

Those That Do, Plan: Bringing Discipline to Teamnets

In an 18th-century farmhouse in the central Massachusetts woods, a handful of engineers huddles around white boards and flip charts. They have gone to their company's retreat center to plan their future. There, they deliberate such things as PLIMS (Product Life Cycle Information Management Systems) and whether they can meet FRS (first revenue shipment) if the TPV (third party vendor) misses Milestone Six by a quarter. To them, it makes sense. Too much so, in fact, because if the plan slips, it's dead.

The PLIMS group faces many challenges. It needs to ship its product in 18 months to be profitable in a very hot new market. To complete the PLIMS product, the group depends on a California vendor for key technology, whose development schedule depends on yet another vendor in Sweden.

Meanwhile, the PLIMS group is in organizational limbo for the moment. It doesn't report to anybody higher in the organization— i.e., they have no boss. The manager of the larger engineering

group (in which PLIMS is responsible for software development) has just left for another company. Worse, the PLIMS group needs more software engineers at a time when their company is in the midst of major downsizing in the next year.

In spite of it all, the seven engineers are sufficiently able to concentrate. Within two and a half days, they put together a plan that carries them through to shipping the product. "That planning session saved me a year and a million dollars," the group's manager says six months later.

This particular manager is lucky. He had the sense to understand a simple rule:

Those that do, plan.

There's a very easy way to kill a plan. Ask one group to put it together, then ask another group to carry it out. For plans to work, the people who will have to execute them must put them together. Plans make it possible for teamnets to take on all sizes of tasks. The power of the Thamnet Principles lies in their scalability from small to large. Of course, there are also real differences between small teamnets and large, between simple and complex purposes. Simply put:

? General organizational costs of coordination and communication increase with size.

? The need for explicitness and participatory planning also increases with size, scope, and complexity.

Planning is not about having a neatly bound document sitting on a shelf. Planning is about doing the project right the first time. Plans work because you take the time to mock up, simulate, or otherwise try out the process you will use to accomplish a shared purpose. Planning develops teamnets, where people learn to think together, to make and keep commitments to one another, and to develop personally while building the group.

With size and complexity come data and the need to represent and track changes in them. Complexity increases rapidly with the addition of new members. The more people, the more difficult it is to render common information. Historically, the inability to access common information has been a severe limiting factor for networks. With computers and telecommunications, the complex becomes more manageable. It is an important part of the technological push behind the accelerating use of this organizational form.

The larger the teamnet, the greater the need for conscious planning. The more complex the task, the greater the need for computer support tools.

Purpose Is Where It All Begins

Purpose is a vast natural resource for a group. Like information, a group's purpose is a renewable resource. As people absorb more information, they understand their purpose better. The better they understand their purpose, the more information they can absorb. With use, its value tends to increase rather than diminish. However, as with extracting or harvesting any natural resource, you must combine the purpose resource with human ingenuity to form something useful.

By definition, business networks form for specific purposes. To be successful, they must have a purpose; they must be intentional. Just like any type of business organization, people judge business networks by the normal criteria: effectiveness and efficiency of meeting goals. Business networks succeed by design. A *design* brings clarity and explicitness to business purposes. It is the foundation for carrying out purposes.

A good design gives order to a complex intangible future. When people arrange their detailed purposes systematically, they create handles and hooks to grasp on to. These handles serve to guide peoples individual activities within the whole group, as they grope their way through uncertainty.

If a group fails to become intentional about its work, it limits its ultimate potential. The great challenge of teamnets is to be explicit about work. We use the principles of work process design and the Target Method (see "Launching Teamnets," chapter 9) to create explicit plans and put them into action.

Purpose Is Key to Teamnet Management Purpose Is Key to Teamnet Management Mission and Goals Purpose Steps to Goals Focus on Customer Needs

Purpose is central to all good management practice. For organizations pushing beyond hierarchy and bureaucracy, it is critical. It plays a key role in the power dynamics of human organizations.

In the chaotic modern business environment that extends across boundaries, traditional sources of power—charisma, coercion, and law¹—collapse. At a distance, personal charisma has its physical limits; the hire-fire power club doesn't work; and legalities are too slow to keep up.

