


CHAPTER 5



TEAMING WITH PEOPLE

The Paradoxes of Participation

We live in a 270-year-old house near Boston, Massachusetts, and we still get milk delivered weekly in glass bottles. These are all anachronisms: the pre-Revolutionary house, the milk route, and the glass bottles. The rest of the developed world goes to the supermarket to get its milk and juice in paper cartons and plastic containers. Most likely the packaging comes from Tetra Pak, the half-century-old firm that delivered the first milk cartons in 1952 and now provides its products in 117 countries.¹

In Fall 1994, the company's subsidiary Tetra Pak Converting Technologies AB took a bold leap into the future. They eliminated internal functions altogether and reorganized around client project teams. No more line managers and no more staff.

Tetra Pak Converting Technologies

Tetra Pak Converting Technologies (CT) is a 115-person independently incorporated company within the 18,000-person agglomeration of 50 factories and product companies that is Tetra Pak. One of the biggest packaging manufacturers in the world, Tetra Pak produces 75 billion

packages a year. It is the largest of the four branches of Tetra Laval, the Swedish foodstuffs giant formed in 1993, a 35,000-person behemoth.²

Tetra Pak sells two types of products, machines that fill the packages and the packaging materials themselves. CT, working at the juncture of machines and materials, is a production engineering house that creates new converting equipment and helps factories develop new processes to reduce costs.

As globalization spread in the 1970s and 1980s, Tetra Pak began to open factories around the world. This trend accelerated in the early 1990s. Suddenly, the bulk of CT's clients were no longer in Lund, Sweden. The company had to adapt—quickly.

Transformation at Light Speed

When Sture Karlsson arrived as managing director of CT in August 1994, he began his tenure by talking to the company's clients about their needs and expectations. Initially confused by what he was doing, employees quickly came around. He engaged the whole company in the client discovery process and the subsequent discussion of how best to organize. They learned that clients wanted more projects done faster and better.

At the same time, Karlsson talked individually with CT's employees. He found out that CT's major business process was not engineering or research and development or any of its other functions, but rather its client projects.

The take-off point for the new organization came at a two-day management meeting in October 1994, just two months after Karlsson arrived. "We started to think, 'If the project is our focus, why do we have a line function?' That was the turnaround point," Karlsson says.

Most experienced managers say change takes time, inevitably more than anticipated. But not always. "It can go faster than you expect. I was surprised that it went so fast with such commitment all the way. A great portion of it was the way that we communicated it," Karlsson remembers.

Within a day of their decision to change, management sat down with the unions to say they needed to reorganize but "didn't know how it would end up." Two days later, they took the same message to the whole

company thereby establishing a pattern of continuous communication. Karlsson's one-on-one meetings continued. Small groups held open discussions in "square meetings" (referring to the architecture of the office centers), and monthly companywide meetings took place (for those first two turbulent months, they took place weekly).

Three questions immediately arose when they asked themselves what the risks were in moving to a purely project structure:

1. How could there be a stable place to have salaries set and make social contacts?
2. How could they be certain that they had a process for long-term competency development in place?
3. How would connections happen between the teams and across the company to share knowledge and manage common processes and resources?

To address the issues related to people, they developed a mentor system. Employees would choose a member of the management group to act as their direct link to the senior team, to help develop their individual competence development plans, and to act as the key figure in setting their salaries.³

Networks address core competency and infrastructure needs. Each network has a sponsor from the management team and a competency leader who is a non-management specialist in the area.

Role Redesign

As the discussion about the new organization continued, decision making gradually expanded beyond the nine-member management group. The workshop finalizing the vision and organizational structure involved 27 people, a quarter of the company.

People experience organizational change as a change in their roles. At CT, they have continued and strengthened some roles, such as that of project manager. Other roles such as line managers have gone away. There also are altogether new roles including network and competence support.

Change hit the management group particularly hard. Their functional roles had been eliminated. Karlsson allayed their fears by making it clear from the start that “roles are changing, not people.” The management group as a whole was charged with redefining its place in the new structure. Together they defined the key new roles for themselves:

- ? Mentors to 10—15 employees each;
- ? General project support;
- ? Project sponsorship and steering committee membership;
- ? Network support;
- ? Factory (client) contact; and
- ? Factory and product company contact.

The CT management team takes responsibility for a variety of initiatives: internal networking, the overall direction of the company, the total results of project activities, and the external network of clients, suppliers, and competency sources, as well as the relationship with the larger Tetra Pak organization.

Project teams are another key element in the new structure. Multi-level by design, each team includes a management team sponsor. The sponsor is also part of the team’s steering committee along with the client and other stakeholders and advisors. The project manager personally commits through the project life time, the traditional role having been weighted with considerably greater responsibilities for success.

Specialists staff the teams. They also belong to and may share leadership in at least one competence network. Two sorts of competency networks serve systemwide needs:⁴

- ? Core technical competencies related to the specific requirements of the business (such as printing); and
- ? Role (project managers’ network, secretaries’ network), infrastructure (communications), and enterprisewide functions (such as quality and the environment).

