Virtual teaming: You don’t know me, but….
August 2003

Executive Summary – Teaming has often been an issue for individuals, as well as for people who are trying to get more out of their workforces. Virtual teaming – which includes assigning, managing and performing work among geographically dispersed people who share a common goal – compounds the everyday obstacles to optimizing how a team functions. Maintaining work relationships through dial-up cable or an occasional phone call can be a real challenge, but it’s a particular challenge that is not going away. Even if travel budgets loosen up, there will still be more virtual teams, not fewer, in the future. By understanding the advantages and disadvantages of virtual teams and identifying desired team outcomes, companies can begin to strengthen selected capabilities to build virtual teams that are more cohesive and productive.

This Executive Technology Report is based on a live Web broadcast by Peter Andrews, who is a consulting faculty member with the IBM Advanced Business Institute in Armonk, New York.

The goal of optimizing virtual teams is to discover and adopt methods, tools and concepts that support the outcomes that are most needed from the team. To accomplish this, seven steps can help:

1. Understand your team and its characteristics
2. Appreciate the problems virtual teams face
3. Consider potential team outcomes and choose those that are most critical to your success
4. Recognize the key capabilities that can influence the success of teams
5. Identify resources at hand that might help your team
6. Choose the attributes and technologies that best support your specific outcomes
7. Perform specific initiatives necessitated by your action plan.

Start by clarifying what a team is. A team is a group of people with common interests and at least one common goal. Usually, there exists across the team a substantial amount of social capital – defined by author Robert S. Putnam as mutual commitments based on “social networks (who people know) and the inclinations that arise from these networks to do things for each other (‘norms of reciprocity’)”1. A team requires real collaboration, along with sharing work and responsibilities.
Yet, other groups of people without these characteristics may also be described as teams. For example, task forces, workgroups and formal departments are all often called teams. And, sometimes they really are teams. But frequently, those groups are more like a gearbox, where someone has put together a set of skills and just expects it thereafter to produce more than the sum of its parts. Luckily, people do have a natural tendency to team and work socially, so they can overcome some of the limits of that expectation.

Other affiliations are also sometimes called teams, such as communities. Communities are often very large and may not share common goals, but they may feature quite a bit of social capital. In practice, the “ideal” team probably doesn’t exist, but hybrids often have aspects of communities, task forces, departments and other kinds of groups. Teams are never simple, and teaming is never easy.

**Advantages and disadvantages of virtual teams**

Virtual teams exhibit all the confusion and organizational predicaments of face-to-face teams, plus they bring their own set of concerns. One might ask, why even bother with virtual teams? Partly, it’s because we can. We have the tools now that make it possible to work with each other at a distance. And, partly because we must.

Real talent - an irreducible competitive advantage - is rare and companies have to get it where they can. Nowadays, people who can “do the job” may want to live where taxes are lower, congestion is less, there’s a magnificent view or their parents are nearby. Virtual teams let managers pull some of these people into jobs whom they might not be able to recruit otherwise.

Virtual teams offer other benefits for businesses. Cost savings frequently tops the list because of flexibility in hiring. In addition, work can continue around the clock if people are staged in different geographies, handing off work so that a subset of the team is busy while other employees are sleeping. And, another reason that it’s compelling to establish virtual teams in an organization - particularly a worldwide organization - is the difficulty in carrying out change across the enterprise. A virtual team is likely to have a membership that’s diverse - in different places and different organizations. As a result, managers can use the team as an opportunity to plant the seeds of change within the company and make change happen more quickly.

Now, we all know about disadvantages of virtual teams. For instance, in a live conference call, nobody can see the faces of their teammates, so it’s not possible to know how many attendees might be bored, eating lunch, confused or how many are hanging on every word. We always hope it’s
mostly the last one, but you never know. Many probably handle e-mail or surf the Web, which may be okay, depending on the call topic.

In a virtual setting, it can be harder to gain agreement from others and locating experts can be more time-consuming. Also, it's tough for people to keep the team focus and for the team to be recognized as a powerful entity. How to gain a reputation of power is an old dilemma – typically, a lack of face time with executives translates to enjoying less power in the organization.