The key to coordinating work across boundaries lies in the fourth source of power in organizations: purpose—explicit, common, clear and detailed.

Purpose is basic to groups. It is sometimes all they really have. Grass-roots groups demonstrate this: people volunteer because of the group's mission, what it is trying to accomplish.

For most of human history, small groups have done just fine keeping their purposes mostly implicit. Since most of these groups have formed around a particular location—home, community, and workplace—tacit expression of their purposes has sufficed. When people do need to clarify something, they are close enough to talk with one another.

We know what we're doing. We've always done it this way. There is no need to talk about why. When a change comes, word gets around. Somebody takes care of these things.

Boundary crossing introduces a new wrinkle into purpose. The more boundaries to cross, the greater the need to make the purpose explicit. Most specifically, purpose needs to roll out over time. This means that everyone involved needs a shared picture of the work, the schedule, the milestones, and the players.

MAKING THE IMPLICIT EXPLICIT

Strength of purpose is a group's only defense against the inevitable storms of personality and politics that pervade every human organization. How does purpose become a practical tool for group management? By making *some* of the implicit explicit. Note the word "some." It is neither possible nor desirable to make everything explicit. Such a horrible blizzard of information is virtually useless.

There are great rewards in making purpose explicit. From it, people derive tangible drivers for their work:

? Purposes translate into targets and goals.

? Goals break into task activities.

- ? *Tasks*, when organized into related sets, become plans.
- ? Plans turn into the ongoing management system.

In teamnets, discipline does not come about through authority or threats. Discipline arises from systematic development of the purpose at the appropriate level of detail and explicitness.

Success requires creating a systematic plan and living it as an ongoing process of change.

Use a light touch to introduce a disciplined systematic process. You don't need to nail down everything to bring sufficient order to real complex work. A disciplined process also helps in the group's dynamics; it introduces structure for planning and gaining agreements, activities that usually stir up conflict.

QUANTIFYING QUALITY

Six sigma. Defect rate of three per million. People familiar with quality management practices know its statistical foundation well. Indeed, many people's views of quality are stuck in numbers. Much how-to literature of the quality movement devotes itself to measurable quantities: methods of planning, gathering, analyzing, and applying data to solve problems.

There is good cause for quality's obsession with data. They provide a systematic way to:

- ? Uncover customer needs;
- ? Measure the process of transforming inputs into outputs; and
- ? Evaluate the customer response to the output.

Qualitative need is intangible; quantitative data are tangible. The combination is powerful. By creative choice of data sources, people can make many "qualities" visible through measures and charts.

Teamnets depend upon data and information. Open, shared, accurate, unbiased information of all sorts forms the basis for peer interaction and decision making. Groups of people who are physically distributed constantly need to receive, evaluate, and digest ever more information. This fundamental information-processing function is one of the prime reasons for the rise of networked organizations.

You can see a hallmark difference between networks and bureaucracies in their approach to data sharing. Compare the relative size and diversity of their common information bases. A person who can control information flow holds a prime lever of power in traditional organizations. It's a major reason why subordinates need direction from superiors. In a successful network, many people have their hands on the information lever; they distribute this power source widely.

In most corporate cultures, access to information is, as they say, a nontrivial issue. The thought of too great an information flow terrifies some people. One fear is that the corporate jewels will soon end up in the hands of the competition. This certainly does not have to be the case, as the experience of more than one open company shows. The more good, useful information that is available to people, the better their decisions. They will be more productive, and the overall business will benefit.

SCIENCE AND THE BOTTOM LINE

The quality movement has brought a great indirect contribution to modern management: scientific method. Today's quality toolbox includes techniques like control charts, Pareto charts, cause-and-effect diagrams, time plots, dot plots, flow charts, deployment charts, scatter diagrams, simple check sheets, and many more.

These very pragmatic, simple "scientific" methods have a modest

price tag. Some are done by hand, or require at most desktop computers, yet have features powerful enough to help you uncover the basic laws of your business.

A great teamnet combines science with heart. The heart points the way with a tantalizing target. The science offers a met hod for getting there based on explicit information.