At CT, the purpose of a network is “to maintain and further develop work skills and competence.” Everyone is expected to keep one another

informed about projects, literature, courses, exhibitions, study visits, suppliers, and other external contacts that bear on the network's specialty. A Competence Support leader convenes, coordinates, recruits, and speaks for the network. Activities are small in scale so as not to burden the projects, and time is allocated for support work that everyone recognizes as requiring time unconnected to projects.

Project Routines, one of CT's networks, shows how a role-based network contributes to quality, improved processes, and cost reductions. In this example, as project managers discussed how to run projects within CT, they began to build a common file of best practices, guidelines, and standards for projects. The network is also responsible for the competency development of current and future project managers.

One of the notable savings of the new organization is a dramatic shrinkage in capacity buffers. These are the underutilized resources that most functional organizations accept, such as people sitting around not productively occupied. Four factors provide this flexibility for CT:

1. Management team project support that coordinates new projects, responsibilities, and resources;
2. Guidelines allowing teams to borrow staff from each other for up to a week, and longer with the agreement of project support;
3. A common source of work methods and "project routines" that enables specialists to easily move between teams; and
4. Networks where people discuss resource allocations of present and anticipated work with an openness "nonexistent in the old organization."

Going "First Class"

Communication in all of its many meanings is the key to CT's success. First and foremost has been communication of the change process itself. Once Karlsson and his management team glimpsed the new structure, they switched to the new model while working out details along the way with the people directly affected. The process both demands and generates trust. "If you are insecure about where it will go, then the process itself must be very secure," says Karlsson.

Once the change was underway, face-to-face interactions increased dramatically in one-on-one meetings, small group discussions, and all-company gatherings. Even as the direction and plan took form, CT recognized the need to expand the number and type of communications channels to support the project teams and competency networks.










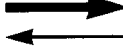



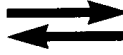
In mid-1995, less than a year after the change process had begun, CT started to use First Class.® This groupware system offers sophisticated e-mail, conferencing, and newsgroup bulletin board services. Each network and many projects established their own conversations. Online conversations are open to the whole company. Monthly team reports are also open to everyone.

The impact of questions being posted in the morning and answered from 10 directions by evening generated early excitement and underscores the business value of the online exchanges. “It is a tool for us to make network thinking obvious,” Karlsson remarked. “It’s the type of experience that makes you feel this is the right thing to do. It helped me show my boss what we were doing. We let him in (to the discussions) just before Christmas, and he suddenly said, ‘Now I understand.’”

CT did not rely solely on computer-based communications tools that soon included the Internet and the use of internal Web sites. They put together a plan to utilize other channels as well, including large meetings, an internal news-sheet/magazine (featuring summaries of management meetings), cascading information through the reporting structure, gatherings, literature, and individual interviews. Their media plan indicates whether the communication is one-way or two-way and how often it occurs (for example, monthly large meeting, weekly magazine, continuous newsgroups; Figure 5.1).

The most important changes, however, have been in perspective and behavior. In virtual teams and the networks that they connect to, the overall communications pattern shifts from delivery to access. Lena Bengtsson, responsible for CT’s communications competency network, says, “We have transformed the whole system of information flow and have tried to change the habits of our colleagues. Instead of being fed with information we encourage people to be curious and seek out information. Now our responsibility is to see that the information required is available.

Figure 5.1 Tetra Pak Media Plan

Media	Type	Interaction	Frequency
Large meeting			Monthly
Internal magazine			Weekly
Cascade information			Weekly or biweekly
News groups			Continuous
Gatherings			Monthly
Literature			As needed
Individual interviews			Variable

In virtual teams and networks, each act of sending information is an act of leadership that requires making assessments of need and appropriateness. An open information system puts new demands on people, which boil down to two at CT:

1. “Do I need to make sure that this information reaches specific receivers? If [so], the information must be clearly addressed.
2. “Is this information that I want to be available to people when they need it? If [so], then I must store the information correctly.”

Extensive communications support offers great benefits for regular and routine information exchanges, for providing background and related information, tracking plans, and the like. In Karlsson’s view, old-fashioned

face-to-face meetings are still best for “gaining commitment and problem solving.”

The Stress of Being Me and We

CT has had a unique and instructive way of balancing the inevitable strain between individual and group needs. At CT, the company addresses all three aspects of the life of the individual in the new boundary spanning world: independent members, shared leadership, and integrated levels.

While it is not easy to be a member or leader of a team, it is even more difficult to play these roles in a virtual team deep in the flux of change. All the self-doubting questions that any team member asks—“What am I doing here? Do they need me? Am I included? Who thinks they are a leader here? How aggressive do I need to be? Will I measure up?”—can be even more exaggerated when the group lacks daily face-to-face contact.

Doubts, concerns, perceived problems, and boredom mingle with excitement, opportunities, caring, satisfaction, and even exhilaration. To be part of a team is to continuously work a dynamic tension deep in the heart of being human.

