

HOW COMPANIES WORK CREATING DISTRIBUTED TEAMS ONLINE



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White Paper**

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EXECUTIVE SUMMARY

Increasingly, corporations are relying on distributed teams to accomplish the work of the organization. To succeed in the new global marketplace, corporations need to find ways to make distributed teams *work*.

Early generation solutions for coordinating the work of distributed teams have proven inadequate to the task. These include email, listservs, conference calls, threaded discussion software, “e-rooms,” rich media presentation technologies, and same-time online meeting applications.

These technologies are valuable, but in themselves cannot provide an adequate infrastructure for teams that deal with multiple projects in multiple subgroups, comprised of individuals who have different roles and responsibilities and teams that have underlying dynamics that impact their process.

Third-generation solutions are emerging that address these issues. This third generational approach has several characteristics:

- It is a blur of technology and the consulting to effectively use it
- It keeps conversations-for-action at the core of the process
- It structures and focuses business conversations
- It integrates conversations and the “stuff” about which conversations occur
- It supports multiple projects and groups
- It facilitates team building
- It integrates the organization’s present productivity tools.

In an increasingly digital world, with increasingly distributed corporations, and increasing demands for our “real-time” attention, the challenge is clear. Corporations must solve the problem of creating high performance teams who can work any time, from any place.

Fortunately, new approaches combine deep understanding of how teams work with enabling technologies. Organizations as disparate as Fortune 10 mega-corporations to 30-person dot.com startups are utilizing these approaches to leverage the power of both their “silicon-based” and “carbon-based” resources.

INTRODUCTION

Increasingly, corporations are relying on distributed teams to accomplish the work of the organization. For some companies, this is a planned strategy of becoming what James Martin calls a “cyber-corporation.” For others, it comes as a surprise. “Forty-five percent of our employees are not co-located with their managers,” we were told by one of our clients – a manager for a major telecommunications company. “We didn’t plan it, it just happened that way because of different acquisitions.”

Whether they plan it or not, corporations need to find ways to make distributed teams *work* – effectively produce the deliverables with which they are charged, and work together as a team in a coordinated and productive manner.

The ability to accomplish this is one of the first great challenges that face global corporations in the 21st century, and their ability to leverage distributed teams will, in large part, impact their competitive positioning.

As we use the term, a distributed (or virtual) team is a group of workers who are not co-located for a significant part of their working time; who are charged with the production of specific work products; and whose collaboration is required to produce these deliverables.

First generation solutions for coordinating the work of distributed teams such as email, listservs, and conference calls – proved inadequate to the task. Email is optimized for one-to-one communications, listservs for one-to-many broadcasts, and both prove awkward for many-to-many conversations. Conference calls have proved a valuable tool for team check-ins, but not for the sustained conversations needed to *accomplish* projects. None were fundamentally designed for enhancing the work of teams.

Second generation solutions such as threaded discussion software (sometimes packaged as a “electronic meeting room” or “e-room”), rich media presentation technologies, and same-time online meeting technologies have proven to be valuable tools, but not a solution. While they each provide a piece of the puzzle, none of them is optimized for engaging a group of people – over a sustained period – in numerous tasks – where they play multiple roles – to produce concrete deliverables.

Creating virtual teams that *work* takes two things: the **right process** and the **right infrastructure**. To understand why, and what next generation solutions require, we must start by examining how distributed teams work.

HOW VIRTUAL TEAMS WORK

Noted consultant **Juanita Brown** suggests that *conversation is a core business process*. Our experience would suggest that for highly effective teams, conversation is not only a core business process, disciplined conversations-for-action are **the** core business process that leverages the collective skills and knowledge of team members, and enables them to produce collaborative work products.

The challenge of having effective conversations-for-action are exacerbated in distributed teams. Not only are the normal communication filters present, but additional ones exist.

In creating and managing such teams, it is important to understand the special dynamics of virtual groups, and to design the infrastructure, orient the members, and prepare the managers accordingly.

