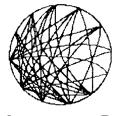
CHAPTER 6



IT'S ALL IN THE DOING

Virtual Team Life as a Process

A team is first and foremost a process: It has a beginning, middle, and almost always an end. No team springs to life full-blown and none lives forever. Words such as conception, gestation, birth, childhood, adolescence, adulthood, mid-life crisis, and old age all apply to a team's life. Powerful results accrue when virtual teams consciously work their way through a lifecycle process.

Growing a Strategy

ServiceCo (a pseudonym) is one of the largest facilities management companies in the world. With operations in 35 countries and revenues of \$3 billion, ServiceCo manages computer operations, building and grounds maintenance, and other support services for corporations, educational institutions, and healthcare facilities. Since its 1985 start as a small player in the burgeoning European facilities management industry, it has grown to be an international corporation with 100,000 employees that dominates many of the markets in which it competes.

By its nature, a facilities management company is the archetype of a networked organization comprising multiple virtual teams. ServiceCo's

teams operate inside its clients' organizations. They perform tasks for which the client has no special competency: Sydney's Rocks Bank's expertise is in banking, Massachusetts' Art Academy's strength is education, and New Jersey's Eldercare Medical Center's specialty is healthcare. Thus all of these institutions outsource the operation of their facilities management to ServiceCo.

What ServiceCo offers is functional expertise. It employs a network of experts who are available to provide technical support to accounts as needed in software development, purchasing, landscaping, and security, to name a few. District managers who know the facilities management business oversee and mentor account managers working directly with clients. In addition, the company packages its expertise as standards, procedures, and computer systems that tie together their far-flung operations.

Most ServiceCo employees work at the clients' sites and have far more contact with client personnel than they do with the ServiceCo organization. Account managers spend most of their time managing client relationships and the local labor force. Most district managers and even regional vice presidents spend almost all of their time on specific account-related matters. As a result, most ServiceCo personnel feel as much a part of their clients' organizations as they do ServiceCo's.

To maintain connections among their decentralized personnel, ServiceCo builds communication and shared purpose through what it calls its "Strategic Process." ServiceCo Group, the parent organization, follows a tradition of holding annual structured planning efforts that look out over the next three years. Such strategic planning helps the subsidiaries keep their action plans aligned with their individual long-term strategies. In addition about once every five years, each subsidiary goes through its own major Strategic Process, during which it rebuilds its strategy from the bottom up through virtual teams. By involving people at all levels of the organization, the company gains widespread support and commitment that make for effective and energetic implementation.

Rethinking Health

In 1990, ServiceCo Group expanded its U.S. market with a series of acquisitions. They included a Texas company with clients in business,

education, and healthcare (primarily large hospitals) and a Florida-based company whose business came largely from nursing and retirement homes. (In 1993, the two companies were merged and renamed ServiceCo U.S.A.) The extremely complex and dynamic U.S. healthcare market caused the international firm to re-examine its basic assumptions. Among the issues it had to consider were shrinking use of hospital facilities, intense cost pressures, and rapid realignment and consolidation in the industry. In particular, it needed to rethink how it provided service to acute care hospitals and long-term care institutions.

Sophisticated hospital and nursing home systems were demanding their facilities management providers take more of a virtual team approach. They wanted to coordinate services among widely dispersed facilities and integrate across service functions. To sharpen its approach, ServiceCo U.S.A. embarked on its first strategic process in the health-care divisions. ServiceCo U.S.A's CEO Sol Kramer recruited White-wood Management Consultancy, an English firm with U.S. operations that had worked with the parent group in Europe. On this project, the consultants acted as process, methodology, and quality leaders, filling in where analytic skills were weak.

ServiceCo U.S.A.'s New Market Strategy Group (NMSG), comprising its healthcare division presidents and the senior corporate staff, became the official body for the Strategic Process. They set three overall goals:

- 1. To develop a breakthrough "ambition" and strategy for the healthcare sector that would be broadly shared and supported throughout the company;
- 2. To develop planning and analytical skills among people in the healthcare division; and
- 3. To create relationships across the geographic and functional divisions that would facilitate the greater integration clients were demanding.

Initially, the NMSC chartered eight virtual teams. Three were to look at the needs and buying practices of different client segments. Three were to consider the clients' customers, that is, patients. Another was to examine healthcare "payers" (health maintenance organizations,

insurance companies, and the like). The final team was to develop market statistics for the other teams. Each team drew members from across geographic and functional divisions of the company.

Getting Started

To facilitate a quick start, the teams received considerable structure along with their charters. Members were designated either as "core" (expected to devote 20 percent of their time to the team) or "backup" (expected to spend 5 to 10 percent of their time on the team). Each team had shared leadership. A designated leader was responsible for managing the overall plan and timely delivery of products; an "issues leader" was responsible for the quality of the informational products that were their parts of the strategic plan (for example, reports, data, analyses, decisions). To supplement its charter, each team received detailed "issue analyses." These analyses provided clear categories for a preliminary work breakdown of their problem areas. The teams were expected to meet face-to-face at least once to develop a preliminary work plan that they would present at the kick-off meeting one month later.