Probably the most cited challenge is about establishing trust. We're all used to building trust in a face-to-face way. Trust is clearly important to team effectiveness, yet it's hard to establish over the phone. Nevertheless, people have even fallen in love and married on the basis of correspondence, so it's not impossible, but it may prove more problematic in a virtual environment.

A lack of social cues is detrimental as well, because someone on a telephone call can't tell if others are looking away, if they're confused or if they're mumbling to each other. Real connection is harder since all those valuable cues are missing.

In addition, differences in culture can create other concerns. For face-to-face meetings, if people are from different countries – or even different areas within the organization, such as an engineer trying to talk to a marketing person – there can be disconnect anyway. However, in cyberspace, those disconnects might not be as visible until they become real conflict. Which brings up another question: how do you resolve the conflict? It can be very tough when you're physically separated. When people are sensitive or emotional, it's much more troublesome than being face-to-face, where it's obvious how upset they are and whether progress is being made.

Also, knowing whether someone is available to participate can be unclear. Distance can result in people who have difficulty contributing, especially if they're connected only by telephone while most of the other team members are in a room together – those far away can be more easily forgotten. Unfortunately, this list of challenges associated with being virtual could easily be doubled. But, the question is, having looked at potential advantages and disadvantages, what can companies do about it? How do they make improvements?

How virtual?²
First, take a close look at the team. You may already have a sense of where you are – maybe you recognize that yours is a hybrid between a task force and a genuine, ideal team, but how virtual is your team? To answer this, consider numerous factors beyond the location of team members. For instance, different cultures amplify “virtuality” and present a greater obstacle.
It’s especially tough if the team is never able to hold face-to-face meetings. Certain organizations do hold in-person, kick-off meetings to start each new year; others don’t. Another consideration is whether social capital is already built up within the organization – has the group bonded at a basic level – or is everyone a stranger to each other? The more past interaction, the more the team can leverage that. If many have never met, the team faces more challenges. And, the size of the team can make a big difference. Certainly, with more than twenty people, building group coherence becomes more complicated.

**Team outcomes**

Say that you’ve gotten a sense of the kind of team you have and a better feel for potential hurdles. Here’s a surprising fact: corporations don’t really care about teams. They care a great deal about what teams produce, but if an individual can produce the same outputs that a team produces, then “the business” is just fine with that. They like that.

As it turns out, though, a team can produce certain results that an individual can’t. And different kinds of teams may produce different outputs in better ways. That’s the key, because it’s critical when creating or enabling a virtual team to focus on what is essential to make the team better. It’s impossible to do everything. In fact, many activities that would traditionally be done as team-building exercises are just not going to be effective for a virtual team. So first, perform triage by considering this list of team outcomes:

1. Teams reach out more broadly to get a more complete set of inputs (+)
2. Teams extend the range of interpretations
3. Teams combine and build on talents and skills (+)
4. Teams distribute work load (+)
5. Teams provide reactions, testing and evaluation for more robust work products and solutions
6. Teams reach out more broadly to influence and leverage capabilities and knowledge (+)
7. A team provides mutual support.

Sometimes, certain outcomes offer bigger advantages in a virtual team environment than a traditional one – several are denoted here by pluses. These are team results that a corporation cares about.

Adding one caveat: even though these describe outcomes that a corporation cares about, an individual may be more concerned with other outcomes. Individuals may place importance on the people they’re able to work with. If they get to work with friends, that can make a difference in how they perceive
the value of the team. The corporation probably doesn't give weight to that. Likewise for factors such as career advancement, that may indirectly affect the corporation but directly affects individuals.

Back to the outcomes list: One reason we form teams is to get a more complete set of input by reaching out more broadly, which can happen when a team tries to represent different groups. Diversity is one of many criteria often used when forming a team. Even if a team is bubbling up out of the community as a grassroots effort, people often look around to see if they have the right sort of representation within the membership.