HOW WORK IS ORGANIZED

Multiple subgroups

In the normal life of a working group, tasks are assigned to individuals or subgroups. When this happens in a face-to-face environment, the subgroup meets at a different time or in a breakout room to accomplish their work. It's very clear when and where the subgroup is meeting, and who's in it. You can count heads in the breakout room!

In a virtual environment, the requirement is the same, but the headcount is less clear. Unless the virtual team environment is designed clearly and structured well, it is less clear to everyone who's "on the bus" and who's "off the bus" when it comes to groups and subgroups. Worse, many first generation online technologies (such as email, listservs, and "electronic team rooms") are not optimized for creating quick-forming, quick-dissolving sub-teams, or for individuals who at any given time are members of many different groups.

Action Implication: In creating effective distributed teams, it is vital to analyze your requirements for ongoing and temporary sub-groups, and select an infrastructure that will support this requirement.

Roles & responsibilities

Work groups need several things in order to function effectively. They need to have a point of contact with the rest of the organization, report out their results, be facilitated, convened and adjourned, etc.

In short, in well-functioning groups, there needs to be clarity on the roles and responsibilities of group members and the group as a whole.

Distributed groups have the same requirement, but again their nature makes fulfilling it somewhat harder.

In a face-to-face meeting, the team leader is usually easy to identify, and the associated roles (recorder, facilitator, etc.) are clear to all involved. In distributed teams, this is often more problematic.

Moreover, the skills required for filling the various roles virtually do not correspond one-for-one with the parallel skills in face-to-face meetings. For instance, facilitators of virtual groups need to know when and how to use different communications media, how to encourage online interaction, and how to defuse unintentional slurs – in ways that are very different online than face-to-face!

It is not only the “soft skills” that are important, however. The technologies used for the virtual team can enhance or inhibit the clarification of roles and responsibilities. For instance, email and listservs have a “leveling effect” which makes it very difficult to maintain visibility on who is doing what within the group. Conference calls make it easy to identify the team leader, but the synchronous nature of the medium makes it difficult to facilitate and record an open exchange or brainstorming session.

Action Implication: In organizing a specific project, you must take special care to clearly communicate the roles and responsibilities relative to that task. You should choose an infrastructure that supports this by recognizing that people have different roles in different projects.

DEVELOPMENTAL STAGES

We may remember from Psychology 101 that groups go through “forming, norming, and storming” periods, before they settle into their working stage. It’s true, and during these initial periods they often go through a developmental process in which issues of inclusion, control, and norm setting are addressed.

Distributed groups go through these same stages, but there are some distinct differences in the dynamics involved.

Inclusion is often not a major issue in a co-located group (unless the group consists of people at different “levels” in the organization), and dealing with it is usually a simple matter of soliciting and recognizing contributions from everyone from the start. In an online any-time environment (such as listservs, email, and e-rooms), it’s often hard to even know who is present or what they are tracking (especially if they are not actively participating).

In contrast, it's easy to know who's present in same-time technologies such as NetMeeting or conference calls, but it's harder to allow everyone to participate and thus feel included and get buy-in to decisions.

Norm setting is accomplished in a face-to-face environment, as organizational psychologists tell us, by clearly setting forth and agreeing on ground rules, reinforcing compliance, and (subtly or overtly) sanctioning deviance. However, to be effective, norms must have buy-in from the entire group, and they must be reinforced – not merely stated. And, not to make too strong a point of it, but *it is shared norms that weld a disparate collection of people together into a high performance group that achieves the synergistic effect where the whole is more than the sum of the parts.*

Again, virtual groups have special challenges when it comes to norm setting. The problem comes in getting buy-in, and reinforcing the norms during the life of the group. What is needed is the equivalent of the eye contact, the nod, the “nice idea,” on the one hand; and the shifting away of attention or pulling the person aside on the other.

Most virtual team technologies are not optimized for this type of interaction, so facilitators must rely on a follow-up “heads-up” phone call or an e-mailed “attaboy” to supplement the more business-like interactions within the group environment itself. Web conferencing and threaded discussion software, in which a conversation is read as an entire stream, **do** allow for this type of norm setting by facilitators and experienced group members right in the flow of discussion.