People must simultaneously be “me,” an independent individual, and “we,” an interdependent part of groups.

Each of us grapples with an inevitable and continuous tension between the need to *differentiate*—to enhance our individuality—and the need to *integrate*—to bond in groups.

Complements Not Opposites

Individuality is necessary for cooperation. A paradox. An apparently contradictory assertion that may be true.

Too often the individual and the group are posted at opposing ends of a contradiction, each vying for primacy in a win-lose contest. We

characterize entire cultures as individualistic (for example, the United States) or group oriented (for example, Japan).

In reality, *me* and *we* are complements, not opposites. This is the key to resolving the paradoxes of participation.

Virtual teams are high -connectivity/low-maintenance organizations.

To a significant degree, virtual teams are self-managing. To be successful in virtual groups, people must have much more independence and decision-making capability than people typically do in bureaucracies. People who form teams that cross boundaries need to know more, decide more, do more. This is made possible by clear purpose and personal commitments together with open, accessible, comprehensive information environments. These in turn link to the ongoing conversation that is the team's process.

Sture Karlsson puts it this way, "People must know more about the vision and purpose when they cannot lean on the side of the organizational box they belong to."

It gets more complicated if you are simultaneously a leader of teams of subordinates and a member of teams of peers and bosses. "Me" is me personally, but also me representing "my team." "We" is the family feeling of "me and my reports," but it is also the language of "me and my peers" with the boss. How can people be both "me" and "we?"

The Janus View

To see *me* and *we* across the boundaries of a virtual team, everyone needs the ability to adopt a "Janus view." It is a personal and fundamental virtual skill.

Janus is the Roman god of beginnings and endings, the guardian of doorways. The god of portals has two faces, one that looks in and the other that looks out.

Janus views life from the boundary—looking inward to the group itself and looking outward to other people and other groups.

The CEO has a natural Janus view. The top-level leader sits on the organization's boundary and is skilled at balancing views of internal needs and capabilities with external assessments and strategies. Internally, the organization as a whole appears as a web of relationships, while externally a web of relationships enmeshes the organization itself. Not only at-the-top leaders, but leaders at every level sit on boundaries. Simultaneously they peer “up and down” and “in and out.”

From the Janus view, people are *holons*. Holon means *whole* (“hol-”) and *part* (“-on”). People are both wholes and parts. People are parts of groups and may stand for the whole group as leaders.

Arthur Koestler originally coined the word holon.⁶ It concisely expresses the idea that everything (like atoms, cells, solar systems, cars, and people) is simultaneously a *whole* in and of itself and a *part* within larger systems.

Usually called “hierarchy” by scientists, the holon is a central principle of general systems theory. It is the idea that life and the universe and everything in between structures itself in levels, “subsystems comprising systems within suprasystems.” Mathematicians talk about “sets-of-sets.” Nobel Laureate Herbert Simon called hierarchy the “architecture of complexity.”⁷

Simple word, complex idea. We use the holon (hierarchy) idea every time we use money, outline a report, store a file, find a reference, or check an organization chart. We use the holon idea when we “go up a level” to a higher authority, broader scope, and more abstract view. We also use it when we “go down a level” to more detail, narrower scope, and more concrete views.

In virtual teams, people operate as holons in three ways, as:

1. *Members*, the parts, whether people or groups of people;
 2. *Leaders*, the connective tissue between the parts and the whole;
- and

3. *Levels*, the successive wholes that make up complex networks, the recursive idea embedded in the holon.

Strange and new a word as it is for most people, holon can stand for organizations, small groups, and individuals. It is logical (if a bit strange) to say “a team is a holon composed of individual holons that are part of a larger organizational holon.”

Stripped to its mathematical essence and used in the context of technology, a holon is a “node.” People and virtual teams are nodes in networks. A node may be simple—one person—or it may unfold into a whole universe—America Online is one node on the Internet. A team is a node in a larger organization, and it comprises member nodes linked into a network. This ability to map organizational terminology to technology is a powerful benefit of using the virtual team model (see Chapter 7, “Virtual Place”).

Members, leaders, and levels are three transformations that resolve the me/we paradox. They turn flesh-and-blood huggable people into intangible hard-to-grasp virtual teams.

1. The transformation of the autonomous individual into a member of a team;
2. The leadership transformation of individual members into the group as a whole; and
3. The transformation of a group of individuals into a “group individual,” a new level, a team.

Independent Members: “Who Is Involved?”

The first transformation rests on what seems to be an uncommon-sense idea: *People are not the only parts of groups*. Does this make sense? It seems so obvious, beyond question: People make up groups! Period. However, there are problems with the view that people are all there is to groups:

- ? It obscures the reality that the group is something more than the sum of its members. A virtual team is a unit—a coherent

system itself—or “something more” that is separate from and in addition to its corporeal members.

