Chapter Six

Leading in the Information Space: Teams and Technology

'The systems weren't set up for global working – we can't send attachments – we are still relying on faxes and snail mail.'
'E-mails get lost in the ether.'

The Information Revolution

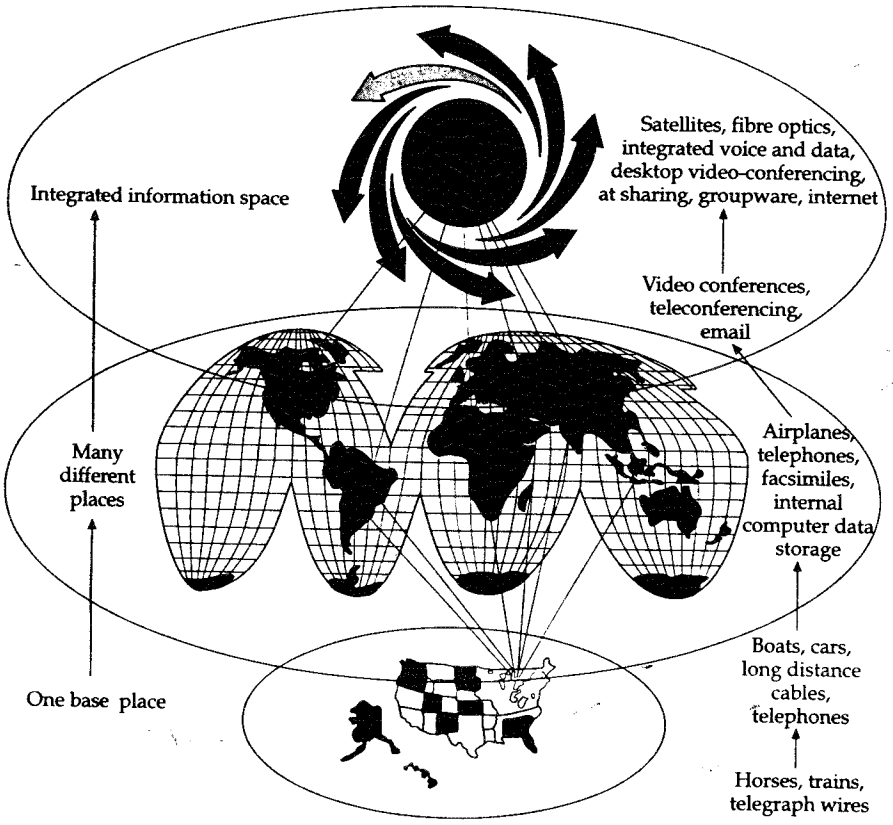

Figure 6.1: The information revolution

The shift towards information as a global commodity and the development of increasingly sophisticated technology are, we believe, major forces in the creation of international teams. Just to survive, companies need to know what is going on in the rest of the world. Lone brains can no longer handle the complexity of processes needed to scan and encode all the available data, or understand all the implications of their decisions and actions. Teams are needed not only to create value from this myriad of information, but also to exploit its value within the swirl of global market forces. It is the evolution from data storage systems into data sharing systems that is creating increased excitement and massive change. Some people estimate that data storage systems never increased the profitability of most companies. The pay off, it is hoped, will come from effectively using data sharing technology.

Computer-based data sharing systems, such as internal networks and e-mail, shared databases, electronic data interchange, Lotus notes, desktop video-conferencing, personal communicators, cyberspace offices, support collaborative organisations and effective team processes. Teamwork takes place increasingly in a 'team information space' rather than in one or more geographic location, due to the shifts outlined below.

- Instead of people moving to the workplace, increasingly the work can be moved to the people, almost wherever they are and in turn, they will be able to contribute to group work from wherever they are.
- Old internal and external boundaries are becoming irrelevant. Integrated cross functional teams with access to a wide variety of different internal and external sources of expertise working within tight time frames have become a reality.
- The role of management and leadership is being forced to change towards supporting and designing collaboration or become irrelevant.
- Integrated visual, voice and data sharing technologies will increasingly enable teams to work faster across distances if these technologies are introduced properly and technical and personal support is provided simultaneously.

These changes in the way people work have allowed dispersed international teams to become a reality. There is already much good thinking on virtual teams, cyber-meetings and knowledge working[1]. Rather than repeat this work, we want to acknowledge these insightful discussions and point readers to appropriate texts. This chapter will instead focus on the ways technology supports or hampers certain team processes and which technologies are good for different tasks and phases of teamwork. International team leaders need to be aware that:

- ***Most technologies support but do not initiate or sustain collaboration and effective team processes.***
- ***Different current technologies are good for some things and not for others and best practices for using them can usefully be established, especially when working internationally.***
- ***However fancy the technology becomes, good cross-cultural facilitation will still be important.***

The Best Uses of Current Basic Technologies

> *'Since I have been working with the Americans, e-mail overload is a joke – it takes me over an hour a day just to read my inbox, let alone do anything about them – it's getting so I dread coming in – I clear my inbox when I go home and by the time I get in there are a load of new ones.'*

Some companies, such as widely spread franchised document handling companies manage an effective global network with telephones and faxes. The key managers meet once a year to exchange ideas, get to know each other, and the rest is based on mutual interest and trust[2]. High tech is not a prerequisite for effective international working. Much can be done with telephones, faxes and e-mails. Whatever the level of sophistication, it is important for international teams to draw up a communication charter of how and when they will effectively use different technologies so as to avoid the type of overload described in the above example. The first step is to work through what each technology is best used for.

The best way to tackle this discussion in a team workshop is to ask small groups of two or three people to work through the advantages, disadvantages and basic ground rules for a specific technology. Our experience of working with teams to create their communication charter has illustrated an interesting dilemma. If you create a table in plenary, using a nominal grouping technique with the whole team of the points made below, most team members ask for the exercise to be dropped – they claim it is too boring and obvious. If you drop the exercise, most will clamour for the list shown below. The fact is that although it can seem tedious, thinking through the use of communication technology is valuable. It certainly helps surface different assumptions about what the advantages and disadvantages of each technology are and highlights that communication technologies are not culturally neutral. The more creatively it can be done, the less painful it will be for any team leader or facilitator.