Action Implications: (1) When possible, it is usually beneficial to “kick off” a virtual team with a face-to-face event in which ground rules are established and agreed on. Absent this, a conscious discussion of norms or commitments can be held in the virtual environment. (2) Creating an infrastructure that includes online threaded discussions can greatly assist the team leader in creating the norms and inclusion that characterizes a high-performance virtual team.

VIRTUAL GROUP DYNAMICS

Distributed groups have several other dynamic that operate in addition to the ones found in co-located teams. Three of the most salient are the rolling present, energy binding, and conversational digression.

The rolling present

In co-located teams, a significant percentage of group communication happens in a “same time, same place” environment. In a typical meeting, all the in-

volved parties are there, in the same room, at the same time. In fact, if a key decision-maker cannot make a meeting, it is often postponed.

Many remote teams use a combination of same-time technologies (such as teleconferences, video conferences, or NetMeeting) and any-time technologies (such as voice mail, email, listservs, and conferencing software such as Caucus).

When any-time technologies are used, group members can access conversations at their convenience – early in the morning, at mid-day, or late at night. They can also access participate in conversations with different frequencies. Some may participate several times a day, some once a day, others one or two times per week.

The result is unique to any-time communications environments. John, Mary, and Susan (who each participate several times a day) may be holding a conversation that has a dozen different statements by the end of the day. Because of the nature of dialog, during the course of that day the conversation may progress from an initial opening, through exploration of alternatives, to an emerging consensus. Tom, who only checks in once a day, feels left out – because he is not a *part* of the conversation, but only a *witness* to it after the fact. The present has “rolled on,” and for Tom to suggest a new alternative may feel like “old business” to the other three.

Action Implication: When any-time conversational environments are utilized, the design, management, and facilitation of conversations-for-action must account for the dynamic of the rolling present. Often this can be done through creating effective norms for frequency of participation.

Energy Binding

A related dynamic in any-time environments has to do with the build-up and dissipation of energy.

In a face-to-face meeting, the energy generated by a question naturally builds by virtue of the confined space. If someone asks the group, “what do you think we should do next?” there may be silence at first, but eventually someone will answer. As any experienced group leader can attest, silence is uncomfortable, and in less than a minute, someone will answer so that the anxiety does not build. Metaphorically, we may say that the energy of the question bounces off the physical walls and builds, until it is dissipated by an answer.

In an any-time environment, the energy generated by a question can quickly dissipate. If no one cares to answer, someone else may make a remark or ask a question that is totally orthogonal to the original one. In any-time environ-

ments, there is not the same feeling that “I must respond to the previous speaker rather than taking the conversation in a different direction.”

Action Implications: (1) The design of online conversations must have a higher degree of structure than their face-to-face counterparts. (2) It is often useful to bind the energy with time. For instance, a “request for comment” can be held for a three day or one week period, so that team members feel a sense of immediacy about making time for their input.

Conversational Digression

In online environments, conversations tend to digress in ways that are somewhat different than their face-to-face counterparts.

Often, a conversation digresses into a tangential topic, sometimes it digresses into social chit-chat, and occasionally it just stops altogether.

The reason for this has to do with the technologies used and the nature of any-time conversations. Most online technologies are optimized for a participant seeing only the parts of the conversation that they have not yet read. This is done to save the participant time, because otherwise one might have to wade through an entire week of dialog to see the one new contribution.

The down side of this is that when reading three new responses on a tangential or social topic, it is often not clear that the conversation is, indeed, off-topic. It’s easy to “go with the flow,” and inadvertently contribute to the problem. Similarly, if a conversation has stopped, the average team member may not recognize that there should be an ongoing conversation that is now missing.

Action Implications: (1) A person must be clearly responsible for a conversation-for-action, and must know the techniques for facilitating online discussions to keep them moving and on track. (2) The technology used for online conversations must provide tools for keeping conversations on track, such as providing separate spaces for social conversations, tools for moving conversations to appropriate areas, and ways to link disparate conversations together and separate out tangential but valuable conversations.