- ? If people are the only parts of groups, then the ability to analyze and understand groups in a detailed way is limited by individual human psychology and the ability to peer inside people’s heads.
- ? Finally, if only flesh-and-blood individuals can be members of small groups and teams, then there is no meaningful way to talk about groups that we perceive as organizational individuals, what anthropology might call “fictive individuals.” The law formally recognizes corporations (which American English even refers to in the singular—“IBM said today that it would and nations (“France declares) as “individuals.”

Roles Relate People

People are not parts of groups the same way that hearts are part of people’s bodies. Only in the extreme (for example, slavery) does a group own people body and soul. Lynda Popwell’s experience at Eastman Chemical Company of finding herself on too many teams is not unusual. Most people are members of multiple groups. We all take part in a constantly changing personal pageant of many small groups simultaneously—family, community, friendship, and affinity groups as well as task-oriented work teams. In each group and team, we play different roles.

Like people, roles are integral parts of groups. People animate roles that belong to the group.

The role is a basic social structure that mediates between an independent individual and expected behavior in a group. Roles naturally arise in small groups and are what sociologist Erving Goffman calls the basic “unit of socialization.” In a small group, roles are informal, more “felt” than “visible.” In larger organizations, however, roles tend to take on more concrete trappings through titles, written job descriptions, and personal contracts.

Although you cannot see them, you experience the importance of roles by talking about your part in a group: “What is my role?” or “That role’s already filled,” or “I can fill that role,” or even, as you are leaving, saying, “There’s no role for me.”

Roles translate between me and we, between the bottomless complexity of individual people and the comparative simplicity of playing a part in a group.

Roles are easier to see in their more formal manifestation as “positions.” People usually diagram positions in relationship to other positions, for example, an organization chart where this person reports to that one. They often accompany them with written profiles—job descriptions. Positions clearly belong to the organization that sets them up and can just as easily take them away.

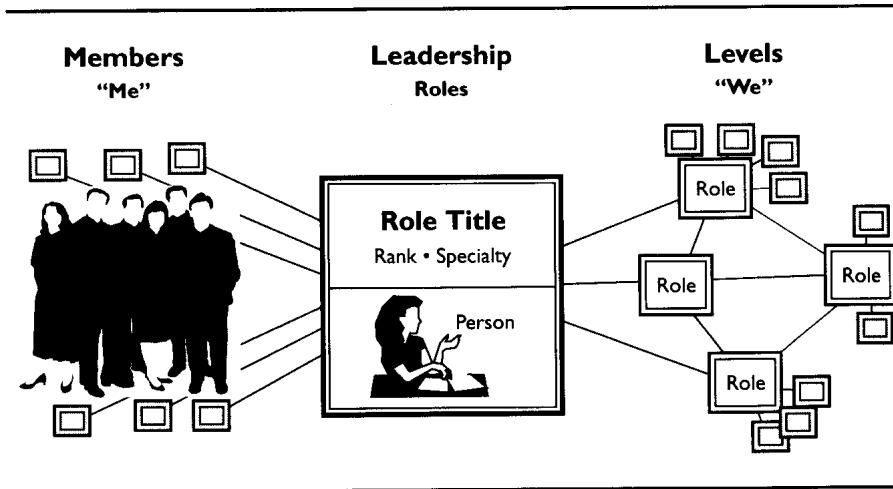
A position is either “open” or “filled.” You receive “an offer” for a position that you “take” or “accept.” An open position—a formal role—stands by itself as a sometimes gaping hole in an organization, an empty place in the structure. When a person steps into a position, a classic dynamic arises between the characteristics of the particular person and the legacy of expectations that the role conveys. Once populated anew, the role both shapes and is shaped by the person who occupies it (Figure 5.2).

Formal positions provide clues to the informal roles that people play in small groups that can be more elusive. People (particularly management) also carry their positions into the many teams they join. Sometimes this is appropriate; sometimes it is not. For positional teams, such as an executive management team—a *de facto* task group because of its place in the hierarchical structure—it is especially important for people to understand both their formal and informal roles.

In virtual teams with limited face-to-face interaction, roles rise in importance. Consider that in virtual teams:

- ? People typically play multiple roles, often many more than in conventional teams;

Figure 5.2 Roles Integrate “Me” and “We”



- ?? Roles require greater clarification. Expectations need to be made more explicit than they are in collocated teams; and, at the same time,
- ? Role flexibility is essential. Because the process is dynamic, roles are constantly changing.

Independence Starts with Me

Respect for the individual is a core value of all the great team companies. At Motorola, for example, its management philosophy “begins with two key beliefs—respect for the dignity of the individual and uncompromising integrity in everything we do.”⁸ The trick is to develop greater cross-boundary capabilities (through clear purpose and constant communications) without diminishing—better yet, while enhancing— the independence of individuals and teams.

Enhance independence as you strengthen interdependence.

Independence is a quality that permeates every level of organization—from the personal level of people as members of teams, to teams as member parts of larger organizations, to the independence required of companies in alliances. That is, all groups need a minimal level of independence and decision-making in relationship to the larger system. Virtual teams need even more.