The Toolbox for Teamnet Support

Finance wants to see numbers. Operations wants to see a schedule. Human resources wants to see the staffing plan. The president wants to know where it's all heading. There is no single "right" view of a process. What it looks like depends on your perspective and the set of relationships you focus on.

Different views of a process accommodate people's different learning styles. Different cultures, disciplines, and personalities favor one type of process picture over another.

While no method can claim completeness, people can draw on and integrate many different views when they have common agreement on a set of tasks. Based on the consistency gained from a common pool of tasks, these views are connected at their roots. Task-based models yield different, consistent, *and* complementary pictures, which enable a variety of people to plan, modify, and manage a process.

MANAGING THE DATA OF CHANGE

Since change is constant in business today, it's wise to assume that your plans will change. To manage the data of change, we string together a set of relatively low-cost software applications. These

tools maximize the effect of the teamnet planning process. They make it easy to display and communicate the five-T (targets, tasks, time, team, and territories) answers generated from the five-W (why, what, when, who, and where) questions and their inevitable changes. By capturing the answers in desktop computer tools, you greatly enhance the chances of success in shared management of dynamic distributed processes.

We use portable computers in real-time work process design sessions. The effect is dramatic benefits in the speed of iterations, quality of output, and excitement of participation. With a little experience, you can use them this way, too. Two applications we use are:

- ? Project management software that supports task sequencing
- and enables quick schedule forecasting; and
- ? Cross-boundary mapping tools, based on ideas originally developed at Toyota Motor Company. This allows everyone to quickly see who is responsible for what.

We use different tools and display media to represent data about each of the five-T's, including:

T1 Targets	• Timeline • Milestones
T2 Tasks	• Lists • Framework
T3 Times	Task flow diagram Task duration schedule
T4 Teams	Cross-boundary chart Directory
T5 Territories	• Handbook

Computers function like optical lenses in the organizational sciences. They reduce and enlarge data to help us resolve micro-cosmic details and create macro-cosmic maps. Desktop computer tools enable teamnets to be successful. They make the work explicit through display of detailed information. A medium of distributed work, they keep track of and manage work, and provide a communications structure.

Use the Target Method to build a solid foundation on which to develop moredetailed project management systems. With the target application tools, a small team can capture and organize its own plan, then combine it with larger teamnet designs.

T1: TARGETING TARGETS

When you need to keep the future simple, think of process simply as *steps*. Just think about getting from here to there as a path to be traveled in steps. "Here" is where you are, "there" is where you want to be, representing the purpose. Getting from here to there is a very common, basic human activity.

Teamnets pursue purpose over time. Purpose times time equals process. Processes are pursuits of goals, steps toward achieving the purpose. Processes are sets of activities strung together for a reason.

Purposeful pursuits are the doing, the for-better-or-worse actions performed along the way to produce an outcome. This is the very essence of how groups translate goals into work. The critical success factor in networks is the ability to share work. Great plans are useless without action. You need to map out and track complicated ideas requiring action by multiple players.

TimeLines

Habitually, people keep track of things with a mental timeline. When a group gets together to plan, they need to share and make explicit their timeline.

A line with an arrowhead is the most basic image people use to lay out the path of processes. The arrow points simultaneously at a target and the future.

Break up a timeline into steps. This fundamental technique in process planning may be as far as a group needs to go. You can lay out a plan at this level of detail in a few minutes' conversation.



Steps 1, 2, and 3 label the *beginning*, *middle*, and *end* of a process, the simplest "phases" that a group lives through.

Beginning involves what it takes you to get going; the middle is where you do the bulk of the work; and, at the end, you need to wrap things up.

Define your phases; it's a basic task for launching your team. Phases mark off the big steps for getting the project done. Every planning process segments time into a series of phases. You can array any life cycle model of whatever scale along the line. Every group cuts the process line to suit its needs.



Turbulence

Change rarely moves us harmoniously in a smooth sequence of activities from here to there. Instead, change plays out in fits and starts. To the group experiencing it, this sometimes feels like major turbulence. Turbulence shakes things up at natural stress points in the group's development. It is so common that process professionals can anticipate when it will arrive.