Current technologies

Telephone

Advantages: Immediate answers or can defer call till later. It is personal. Can choose any language, check understanding, change tone and information half way through.
Disadvantages: Can be intrusive. No record or use of documents unless previously faxed. Variable global quality with echoes, crackles and delays. Long distance. 9–12 hour time differences are always inconvenient.
Basic ground rules: Keep to the point. Note main points before calling. Make notes during conversation.

Tele-conference

Advantages: Involves large group. Can impose disciplined communication. Don't have to book like video-conferences yet they give you immediacy of response and the nuance of reactions missing in e-mail and fax.
Disadvantages: Difficult to keep the whole group in mind. Have to select one language. Second language speakers cannot use body language to interrupt or show confusion. Underused in global working.
Basic ground rules: Fax agenda before, elect facilitator to keep time, stop wafflers, involve everyone. Need to make time for second language speakers.

Facsimile

Advantages: Now widespread. Can be computer to computer. Very cheap but insecure when sent over the Internet. Can be good for accessing less developed countries. Some people will act on the written rather than spoken. Can send specifications, designs, pictures etc.
Disadvantages: Cannot edit while sending. Frustrating if intermittent power failure, switched off or paper runs out. Needs good connection.
Basic ground rules: Stick to facts. Good for small amounts of urgent data. Can be sent and received direct from computer.

Internal e-mail

Advantages: Excellent for short encouraging personal messages and sorting out details. Can set up internal interest groups as well as broadcast progress and achievements. Can reach a selective or wide audience. Participants can choose when and how to respond and can edit and interject into received messages. Time for second language speakers to hone what they want to say and can act when it suits you. Cheap excellent tool using local servers in developing countries where phoning and postal mail is unreliable, prohibitively expensive and slow.
Disadvantages: Usually confined to text unless participants have identical packages for sending attached files. Often lose formatting from word

processing files. Not good for controversial difficult announcements. Can be hard to set up the architecture between disparate sites and companies. American standards tend to dominate. Can be ignored. Overload. Overused. Even then, messages get lost and go unanswered. If too many questions, some tend to go unanswered. Loses intonation and subtlety. Do not use for urgent messages that need a reply. Phone or walk to person's office.

Basic ground rules: Use the priority and action codes. Give clear headings indicating the subject. Keep points clear and succinct. Avoid philosophical debates. Create company etiquette for expressing emotions and negative responses. Train newcomers in company idioms and slang. File and delete as you read. Make an address book of regular mails. Use very specific mailing lists for specific issues and keep them updated. Avoid general mail outs.

External e-mail

Advantages: No need for company to invest in own Local Area Network (LANs) and architecture. Great for informal chat at low cost. Can access wide range of resources at low cost.

Disadvantages: Loose formatting or attachments become scrambled in different codings. Viruses can be carried on attachments. It is insecure.

Basic ground rules: Same practices as above. Use filter for junk mail. Still seems to be more of a problem in America than elsewhere. Remove attachments before sending replies.

Internet

Advantages: Can access a wide range of information at relatively low cost. Teams can create websites to stimulate interest in suppliers and customers not on internal architecture.

Disadvantages: Can pick up viruses. Time consuming especially if surfing is non-specific. Companies can limit the usefulness by insisting all mail is vetted to stop surfing on their time.

Basic ground rules: Update company access to latest web search facilities. Keep website graphics, colours and logos to a minimum. Limit or log connection time and probably access to certain sites, especially if offices are still closed door.

Group decision support systems

Advantages: Increases quantity of participation from all participants, not necessarily quality. Can dramatically cut meeting time. Focuses 'discussion' on task.

Disadvantages: Anonymity may not suit all cultures. Does not help to mature interpersonal processes. Has more impact in teams of more than eight people.

Basic ground rules: Facilitator must be both technically and process able.

Groupware products such as Lotus notes

Advantages: Allows teams to jointly consolidate contributions into one document. Allows preferential editing/reading access. Enables point to point on-line screen shows.
Disadvantages: Can have problems setting up and maintaining the technology, especially between high and low level infrastructure sites. Very large investment in training and on line coaching is needed to make full use of it. Need good in-house people who can create customised templates. All users need to be in All-Lotus desktop environment to take advantage of team computing capabilities.
Basic ground rules: Be selective about edit, read only and access options. Create process and chat files alongside technical and data files. Teach the team how to customise their own files.

White boards/shared database

Advantages: Excellent record of team activities.
Disadvantages: Can be hard to file and index so that information is accessible. Somebody has to maintain relevancy which may lead to reduced usefulness.
Basic ground rules: Need disciplined up dating and sending of information. Information needs to be usefully packaged. Someone needs to be responsible for editing the site.

Group video-conferencing

> *'Getting to the video conference facilities is impossible – people are block booking and then not turning up.'*

Advantages: Can see more than teleconferencing and can all be looking at the same written text, so greater reliability and relevance can be assessed.
Disadvantages: Unspontaneous, formal. Delayed actions due to small bandwidths. Many people say that this is not much better than teleconferencing, except when simultaneous data exchange is also possible. Size of room and access may differ between sites. Needs booking. Still expensive. 'Looks like University Challenge'*.
Basic ground rules: Need advance planning, agendas and preparation, clear outcomes and process facilitator, eg speak one at a time, not more than two minutes; clear bulleted decisions and actions. Have a technician on hand for new teams.

*A British TV quiz where university students sit in straight lines to answer questions.

Desktop video-conferencing

Advantages: More spontaneous. Adds personal immediate dimension, more able to interrupt and change input in response to visual cues. Do not have to travel or gather at specific sites.
Disadvantages: Still not as rich as face to face. Still expensive to set up, but transmission costs will be far cheaper. Technology has still not reached global industry standards and reliability and will demand good infrastructure to be effective.
Basic ground rules: Depending on type of exchange, will have same ground rules as any good meeting for preparation, keeping focused, perhaps agreed signals for strong feelings, summarising and following up. Will need to prioritise questions so as not to bother other people unnecessarily, eg could they answer an e-mail in their own time as well?