For some teams, the first meeting produced the required plans. Others took longer, struggling to understand their charters and formulate an approach to their work. Whether fast or slow in creating their first draft plans, all were ready for the kickoff at The Art Academy. a ServiceCo client located in a Boston suburb. The decision to hold the kickoff at a client site was deliberate: It symbolized the importance of client focus in developing strategy.

The goal of the all-day meeting, according to Eric Rogers of White-wood, was "to clarify the purpose of the overall project and to enable the teams to see how their individual charters and plans contributed to it." The session mixed presentations by senior management and the consultants with workshops where the various teams presented their plans and got feedback.

That evening, the group moved from the school's newly constructed theater (that provided numerous break-out rooms for the day's workshops) to the oldest building on campus: the school's president's house. With its

high ceilings and rich dark wood beams and paneling, the evening's venue and agenda were very different from that of the day. The goal of the evening session was to build relationships. Because the divisions had operated so independently—in "separate chimneys" as they call them at ServiceCo—many people on the teams had never met one another. To speed up the socialization process and ensure a memorable event, the facilitators orchestrated a murder mystery theater over dinner.

By the end of the 10-hour day, team members knew that the company was making a serious commitment to defining its strategy. The individual teams bad refined their plans and had started to define their end products.

The Pattern of Teamwork

After the kickoff meeting, teamwork began in earnest. Team members worked independently on agreed-upon tasks, coming together to review one another's work and make decisions, then splitting up to do more concentrated work. Between face-to-face meetings, the groups held periodic conference calls to check on progress. Face-to-face meetings continued to be very important particularly since a major goal of the project was to establish relationships among normally dispersed managers. Most meetings concluded with dinner for the whole team. Frequently, two teams met at the same time and would merge at the social interludes, giving a chance for even broader interactions.

Early on many of the teams appointed someone to be the official "nudge." The original thought was that this person would be responsible for calling other team members to make sure they were on schedule between meetings. As it turned out, the nudge's most important role was to document the results of the team meetings. By capturing what transpired, the nudges helped solidify the evolving understanding of each team's purpose and its method of expression in the products it produced.

As is the case with most teams, the ServiceCo teams soon began to build their own task-oriented in-talk: They called a school system a MISO (standing for Multi-Institution School Organization). One team gave nicknames to its members while another adopted a cheer and a mascot.

The teams relied heavily on voicemail that proved to be quite convenient for people who spend their lives traveling to accounts. E-mail was new to the company when the project got underway. 'To be sure someone read their e-mail, you had to send them a voicemail," recalls Ethel Berlin, a ServiceCo market development manager and team leader. With time, however, as the teams worked toward completing their products, e-mail became indispensable as a way to move drafts around among team members.

Phasing In Work

The original plan called for the teams to disband after accomplishing their original work in Phase 1 and reform in new teams. When the time came to transition to Phase 2, aimed at understanding the competition, the NMSG decided to stick with the existing groups. The teams had bonded so well despite their virtuality that the NMSC chartered eight new overlapping teams with one representative from each original team to study competitors.

The Competitor Teams never met face-to-face: They used conference calls to coordinate data collection, then shared their results via e-mail and overnight delivery. The competitor-team members then went back to their original teams where they compared competitor competencies with market requirements. The original teams (with some changes) then continued into the third phase where each group developed and proposed strategy options.

At the end of each phase, the team leaders and issue leaders presented their results to one another and to the NMSC. Phase 3 marked the end of the "public" part of the Strategic Process. By then, more than 75 people from across the subsidiary had participated in the virtual teams.

The NMSG now retired to the "private" decision-making part of the strategy development process. With the team recommendations and options now synthesized by Whitewood, the NMSG developed its own unified options and scenarios for the future. Over two months and seven full-day meetings, the senior group made choices and crafted its own vision and strategy for the healthcare market based on the work done by

the teams. The strategy had major implications for structure and resources. With the will-to-act and unity of purpose generated by the process, there was little resistance to making the required changes.

At lower levels in the organization, the process created confidence in the future and in the organizational outcomes. Participants could all point to elements of the strategy that their team had contributed and could claim ownership for various aspects of the final product. The long-term implications of the project for the smooth operations of the company were perhaps its greatest benefit. "Getting to know people from different parts of the organization was tremendous," says Marvin Krieger, Human Relations manager for one of the healthcare divisions.

"I had never really worked closely with my counterparts in other divisions before. This project will make it much easier to integrate across divisions in the future."

