



Project collaboration: How we've wanted to work together all along





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Introduction: Metaphoric evolution

The Internet, and then the Web, have, of course, drawn many new applications. Each takes advantage of some facet of the new infrastructure and each has strengths and weaknesses:

Application	Strength	Drawback
Email	Point-to-point communication, unfettered and uncontrolled	Mountains of ideas and information not shared and lost forever
Threaded discussions	Groups of strangers exchange information and opinions	Context-free, and more noise than value
Groupware	Large teams can communicate	Harder to use and install than just about anything on the Web.
Home pages	Everyone can publish	Everyone can publish

The tremendous acceptance of these applications clearly indicates that their strengths far outweigh their weaknesses. But none of them has touched the fundamentals of how we work.

There are three reasons for this.

First, none has been aimed squarely at the basic unit of work: the project.

Second, projects are highly complex. Even simple projects involve richly nuanced communications among the team members who rapidly build a context for their work — a context that includes shared information, shared goals, and shared culture. An application aimed at reworking projects must integrate many different functions, including all of the ones we listed above.

Third, we've been distracted by the Web's glamour and only now are we, as a culture, coming to understand its true nature. The Web is not simply a communication medium. Nor is it only a channel for sales. Much less is it an infinite-channel television.

So what is the Web? Not to get ahead of our story, but it's a place. In this place, we can work together on projects in new ways that are oddly familiar... because they're how we've wanted to work together all along.

This white paper looks at how Web workplaces are transforming the fundamental unit of business work, the project.



1. What is the object of work?

Tear business down to its fundamentals, and what is it that people work on?

Sure, they work on reports, on proposals, on sales campaigns, on products. But in just about every example you can find, in business people work on projects.

Projects are the fundamental unit of work.

2. What is a project?

What is a project? What's the difference between a bunch of people working on tasks and a project?

A project is activity organized around a goal.

Fine, but in real life projects aren't as cut and dried. Typically they involve:

- A deadline and a set of tasks or steps that have to be taken to get to the goal
- Some number of people in a variety of different roles (not always in a clear-cut fashion)
- A set of shared information
- Many communications in many forms among the members
- A shared sensibility, a shared set of assumptions, and other ways that people get along

The point? Projects are very rich experiences, not simply people, tasks and milestones.

(By the way, projects don't exist)

There is literally nothing that is a project. Let's say you have project: a team trying to come up with a refinement of the current product that will leapfrog the competition. The team consists of four people in corporate headquarters in Akron, Ohio — two in marketing and two in R&D — a salesperson in Philadelphia who knows more about beating the competition than anyone else in the company and the marketing directors for European and the Pacific Rim."



Now, what does the project really consist of?

Let's see, we've got a bunch of people. We have some meetings, some phone calls, some email. But what distinguishes these people, meetings, calls and email as a project?

A project is literally nothing more than a shared objective... something merely in the heads of a group of people. And this is what you're basing your business on?

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3. How do we manage projects now?

We all manage our projects, of course. Otherwise, our businesses simply couldn't run. But we use tactics and techniques that are fraught with risks and inefficiencies (because that's the best we've been able to do so far):

Project element	How we manage	
Deadline	An email or memo is sent out — and then misplaced.	
People	If you want to know who is on the team, you look at the "To" and "Cc" list of the latest email	
Different roles for the different people to inhabit (sometimes in not very clear-cut fashion)	Either there's an "action item" list someone put together, or you just sort of kind of get a sense of who's doing what.	
A set of shared information	Every project member maintains a folder on his or her physical and computer desktops. The content of each person's folder is different. Version-itis sets in as the members start dealing with different versions of documents.	
A set of tasks or steps that have to be taken to get to the goal	A list of action items is created once and stuck on the bulletin boards of each project member. As the list changes and items are accomplished, the separate lists go out of synch.	
Many communications in many forms among the members.	Phone conversations go unrecorded and unshared. Emails get sent and lost, and not everyone sees all of them in the first place. Faxes arrive and are shoved into folders (see above).	
The work that's being produced	A document is created, revised on separate desktops, and comments are attached on yellow stickies that aren't shared and get lost.	

4. Ack. Isn't there any hope?

Don't despair. There is hope. But it doesn't come from a better brand of yellow stickies or the introduction of faster photocopiers. All of the problems listed above have to do with the way we communicate and share information — whether the information is about research, ideas, opinions, decisions, or the current status of the project's march towards completion.

As we all know, there's been a revolution in how we communicate and share information: the Web. The Web will enable us to transform projects.

But first it's important to understand that there are two basic types of projects...