Virtual offices

Advantages: Meeting rooms, simultaneous desktop visual and data exchange. As close as one can get at the moment to sitting down in the same room with a group of people. Will soon be able to split up the screen, focus in on people. Move camera etc.
Disadvantages: Expensive, few standard, industry tested reliable products. Weak national infrastructures cannot yet support necessary data flow.
Basic ground rules: All the underlying best practices and disciplines of other 'meetings' technologies will still apply.

Each team needs to explore their current access to each technology, what their agreed best practices on each will be, what they will use each one for and which ones they think they should invest in. While much can be achieved using simple technologies well, when they are used inappropriately, they send strong negative messages as the following example illustrates.

One director in a hurry to fly was on the verge of sending out a company wide e-mail announcing the very early date of replacement of his deputy director. The outgoing deputy saw it and pointed out that she could sue him for breach of the three-month notice ruling. He left the date open and sent out the e-mail, which created much disquiet in the rest of the organisation, as nobody was able to question him about why a popular and effective person was suddenly resigning. Perhaps it was a good move on his part, to avoid the embarrassing questions. Yet it also demonstrated the communication problems that were forcing the resignation.

The Future Possibilities

Some new technologies are focusing on replicating the richness of same time, same place, face to face as much as possible (eg desktop videoconferencing), others on allowing manipulation of two dimensional and three dimensional design objects or even humans in surgery at a distance (integrated modelling with voice and data) and still others on having an instantaneous flow between individual and group work, again across large distances (many kinds of virtual meeting options and groupware). As this is not a book about future technologies, here we point you to other resources[3]. One good source of thinking about future meeting technology is *Cyber meeting* by James Creighton and James Adams. They highlight the following technologies as being close or future possible realities.

- Multimedia presentations/modelling/simulations
- Immediate access to databases
- Software agents that carry out assigned tasks such as scheduling meetings
- Meeting room video-conferencing with participation of multiple parties at several sites
- Voice and written interface with the computer
- Whiteboard technology/PC linked projection screens
- Wall size PC-linked projection screens/systems
- Thin film deposits on walls
- Modelling/holographic projections
- Remote viewing headgear
- Translators
- Expert systems

The emphasis is on anyone, anywhere being able to link up to meetings in fully supported meeting facilities where all the wall space is linked to individual computers, can be drawn on and can be recorded as part of the team memory.

The Cross-cultural Argument

The research into the impact of technologies on dispersed national, let alone international, teams is still limited. Huge increases in productivity are anecdotal and company specific. Academic research has focused on group decision support systems (GDSS). An example of GDSS is Ventana Corp's Group systems V where everyone has a computer terminal in the same room and types in their ideas that are then displayed on large computer screen. These ideas can then be prioritised according to agreed criteria. Group communication support systems (GCSS) refers to the 'different time, different place, at a distance' technologies such as e-mail. Some of the research findings are as follows:

- Electronic brainstorming facilitates the generation of ideas in larger groups (eight and over) more than in smaller groups (less than eight)[4]
- GDSS increases the depth of analysis and increases task oriented communication and clarification efforts[5], but not necessarily the quality of decisions.
- GDSS increases the participation of group members and decreases the domination by a few and seems to reduce the amount of team conflict.
- Unlike GCSS, GDSS seems to increase the consensus between team members on simple tasks. It seems that audio- and video-conferencing lead to quicker consensus than face to face and then same time, same place computer-conferencing achieves it even quicker.
- GDSS seems to increase the confidence and satisfaction of the team members towards the decision. However, while GCSS increases the quality of the decision, it decreases the confidence of the members in the decisions and did nothing to increase the interpersonal characteristics of the team.
- The benefits of using GDSS or other technologies accrues over time as the group assimilates the technologies into its working processes.
- Common figures for shortening meeting times using 'same time, same place' GDSS are halving the procurement time in Chevron, saving $5million on a $100,000 investment and creating 91 per cent–95 per cent drops in meeting time in the American army and IBM. (The mind boggles.)
- The level of commitment and motivation on GDSS falls if participants are separated into different rooms[6].

Most of the research has compared groups using GDSS with groups not using GDSS rather than the different responses from individuals from different nationalities. Without this information, one has to look at some of the surrounding issues.

Some writers[7] go to great lengths to show how the Western keyboards are hard on writers of other scripts. The cursor moves from left to right, the Qwerty board is illogical (and designed originally to slow people down), ideographic scripts such as Chinese and Japanese need completely different ways of thinking about typing and there are relatively few symbols that attribute vowels compared with Arabic scripts. So, argue some people, the very keyboards themselves demand a totally different way of thinking for some second language speakers. In 1995, *The Economist* reported that only eight per cent of top Japanese managers saw computers as critical to their jobs. It is hard to say whether this was a cultural preference or reflects the fact that computer keyboards and software have been primarily designed for English speakers and American patterns of logic. After failing to make much impact in Japan with Windows 3.0, Microsoft customised 3.1 for the Japanese market. They sold over one million copies.

Some researchers have found that[8] GDSS that provided automatic translation demonstrated that, despite poor grammatical accuracy, 98 per cent of the