A team can extend the range of interpretations, which again points to the diversity of the team and may encompass recognizing different and compelling perspectives. When studying emerging technology, for example, it’s very interesting to hear an industry expert talk about the capability of the technology versus what a technologist says about it. You can get a different point of view, a different reaction.

Which brings up the next point; teams capitalize on talents and skills. That is one of the most obvious advantages with a team. If you need a programmer, you need a programmer. If you need a marketer, you need a marketer. If you try to fake it, things aren't likely to work out well. People have different gifts, and they bring them to a team.

Also, teams can distribute workloads. The most obvious example is the 24-hour clock usage, handing off work from one geography to the other. But it also can happen when a person says, “Hey, I've got some 'spare cycles' (availability). I'm going to get in there and get something done.” Such efforts will push the ball forward even though the task was assigned originally to somebody else.

Teams can provide reactions. Ever notice that comedy screenplays are usually written by a team? The reason is because when you tell a joke and somebody laughs, you immediately realize it may be a successful joke. If that person doesn't laugh, it probably isn't. They really need the feedback and reactions of other people to be most successful. Beta testing – or testing in different environments – can be an important part of this.

The next point on the list is influence, which has to do both with selling and being able to access different capabilities within the organization. And finally, a very important outcome: teams provide mutual support. If a team is doing something that's “delicate,” the team has to provide a protective environment for the early work. Being out in the open among other people may discourage the team very early on. Instead, the people with common goals will say, “Okay, you've got ten percent of it here, and that's good progress so far. So,
Let’s see if together we can get to twenty percent and we’ll keep moving forward.”

For best results, people should choose no more than two of these outcomes as the main reasons why their team exists. This is always tough to do; nobody wants to make the choice. Everybody wants to achieve them all since they're all good objectives. But if you're going to focus and target your actions to create a more effective team, you have to be selective. After that, start gap analysis, which is an essential capability for successful virtual teaming. And finally, take action. It’s vital to invest in the people, processes and technology to close those gaps. Because if you just diagnose without prescribing and taking the medicine, you won’t be better off.

**Finding routes to better virtual teams**

Now, having gained a sense of your team and understanding the desired outcomes, start to assess the resources and capabilities at hand. The assessment is aimed at enhancing, in a prioritized way, one or more of these important capabilities:

1. Having skilled people in the team
2. Having sensors to find the right people and information
3. Supporting technologies that allow the team to reach out for input
4. Using taxonomies to allow the team to filter and structure information
5. Empowering individuals and teams
6. Accessing tools and techniques for analysis
7. Accessing tools and techniques for synthesis
8. Including mentoring for the team
9. Facilitating communication and participation
10. Building significant social capital
11. Negotiating and documenting the project itinerary
12. Recording and monitoring project progress to keep it visible
13. Facilitating initiative among the team members
14. Attaining sufficient resources
15. Facilitating error correction
16. Developing “sensors” to find the right people to influence
17. Using technologies that allow the team to influence and leverage capabilities and knowledge
18. Helping team members gain influence
19. Generating collateral material.
For instance, to obtain a more complete set of inputs, assess the skills of people among your team to make sure all the key skills are available – if not, acquiring key skills becomes an action item. Another action is recognizing the social network as a team resource, such as when consulting “the grapevine” for background on a specific client before attending client meetings. In particular, it’s necessary to focus on the newest information. That’s where the social network becomes more vital – by providing access to fresh information either through peers or regular communication, such as newsletters or Web conferences. If your group isn’t “in the loop,” think about how to address this need. How can you be the eyes and ears of the organization, which is the outcome a corporation expects?

To improve your abilities to deliver on team goals, there are many levers to pull. They fall into two main categories: attributes and technologies. Attributes are related to rules and culture, how the team defines itself and the power the team can exercise. But, there’s almost no technology that’s a cure for a team. It doesn’t work to go out and buy instant messaging software and say “Okay, from now on my team is going to work just fine.”

Any of these levers are embedded within the power of the organization. They only become effective when combined with the right rules, the right expectations, the right training and all the other elements that make using the tool something that’s natural, expected and obviously beneficial to the people within the team. One questionable approach is to mandate the use of a tool and tell people, “Just go ahead and run with it, we’ve already provided what you need.” That doesn’t usually work, particularly with talented people who may comply, but it’ll be malicious compliance. Everyone has probably experienced that type of reaction on occasion.