The Team Pulse and the Life Cycle

Virtual teams are living systems not machines. Made up of people with interdependent roles and a web of relationships aligned through shared purpose, everything about them is organic. As *living* systems, they are not biological organisms but rather social organisms,' which have both a pulse and a life cycle.

The proper metaphor—living system or machine—is critical to the understanding of virtual teams. It is hard enough to get face-to-face teams to "happen," to "jell" over time. It is doubly hard for virtual teams.

Teams grow. They take time to develop—and virtual teams tend to take even longer.

The Rhythm of Aggregation and Dispersion

A team's life cycle has its own rhythm oscillating between interludes when members come together and when they go apart. This tempo obtains through the long-term patterns and peak moments of key

gatherings, the overall life cycle, and the hour-by-hour cycles of a team's daily life.

We still can hear the echoes of the earliest groups in human history in organizations today. While archaeologists cannot excavate social organization in the same way that they can unearth shards of pottery, they can infer a lot about it. By matching artifacts with direct observation of foraging societies that survive today such as the Kung of the Kalahari Desert in Botswana, we have a reasonable facsimile of the "organizing process" for the first teams.

There was a pulse to the ancient life of nomads: groups of families came together and then went apart. Foragers had to follow the rhythm of the seasons dictated by their sources of food. Even today, !Kung households move to the same beat that literally "goes with the flow." Access to water moves the !Kung through seasonal cycles that cause groups of families to diverge and converge. The !Kung beat holds for the

!Kung Seasonal Cycle

From December to March during the hot, rainy summer season of Bara, !Kung families disperse to the maximum as food and water are widely available. As April and May, the cooler and dryer fall season of Tobe, approaches, the families begin to gather in camps around the larger water holes. From June to August, the cool and dry winter of Gum, several camps cluster around one of the permanent water holes, which define the locality. They remain there through September and October, the warmer but still dry early spring of Gaa. As the hot late spring of Huma brings showers in October and November, families quickly disperse into temporary camps. There, they take advantage of water caught in the tree hollows of the mongongo groves. As summer comes and water is plentiful once more, families scatter over the territory as the cycle begins anew.

way most people work—coming together and going apart. People work alone and then join up in a group. We do what we do best independently and then work with others to expand our capabilities. The basic social rhythm of human beings has not really changed in two million years.

The !Kung's major camp gatherings are akin to business off-sites. These are special times and places for convening teams to literally "pull things together," to resolve conflicts and decide future actions. They are also times of intense social interaction. Some managers regard the community-building aspects of such meetings as 50 important that they insist on them in spite of tight budgets. As we inaugurate the age of virtual teams, such meetings become all the more important. Most of the people whom we interviewed for this book stressed the importance of face—to-face interaction to solidify virtual teams.

Face-to-face time is increasingly precious, a scarce resource in limited supply.

When the !Kung families come together, they suddenly find themselves living in a very (different environment with a greatly increased local population and numerous channels of interaction. Their camps are alive with feasts and dancing, partying and ceremonies. Suddenly there are many hands to make light work. People hunt together and build common storage facilities, share resources and information, trade goods, and exchange tools. Perhaps most important, the camps are incubators for new families, where people make matches and find mates.

Camps of 25 and supercamps of 100 to 200 serve broad human needs to associate with other people. Multifamily (the analogy in business is multifunctional and multiteam) camps arise from exchanges, interdependent relations, and repaid reciprocity. There is an ancient and natural tension between the family (the team) and larger social groups (organization). Even so, the cooperative act of sharing across kin (organizational) lines is a critical, necessary step in the development of human societies (networks) of all sorts.

Cooperation and Concentration

The "together/apart" rhythm vibrates deep in all sorts of human groups. People congregate then separate not only over seasons but in the course of a day as well. Think about your day with some of your time spent alone and some time spent with others. Time-lapse videos in Steelcase-sponsored research show a remarkable pulse to team life. Collocated teams of people come together for a time, then separate to do individual work—a together/apart fluctuation that replays many times over the course of the day.

An old-line office furniture designer and manufacturer that now sees itself in the "work performance" business, Steelcase characterizes this working rhythm as "times of cooperation (together) punctuated with periods of concentration (apart)." Among the many office systems they have designed to facilitate this natural pattern of interaction is their Personal Harbor and Commons product.² People work privately in their own Harbors and gather to collaborate in the Commons.

"The design absolutely facilitates communication," says Loree Goffigon, director of Work/Place Strategies in the Los Angeles office of Gensler, the architecture and design firm. The consulting group that Goffigon works in uses four of the Steelcase systems. "The doors on our individual Harbors are closed only 5 percent of the time. We have lots of space to pin things up around the activity tables in the center. We can hear what one another is saying and we call back and forth while we're on the phone. We're trying this out for our clients who want to collapse the literal and figurative time between the transference of ideas and information."

Virtual teams have a harder time getting started and holding together than collocated teams. Thus, they need to be much more intentional about creating face-to-face meetings that nourish the natural rhythms of team life.