A THIRD GENERATION APPROACH

Caucus Systems offers a third generation approach to facilitating the work of distributed teams; an approach that is built from the ground up on an understanding of how people synergistically collaborate together to produce work products that are better than any of them could have produced individually.

THE SOLUTION MUST BE A *BLUR*

The first lesson that 15 years in building online communities and creating virtual teams taught us is this:

It isn't the technology, stupid!

Equipping a group with great technology is like equipping the average accountant with Adobe Illustrator, and asking him to create a corporate logo with it. It's useless to provide him with a world-class tool without the training and experience to use it.

But the second, related, lesson that we learned was this:

It IS the technology, stupid!

If you give a trained graphic artist a copy of Microsoft Paint and ask them to make your corporate logo, you may eventually get an acceptable result. But without the right technology, it will take ten times as long and will never be as good as it would have been had they used Adobe Illustrator.

What we've found is that creating virtual teams isn't a matter of just the right technology – though that's important. It isn't a matter of just the right consulting, though that's an important piece as well. The right solution is a *blur* offering – a combination of the right technology and the right expertise in how to effectively configure, customize, and use it.

At Caucus Systems, for instance, our *successive roll-out approach* begins by selecting an initial project with a concrete deliverable to demonstrate a proof of concept, gain additional sponsorship, and create an initial “win” for the customer. From there, specific business units are targeted for selective implementations, and then these are extended into pervasive use.

Our Caucus Centers transpose the processes your co-located teams use for planning, knowledge-creation, project management, and decision-making into an online environment that your distributed teams can immediately appropriate and utilize.

Our consultants help you understand factors such as: the social organization of your processes; the human interactions these processes build and on which they depend; the wide variety of groups and meeting structures and settings (each with its own appropriate character) that are central to these business processes; the diverse roles people play in the processes; and the wide variety of activities people engage in while participating in these processes.

We then help you select appropriate projects, design and customize the right environment, identify the roles and responsibilities of team members, train the managers and other internal facilitators, and kick off the project by orienting the team members and orient them to norms and responsibilities.

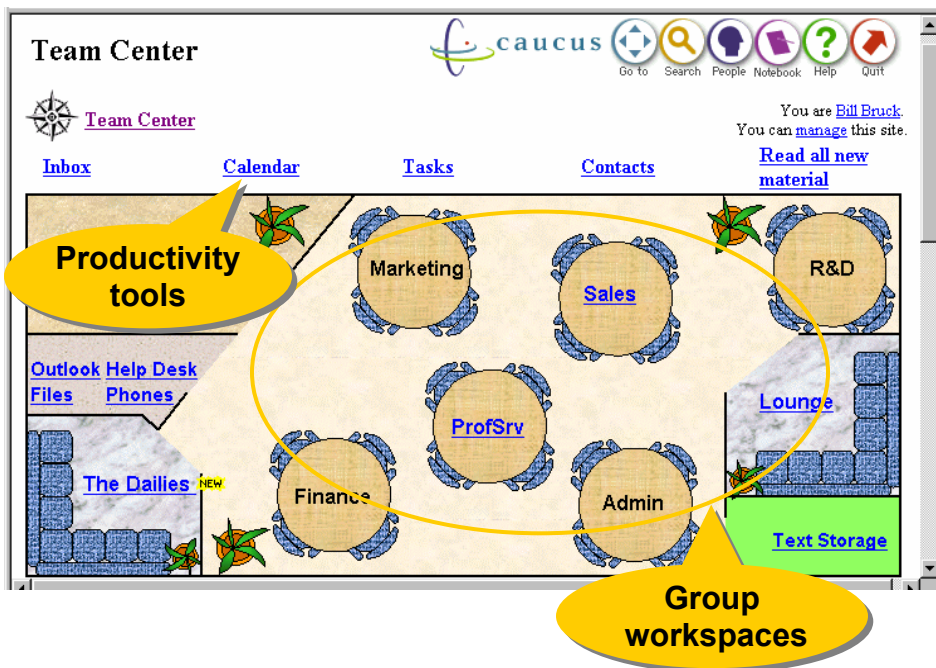
THE SOLUTION MUST KEEP CONVERSATION AT THE CORE

The second fundamental lesson that constitutes our third generational approach is the conversation is, and must be, at the core – not at the periphery.