5. Two types of projects

There are two broad classes of project, with considerable overlap. Project management software — the type of application characterized by Gantt charts and resource allocation tables — aims at coordinating projects that have a fixed and known course. For example, if you're building a new parking lot for your employees or making sure everyone goes through diversity training, you can use project management software to make sure every "t" is crossed and every "i" is dotted. Good stuff.

But not every project is like that. Some are less predictable, more creative, more open. Let's call these collaborative projects.

Here's a field guide:

Task-based project	Collaborative project
Known objective	Project may be intended to decide on objective
Known steps to complete project	Project may be intended to figure out the steps
Project succeeds if end result is what was expected at the beginning	Project succeeds if something new, unexpected, creative results
May include scores of people, not all of whom will interact directly	Usually consists of 3-20 people, all of whom come to know one another
Business objective: Typically, hold down costs while maintaining quality	Business objective: Typically, increase revenues while maintaining quality

6. Intermingled types — some examples

Most of us are involved in both types of projects.

And, of course, the two types overlap. Collaborative projects frequently have tasks within them that need to be managed; in such cases task-based project management becomes a subset of collaborative project management. And the reverse may be the case.

For example:

• An IT group has to upgrade 2,000 desktop computers. Task-based project management helps maintain the schedule. But the decision about whether to upgrade and what to upgrade with resulted from a two-month collaborative project.

- A consulting team has to help a client design a change in their distribution strategy.
 Collaborative project management helps the team consisting of people from the consultancy and the client corporation work through the issues and make a decision.
 But they use task-based project management to keep the market research phase on track.
- A mixed team of people from marketing and engineering are working on the next generation of their product (with a boatload of nervous executives "auditing").
 Collaborative project management software enables them to share information, discuss the salient points, make decisions... and design the steps that will be implemented via task-based project management software.

7. Collaboration exacerbated

There's nothing new about collaborative projects. But the Web also makes managing collaborative projects more challenging than ever:

One of the most pronounced effects of the Web on business is an increase in the number of projects. More people can work together faster on more issues.

Also, the projects tend to become smaller in number and shorter in deadline.

Also, the projects tend to spread out geographically.

Also, the amount of information available to projects has gone up by orders of magnitude.

Also, projects now have to cycle faster and faster in order to keep up with competitive pressures and the incredible pace of change in the market.

More than ever, then, we need to manage our collaborative projects.



8. What's required

What exactly would we want a collaborative project manager to do?

Go back to the list of basic elements:

Project element	How we manage
Deadlines and tasks	Maintain lists of steps with enough flexibility to accommodate both Set In Stone schedules and Wander Till We Find Where We're Going projects.
People	Keep track of who is in the project and who isn't and let the members find one another.
Roles	Distinguish coordinators from participants (even if, in some projects, everyone's a coordinator), and track who has what responsibilities for moving the project forward.
Shared information	Create and maintain a central "library" of information of any type members find useful. Control permissions in case not everyone is allowed to see everything. Manage versions transparently so no one is working from outdate information.
Communication	Enabled the full range of conversations, from structured to highly ad hoc, from discussion boards to realtime chat .
Sensibility/culture	Let the team create a sense of its self and its values, and let that sense be manifested so that new members can integrate quickly.



We're all familiar with the old requirements of projects. But there are new requirements emerging because of what the Web is doing to us all.

There are two related, aspects of the Web that account for the type of effect it has.

First, the Web is profoundly connective. It connects every person to every other person and to every other shred and shard of information anywhere on the globe.

Second, the Web is profoundly decentralized. No one owns it or controls it Conversely, everyone is responsible for herself on the Web — what you publish, what you read, how you maintain your site, is all up to you.

This creates a new business world with new requirements for projects.

- The increase in information requires new strengths in searching and organizing what's actually germane to a project.
- The efficiency of the Web at connecting people has increased the pace at which businesses have to move.

- The decentralization of the Web has built a do-it-yourself ethos. Anything that stands in the way of my connection whether it's an authority trying to control the environment or even someone trying to provide support feels like an obstacle. This is the principle of self-organization.
- The connectedness of the Web has knocked down the old walls both within and outside the company. Partners expect to be able to work with people from within your company fluidly and without barriers.
- The increased pace and the increase in "ad hocracy" mean that more than ever, we need to learn from the projects that have already happened and have already succeeded. Since there are so many possibilities now, identifying processes that work and defining best practices has become more important than ever.

Projects today have to meet these expectations, which can be summarized as follows:

- Work quickly with talented people
- in a messy, distributed environment
- making efficient use of the world of information
- and leveraging what you discover works

10. The need for a new type of application

The Web is, to some degree, responsible for these new requirements. By opening up a connected world, it has made a distributed business model possible. But by itself, the Web doesn't enable a business to succeed with a distributed business model.

We need business applications that enable projects to use the Web to meet the expectations and requirements unleashed by the Web.