Establishing the life pulse is not hocus-pocus. Life is sparked by the sequence of activities that people undertake together and continue apart. It lives in how we choose to start things, whom we invite to participate, what agendas we create, what plans we make, which tasks we implement, when we reach milestones, and how we bring closure. A team unfolds through its unique life cycle.

Forming, Storming, and All That "-orming"

Team life is a process. Most organizational researchers and authors acknowledge and underscore this small group truth. Popular and academic studies alike agree on the general outlines of team process. Many books on teams use the model (or a variation on i) of the "stages of small group development" developed by Tuckman in the 1960s:

- ? Forming:
- ? Storming;
- ? Norming;
- ? Performing; and
- ? Adjourning (often omitted).

This nearly two-decade-old model retains its original freshness because it accords with the experience of countless facilitators and team leaders who have used it as a guideline. Among them is Apple CEO Gil Amelio who used this model for his turnaround of National Semiconductor:³

"Stressed 5"

The Tuckman Model also has a powerful theoretical basis. It is a social variation on a growth model that applies to everything from astronomy to biology to marketing. The "5" curve (in mathematics it is the logistic growth curve) is so common that Ludwig von Bertalanffy. the "father" of general systems theory, offered it as the original proof that there are mathematical principles and patterns that hold across diverse sciences.⁴

Virtually all successful team process models follow this universal cycle of life whether consciously or unconsciously.

When applied to a team, the "5" curve has some interesting ripples. The Tuckman Model points to an important, overlooked feature of the life cycle, times of natural turbulence and potential conflict—stress points. By anticipating the likely stress points, a new, still-forming team gains a powerful advantage. Team members can use these natural points of commotion to give their process the energetic lift it needs—or they can be thrown off-balance by conflicts that seem to come out of nowhere. While not all conflict is predictable, some of it is.

There are two major points in a team process where stress is predictable—near the team's beginning and not long before its end. The Tuckman Model incorporates the first stress point (storming and norming), while the second most famous process model—the quality sequence of "plan-do-check-act"—points to the turbulent testing phase as "checking."

While the (quality cycle gives no hint of the anticipated tumult in the early stages, the Tuckman Model misses the difficulties that often arise in the later stages of a team's life cycle (test).

The "Stressed 5" is a generic process model (Figure 6.1), which we labeled elsewhere as the general stages of network development—Start-up, Launch, Perform, Test, and Deliver Phases.⁵ In *The TeamNet Factor* we offer several methodologies for using this process model, from simple to comprehensive, along with supporting tools for complex implementations.⁶

The Pulse and the "5"

Team life is dynamic, managing the tensions of stability and change while moving forward through the life cycle. That same root dynamism lives in each of us, the conflicting pulls of being both "me" and "we." A significant way that this plays out in team life is in the pattern of aggregation (we) and dispersion (me).

Virtual teams must be especially conscious of their dynamics. Behavioral clues are spread out not only in space but usually over longer time-frames than they are with comparable collocated teams. Virtual teams

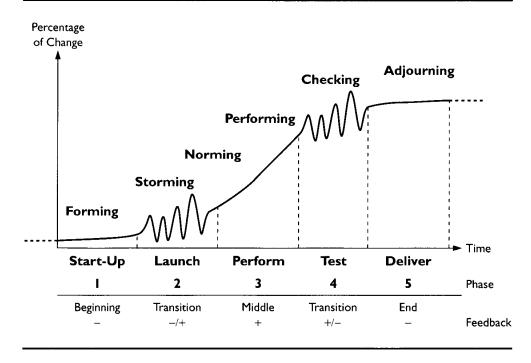


Figure 6.1 "Stressed 5" Team Process

need to design for this supercharged eventuality. Smart virtual teams, like ServiceCo's Strategic Process teams, develop methods that anticipate a life cycle and accommodate its predictable moments of stress.

From the perspective of feedback, it is apparent why these stress points occur in the life cycle. Peter Senge, who brought systems dynamics and organizational learning into the center of contemporary management thinking⁷ describes the complementary feedback loops found in every process as "slowing" and "growing" actions:

- ? Slowing is the dampening, stabilizing, conserving tendency that keeps change in check; and
- ? Growing is the building-on-itself accumulating tendency that expands change.8

Change and growth are processes of going from one level of functioning to another. Stability must be disrupted in order for change to

occur. Then things restabilize. In virtual teams, feedback loops go from slowing to growing and back to slowing over the course of a life cycle.