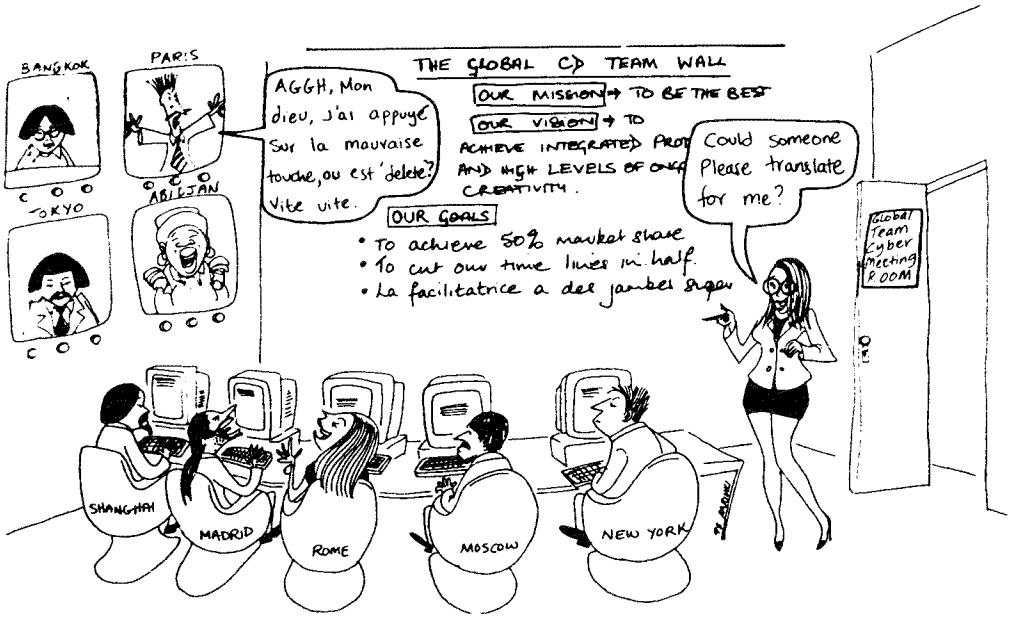

Figure 6.2: Global communication

discussion was understood. Thus if language is taken as the major barrier in international teams, this can be seen as a major step forward. However, especially if idioms are used, then currently translation into one language and back again is much less reliable and will not be good for technical detail for some time to come.

It is true that Microsoft converts menu names, command names and instructional files into local languages and builds in the logic to understand different calendars, keyboards and currency symbols. There are multilingual spell checkers (not always with the correct spelling). It easy to imagine that it is within current computer capabilities to make minor cross-cultural adaptations such as adapting preferred forms of address, reversing American and European dates and editing UK English into American English. Using virtual reality for cultural awareness training of specific cultures is already on the drawing boards. However as yet, there is no computerised cross-cultural facilitator to register and adjust differences in values, perceived power, expectations, behavioural and communication norms.

American researchers are putting forward the notion that anonymity, automated record keeping, parallel communication, translation and time to think in a second language without being interrupted all mean that GDSS and other Groupware services are a first-class tool for multicultural groups. What is

*On the wall the last sentence says 'the facilitator has superb legs'. The man from Paris is exclaiming 'My God, I have pressed the wrong button. Where is delete? Quick quick.'

more they will counteract the dominance effects outlined in Chapter Three. One Japanese writer[9] warns that it is not that simple. He agrees with the huge benefit of not having to interrupt to get a point across. However, he points out that while Americans place emphasis on the exchange of words and specific explanation of ideas, the Japanese depend very strongly on the context of the discussion, facial expression, postures and tacit understanding, all of which are lost in GDSS. Some Western writers suggest that this kind of need for physical interaction can be accommodated in the breaks, if they are working on GDSS face to face, obviously not if the team are using GDSS apart. Clearly there is a lack of understanding of the importance of these signals for Japanese at key decision making moments. These observations fit in with research on different decision making preferences. Americans prefer deduction and logic that suit the use of GDSS, while the Japanese prefer intuition and analysis to validate their thinking.

Again the message to international team leaders is that while technology may take away some aspects of cultural dominance, it is still an imposition of one way of doing on top of different sets of logic and preferred ways of communicating.

What we find slightly suspect is the very strong preconception that the more sophisticated technology becomes, the more it will be a great equaliser, such that cultural, linguistic and perceived inequality will fade away and become irrelevant. The fact is that however fancy the technology becomes, most meetings will undoubtedly be run in English with all the misunderstandings of idioms and the use of 'American', versus 'British', versus 'second language' English. People can write things directly onto the walls, but there will still be a need to ensure at each stage that everyone is understanding the same thing. And mistakes will be made.

Some people are bound to be more active than others. Some will be more comfortable with computers and familiar with the kind of conceptual and logistical sequencing of the task. Even if a Japanese person is hooked directly into a 'team wall', he or she may still wait for a space in the activity to make a contribution. What is projected from individual computers is technically anonymous. However, in an international team that knows each other, it is soon easy to ascribe 50 per cent of the inputs accurately to individuals. The recognisable differences lie in what they say, which words and idioms are used, grammatical errors, the type of humour and the tone, especially if meetings facilities include being able to get up and move items, similar patterns of perceived influence and linguistic dominance will occur. The leader or facilitator of the meeting will still have to be sensitive to cultural differences and to be proactive in ensuring that different views, bright ideas, and less dominant members contribute. We envisage that a human cross-cultural facilitator will continue to be useful until a team can manage its own internal biases. Karen has also been finding that the greater the reliance on technology, the far harder it is to be subtle about intervening when things aren't

quite right. You cannot quietly go up to someone and ask what is wrong or use body language and room positioning to shift the dynamics. Facilitation is still useful for all the same reasons as in face-to-face meetings, but harder because you need to be more blatant.

A sensible question for an international team leader to ask at this point is 'are there different cultural preference for using different technologies?' The problem is that attempting to answer this question can lead to grossly misleading generalities. If one is looking for generalities, then we have had the impression that different cultures seem to take both the spoken and particularly written word much more seriously than others. There are famous cases of Middle Eastern business men shaking hands with Americans, and then dropping out of the deal insulted when the Americans have said 'and now I will call in my lawyer'. Finnish and German people seem to take what they say much more seriously than some other Europeans. They tend to only speak when something is well thought through and to work more from the written word than from a telephone call. Something that may be true of many second language speakers, where reading gives them time to think. The upside of this seriousness is a strong sense of reliability once something has been agreed. Any such cultural generalities should only serve to remind a team leader that they have to explore each of their team members' comfort and response to different technologies when drawing up a communication charter.

It is also our experience that personal style and 'what you grew up with' play an enormous part in any one person's comfort with different technologies.

During extensive interviews for a research project on transnational teams, in one international team based in a British company, all but one of the team expressed great satisfaction with the communication in the team. The only woman, who was also quite junior, said that although the team members sat only a few yards from each other in an open plan office, they hardly ever spoke to each other, instead they used e-mail and shared databases to communicate. This in her opinion led to unnecessary misunderstandings, delays and a general feeling of unfriendliness, i.e. poor communication.

What international team leaders need to remember is that there will be different preferences and that once they are expressed, they should not ignore them but instead use them to open up a creative discussion.