We portray these turbulence points as zigzags. Otto, a member of the Digital MD-12 team, particularly liked this analogy. In a meeting one day, Otto stood behind Ralph, another member of the team, who was loudly complaining about how badly things were going. Although Ralph couldn't see what was happening, Otto, who was standing behind him, started to draw zigzags in the air. Otto's zigzags grew bigger as Ralph got louder. When Ralph finished his harangue, Otto walked over to the group's process chart, which had a prominent place on the wall. "We are here," he said, pointing to the zigzags, as everyone in the room laughed.

Disruptive as it is, turbulence can be a source of energy for the group if you harness it early and properly.

Turbulence first breaks out in the middle of the early stages of a developing process (roughly speaking, in a three-day meeting, it's the end of the first day or morning of the second; in a three-month project, it's week three). People from various factions and with conflicting viewpoints need to work out their differences. To move forward together, they need to sufficiently affirm goals, recognize leaders, and agree on an action plan.

This period is fraught with conflict and potential pitfalls: it always takes longer than anyone estimates or desires; it contains the potential for explosion, *and* it holds the promise of a big reward. If you successfully make it through this stress point, you've launched your teamnet into the performance period—where the real work of the group gets done. This is no small accomplishment.

Turbulence breaks out again toward the end of a change process. Change processes eventually need to level off and stabilize as they approach the inevitable limits to change. Before the change becomes final, you must pilot, test, validate, or otherwise check it. Not every group is successful. Some neglect to figure out how to implement the change. Others skip the critical task of explaining and selling the solution to those who will have to live with it. An engineering group "throws the design over the wall" and calls that its handoff to manufacturing.

Whatever the method, testing introduces turbulence and tries everyone's patience. The more you can anticipate this period of turbulence, the easier it is to live through. Groups who stumble into the second stress period are blindsided by unexpected and sometimes fatal obstacles.

By adding two transitions—times of turbulence—to the basic three stages (begin, middle, end), our general change process has

the five Teamnet Phases of Growth: Start-up, Launch, Perform, Test, Deliver. Two transition phases, Launch and Test, punctuate the basic phases, Start-up, Perform, Deliver. Together, these five phases serve as a generic template. Use them to develop a custom phasing strategy for your boundary crossing teamnet.

The Checkout Counter

How do you know when you've gone from one phase to the next? *Milestones* enable a group to set interim collection points for the process as a whole. Milestones are markers, beacons on the path to results. They provide midterm targets that periodically refocus the distributed group on the shared effort. Milestones function like a checkout counter: once you've passed through it, the goods are yours.

Milestones may be deliverables, meetings, or decisions that signify progress toward goals. They are valuable tools for helping a group manage its time.

Consider these milestones as examples:

? Phase 1. Start-up: Make an ordered list of customer requirements and write a mission statement.

? Phase 2. Launch: Complete a plan and gain commitments.

? Phase 3. Perform: Implement a pilot or prototype.

- **?** Phase 4. Test: Complete performance check against expectations.
- **?** Phase 5. Deliver: Gain enthusiastic customer acceptance.

Exit criteria offer a more rigorous method for passing from one phase to another. Entry and exit criteria, conditions that distinguish where you are in the process, keep track of progress by deliverables, reviews, and decisions as phases inevitably overlap with one another. For example, a group develops preliminary ideas of customer needs in the Start-up Phase. It gathers, documents, and debates perceived customer needs in its Launch Phase. It details a final set of precise requirements as an early task of the Perform Phase. Requirements turn into evaluation checklists during the Test Phase. Thus, the group progressively refines its picture of customer needs, which it can chart phase by phase using exit criteria.

T2: "MINI-PURPOSE" TASKS

Both the visionary and the pragmatist have a stake in defining the tasks correctly. Getting the tasks right is an early vital *task* of any business teamnet. It also is iterative, one that you need to do repeatedly.

Work translates goals into action. Action gets results. The magic comes in dividing the *work—chunking it in the right way*. When this happens, people can commit to concrete tasks. Tasks are the tangible outcome of ephemeral visions and goals.

Each task is a "mini-purpose." It is a little goal, part of the work required to reach a broader objective. Objectives themselves often are part of a larger set of goals that detail aspects of a still-broader mission. Tasks in turn break down into subtasks, as far as necessary—called, quite literally, a *work breakdown structure*.