Independence can never be complete or absolute. Not for people, teams, companies, or nations. Independence is always a matter of degree along a range from “too little,” to “sufficient,” to “optimal,” and finally, “too much.”

When CSC Index, the Cambridge, Massachusetts, consulting firm reorganized after an unparalleled growth period, it drew specific attention to this tension. “The local offices in New York, Atlanta, Boston, Chicago, and San Francisco needed autonomy,” recalls senior vice president Judi Rosen, “but we also needed strong ties among the people in specific practices who were spread out among the locations.”

Because virtual teams need higher levels of *interdependence* in roles, they require correspondingly higher levels of relative *independence* and voluntary behavior in the individual members.

For virtual teams, entirely new roles have sprung to life to deliver productivity and provide cohesion, such as network support at Tetra Pak Converting Technologies. It is not just new roles. People must play old team roles in new ways. This is particularly true for the central role of leadership. There the struggle between “independent me and interdependent we” becomes part of the group persona.

Shared Leadership

One leader makes for a good sound bite, but it takes more than one to lead a successful virtual team.

Insofar as the sudden proliferation of virtual teams is in some ways a harking back to a simpler way of organizing, it is instructive to look at how the most original teams handled leadership. In forager societies, there are many informal leaders. Among the !Kung tribe in the Kalahari Desert in Botswana, a foraging society that has survived thousands of

years in spite of tremendous threat, leaders influence but they do not force.

Traditional anthropology interpreted such systems as being without a head (“acephalous”). Then in the late 1960s, University of Minnesota anthropologists Virginia Hine and Luther Gerlach confirmed that this distributed leadership form is in reality many-headed (“polycephalous”).⁹ Herbalists, hunters, midwives, warriors, and other particularly skilled or knowledgeable people take the lead as circumstances require. To one frustrated researcher trying to identify a single local leader, a !Kung elder said, “Of course we have headmen! In fact, we are all headmen.... Each one of us is headman over himself!”¹⁰

Virtual teams take a page from the !Kung book. As organizations that require much more leadership than conventional teams, when successful, they nevertheless have much lower overall coordination cost. This only works if everyone understands and assumes part of the expanded virtual leadership burden.

Grasping a Group

We each wear many hats, a typical metaphor for diverse roles. Even very small groups may have members with many overlapping roles and the number of possible roles is infinite. Decades of research on small groups and teams searching for general team roles have turned up this major insight: The only universal role observed in groups is leadership.

Virtual teams that are highly self-motivated and self-managed are leader-ful not leader-less.

Leadership is pervasive in virtual teams. The leadership structure as a whole is an inclusive set of related roles of leaders and followers. Reuben Harris, chair of the Department of Systems Management at the Postgraduate Naval Academy, has identified six basic leadership roles that virtual teams require:

1. Coordinator
2. Designer
3. Disseminator
4. Tech-net manager
5. Socio-net manager
6. Executive champion

The transformation of a person into a group by way of a leadership role is a miracle of social construction. Leaders are convenient handles to help members and outside observers alike grasp groups.

When confronted with complex ideas, people have a habit of using one part of the idea to represent the whole.¹¹ “Wall Street” stands for the complexity of U.S. financial markets; the “Oval Office” stands for the presidency and Executive Branch of government.

The phrase, “I belong to Jim’s group,” shows one person representing a whole group, nowhere more obvious than in the role of the CEO. Here, a person stands for a corporate entity that may include thousands of people, “speaking for” the organization externally and “speaking to” the group internally.

The habit of simplifying complexity by grasping a prominent part translates into a presumption of single-pointed leadership. Cultures even build in this view. Such is the case at one major company that requires every project to have a single designated responsible individual or DRI.

While virtual teams may have single leaders, multiple leaders are the norm rather than the exception.¹² Virtual teams that deal with complex issues and problems invariably have shared leadership regardless of the titles they use for convenience.

Many authors of books on teams simply assume without discussion that a team needs a single leader. A few distinguish, as we do, between formal leadership (governance) which may be singular and the broader multiple leadership that always arises in a successful, healthy team. “In successful teams, leadership is shared,” states Glenn Parker unequivocally.¹³

In the earliest teams, the camp teams, leadership was informal and distributed, based on influence rather than authority. We are in many ways returning to the organic structures of that era, albeit with a

fantastic new capability to create nonterritorial spaces and share information.

Social and Task Leadership

Small groups typically have at least two kinds of leaders—social leaders and task leaders, a distinction first made in the 1950s:

- ? *Task leadership* is oriented to expertise, activities, and decisions required to accomplish results. The measure of task success is *productivity*. This leadership clearly is of central importance to virtual teams, since “the task rules” in this type of small group.
- ? *Social leadership* arises from the interactions that generate feelings of group identity, status, attractiveness, and personal satisfaction. The measure of social leadership success is group *cohesion*.

In a traditional hierarchy-bureaucracy, social leadership simplifies and formalizes as a place in the authority structure. Task leadership boils down to one core expertise. A typical role title reveals both the social and task aspects. Consider the vice president for Manufacturing:

- ? The vice president is a designation of social *rank*, a level in an authority structure—the hierarchy part of the title.
- ? Manufacturing is a label of task specialization, pointing to an area of expertise—the bureaucracy part of the title.