But we already have a belly full of applications — everything from discussion managers to groupware. Simply adding more applications is not the answer.

What's required is an application that

- Integrates the functionality we need
- Takes advantage of the Web's unique connectedness and self-organization
- Is so user-attractive that people will flock to it
- Presents a way to work that feels liberating rather than constrictive
- Gets smarter all the time so that we find it easier and easier to do what works

Yes, it can be done. That's what the category "Project Collaboration" is all about.

11. The Web workplace

Here it is page 10 of this white paper and we haven't used the term "paradigm shift" yet. Let's rectify that immediately!

The solution requires a paradigm shift.

Instead of looking for an application, let's think about the fundamental Web experience. When we talk about the Web, we all use words like "browse," "visit," "Site," "home" and "go to." Fundamentally, we experience the Web as a place.

A place is where things happen.

So, suppose we were to make the Web into the place where projects happen.

These web workplaces would provide all the tools required to get a project done — on time and well.

A Web project place isn't just a collection of tools, however. It's also a persistent location like a physical work room — that functions as the place people can go to talk with others and to find information about the work that's going on there. And it serves as the archive once the work is done

In short, a Web work place is:

- 1. The shared office, outfitted with all the tools required
- 2. The research center for finding and sharing information
- 3. The "war room" where the key decisions are made
- 4. A working, continuing bookshelf for future reference once the work is done
- 5. A blueprint for future projects so that what has proven itself a successful way of proceeding can be added o the corporate "best practices."

Collaborative project management software enables project teams to create places on their intranet or extranet where they can work successfully.

What task-based project management forgot: For all its strengths, it's important to keep in mind that task-based project management software manages information about the project. The project itself happens somewhere else. Collaborative project software provides the where for projects.

12. Three workplace paradoxes

Web workplaces are where you do projects. And to succeed at projects, we know we need tools to manage tasks, people and roles, information, communication, work, processes and culture.

In so doing, however, we run into some paradoxes. We want to have our cake and eat it, too:

 Physical space is an irreplaceable pain in the tuchus. Physical space is great. Without it, there'd be no such thing as a ski path, a pancake house or sneeze guards over salad bars. But, when it comes to communication, space can be a big obstacle. In fact, physical meetings are so hard to arrange that once we have one, we tend to focus really hard so we won't need another.

It's not a matter of replacing physical meetings. (Let's repeat that: It's not a matter of replacing physical meetings.) We want to enable additional communication without having to leap tall buildings — and entire continents — in a single bound.

- 2. We need broad access but also some form of coordinating control. Sure, it's the Web and we all want untrammeled access to everything there is. But it's also a business project, and we need to have some control and coordination in a word, management. We just don't want it to be heavy-handed, condescending or parental. We want to be assured that:
 - The right people are seeing only the information they have permission to see
 - We are looking at and working on the most up-to-date version of a document
 - We can find all the information that we need
 - All the team members are working from the same information set
- 3. We don't want to take the time to record everything that happens, but we magically want a record of everything that happens. If we're going to learn from the projects done before us — and, on occasion, if we're going to avoid some costly litigation — we need to be able to find a complete record of all the thinking behind key decisions. We could force all the team members to spend time documenting everything, but, frankly, it wouldn't work. So, we need a way we can gather all that information without asking anyone to expend more effort.

Then it'd be good if we could use successful projects as templates for future projects.

Security: As with any Web-based system performing important work for the organization, security is important. In a Web workplace, security serves two functions. First, it keeps outside eyes from peering in. Second, it enables permissions to be set within the work group so that people only see that which is appropriate to them. Web work places have to provide strong security of both types.



• 13. How the Web lets us have our cake and eat it, too

Web-based collaborative work places to the rescue!

- Physical space is an irreplaceable pain in the tuchus. There are lots of advantages of physical meetings. Collaborative workplaces allow projects to continue successfully in between meetings, adding another dimension that enables more frequent access, at the convenience of each of the participants,.
- 2. We need broad access and some form of coordinating control. "On the Web, no one knows you're a dog," as The New Yorker cartoon has it. That is, when you got to a Web site, what's happening on the server is none of your beeswax. It might be a simple page-fetch. Or it might be a secure database that's checking your permissions and only showing you what you're allowed to see. Warm, fuzzy and sneaky. Perfect!
- 3. We don't want to take the time to record everything that happens, but we magically want a record of everything that happens. The same principle applies when it comes to compiling a record of how a team made a decision. All the "knowledge transactions" occurring across the Web can be recorded and maintained.

This not only compiles a record but can become a valuable knowledge base. You might as well learn from your mistakes. And your successes.

14. Doing the right thing

With what shall we furnish our collaborative work places? What does a team need to work together virtually?