Technology is not yet good for emotional exchange

> *'Effective messages have to be both plausible and useful in the sense that their recipient will consider them to be substantially true and relevant to his/her circumstances.'*[10]

I was once videoing a team led by a Hong Kong Chinese woman with two other Hong Kong Chinese men, an Australian, a British man living in Beijing and a Filipino woman. They got into such a deep emotional hole that even my stomach was churning with emotion. After a while they asked me to stop videoing and come back later. When I later watched the video, my stomach did not churn. In fact, I was struck as to how difficult it was to pick up any empathetic feeling of what I knew, from experience, they were going through. It then dawned on me that perhaps this lack of tangible 'vibes' from celluloid, television tubes or digital data is the reason why all but the best television and film directors resort to so much overt sex and violence. Viewers find it hard to 'feel' small subtle gestures or overtones.

Communication technology is not allowing us to understand and read any more data about each other than we can pick up face to face. It usually transmits much less. We cannot, for instance, read each other's non-verbal cues to understand someone's complete emotional state at a glance. Richness, in terms of interpersonal cues and emotional messages (and hence confidence in ambiguous situations) diminishes across the different technologies as shown in Figure 6.3:

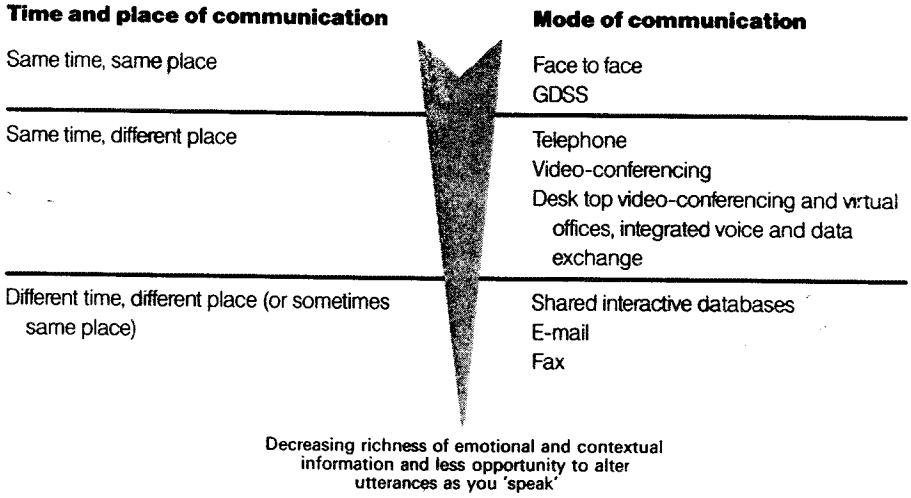

Figure 6.3

While richness decreases, in each operating mode, the amount and possible diffusion of data has increased dramatically. So far technology has expanded on quantity and handling complex data at a distance, not on emotional richness. This paucity of data in electronic interpersonal interaction has led one team expert to suggest that 'the current technology does not support teamwork'[11]. Other researchers[12] have posited that electronically mediated exchange can only effectively substitute for face to face interaction when:

- the identities of the individual's interacting are not important;
- the circumstances at hand are certain and unambiguous;
- the resulting actions needed are standard and routine;
- ongoing interaction does not depend on a robust structure of relationships.

In other words suitable for routine, bureaucratic impersonal processes that do not involve emotional exchange. These suggestions are certainly not supportive of the flexible, high risk creative teamwork needed to achieve extraordinary targets. Software sellers will also surely argue that these suggestions mirror early day, old fashioned conservatism of what can be done with technology once people understand how to use it creatively.

Nevertheless, a recent book[13] has pointed out how emotional intelligence is as equally crucial to success as intellectual intelligence. A large part of emotional intelligence is being able to correctly read and empathise with what someone else is feeling. Something that gets increasingly hard across communication technology.

I was once trying to organise a piece of work in Perth, Australia over the fax from London, UK. I put a British exclamation mark after my normal fee to show that I was joking and appreciated that an academic institution could not afford this. I asked them to tell me what they could afford. I had also been asked to write to two separate contacts in the institution, which I did. Dark clouds gathered and when I arrived the friend trying to help me was very upset. 'How could you be so arrogant and pompous demanding such fees and then playing off two departments that are just down the hall from each other? You have some serious apologising to do.' Needless to say, despite apologies, I never worked there and it still leaves a bad taste. I wished I had picked up the phone, despite the inconvenient hours from London. Fax, I discovered, is the worst medium through which to start a business relationship.

Being out of 'emotional sync' can seriously hinder progress in any interaction. Some of the conditions of being a high performing international team include reaching a point of emotional maturity, where humour is strong, feedback is not intended or taken as personal and physiologically, nobody's stomach is tight or wobbling for emotional reasons. A good facilitator can feel when this mature pattern of interaction falls into place and know that now the team is ready to take interpersonal risks that they had previously carefully avoided and sidestepped. This maturity can sometimes happen after working through a strategic moment.

One of the main features of a strategic moment, as described in Chapter Four, is that everyone is focused on the same issue at the same time. The

tension is held open. Communication across electronic media is sequential. It is hard to imagine how teams will go through these sudden transformational changes* without being face to face in the same time and place. In fact, given the current technology, the only way to be very confident that you are 'in sync' (if the task demands it), is to see and feel it face to face. One network group that was discussing personal issues and emotions spent the first half-hour or so of meeting face-to-face hugging and touching each other. It was as if they were putting into place the missing parts of their previous computer exchange.

In international teams, there will be the added complexity of measurable cultural differences in the extent to which people expect to be involved with someone else as a whole person, at work or not[14]. As explored in Chapter Two, people from different cultures express emotions in different ways and it takes experience and sometimes many years of getting to know someone to be able to empathise with what they are feeling. Even when you have reached the point of being able to ask someone directly, emotional and physical sensations and actions are often explained and interpreted in different ways. Cultural and contextual differences mean international team members will get out of 'sync' and stop collaborating much quicker than most national teams. In other words, they need to meet more often. Teams will need to meet less often if team members understand each other's contexts and how they are likely to interpret messages. In MacGregor Navire, a small Finnish marine engineering company, the top dispersed team met at a different European site each month and usually spent an extra day visiting that site and familiarising themselves with what was going on there. Their future edicts are much more likely to be seen as relevant.