**Taking action to improve teams**
Time to formalize an action plan. The following actions have been chosen by other teams going through this thought process. The most obvious are not listed here since they’re probably ideas that would pop into your mind first as you determine how to work toward a specific outcome. Perhaps a little less obvious, these actions might be useful:

- Take time to assess your team (consider attitude, talents and goals)
- If large, select a core team
- Provide access to decision-makers
- Set expectations regarding applications, especially chat
- Make sure everyone is comfortable with the tools
- Keep it simple
• Equalize where possible. Let distant members chair meetings. Go “non-synchronous” (exchange information, but not in realtime) to accommodate non-English speaking members

• Have backup methods

• Use a shared workflow tool

• Systematically build social capital

• Invest in face-to-face contact, if possible

• Create a “sensitive” forum

• Enlist facilitators

• Find a means to establish presence

• Make sure “Webinars” (seminars conducted realtime via the Internet) are two-handed – managed not by only one expert speaker, but also a second person who can assist attendees wanting to ask questions, as well as manage connectivity or other technical complications.

Let’s look at each of these in more detail. First, take the time to assess your team; find out what capabilities they have and what their attitudes are. It’s not good to have people on the team who are there grudgingly – but it’s even worse not to realize when that’s the case. Make sure that people understand the common goal, that they have a chance to discuss it among themselves and it becomes their goal. Those are all very important.

For a large team, it can make a big difference to select a core team – in practice, using about seven people typically gives good results – who will be very active and hold overall responsibility. Each could also be responsible for a sub-team. It’s unwieldy when many more than seven people are running the show, so shrink it down to a core team. This doesn’t mean other people are lesser members. Others may be huge contributors, but designating a core team creates a way to manage more effectively.

Another tip is to provide access to decision-makers. There’s nothing more frustrating than working on a virtual team and not being able to make progress because you’re waiting for an answer. If the decision-maker is amenable to it, have him or her available by instant messaging, at specific hours, on a regular basis. This way, everyone knows, “Hey, I can get access at that time. Despite their obligations to attend meetings, be on the phone or involved in another team, at least I can get a quick answer from decision-makers on whether I can proceed.”
Another action is to set expectations with regard to supporting applications, especially chat. If everybody needs to be available, let them know that it has to happen.

And try very hard to make people comfortable with these technologies. One situation that happens repeatedly is the mandated use of a “wonderful” tool that half the group really loves and with which the other half has never become comfortable. Look for workarounds; for instance, certain people don’t like the realtime chat because they are less proficient with spelling or the English language in general. Make adjustments for that. Consider using a nonsynchronous tool for non-English speakers, because it gives them a chance – through something like a newsgroup format – to rewrite their document before posting it. If they need help with writing or more time to compose their thoughts, this approach allows them to participate and not lose face. You have to respect the dignity of the people within the team.

It’s possible that only a few people are distant while most of the people in the group are face-to-face. Having a distant person chair your conference call allows that person to decide when others speak and prevents others from forgetting those who are remote. Another remedy to try: notice that CNN can provide viewers a real sense of their various reporters by just displaying the reporter’s picture on the screen, as opposed to feeding live video of that person. So, if you’re having a Web conference, make sure everybody’s got a picture of the person who’s remote, giving people something they can focus on as they listen. In fact, this tactic can reduce the amount of other operations since it almost elicits a feeling of being watched. People tend to avoid moving into chat or ignoring what’s going on if the speaker’s picture is in view. You won’t forget those who are remote, not as easily anyway. Even if it’s not a webinar and you’re just holding a phone conversation, you might want to circulate pictures of the group so people can stick them up on a bulletin board. During conversation, eyes will drift to the person who is speaking, and it will make a difference.

Of course, you always need backup methods for communications because technology fails. And when it does, those suffering most are the people at the greatest distance or with the weakest lines. An example of backup would be making sure that everyone has received in advance all the charts that are needed for a particular webinar or call. Because there can sometimes be a delay on the Web that’s nearly intolerable for those connecting from another country or continent and people need to be able to follow along and participate.