- ? Phase 1: Start-Up (Slowing). During the initial forming stage, slowing prevails as the idea for a team and its initial formation struggle to arise against resistance. The team's initiators generate interest, gather information, and explore ideas. This phase may have an excruciatingly long fuzzy beginning that no one clearly recalls or it may have a breathtakingly brief, well-remembered "aha" initiation. Either way, change of any kind must struggle against the status quo.
- ? Phase 2: Launch (Transition). As a critical mass of people and purposes comes together, the team's ensuing storm begins to brew. Before the team is really ready to perform, it must sharpen its vague purpose, establish leadership, make plans, find resources, obtain commitments, and acknowledge norms. This is the first transition poised between the slowing loops of Phase 1 and the growing loops of Phase 3. Launch is the "make or break" phase. During this period, the team establishes the code for its life cycle and sows its seeds of success and failure. Some teams never get out of this phase and there are no guarantees here. It always takes painfully longer than anyone thinks that it will, and for virtual teams it can take even longer still.
- ? Phase 3: Perform (Growing). Most teams would much prefer to start right here in the growth phase. Perform is where the team does the bulk of the work. This is where results accumulate and where the team makes progress toward the goals set in the launch phase. People meet and overcome obstacles. At its best, life is good and seemingly will go on forever. But growing cannot go on indefinitely without being checked and reshaped by countervailing slowing actions.
- ? Phase 4: Test (Transition). This is the challenge phase, where the team must review results, finalize features, and limit resources. Meanwhile, time is running out and customers are demanding the goods. This is the second transition phase, with the

- process now going from growing to slowing. Early participatory planning, customer involvement, regular reviews, and milestones can turn this phase into a triumph. All too often, this late-in-the-game trial is unexpected. Some teams never make it through this phase.
- ? Phase .5: Deliver (Slowing). Deliver is the endgame, the adjourning phase. The team delivers results, provides support, wraps up details, and ceremonializes its endings. The dominant tendency here is slowing as the team seeks to stabilize at a new level after it establishes change or a development cycle completes. It maybe the end of one lifetime and the beginning of another and its duration may be brief or long.

Creating Time Together

"I believe that you clearly expedite [team processes] by spending more time on the front end and getting consensus," says Eastman Chemical Company CEO Earnest Deavenport. "You shorten the implementation cycle as opposed to the opposite when differences and resistance come out in implementation.

The moral for virtual teams who want to design their together/apart pulse is simple—and widely held by experienced team leaders and experts alike:

Invest in beginnings.

You will recoup time spent in the first two phases many times over in later phases. Mistakes, mistrust, unexpressed viewpoints, and unresolved conflicts all too easily introduce themselves and become part of operating norms. Lack of clarity around goals, tasks, and leadership hobbles the team in the performance phase. Failure to establish criteria and measures for results ensures a rocky ride during the inevitable testing phase regardless of whether the team is collocated or virtual.

Anticipation is the recommended prescription.

"Optimally a team gets together at the beginning of its process," says Curt Crosby who coordinates the virtual team effort across Sun Microsystems largest division, Sun Microsystems Computer Company (see Chapter 7). "It's the old forming, storming, and 50 on. It doesn't always happen like that because at a company like Sun it's too easy to start these grassroots teams without meeting. If I can catch it fast enough, I do recommend that they get together at the beginning, mid-point, and at end of the life of the team." Crosby's advice:

- ? Invest face-to-face time for the start-up and launch phases.
- ? Reserve time for a meeting to assess and review the team's work before it completes.
- ? Punctuate your process with breakpoints and mile stones where the team converges and realigns its work.
- ? And celebrate at the end. Even when the team has not been an unqualified task success, you may accrue valuable social capital (see Chapter 9).

Teams that take the time for ceremonious closure provide their members with valuable information about how they worked together as a group, Crosby observes. "If everyone is informally assessed by their peers,' he says, "they have that experience to take to their next team assignment. This potentially shortens the storming cycle that might occur based on an individual's perceived weakness and willingness to overcome it."

Aggregation is a major challenge for virtual teams. Some have no face-to-face time at all. If the team cannot all meet together, perhaps one person can act as liaison-in-chief, as Buckman Laboratories' then-CEO Bob Buckman (see Chapter 2) did. When the company was launching its online knowledge network of virtual teams, Buckman traveled around the world, playing the role of the "circuit rider" carrying news from outpost to outpost.

Most of the virtual teams that we interviewed use telephone conference calls to provide some means of synchronous meeting and many relied on video conferences. The people at Buckman Labs found, as have many other companies, that a very active online conversation can he fast-paced enough to seem almost real-time. Buckman's early chat

allowed people who had never met (and might never meet) to have "screen" conversations where people talked about their families and hobbies. The major advantage of these sessions is that they quickly build a modicum of trust and usually cause affection to develop among the participants as they glimpse one another's private lives.

Sun Microsystems uses integrated digital environments that bring together features of chat with shared computer screens and the telephone. Intel is pioneering the uses of desktop video conferencing for virtual teams. Technologies that work well for small face-to-face groups and capitalize on the peculiar strength of the digital era are driving the explosive growth of teams and team capabilities. Intranets combine all the digital media into "digital" campgrounds. These "virtual water coolers "s—reminiscent of the !Kung gathering around Kalahari water holes—offer entirely new options for shaping meaningful aggregation in virtual teams while supporting their dispersion.