How do you convey rank online? New interactive media such as email pose unforeseen problems to the existing authority structure. In work areas, for example, space displays importance (a closed office versus a cubicle), signs offer titles, and choice of attire differentiates employees from executives.

Rank—having it and using it—is a major challenge for virtual groups.

While this status-creation process exists in virtual teams (as it does in all teams), the role of rank is far from clear or easy to settle. Too much rank ossifies the team all too quickly. Rejecting it sometimes cuts the team off from necessary organizational connections. Throwing out hierarchy blindly also risks the loss of the crucial navigational and cognitive advantage of levels.⁴

A team will not coalesce or feel complete until it identifies a critical mass of appropriate people with the expertise required to accomplish its tasks. Teams acquire skills for their tasks as people perform their activated roles.

A new team often defines its expertise roles before it locates the members who populate them. This is in itself a step toward virtuality. Imagine a team that does not yet exist. It is most often the search for the “right people,” those with needed expertise and experience, that leads to different locations and organizations—and the consequent formation of a virtual team.

While rank is confusing, specialization is booming in virtual teams. Your area of expertise most often defines your role in task-oriented virtual teams.

“I can’t think of any project that we do on our own. There is just too much to know and there are too many specialties in the built [architected and constructed] environment,” says Gary Wheeler. Wheeler is a principal at Perkins & Will/Wheeler, the Chicago-based architectural, engineering, and interior design firm and a past president of the American Society of Interior Design. “Ninety-nine percent of what we do is not a stand-alone. We designed a sales office in New York that involved an engineering firm, a construction manager, a real estate consultant, an audiovisual consultant, a move coordinator, and technology and data consultants. The ‘real’ client was in Cupertino, California, and the user client was in New York but even they were in three different divisions. Our job was to make sure that the whole group was interacting and coordinated. People had to step forward and then step back when it wasn’t their job.”

Managing the challenges of virtual team life also brings the opportunity to involve the best minds and most experienced people, wherever in the world they may be. In time, great teams will become the norm as we climb the learning curve of distributed work.

Integrated Levels

Big organizations are made up of smaller organizations that are made up of small groups. Small groups tie together organizations from the front line to the executive suite and board room.

As the basic unit of organization, how big is a small group? How big is a group of small groups? Does being virtual make a difference in size?

Counting the Guests at the Virtual Table

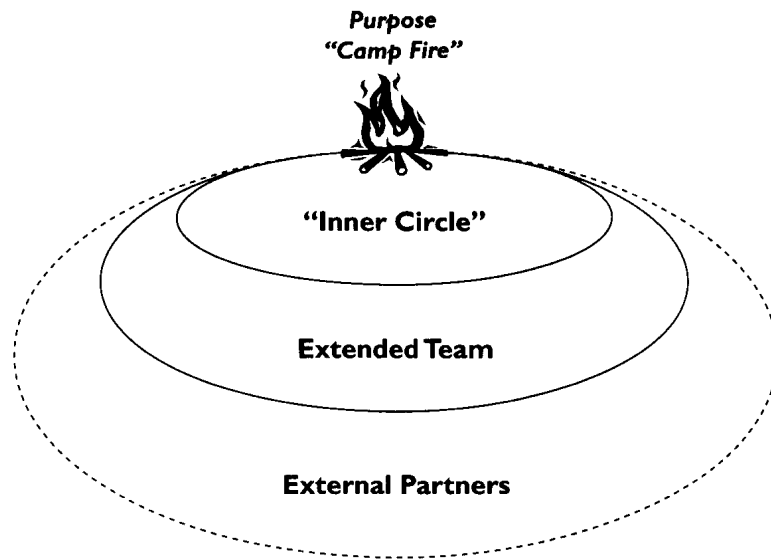
The number of people on a team is one of those things that appears so obvious that it is easy to miss its significance. All teams, after all, have a size. Size refers to the number of people who are members. Size also strongly influences the internal communications burden and the number and variety of interactions and relationships that the team requires.

The size of a collocated team is rather immediately obvious and membership is usually clear. In virtual teams, size often can become fuzzy as membership swells and contracts as individual participation peaks and wanes. Virtual membership boundaries often have degrees of “centralness” or “bands of involvement”—for example, a core group, an extended team, and external partners (Figure 5.3).

Millions of years of experience indicate that some numbers recur. There seem to be two natural breakpoints in the size of small groups: 5 and 25.

The number 5 sits at the approximate midpoint of a range for the size of a team. Researchers, popular writers, and experienced team leaders

Figure 5.3 Bands of Involvement



alike agree that the ideal team size ranges from 4 to 7 members. This is, not so coincidentally perhaps, the same size as a typical Stone Age family and not very different in size from many families today.