Purposes translate into tasks that people collect into plans. Plans are ways of making purposes real.

A plan is what it takes for a desired outcome. A process plan may be no more complex than a sequence of tasks in steps. Tasks represent goals, purposes, vision, and values in the work. This is how a conceptual model becomes practical. The plan stands for the vital core spirit of the group.

Never Underestimate the Importance of Lists

The "no frills" way to make a plan is to come up with a list. Even if you do nothing else, do this one step. Lists are invaluable aids to the group's memory. Just making and reviewing a list brings other things to mind. A list is also the critical first step in compiling all the tasks necessary to attaining an objective.

The key to making up a task list is to begin each item with a verb. Verbs indicate activity—create, modify, check, buy, do. Each task represents a chunk of time spent doing something.

The next step is to arrange the chunks in rough time order. For example, "Gather customer requirements" comes before "Introduce new product." At a high level, the task chunks represent a lot of work over a long time. At a detailed level—an agenda, for example—they encapsulate the precise steps the group plans to take over the next hour.

An agenda orders a groups work together. It is an excellent example of the use of task lists and is always worth the effort to put the time into a good agenda. For groups that meet only infrequently, agendas are an extremely important tool of group facilitation and ongoing integration.

Frameworks: Putting a List Into a Bigger Container

Ah, if life were only so simple that lists could do it all. As the group expands both in complexity and time, so does the common work. The group needs a bigger container than a list to hold clearly all that it has to do.

To manage complex processes, arrange your work in a *Task Framework* organized by some consistent format based on the team's purposes and context—a taxonomy. One way to create your framework is to lay out the phases of your project on the horizontal axis and the functions or people performing them on the vertical axis.

? Along the top, you have a rough timeline of major phases.

? Down the side, you have the segments of the team, e.g., people, projects, departments, divisions.

- ? Populate the cells with tasks, listing each once in the phase and organization where it originates.
- ? Indicate major steps and milestone dates above the horizontal phase axis.
- ? Use lists or subframeworks to detail tasks at lower levels.

R	filestones	7 ,	$\Delta = 2$	7	Δ
Phases Organization	START-UP	LAUNCH	PERFORM	TEST	DELIVER
PROJ MGMT					
MARKETING	·				3
DESIGN			*Task •Task	4	
PRODUCTION		· ·	•Task	$\tilde{\mathbf{C}}$	
SERVICE		Taisisisisi			
SALES					

Task Framework

The goal in early rounds of planning is to stabilize the information in the Task Framework. Add a variety of details and draw on this common database of elements to construct various models. Do not confuse the collection of tasks—the framework— with the process. A framework is only a well-organized warehouse of tasks. From it, you can construct a variety of interrelated process views.

Change is inevitable. Assume that your plans are going to be messed up. Change has impact to the degree it affects the purpose and activities and your tasks will be modified to reflect external change. By adding, modifying, and deleting tasks, you continue to use the framework to represent the common process. Use it as the basis for redrawing various work perspectives, such as schedules and deployment charts. For the technologically adept, you can use everything from a graphics tool to a simple spreadsheet to a powerful database to draw your framework.

T3: MOVING WITH THE TIMES

Task Flow

A flow diagram is a popular way to represent a project's process. Flow represents the commonsense notion that you need to finish some tasks before others start, while you can do still others in parallel. When you draw lines between boxes, you represent logical relationships of dependency between tasks over time—creating a "task dependency network."

Task Flow Diagram

When you have only a few steps, the flow is simple and mainly linear.



The more steps you add, the more complex your flow diagram becomes. You begin to see more activities going on in parallel. The connections among the tasks increase and become more varied. It doesn't take too much complexity before a computer comes in handy. Virtually any comprehensive project management software tool— desktop to mainframe—has the facility to link tasks in dependency order.

Task Schedules

Although schedules are an essential part of the planning process, too often people regard them as the only part.

Don't let the schedule drive the plan.

Many a group makes its plan by setting up tasks according to beginning and ending dates. Then it simply collects these dates together into a schedule, letting this hodgepodge serve as the de facto design of the process. Luck is a big wild card in this approach to processes. The key to success is this:

Get the plan to drive the schedule.