- Members Control over who gets in and what tools and information are exposed to them once they get in.
- **Coordinators** People who have the special levels of permission required to administer the group without requiring special training.
- Common work area A shared view of the materials that are the knowledge base of the project.
- Version control Presentation of the latest and greatest version of any documents (or any other objects) in the common work area. You can also see and comment on previous versions if you want.
- Routing Move a knowledge object from one person to another so it can fulfill its destiny
- **Discussions** Threaded discussion manager enables a group to carry on a conversation and others to find it and learn from it in the future
- Tracking lists Lists of various types so the group can chart its progress.

- Notification Let the group know when members have contributed to the project space-connecting people's personal workplaces with the team's project workplace.
- Decision tools Enable the group to come to decisions via votes and polls. Record those actions for posterity.
- Search Find information in any work place you have permission to see
- Administrative tools Everything the group needs to run itself. It's crucial to the group's productivity that this not require getting on the corporate system administrator's schedule.
- Home page Every work place for every project should be able to have its own character.
- Accessibility Make it all run in a Web browser.

If your had those capabilities, your team would be able to take advantage of the connectedness the Web provides to work together more efficiently, more effectively, and, more fun-ly. (Fun counts. It's one reason people become hugely productive.)

15. Getting used

No set of features is enough. People also have to use the system.

Step One. Step one is to pick the right metaphor.

This isn't like picking the right color paint. It's crucial. After all, think about how well the Web would have been accepted if it had been presented to us as The World Wide Home Page Viewer or the World Wide Library of Unreliable Research.

Consider the aims of the metaphor:

- 1. Make the solution inviting and attractive so people will use it willingly
- 2. Make it easy to understand and use

This rules out things like Web-based Database Management, Web-based Workflow and Web-based Document Management since they fail at aims 1 through 2, inclusive.

Why not use a metaphor that is already well-understood? Do you think people need a lot of training and white board explanations to grasp the concept of a room? Sure, it's a little technical but we think people will catch on pretty quickly.

Step Two. Next, you have to enable people to be successful with the software.

This entails not only making it easy to learn and use, but also enabling the project members to manage their own projects without having to go through central administrative services.

People should be allowed (with permission) to create their own project places at the push of a button, bring in members, set permissions, drag in information, set up chats, and be in charge of their own destiny.

Not only does that let them move at their own pace, it also makes them feel more in control (and it's no illusion).

Step Three. One of the groups that has to succeed with the collaborative project management system is in fact the information managers. The software has to be:

- Easy to deploy
- Easy to maintain
- Support standards

16. Instinctive eRoom: How we've always wanted to work

The availability of collaborative project software that creates and sustains Web work places is of course something new. But it also for the first enables us to work the way we've always wanted to.

We — all of us in business — have come up with a variety of kludges and hacks to enable us to succeed at managing tasks, people and roles, information, communication and culture. We use paper clips and folders, memo pads and sticky notes, faxes and email attachments, and weekly meetings because it's the only way we can share information and ideas.

We're so used to these hacks that we rarely recognize just how painful it is to work this way.

Now, software is emerging that enables us to work on projects the way we've always wanted to. This new breed of software — collaborative project management software — is very different from anything that preceded it (as different as the Web itself) but feels natural, feels like a lifting of constraints.

Within the field of collaborative project management software, Instinctive eRoom is a clear leader, distinguished by:

- The naturalness of its implementation. If you know how to operate in physical space, and if you have ever used a Web browser, you can be a full-fledged member of an eRoom in minutes. Literally.
- The fullness of the project workbench it provides. Instinctive eRooms come furnished with a broad and well-designed set of tools that will make just about any project team more productive and efficient.

- Its self-reliant nature. Participants in an eRoom have unmediated access to it and its materials. No web masters or system administrators are required. Even setting up a new eRoom is as easy as filling out a simple form and pressing a button. This is how people on the Web expect to work.
- Its webbiness. eRoom was built for the Web, supports Web standards, is as easy to implement and administer as any Web application, and has a truly webby attitude.

Instinctive eRooms doesn't require us to work differently. It enables us to work better — overcoming the obstacles of physical space, of fragmented information, of lack of communication.

Instinctive eRooms enables us to work the way we've always wanted to work.

17. Summary

Collaborative projects are a basic unit of business.

We all stumble along doing collaborative projects because there haven't been great tools for them (although there are strong tools for task-based projects).

The Web exacerbates the problem but also provides the connectedness that lets us address the problem for the first time.

The Web lets us get over the limitations of distance.

Instintive eRooms turns the Web space into Web work places where groups can work efficiently, creatively, and without friction — using a natural metaphor and without requiring training or the intervention of system administrators.

Web work spaces let us work the way we always wanted to.

Instinctive eRooms are good.



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