'Trust, discipline, communication and team spirit are the four things that allow us to work as a dispersed headquarter's team.' The CEO of MacGregor Navire, Ulf Hedberg, described trust as knowing that his colleagues share the same business values and were not running separate businesses on the side. It had been long in the building. Despite their long personal acquaintances, it had still taken them a couple of years to achieve the discipline and rhythm of communication needed to manage a top team based in four different countries.

To sum up, values, stereotypes, prejudices, self esteem, respect, and strong personal beliefs and opinions usually come heavily laden with emotions. In our experience, this makes discussion, decisions and difficulties that involve these issues very hard to conduct, make and resolve across electronic media unless the parties involved are willing to give each other a lot of emotional latitude and benefit of the doubt. Very occasionally it has been worth flying all day, just for a lunch, if gross misunderstandings have been put to rest as a result.

* Analogous thinking is Connie Gersick's punctuated equilibrium and catastrophe theory.

To Meet or Not to Meet?

> *'Getting to meet face to face has been difficult – some of the managers won't authorise the budget and only using e-mail and phone over this distance is just asking for trouble – they leave so much room for misunderstanding.'*

A senior Ford manager who had hardly landed between airports for three months after the initiation of Ford 2000, asked the 'do teams need to meet?' question. Two thoughts seemed uppermost in his mind. 'If everyone does this, we won't make any profit' and 'I am not sure that all this running around really achieved anything substantial'. I was brazen enough to suggest that maybe he was running around for the wrong reasons and wasting a lot of time. Perhaps the team was travelling only to share information, which could have been done more effectively by other means and after all, the atmosphere in most airports, aeroplanes and five star hotels is not usually conducive to doing much serious or creative thinking. It is worth looking very carefully at the reasons why a team should meet, especially in its start-up phase.

Deciding whether to meet or not will depend on what the team needs to achieve and how much money is available to travel and install appropriate technology. One of the first questions is whether the team has worked like this before. If the answer is yes, they are more likely to have established a shared mental and procedural context in which to work together, a 'team space'. There is then less reason to have to meet except as a form of review, renewal and clarification of goals, roles and commitment, a re-affirmation of that shared context. This would still be time and money well spent if it is available. If the answer is no, then, assuming that the necessary technology will be provided to work apart effectively, team leaders and sponsors need to ask the following questions.

1 Is the purpose of the team to share/collate information or to solve complex problems and come to difficult decisions?
2 Do the team members know each other?
3 Are the cultures involved similar or very disparate and how many are there?
4 Is the team working across large or small geographic distances and time zones?
5 Is the team familiar with appropriate technologies for working apart?
6 Does the team have similar or disparate functional expertise?
7 How routine, unambiguous, low risk are the tasks?
8 How much organisational learning or change are the outcomes expected to create?
9 How much impact will a good outcome have on profitability?

When working through the above questions, each team leader or sponsor may want to put a weighting on some questions, depending on the task, the team composition and organisational reality. A widely cross-national, cross-functional team, working around the globe, unfamiliar with technology and each

other has both a high probability of failing *and* high costs of getting together. So, focus on the teams who are expected to significantly impact the profitability and learning of the company. Spend the money to get them together to agree the goals and how they are going to work together and to support them with appropriate technology. The processes described in Chapters Four and Five are specifically aimed to speed up this face-to-face orientation work on goals, understanding each other's perspectives and agreeing a common working process. As one ABB manager pointed out, leaving the decision of who and when to contact to human nature is risky.

> *'The fact is there are three types of relationships. There are some people you make friends with immediately, others you do not mind as colleagues and others that you never want to have to talk to again. That affects when you do or do not pick up the phone and who, in the matrix, gets which contract.'*

Support for other teams, such as looser networks for information sharing, routine work and less diverse low-profile teams, can be supported cost effectively through newsletters, on-line, by having a key person to phone, and using teleconferencing.

Another reason to meet is to build accountability across the group. As pointed out in Chapter Four, clarity of mission and goals is one of the top ten factors that leads to project success or failure. Dispersed teams who have never met, may well agree on the business objectives of their common goals. However, whether or not the different underlying personal agendas of each team member are tied in with these goals, is almost impossible to work through over e-mail, phone and faxes. If the team is in a highly political environment, nervousness will remain, misunderstandings will happen. If it falls apart, which is likely, a bad taste or bewilderment is left. A picture or stereotype is then built up and it becomes hard for those people to contact each other again unless they meet face to face. There are many types of trust and many ways it can come about. Most of them involve personal face-to-face communication.

Given the need for contextual understanding, emotional synchronicity, trust, confidence, accountability, it is foolish to assume that introducing sophisticated groupware technology into high risk, high potential teams is an alternative to travel budgets. Communication technology is *not* a cheaper replacement of expensive face-to-face work. It is creating a *new* broader form of interaction that demands higher initial investment and should yield *new* types of results. Massive reduction in time scales, simultaneous launches or registration of products in many countries, a large reduction in faults and inappropriate cross-national specifications, very significant leaps in production outputs, huge cuts in inventory, the ending of seasonal delivery schedules and log jams in pan-European distribution systems, these we have seen. Cuts in most travel budgets should look insignificant in comparison to such gains, especially when to start with such cuts may defeat the whole exercise. However, the reasons *why* people travel should become much clearer so that the travel itself has far greater impact

and is used to greater effect than before. To complement this, part of the high initial investment must be used to teach people which technology is best used for what purpose.

Setting the Rhythm of Working Together and Apart

Most teams need to meet face to face when they start in order to create the discipline and interpersonal relationships needed to survive the rigours of working apart. They then need to create the rhythm or 'drumbeat' of working together and working apart.

One transatlantic team in Wellcome that was to run for at least three years met three times for two days within the first three months of being set up. The first meeting was to collectively create a vision for the team, the second meeting was to define the goals and targets and who was going to do what. At the third meeting the team members worked through different questionnaires so that they could appreciate their differences, understand what each person had to offer, how each person might react in certain circumstances and what kind of common language they could adopt to successfully sort out interpersonal problems. After these initial start up meetings, they decided to meet face to face once every quarter with a telephone conference after a six-week period between the face-to-face meetings. Not all the meetings happened on time, if at all, but the underlying rhythm was there.