Forming Goals

Purpose sustains and initiates process. It is the source of life for all teams, the inner fire that gives them their vitality. Here, virtual teams face two particular challenges that differ from those of collocated teams: First, purpose costs more" both in terms of the length of time it takes to develop and in the literal cost of bringing together distantly situated people. Second, purpose plays a relatively more important role as a legitimizing source of authority than it does when the boss is watching. On the other hand, purpose well set can also be a source of economic benefit: Coordination costs lower when empowered people align around goals.

For resource-lean and information-rich virtual teams, the more the design of the organization mirrors the work plan, the better. As the team carries out goals, the organization re-forms to address new goals and the next pieces of the work. Thus, the organization is constantly re-forming, organically adapting to the dynamic unfolding of the work.

Forging Cooperative Goals

Virtual team success or failure begins with the relationships among people and goals. Nearly a half-century of empirical research demonstrates the power of cooperative goals in determining team success.

Social psychologist Morton Deutsch was the first to use goal inter-dependencies as a way to predict how well people would work together. He asked whether people saw their goals as cooperative, independent, or competitive relative to one another.

- ? Cooperation occurs when people have compatible goals. When you succeed, I succeed. Confidence and trust are the expectations in behavior. Cooperation generates positive feelings of family and community as people share and integrate information.
- ? *Independence* results from the belief that goals are not related. Your success or failure has no bearing on mine. I do not expect any support or hindrance from you. Aspirations are personal and relationships with others are impersonal. We all do our own thing and have no need to share information.
- ? Competition follows from incompatible goals and the belief that if you win, I lose. Your success diminishes mine. I not only expect no help but I anticipate hostility and prepare accordingly. To prevail in competition rather than be integrated in cooperation, people hoard information and use it as a source of power.

Dean Tjosvold, Professor of Business Administration at Simon Fraser University in Canada, has been at the forefront of team researchers bringing a wealth of learning from hundreds of studies into real-world practice. 10 He reports that myriad studies document this simple fact:

Cooperative goals motivate team members.

When goals are compatible, people strive to succeed and the work required becomes meaningful. Performing tasks and reaching goals

cooperatively bring the added benefits of helping others, feeling good, and storing goodwill for the future. Cooperation spurs the sharing of information and increases the insights available for planning, problem solving, and executing. People who work cooperatively are confident of success and believe that others want them to do well. They have more fun which translates into more positive feelings about work. Most importantly, a wide range of studies over all age groups shows that cooperation results in higher productivity than competition or independent work. This is particularly true for problem-solving and related tasks."

Researchers' conclusions about competition surprise no one. It does not motivate people to share information, plan together, or find the best path for producing results. Competitors do not expect others to help or encourage them. Competition motivates people who believe they have superior ability and are likely to win, but it demoralizes people who have (or believe they have) lesser abilities and experiences. Competition also can motivate teams where tasks are simple and information needs are low, providing most of the people believe they have a chance of winning. However, since sharing information is the lifeblood of a virtual team, competition within hinders or scuttles success.

Designing Tasks

Whether intentionally designed or not, tasks and rewards will always generate either cooperation, independence, or competition.

? Group tasks promote *cooperation* that is strengthened by joint rewards. When they are in the mode of cooperation, people assume that everything is fair and that they will be rewarded accordingly. They pool their talents, offering and using individual skills and competencies as needed by the tasks. People appreciate creative conflict as a tool for finding the best answer. "We had some pretty heated arguments," says Bill Crowley who led an awardwinning SunTeam in the company's SunExpress division (see Chapter 1).

- ? Unrelated tasks that are separately rewarded encourage *independence*. The measure of individual success is explicit external criteria such as quotas or sales targets. People use their abilities to further their own goals. They avoid conflict, regarding it as a distraction from separate pursuits.
- ? Codependent² tasks—separate pieces of work that *require* a winner and a loser—create the environment for *competition*. Such systems need rules to regulate the games. People use their abilities against others. They avoid conflict entirely or deliberately escalate it to gain personal advantage.

Most work situations involve a mixture of these motives, which are always complex. Tasks that are set up interdependently require cooperation. At the same time, people compete for attention, praise, promotions, and raises while also taking pride in their individual accomplishments.

Typically, people encourage cooperation within a team to better compete with outside groups. One familiar archetype of this behavior is the great sports team—for example, the Boston Celtics basketball team in the 1970s whose internal teamwork was legendary and enabled them to win championship after championship. Such usagainst-them behavior is considerably more tricky in work organizations. Many a successful team that bonds into a tight family also excludes and competes with outsiders. Unfortunately, outsiders to the team may still be insiders in the organization. A company with many teams ultimately wants all of them to cooperate for the good of the enterprise.