Take, for example, the fundamental business infrastructure that a distributed team might use in accomplishing its tasks: a corporate portal.

Earlier approaches (which are still used today) were to create a portal that has information at the center and conversation at the periphery. Such a portal is characterized by a profusion of information such as corporate news tickers, calendars, folders for common documents, and the like. There is often a button towards the bottom that says “community” or “discussions.” Like the empty rooms off unused hallways in a community center, there is a *space* for conversation, but there’s usually no one there; seldom anything of interest going on.

In line with our understanding that conversation is **the** core business process, a third generational approach puts conversation at the heart of the corporate portal. When entering a Caucus virtual team environment, for example, you see a organized list of conversations pertaining to your group’s work. Required tools are of course present, but **they** are links at the periphery, and conversation is at the core.



THE SOLUTION MUST STRUCTURE CONVERSATIONS-FOR-ACTION

While conversations must be at the core, what is required is not conversation-as-chat, but structured conversations-for-action. Whether the group is planning for change, brainstorming possibilities, managing projects, choosing between alternatives, or producing documents, structured conversations drive the process.

For example, Caucus conversations (such as the project management conversations shown below) allow teams to quickly track key information, coordinate actions, and report out results.

Team members participate any place, any time. The Caucus software remembers who you are and which areas you can access. It even remembers what you've read, and let's you know which conversations have new discussion in them. Whether you enter the virtual team center at 6:00am or 6:00pm, from the office or from your hotel, you can fully participate in the work of the team, and be fully up-to-date on the context of all the ongoing conversations.

But conversations-for-action aren't just about text. Your infrastructure must allow team members to easily incorporate the "stuff" that's being worked on and have conversations about that "stuff" – all in the same conversation. For instance, with Caucus, you can incorporate charts, diagrams, web sites, or even live documents right into the discussion – an important part of what makes it a conversation-for-action.

Professional Services Home - Microsoft Internet Explorer provided by Dell

Professional Services Home
Lisa Kimball, Organizer

Project Tracking

Name	Customer	Stage	Knot	Start Date	Target Date
Guided Tour	Kurt	In Progress	Bill	3/30/00	4/10/00
Self Paced Demo	Kurt	In Progress	Lisa	3/30/00	4/6/00
Event idea stockpile	Kurt	In Progress	Lisa	3/31/00	4/7/00
Sales process sheets	Kurt	In Progress	Lisa	3/24/00	4/7/00

Profserv Projects Item 9 "ProfServ Outreach - White papers/Articles/Books"

Item 9 31-MAR-2000 12:18 [Susan D...ery](#)

Customer: Kurt
Stage: ID
<<Choices include: ID; Scoping; In Progress; Completed>>
Knot: All
Start Date: 3/31/00
Due Date: 4/28/00

Project Summary: Write white paper
Project Plan: Susan will research articles here.

Profserv Projects Item 9 "ProfServ Outreach - White papers/Articles/Books"

9:1) 06-APR-2000 07:34 [Bill Bruck](#)

Status Report

Here's the outline I sent to Stan Herman for a chapter in his OD book.

[OD & the new economy.doc](#)

Act on checked responses

On to Professional Services Home:

Enter your response in the box,

it now. Box width:

to Professional Services Home Forget this item? [Who has seen this item?](#)

Project tracking allows you to get an overview of team tasks

Drill down into a specific project

Post status reports and even include working files

THE SOLUTION MUST SUPPORT MULTIPLE PROJECTS & GROUPS

Real-life business units have multiple initiatives going on simultaneously, and most workers are matrixed into several different teams working on different projects.

Recognizing this, a third generational approach must create an environment that supports multiple teams and projects in a familiar setting. For example, unlike simple second generation “e-room” products, Caucus allows work teams to work as they do face-to-face – in different groups for different projects. Recognizing the importance of “virtual architecture,” Caucus environments are designed with familiar metaphors, to provide a sense of place for workers that parallels their face-to-face environments, as you can see in the diagrams above.