Rhythm or 'drumbeat'* in distant communication is crucial. It drives home the extent to which you are slipping so that the pressure builds up to catch up however you can.

Taking all that we have discussed and the research on transnational teams[15] and video-conferencing[16], certain underlying principles for working together and working apart have emerged in our work.

Working together

- Agree the overall vision, common goals and interim targets.
- Work through and integrate personal agendas.
- Lay the ground rules within which working trust and working relationships can be developed.
- Form personal aspects of trust, appreciation and understanding of different communication preferences.
- Work through difficulties, conflicts of interest and interpersonal problems.
- Argue through differing viewpoints and make important decisions, especially on value laden, complex, non-technical issues.

*Mary O'Hara Devereaux's term in 'GlobalWork'.

- Evaluate and review overall progress.
- Jointly undergo some training.
- Introduce a new person or aspect of the work.
- If necessary, change values, policies and targets.
- Agree the patterns and styles of communication at a distance.
- Celebrate successes.

All these factors are concerned with underlying values, principles, building relationships or reconciling differences, things loaded with emotion. They are guiding generalities that will not always be true. One researcher recently found that many managers liked to finally resolve conflicts that had emerged face to face, over the phone afterwards[17]. The 'less rich' medium of the telephone, seemed to allow them to apologise, and compromise without, literally, losing face. The breakthrough of groupware technology is that almost everything to do with information and ideas can be done at a distance.

Working apart

- Establish a disciplined and regular system of communication.
- Share output of face-to-face meetings.
- Have regular tele/video-conferences.
- Update everyone on progress, eg weekly e-mail, establish chat files as well as technical files on Lotus notes.
- Send each other motivating messages and comments on each other's work.
- Clarify goals and make suggestions.
- Implement agreed actions.
- Reach consensus on purely technical issues.
- Find, share, collate, edit information.
- Co-create documents, co-design products.
- Meet in subgroups.
- Prepare for face-to-face meetings in advance.
- Anticipate colleagues' questions and needs.

No international teams should ever spend expensive face-to-face time digesting, commenting on or re-editing information that they could have read before meeting. Packages like Lotus Notes, with their replicative facilities, controlled editing/reading and the freedom to design documents/files and databases as you choose now give companies *no excuse* to perform any of those tasks face to face. One Swedish based team commented 'When we do get together, we seem only to get as far as sharing small parts of information, the time frame does not allow for more'. The time frame did allow more; they were using the time for the wrong reasons.

The adage, 'start slowly, end fast' is even more true when training teams to work apart effectively. When technology is painstakingly introduced so that the team can own, customise and integrate it into their work and innovate with it as

they go along, the payoffs are seen much faster. Our experience has shown us that team performance is non-linear and exponential. Teams that are going to end well, *make* and *take* the time to play and streamline up to half time. After half time, the processes they have created and the way in which they structure the use of technology to support those processes must be focused exclusively on the finishing post. Ongoing teams, such as top teams, can create their own milestones, upgrading their creative use of technology in each repeated cycle.

Rotate meetings

More sophisticated 'groupware' technologies such as Lotus notes, can do much to alleviate these kinds of problems when they are set up and used well, and these are discussed in more detail in Chapter Ten. Teams usually have to meet from time to time to maintain their sense of joint work and mutual co-ordination. With skewed and tilted teams, it is usually the outliers who have to travel to save on expense. This means that they always meet in the main group's home environment, usually tired, and the main group may never get a 'feel' or understanding of what the outliers are facing on a day-to-day basis. Budgets allowing, it is always a good idea to rotate the meeting sites according to the team members involved.

Establishing horizontal communication

> *'There is still too much allegiance to the "home" country line manager rather than to the project team, so if there is a conflict of resource a team member invariably goes against what the international project leader wants.'*

A short example illustrates this small but crucial point. When one American team member was offended by the style of a UK missive, instead of picking up the phone for an explanation or being told to do so, he complained to his boss. His boss complained to his boss who finally picked up the phone to his UK counterpart, who told his subordinate who finally interrogated the UK team member, who then had to explain himself in a teleconference with four managers breathing down his neck. The managers should never have become involved as it was not a major affair, only a misunderstanding of style, so common across faxes and e-mails. The managers' actions diminished the opportunities for the team to learn to trust each other and sort out their own affairs and enhanced the 'them' and 'us' attitudes that the team was designed to overcome.

Work to involve and assist outliers

Technology can also overcome some of the temporal differences, but only to some extent. The fax machine does allow anytime communication, but there are

still things that need to be discussed on the telephone. This means that often either someone has to stay up very late in the UK to catch the Australians as they come into the office or get up very early before they leave. Time zone differences often means that there is increased blurring between home and office hours, sometimes for one or two team members more than others. Build the distances and infrastructure into time frames.

Assisting outliers

As mentioned in Chapter Two, international teams are seldom equally distributed across the globe. There are often a few people working together on one site, and a few others spread out. It does not take much for these 'outliers' to feel left out of the main action. When thinking about assisting these outliers and introducing new technologies for dispersed international teams, there are first a few practical realities to take into account:

- New technologies such as desktop videoing, automatic translation and software agents are available, but not yet robust, reliable or constrained by industry standards. It is usually better to wait until the bugs have been sorted out, especially if they are to be used in far-flung places.
- Countries have different import requirements and regulations.
- In some countries, as in most African countries, finding useful software support for latest technologies can be difficult if things go wrong. This is usually not for want of enthusiasm to help, but for want of experience.
- Getting a clear tone (let alone digital and wide bandwidth) telephone line as and when you want it is a luxury of a few countries in the world (and some 'developing' countries such as Mexico have leapfrogged other countries like Japan and the UK on this one). Free access to leased international lines is consciously limited (in Myanmar unlicensed logging on can mean 15 years' jail![18]) or restricted by poor communications infrastructure. If you get a connection, it may be for a very short time. This means that there should be no non-essential graphics such as fancy website logos, the most important information should be upfront without having to go back and forth to many different pages, and data should be as compact as possible. On e-mail, original messages and attachments should be removed or heavily edited before replying.
- Many countries do not have reliable power supplies, satellites can have glitches and (as Canada learnt recently), weather conditions (droughts, floods etc) can play a large factor in working conditions.