Is there a lower limit to team size? One debate among researchers is whether two people, technically known as a dyad, are enough to be considered a group? Three people, so some thinking goes, bring enough diversity to qualify as a small group: Three people offer multiple communication pathways and the possibility of subgroups and cliques.

This is not a question for us: two can team. If we look just at the roles that people play in groups, then even two people can play many roles with one another, with a great diversity of communication between them. As friends, lovers, spouses, parents, business partners, and even co-authors, we surely are a very small but very complex group.

Is there an upper limit on how big a team or small group can be? Different people suggest different numbers, but the general upper limit

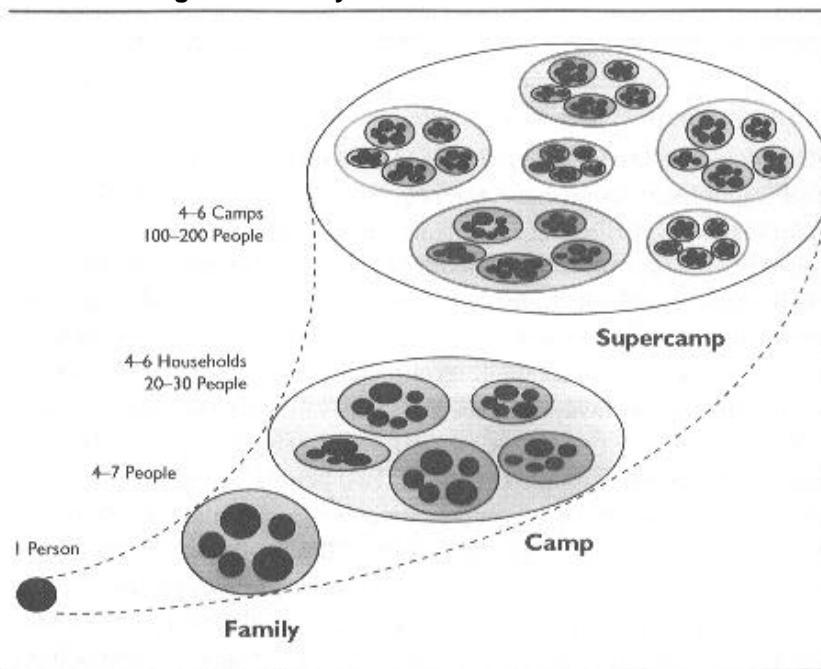
figures range from 15 to 25. Some writers offer a different sort of rule for measuring the extent of small, such as “the number where everyone knows everyone else,” or whatever size can form a “functional unity.” Teams of 25, however, typically are groups of small groups.

Teams Cluster into Teamnets

Teams do not naturally exist in isolation. For millions of years, teaming occurred in camps and groups of camps. Teams naturally belong to a camp (Figure 5.4). This remains true today, even if the camp is often unrecognized.

The nomadic family yoked together between 4 and 7 people as its basic socioeconomic unit, the same size as today’s typical team. From

Figure 5.4 Early Evolution of Team Levels



time immemorial, these small units naturally have congregated into larger

associations. Camps, involving clusters of 4 to 6 families, appear to be as universal as the family itself. The Olduvai Gorge in Tanzania, for example, reveals base camps of 25 to 30 people as early as 1.7 million years ago at the very beginning of the Stone Age, the Lower Paleolithic era.

This primordial clustering has given rise to what researchers have called “the magic number 25,”¹⁵ camps of 5 families averaging 5 members each. Twenty-five is also the number of people in most everyone’s “persisting life-long network.” These are the folks who are closest to you throughout your life—job changes, divorces, births, deaths, moves.

The size of the camp is comparable to the outside limit for a small working group. With more than 25 or 30 people, a comfortable meeting becomes difficult and starts to turn into a conference and people cease to be entirely familiar with one another.

At the next level, Nomadic Era camps invariably joined up in a supercamp, a local network of 4 to 10 or so camps who together identified the foraging territory of a “local group.”

These supercamps are comparable to a large group of 100 to 200 people, another natural cleavage point in modern organizations. W.L. Gore & Associates, the folks who brought Gore-Tex to the world, keep their plant size to a maximum of 150 to 200, which founder Wilbert (“Bill”) Gore believed was the number at which human achievement peaked. Larger than that, he said, people start to get in one another’s way.

When people call a group that is bigger than a handful or two of people a “team,” they usually are referring to a “team of teams.” This is a group that has a common set of cross-team goals and interdependent tasks—what we have dubbed a *teamnet*, a network of teams.⁶ Understanding the appropriate internal team structure is an often overlooked design issue. People often make these sometimes contentious subgroup definition decisions too early, too make-it-or-break-it-confrontationally, or too unconsciously and off-handedly.

A good yardstick for team size is the “rule of about 5”: Package work for small teams of 4 to 6 people. On average, 25 people will work in 5 5-person teams.

There cannot be one “right” size for teams. Team size depends first on the task at hand, and second on the unique constraints and opportunities of the situation.