THE SOLUTION MUST ENHANCE TEAM BUILDING

In his best selling book *Dig Your Well Before You're Thirsty*, Harvey McKay stresses the importance of building strong networks. It is these informal networks that we rely on, he suggests, to actually obtain the assistance we need to get our work done.

In face-to-face environments, this networking and team building is accomplished in the informal venues for conversation – the water cooler, the lunch room, the occasional happy hour.

Caucus environments include a lounge for such informal conversations, and our experts at online community building teach you to take full advantage of it. The lounge quickly becomes the “place” to be, as weekly journals, discussions of popular TV shows, and interesting places to check out on the web get folks interacting in an active, informal way.

The lounge is great for team building

LOUNGE

The Dailies

You may [create a new item](#), read [all the items](#) or click on item to

#	Title	Author
1	Announcements	Aut
2	Who's here?	
4	The Reading List	Lisa Kimball
5	Interesting things we're doing	Bill Bruck
7	Best of the net jokes	Lisa Kimball
8	Red Dot Caucus News	Lisa Kimball
9	Lunch & Two Rivers Studio	Tom Simon

You can scan through topics that interest you or join in casual conversations.

But team building also goes on behind the scenes. Caucus' toolset is optimized for facilitating structured conversations. Discussion items can be moved, copied, and linked to the appropriate area; facilitators can quickly see when folks have last participated in specific discussions and what they've read; and Caucus consultants teach managers the best ways to focus discussions for results.

Teams are made up of people acting in different roles. With Caucus, everyone's role can be specified for each project or subgroup they are involved. You can completely specify whether an individual can start new discussions, participate in existing ones, listen only to other teams' work, or not have any access to confidential discussions. Caucus remembers who you are and where you belong.

THE SOLUTION MUST INTEGRATE PRODUCTIVITY TOOLS

Simple second generation virtual team solutions provide proprietary calendars, contact lists, and document management systems, with very attractive integrated interfaces. While such "solutions" are superficially attractive, it's important to look beyond the sizzle to the steak.

A third generation solution must use industrial-strength groupware and productivity tools. Further, it must integrate with the toolsets that team members are familiar with, and in which the corporation has an extensive investment.

As an example, if your team utilizes a common operating system and desktop suite, Caucus virtual team environments will take full advantage of them. You can integrate group productivity tools such as:

- Microsoft Exchange/Outlook for email, file management, group calendaring, and contact management;
- Same-time communication tools such as NetMeeting for chat, voice over IP, video conferencing, and application sharing;
- Windows NT/2000 for shared files and integration with Office 2000;
- Groupware such as Open Text LiveLink and Lotus Notes; and others.

While conversation is at the center, documents and productivity tools must be readily available and integrated into the environment – and into the conversations. In addition, the productivity tools must be the full-featured ones you've already invested in.

CONCLUSION

In an increasingly digital world, with increasingly distributed corporations, and increasing demands for our “real-time” attention, the challenge is clear. Corporations must solve the problem of creating high performance teams who can work any time, from any place.

Fortunately, there are now third generation approaches that combine deep understanding of how teams work with enabling technologies. Organizations as disparate as Fortune 10 mega-corporations to 30-person dot.com startups are utilizing these approaches to leverage the power of both their “silicon” and “carbon-based” resources.

About the Author. Dr. Bill Bruck is a psychologist and futurist who focuses on the effects of rapid technological change on information intensive industries, integrating technical expertise honed over two decades with his understanding of organizational systems and the people who make them work. A best-selling author, Dr. Bruck has written ten books on the effective use of information technology that are translated and sold internationally. Dr. Bruck is a founder and Principal of Q2Learning LLC.

About Q2Learning LLC. Q2Learning is a leading provider of online workplaces for virtual teams, e-Learning programs, and business communities. Q2Learning’s solutions are designed around the way people communicate, share information, and collaborate in order to get work done. We blend critical work processes, people issues, and right technology to create effective online workplaces that enhance your business outcomes. For more information on how our third generational approach to creating high performance distributed teams can assist your corporation, contact us at info@Q2Learning.com.