Schedules are the means, not the end; they are not the targets. Whether imposed by circumstance or authority, target deadlines are often not negotiable. This is not unusual. All planning takes place within constraints of opportunity, resources, and time. Given the realities, create your plan to maximize advantages, compensate for disadvantages, and take a shot at anticipating the unexpected. The best schedules result from trying combinations of these trade-offs. To generate schedules from the work process design, add estimates of task duration's to the task flow. Every task has a duration that you can express in time units. Ask your group to make its estimates in units of days, weeks, or months according to the scale of the process.

Estimate task duration's quickly in the heat of planning, then refine them over time. Group success in estimating task duration's depends largely on whether the people participating have sufficient knowledge and experience.

Once you have task dependencies and time estimates, you need only provide a start date, and, presto, you have a *schedule*, often depicted as a bar or Gantt chart. This combination of flow and time is powerful. It provides reality checks for the critical early iterations of planning; moreover, it sets up an infrastructure for managing the long-term process.



When you finally run the first picture of all your tasks, complete with logical dependencies, and time estimates, expect to miss your target milestones. Rare is the group that accurately hits its dates on the first pass. Still, the off-by-a-long-shot exercise plays an important role: it prompts a review of all assumptions—from targets to times to a redesigned process flow. This generates new ideas and eventually a new schedule, which should be closer to your desired outcome, but most likely still will not hit the target.

Experience, patience, and need dictate how many iterations you require for the group to feel that its work is well in hand. Remember: The objective is to make a plan understandable and tangible. It is not a perfect and legally binding document that you're looking for. Rather, it is something that all the key members and process players buy into. The more you involve the team in making these trade-offs, the easier it is to achieve jointly agreed-upon results.

Shared team planning provides vital preparation for the negotiations over real money and resources that unfold during the team's performance.

T4: TRACKING TEAMS

When business archaeologists go digging in our era's midst, they will find crossboundary charts sorely lacking in Western business practices. They are a critical missing ingredient in the project management repertoire, the absence of which throws everything else askew. Without an alternative way to view interdependencies, people revert to the old, familiar hierarchical organization chart, rarely adequate to display relationships among the parts of a teamnet.

The complexity of tasks is well known. Charts of task logic and task duration's are typical features of project planning methods and supporting computer software. However, people do not understand the complexity of teams so well. The gaping hole comes in the management of people.

Cross-Boundary Chart

A teamnet, no matter how small, does its real work in even smaller subgroups—in ones, twos, and threes. Boundary crossing tasks by definition often involve more than one member of the team. Only occasionally, however, does everyone need to be involved all at once.

Participation is both the strength and the Achilles' heel of team-nets. Once the idea catches on, everybody soon thinks they do need to be involved in everything. An everybody-in-everything teamnet of any size soon bogs down, eventually collapsing in confusion. In

reality, different people need to work together in different subgroups on different tasks. Horizontal communication is essential. The answer:

Display the subgroup links by tasks so that everyone can understand them.

Toyota Motor Company faced this problem in the early 1960s. Groups had to know what each other was doing because of their interdependencies. To manage, over the past three decades Toyota perfected cross-functional management and invented the cross-functional deployment chart. This is a cross-boundary teamnet chart.

Creating a cross-boundary chart is quite straightforward. Array the names of the people on your team (or the functions they represent) along the horizontal axis. List the tasks down the vertical axis in time order. Indicate which team members or functions the group needs to involve in a given task. Teams form where tasks meet people, the lowest common denominator of teamnet work.

Task teams ideally involve the most effective people in the most efficient way. They are a terrific source of leadership. Each task provides an opportunity for someone to take and/or share responsibility. A cross-boundary chart shows who's involved in what.

The best way to create a chart is with the parties involved. Write your tasks in order on a big white sheet and tape it up in front of the group. List people or functions across the top. Point to the first task and ask the group, "Who will be involved in this task?" Indicate responses by putting X's in the people columns. Circle the member(s) responsible for results. The development of such a chart is a powerful tool for surfacing collaborative opportunities and resolving problems, such as turf and resource conflicts.