One great method for a team to build camaraderie is to share the work, preferably by sharing a workflow tool that gives people awareness that there are jobs that they could do. Rather than just parceling out a bunch of
individual assignments, workflow tools highlight where others can pitch in and impart progress toward deadlines and milestones. Again, make sure everybody's comfortable with these tools because they can be very alienating and may cause people to “drop out.”

You want to systematically build social capital. One method that can work is a series of interviews using chats. Live interviews via chat software can also allow any number of people to participate by watching the interview, just to see what happens. This activity has two benefits. One is that it connects everybody and the other is you've got an immediate, persistent way of learning about a team member. It's a wonderful, highly recommended technique.

Even better, invest in face-to-face if that's possible. Larry Prusak – author of books and articles on topics related to knowledge management and social capital – once said, “It may be that if you can't smell the person, then you're going to run into problems.” You probably don't have to go to that point, but it can be valuable to make the investment to meet in person, particularly in cases where you're doing “delicate things.” Groups have turned around by being able to just get together for one time.

One solution used at IBM before the days of Web newsgroups was to create sensitive forums – places to take care of the anxieties, unfairness and everything else that worried people. Sensitive forums were places where people registered their concerns, such as “You shouldn't use this phrasing,” “We don't understand it when you talk about this,” “I don't think that we're asking this person's opinion enough,” “You're not coming to me with questions,” or “You're forgetting about me when I'm on a phone call.” The process has to be managed very carefully, but it can be a good way to take those discussions out of the meeting itself and recorded in a separate place where they can be handled carefully and well.

Also on the list are facilitators, which can be a big investment, but you might want a trained facilitator on the team. Then, there are a number of interesting tools that can help establish presence, providing immediate visual representation of the degree of involvement of each meeting attendee. In fact, you can also handle group participation by establishing rules of conduct, describing whether people are allowed to do certain activities at specified times.

Finally, webinars are important, but try to do them as two-handed exercises – with both a speaker and a monitor. So, not only are there charts for attendees, but the group has a continual opportunity to chat. To work two-handed, one person is speaking about the charts and a second person in the same room is looking at the text. By being right there, that person knows
when to interrupt and say “Excuse me, we've got a question from Mr. Randolph and I'd like to pass it on to you.” And it doesn't break the rhythm as much. It's more natural and everyone gets to participate in a fair way.

Though it’s easy to get discouraged about virtual teams, in fact, they can be great for both the company and for individuals. All sorts of people have met through virtual teams and established great relationships. It’s definitely possible and even though you may need to work toward improvement in certain areas, it really is worth the effort.

### Technology to watch

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*Executive Technology Report* is a monthly publication intended as a heads-up on emerging technologies and business ideas. All the technological initiatives covered in *Executive Technology Report* have been extensively analyzed using a proprietary IBM methodology. This involves not only rating the technologies based on their functions and maturity, but also doing quantitative analysis of the social, user and business factors that are just as important to its ultimate adoption. From these data, the timing and importance of emerging technologies are determined. Barriers to
adoption and hidden value are often revealed, and what is learned is viewed within
the context of five technical themes that are driving change:

**Knowledge Management:** Capturing a company's collective expertise wherever it
resides – databases, on paper, in people's minds – and distributing it to where it can
yield big payoffs

**Pervasive Computing:** Combining communications technologies and an array of
computing devices (including PDAs, laptops, pagers and servers) to allow users
continual access to the data, communications and information services

**Realtime:** "A sense of ultracompressed time and foreshortened horizons, [a result of
technology] compressing to zero the time it takes to get and use information, to learn,
to make decisions, to initiate action, to deploy resources, to innovate" (Regis

**Ease-of-Use:** Using user-centric design to make the experience with IT intuitive, less
painful and possibly fun

**Deep Computing:** Using unprecedented processing power, advanced software and
sophisticated algorithms to solve problems and derive knowledge from vast amounts
of data

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