However cooperation fares inside the corporation, can we still safely assume competition takes over at the enterprise boundary? For hundreds of years, the simple rule has been to cooperate internally and compete externally. Even this maxim has been challenged. Countless alliances explode across corporate boundaries. Networks tie companies closer to vendors and customers. Competitors cooperate on a range of issues from common interests supporting an industry to saving money together to joint research. In explaining a May 1996 meeting that he and Apple CEO Gil Amelio had attended with Microsoft Chairman Bill Gates, Apple's COO Marco Landi said, "We live in a world where your toughest competitor must be your best partner." 13

Interdependence: From Cooperation to Competition

Interdependence is not only a feature of cooperation, but of competition as well. One person alone does not a competition make. Contestants are *code pendent*, requiring a loser in order to be a winner. Competitive conflicts develop from differences in people's personalities, motivations, fears, perceptions of the facts, opinions, interests, and how much power they wield. At the extreme, large groups of highly organized combatants fight each other to the death—which is war.

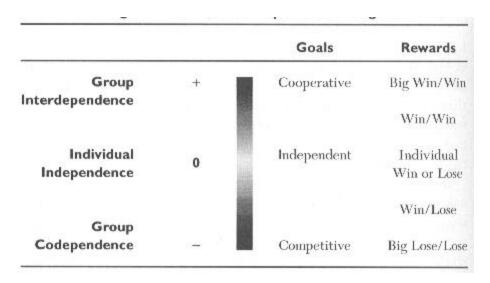
In some situations, companies deliberately set up teams so that people hold individually or departmentally conflicting goals. Digital Equipment Corporation, under its founder Ken Olsen, was famous for intentionally setting up competition among product teams under the belief that such rivalry would improve results. This is now regarded as a very costly approach to creativity, and in the early 1990s, Digital began to change and bring teams together to resolve conflicts. For example, five highly competitive Digital teams suddenly were required to work together and resolve their differences before a major trade show. Although the intense month-long collocated process was at times contentious, it ultimately was highly successful and customers heard a unified voice about one product.

The path to cooperative payoff often leads through the thickets of competitive disagreements. Indeed, this is where the truly excellent team shines—in moments when they meet their greatest internal challenges. Virtual teams are particularly challenged and may not work well where the level of internal competition is high. Face-to-face collocation is sometimes the only way to resolve differences and bridge gaps.

For virtual teams, interdependence is the key measure of tasks that are the organizing focus for all teams. When the team's work is maximally interdependent, it is also most cooperative, which we label positive (+). When the work is most codependent, which we label negative (—), it is most competitive. A virtual team structures its motivations by how it chooses and designs its goals and the work that follows (Figure 6.2).

? At the top of the scale, great teams working together can achieve great things.," big win/wins." Here we see the greatest payoffs

Figure 6.2 Goal Interdependence Gauge



from the synergistic effects of cooperation. When people from diverse specialties share information for complex work, they experience interdependence that is mutually beneficial. Often, work runs ahead of rules and procedures into areas where few criteria are available, and the group must develop its own rules through participatory agreement.

- ? As we move toward the middle of the scale, less intense interdependence and cooperation move to more of a win/win reward system. There a mix of individual efforts combined with cooperation to solve joint problems determine success.
- ? Individual tasks sit at the midpoint of the scale. Here work is unrelated in terms of success or failure, reward or punishment. At this middle extreme, tasks are *relatively* simple, requiring bounded knowledge and little information exchanged with others.
- ? Moving down the scale, self-reliant independence turns more competitive. Scarcity structures the reward system. I win, you lose, or vice versa. Good things, like salaries and promotions, are in short supply and the best will rise to the top by winning

- over others. So goes the conventional logic of motivation in hierarchybureaucracy.
- ? At the bottom of the scale, competitive codependence intensifies in a battle over common resources in a zero-sum game. The larger the competition, the greater the potential loss to an extreme of mutual destruction where win/lose utterly annihilates in a lose/lose fireball. Tasks here are complex and group oriented, but people use information as a weapon rather than share it as a common resource. Rules need to be strong and enforced with disagreements resolved by the hierarchy if necessary.

"Me" or "We" Tasks

Tasks are where the virtual team's goals become real. The actual work of the group defines how interdependent it is. *But not all tasks are group tasks* (Figure 6.3).

Groups offer no advantage for tasks that have a "right" or "wrong" answer. The smartest or most knowledgeable person in the group almost always provides the correct answer. Individuals are the best performers

Information Criteria Complex No Criteria Available Group Info Sharing Needed Make Rules Interdependence Diverse Specialties Participatory Agreement Simple External criteria Individual No Info Sharing "Right/Wrong" Answers Independence Single Specialty No Agreement Needed Group Complex "Might Makes Right" Info Conflict Rules Enforced Codependence Diverse Interests Agreement Imposed

Figure 6.3 Group/Individual Task Gauge Information

on tasks for which there are external criteria and standards of judgment that require no agreement to validate the outcome. Individuals are also most efficient in completing simple tasks. Individuals are particularly appropriate for tasks that require only a single expertise and no information sharing.