Cross-Boundary Teamnet Flow Chart

Learning is a major problem for modern organizations. Few know how to capture the experience generated by all the ad hoc teams and networks that increasingly populate the business world.

One way to capture group learning is to keep a simple, structured record of a process as it unfolds. This gives the next team that tackles something similar a place to start— a template. Templates are records of experience that you can adapt to new circumstances—not bureaucratic doctrines to follow slavishly. They are an effective way to encode an organization's learning into its business practices without making it a separate bureaucratic function.

It is said that Toyota has 2,000 cross-boundary process templates in use. The company, well known for its world-class business processes, regards these templates as a vital corporate resource and a secret of its success. While you can create serviceable simple charts by hand, TeamFlow, a computer software tool, makes the production of these cross-boundary process pictures easy.²

T5: NEW TERRITORIES

Do You Have Your Directory?

Every successful boundary crossing group—every teamnet, every network, every distributed organization—every one starts with a directory. At first, it may be no more than a sign-up sheet from initial meetings. As the group grows, people quite naturally create

distribution lists, name and address handouts, and, finally, a directory of members and resources.

A basic teamnet function is keeping track of people and organizations involved. Transform a list of participants into a directory and you have a powerful tool.

Make a formal, researched, printed, and distributed directory the first project of your teamnet. Such a project serves two ends:

people get to know one another better, and it gives outsiders a handle on who's involved.

For some teamnets, directories set their boundaries, by distinguishing "insiders" from "outsiders." Some directories also serve as marketing documents. The people listed announce their combined capabilities to the world, giving potential customers a direct line to accessing the best resource to meet their needs.

Directories answer the two most basic questions about members:

who and where. People are pointers to places, represented by addresses. Indeed, people point to many places; a person may have home and work mail addresses, a variety of phone, fax, and voice mail numbers, and a host of on-line addresses.

The Team Bible: The Handbook

One team member patted it. "Have you seen our handbook?" Another clutched it. Still another always kept it in her briefcase. People love few objects as much as a new "Teamnet Handbook."

Since boundary crossing teamnets usually have no specific place to call home, you need to compensate. Unlike hierarchical organizations with their corporate headquarters and centralized offices and workplaces, the teamnet is spread out. No matter how distended, every group needs a place to call home. The more distributed the people, the more the group needs another "sense of place."

In the early stages, pull together a handbook to create a simple "place" for your teamnet. Begin by gathering shared information, key memos, and other ideas generated by the group and its mem-

bers' activities. You don't need desktop publishing to do your team's handbook: scissors, tape, and a copier will usually suffice for early versions.

To expand your handbook, include directories, glossaries, and bibliographies as standard sections. Retain the output from the Launch planning process—from mission statements to schedules. Gather agendas, meeting notes, and action item lists to form the early bulk of a teamnet's joint work. For the rest of the handbook, include selections of key documents, diagrams, and other essential elements that help people keep track of the emerging big picture.

At its best, a handbook is both a map and a resource for the team. It helps capture the learning of the group in process. It is a resource for decision making, providing briefing material for external stake-holders, including customers, suppliers, and the hierarchy. It helps bring newcomers up-to-speed quickly, and provides a record for improving future teams or new cycles of the same process.

To capture your learning, build your information capture system into your process from the beginning. Make the record a natural part of the work. This is useful for the ongoing monitoring, managing, and testing of the immediate process, but additionally of value for the future. After-the-fact documentation is expensive, laborious, and rarely a top priority.

Planning and Managing by Tasks

COMMON PROCESS, MULTIPLE VIEWS

To create different models of your process, you need to have a common way to identify the tasks. Give each task, each mini-purpose, its own code. In this way, you can follow each task, with its attributes such as dependencies, time, costs, people responsible, and deliverables, in a variety of models.

Track change—which is inevitable, expected, and continuous in

development processes-through tasks. Reflect change by adding, deleting and modifying tasks and their attributes. Review the effect of change with the team, using each process view – dependencies, time, and teams. Each view offers a different picture of a common process. People find one of another view to be more germane to their part of the whole process, depending on their roles, responsibilities, and learning styles.