Generally, the more complex and diverse the task, the larger and more diverse the team needs to be—more expertise, more people. While more people bring more talent, they also bring along the need for more coordination that generates its own problem. Adding people helps performance up to a point. Then the law of diminishing returns sets in. Before long more people degrade performance.’⁷ After a limit, which seems to vary by task, more people may actually do less. Sound familiar?

Big, big, qualifier: Since these rules around size come from millions of years of experience with collocation, it is only a starting point for estimating the appropriate sizing and clustering for virtual teams.

Virtual teams can be successful only if people cooperatively manage the coordination involved in membership and leadership. With the skills and infrastructures in place to multiply and share leadership, we are seeing some teams explode the apparent limits on productive size. Virtual teams tend to have small active core groups and large memberships.

No Team Is an Island

Engaged distributed leadership leads to new levels of organization. New levels arise both from team integration and team differentiation (Figure 5.5).

A collection of individuals who begin interacting interdependently on a task over time can become a team. The identity of a new team becomes confirmed as people begin to use the words “we” and “our.” Sometimes there is a moment when the team coalesces, a clear “click” audible to all participants. Sometimes, people are more aware that they became a team in hindsight.

As important as people are, the achievement of “teamness” is the creative act of a group, not an individual. Relationships persist *among* people not in them:

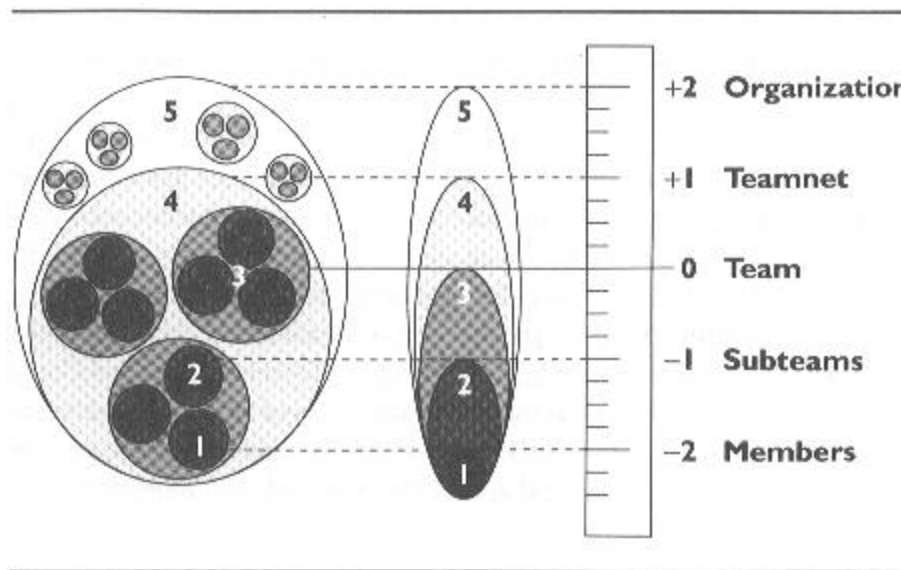
- ? A new level is born through integration: the team “pops” into existence separate from its members. This is the miracle of synergy in systems, the living result of something more than the sum of its parts.

Simple teams have two-level structures, but most teams, even small ones, develop three levels over the course of time. As a team begins to plan and perform joint tasks with diverse specialties, typically overlapping subgroups of a few people form so that they can pursue several strands of work concurrently.

- ? New levels are born through differentiation, when internal groupings form as the work unfolds. Each is itself a team microcosm with a need for clarity of purpose and communications.

For fast, flexible productive virtual teams, the work must shape clear internal organizational structure. Indeed, it is in their internal work design that the intelligence of the group is manifest. The process,

Figure 5.5 Virtual Team Levels Ruler



categories of work, and relationships shape the interactions and ongoing conversation that is the team “thinking out loud.”

With each new level, new team roles and responsibilities emerge. A group with an identity itself becomes an “individual.” The team acts and is perceived as a unit at the next level of organization. Indeed, teams that are really humming often become very inwardly focused, sometimes creating bonds that rival family ones in strength.

Warning: Team success can breed team insularity.

Management movements like quality and reengineering have created a new myth: *the team as hero.*⁸ While this is a great recognition of the renewed importance of small groups, it also tends to invest the team with rampant, often competitive, isolationism. Independent teams without inter-team interdependence can fragment corporate structure.

We are in danger of moving from isolated bureaucrats sitting in specialized boxes to isolated teams of specialists.

The *team-alone* syndrome dominates many businesses as well as other organizations. Individual teams spring up as challenges arise that the existing hierarchy-bureaucracy cannot manage. Generally unconnected to one another, these teams are rarely part of a conscious strategy to grow the organization to meet the challenges of accelerating change.

Some companies are already working in 21st-century, virtual team style. For Tetra Pak Converting Technologies, Eastman Chemical Company, and Sun Microsystems, virtual teams are over time a key business strategy. They offer competitive advantage for meeting challenges of speed, cost-effectiveness, and quality in a global, customer-focused, rapidly changing economy.