Groups perform best when there are no obvious right or wrong answers, no convenient external authorities to validate decisions using an impartial standard of truth. Complex tasks are the province of teams, particularly where diverse information needs to be integrated. Groups are indispensable where tasks such as innovation depend on information sharing. Even under conditions of competition, only a group can perform tasks that require interpersonal agreement such as negotiations or conflict resolution.

To some degree, the individual or group issue is just a question of scale. Human civilization was founded on the ability to do things together that individuals acting alone could not. Companies are formed to harness the energies of groups of people to do bigger, more complex pieces of work that are beyond the ken of individuals. As big jobs break into little jobs, tasks generally get pushed from the group domain to the individual one.

This is the crux of managing the core task strategy of virtual teams. This is the level at which work becomes defined. Traditional management attempts to break work down as logically as possible to individualized pieces. Most tasks are designed to be performed by one person working alone who is measured against impartial preestablished criteria (quotas, targets, benchmarks, "making your numbers"). In today's complex, fast-changing world of work, this level of routine micro-management is increasingly untenable. For virtual teams, it is impossible.

The easiest way to ensure that a group's task will be interdependent is to back up a level: Give people a mission and leave the "task" of becoming a team up to them. Charter the team to determine its own goals, tasks, and results required to deliver the bottom-line outcome.

For most people, work life is a mixture of independent tasks and interdependent interactions—working alone and working together in patterns that vary by the hour, day, and season according to the nature of the job. Teams vibrate with a pulse of aggregation and dispersion. This

pulse permeates the work design either intentionally planned or because of the accidental reactive unfolding of events.

The Strategy of Cooperation

Although we have stressed the benefits of cooperation over competition, these two fundamental tendencies in life are in a dance with each other. "Co-opetition" is the newly coined term for this uneasy dynamic of simultaneous cooperation and competition."

While competition and cooperation are complements, they cannot be evenly matched. If they are, progress stagnates and change dies. One tendency or the other must dominate to carry the process forward. In virtual teams, cooperation provides the greater driving force.

Cooperation is the fitter survival strategy for virtual teams. When necessary the smart cooperator is also an excellent competitor.

Cooperation sounds nice in theory, but should we heed the conventional wisdom: "Nice guys finish last?" Apparently not.

The tooth-and-claw Darwinian competition that many assume to be the natural condition of life is giving way. There is accumulating evidence that cooperation is evident at all levels of biology's kingdoms—from cells to big-brained mammals. It may be particularly evident in humanity's remarkable spurt of evolution over the past few million years. Cooperators seem to be the survivors.

Game theory, a mathematical discipline that explores the relationship between cooperation and competition, originally proved the futility of cooperation. The second generation of game theory demonstrates the powerful logic of cooperation and why it is an even stronger survival strategy than competition.¹⁵

In the original logic of games, an aggressive competitor invariably won over a willing cooperator because they only played single games, one at a time. However, if the game expands with more rounds of play involving more people, behavioral consequences change dramatically. When the news of people's behavior in past games becomes available for future games, it carries a self-correcting social consequence. If you do in another person and no one else hears about it, you can probably get away with it. Yet when such behavior becomes public and the basis for future interactions, others will not want to play with you.

The reasoning is common sense. If people know me to cooperate, they will associate with me, and together we can do more than we can separately. Cooperators win.

Perhaps the most famous event in game theory history clinched this view. Robert Axelrod, a leading practitioner of games, staged a competition to find the best strategy that logically combines competition and cooperation. People proposed various strategies that were translated into lines of code. These were in turn put into the equivalent of an open cyberspace market so that games could undergo many iterations. Anatol Rapoport, the mathematician who was one of the original four founders of the Society for General Systems Research, submitted the original winning strategy. It remains the undisputed champion. With both a catchy name and the shortest code, "Tit-for-Tat" is simple: Cooperate on your first move, then match the other player's response with the same strategy. You might call it "tough cooperation." In short:

Reach out, then respond in kind.

Open with friendship then respond to opportunities with cooperation and challenges with competition. This strategy works even where there are only a few cooperators in a sea of competitors. Tit-for-tat cooperation will slowly accrue benefits while competitors can at best achieve a standstill as they beat up on each other.

The advantage of cooperation will only grow in the years ahead. At the same time, the payoffs from purely competitive strategies likely will diminish. In the age of information, the foundations that support competition are shifting dramatically:

- ? From material scarcity to information plenty;
- ? From limited information to information access; and
- ? From anonymous players to trusted partners.

To cooperate and gain collective advantage, people must come together somehow somewhere. A virtual team must create a place to carry out its process.