The "Concurrent Cube" metaphorically integrates these three



Concurrent Cube- Team, Task, and Time

Team Flow Chart

design elements as a common process. Task dependency, time, and teams are the "three faces of concurrency." Change in one dimension affects the picture in others.

THREADING TASKS THROUGH TOOLS

Tasks thread through the tools:

? *Purpose* is the source of work. It expands into

? Tasks that are common to a variety of process views. A shared set of tasks is a

List, or a *framework* organized by principles. Arrange the tasks according to their logical relationships to generate a

? *Task flow.* Add time estimates to derive a

? Schedule that gives estimated start and finish dates to every task. Then arrange tasks in a

Cross-boundary team chart, according to organizational responsibilities, roles, and dependencies.

The Launch plan sets up an information system for managing later phases. In this way, monitoring is a natural continuation of planning. The data you get from operations greatly facilitate continuous planning, adapting, and reforecasting.

Work process design links planning with program management through its focus on tasks. Program management requires the same essential planning elements: tasks, people, times, and places.

Our Target Method works with existing application software tools. But don't be intimidated by the tools. The concepts are more basic.



Schedule Chart

For the most part, you can use the ideas on a manual basis in most everyday situations. However, when "big" and "complex" describe your project, computer tools can help a lot.

WORK PROCESS FLOW-DOWN

Work process design (WPD) scales from very small to very large organizations. When most successful, it flows down from the top leadership. The initial high-level planning effort cascades to the next level and so on until it involves all levels of the organization. This is one way hierarchies can learn to network.

As the process unfolds, each level's initial WPD results become the goals, targets, and guidelines for the work process of the next level down. Tasks, along with their associated timing and costs, established at one level become processes and parameters at the next level.

Involve two or more levels of organization in each planning session. In this way, members both buy into and understand the work process requirements at the broader level. They also acquire the experience and skill in WPD that they can then carry to their group as they do the planning at the next level down.

In reality, all levels plan simultaneously, with as much information and influence coming bottom-up as top-down.

Each level plans its own work. Overall purpose, strategy, and targets must come from the top as early as possible. Such clear direction provides a context for all levels of planning. By early and systematic initial scoping plans, you use the first few iterations to sort out the major elements of the plan across the levels.

Some Planning Guidelines

THOSE THAT DO, PLAN

The process of integrating work requires both participation and successive iteration. Those who are going to do the work must plan the work. This process is human interaction-intensive, not technology-intensive.

"Those that do, plan." It's almost a commandment when it comes to successful development of boundary crossing projects. It is not the plan but the *planning* that is the most valuable outcome for a teamnet. Distributed groups depend on their shared views of the work. The best way to understand the common view is to be part of its creation and development.

RULES FOR NOT GETTING STUCK

Some basic rules of work process design and quality help avert the danger of getting stuck in detail that can cause a planning process to go amok or grind to a halt.

1. Plan, Plan, Plan... But Only as Necessary

Create minimal but sufficient rules. This original sociotech admonishment heads the list of rules for organizational design. Planning is essential, but good enough is usually good enough. Especially for now.

2. Iterate, Iterate

Get the big picture early and quickly; fill it in later. Start by roughing things out. Make adjustments when the elements are the most fluid. Don't get hung up on completeness and perfection. Processes become increasingly rigid as they mature. Iterate to improve. Learn what's highly leveraged and what's not, then focus on the critical few elements.

3. The 80/20 Rule

Concentrate on a few important things. Attributed to Joseph Juran, one of the quality movement's founders, it means that 80 percent of the trouble comes from 20 percent of the problems, that you can do 80 percent of the job with 20 percent of the effort. It is also known as the Pareto Principle after a simple technique for displaying variants in rank order, so it is easy to pick out critical problems.

4. The 85/15 Rule

If you blame the system, you're probably right. This is the rule that puts blame where it belongs: on the system, more often the source of "the problem" than people. This second Juran rule summarizes decades of evidence: on average, more than 85 percent of mistakes

and errors come from the work system, with only 15 percent or fewer being under the individual worker's control.

The best principles, guidelines, and tools are never enough. The real world always puts a twist on the tried-and-true. Failure, which shepherds our way toward greater understanding of how people can effectively organize, is the subject of "Rascals in Paradise," the next chapter.