As a result of these factors, new technologies will probably be first tried and tested between teams located in industrially advanced countries. It is better to

keep technology as simple as possible, the more a team extends into poor communications infrastructure. The cost in time and money of regularly including those battling with lack of basic resources and unfamiliarity with the software will probably exclude them unless companies are very dedicated to getting them up to speed. We are not suggesting that international teams only think about the developed world. Only that they need to get creative and go back to some basics.

Having matched the technology to the realities of the infrastructure available, core team members can assist outliers by a few consistent behaviours.

- ***Work out an initial time schedule that is inclusive and sets realistic time frames for turning around documents and includes the time to set up compatible technology as far as possible.***
- ***Send regular information updates on what is happening within the core group.***
- ***Lay the ground work for what needs to be discussed on the phone by previously sending faxes, e-mails and other written text.***
- ***Ensure that fax machines are on and working 24 hours a day and e-mail systems are compatible for attached documents.***
- ***Have direct lines (definitely not automated receptionists) and arrange key convenient times for calling.***
- ***Inform secretaries that long-distance calls from developing countries take priority and phone back when you say you will.***
- ***Sound pleased when an 'outlier' gets through.***

Leading Virtual International Teams

Here we refer to virtual teams as teams that never meet face to face. Such teams are no more different in substance to international teams than international teams are to national teams. They have added dimensions of complexity to handle with fewer options of interaction. When teams never meet they will have to do all the things that are described in Chapters Four, Five and Six, but at a distance and in a slightly different way. Creating a unified 'teamspace' with technology is the ultimate triumph over physical distance. But the paradox is that, at least for the moment, the leader may be more tempted and in fact need to revert to playing a dominant 'strong' role.

Like all team leaders, virtual team leaders will need to:

- Establish the purpose of the team.
- Clarify goals, interim targets, success criteria, roles and responsibilities.

- Create a working communication strategy that clarifies the linkages between team members, takes cultural and contextual differences into account and establishes a workable rhythm.
- Establish and harmonise what technology will be used for what purpose and how often.
- Agree good communication and 'meeting' habits.
- Agree on decision making, problem solving, conflict resolution and feedback processes.
- Establish developmental and learning mechanisms.
- Log the learning so that other teams can learn from this experience.

On some of these issues, the team leader can solicit for preferences, experience and ideas. However, it is likely that the team leader will have to put in the first inputs and then ask for suggestions and changes. One option is to share out the responsibilities for creating first drafts on the different bullet points between different team members.

The second major challenge is being creative about team building. If the team is still using simple technology, it is worth sending pictures and fun resumes of each other even through surface mail. Otherwise scanning photos into e-mails, creating team rooms or extra files where the team shares photos, chat and extraneous items can be important. It is unlikely that many team leaders or members will have the technical knowledge to set up a team room, or even format process templates on groupware. If the team has important work, even if the team is short lived, it can be worthwhile hiring a team facilitator who can design the templates, co-ordinate the communication and who again has to understand and accommodate cross-cultural and contextual differences. Especially in virtual teams, having a facilitator can lessen the temptation to resort to being an authoritarian leader when frustration and long silent gaps set in. I heard of my first leader of a dispersed team of home workers six years ago, because she had had a nervous breakdown. There had been no support to deal with all the ambiguity and uncertainty of what was 'really' going on. Facilitators can help leaders chart this unfamiliar territory and act as moral support.

The third issue is checking understanding at every step of the way. Teams that meet can check at the beginning that they agree the purpose, goals, boundaries, sponsors, clients, roles, responsibilities and working practices when they are face to face. Virtual teams need to send out a questionnaire immediately they feel that these are agreed in order to check that everyone has understood the same things. Again questionnaires have to be carefully worded to avoid dual meanings and idioms.*

If this makes it sound easy, it isn't. In our personal experience, dreams are seldom realised quite the way you thought they would be. Someone gets stuck on the plane in Warsaw and misses the teleconference. It is not possible to catch

* A good source book of virtual worksheets and questionnaires is *Virtual Team* by Steve Rayner. http://www.whidbey.com/rayner. Fax: +1 360 331 2047.

up the next day, because they are already on a flight to America. Atmospheric conditions have disabled the Internet connection between Kenya and America. When they return, their computer system has a virus and is not downloading documents. Brief e-mails get through and messages are left on answerphones. Days turn into weeks. At some point decisions have to be made just to move forward. The leader may have to take more power over final decisions than expected or wanted.

One of the paradoxes of effective virtual teams is that the more disciplined the team is about every aspect of its work together, the more democratic and consultative the processes can be. Absolute clarity of team purpose, goals, and contribution, roles and responsibilities, of agreed working processes, especially to manage boundaries and 'meetings' is vital to allow all the members to be consulted and participate in major decisions.

Much can be done by putting established best practices on to e-mail and intranets. Many of the interventions suggested in Chapters Four and Five, such as cultural value checklist for agreeing working processes and team review health checks, are ideal for setting up on conference and on-line questionnaires. What should not be forgotten is that virtual space is full of paradoxes. Handling conflict illustrates this.

Virtual conflict

In contrast to audio and visual technologies, cues about social context are missing when communicating by computer on e-mail, and so people worry less about how other people evaluate them. Researchers notice that people seem to be more honest and direct, displaying uninhibited emotions and perhaps waste less time on posturing and social niceties (and more on social chat). This lack of inhibition has led to the occurrence of 'flaming', pouring scorn and anger, in response to relatively insignificant levels of provocation, into the computer keyboard, as nobody is going to directly answer you back or hit you. Dispersed teams often suffer from sudden flare ups that come 'out of the blue' as all the cues about the build up are missing. So paradoxically, you have less inhibited emotions, which more sophisticated desktop videoing may come back to inhibit, and on the other hand, you have only part of the information that allows empathetic feeling, especially if you have never met face to face.

As Nohria and Eccles point out, their four criteria for electronic substitution of face to face interaction: unimportant identities, routine tasks, unambiguous circumstances and no demands on the relationships' were the truths of hierarchical, bureaucratic and market organisations. They are the opposite of what is now being demanded of team members in unpredictable but responsive 'network' or 'cellular' organisations and self managed work teams. Hopefully the qualifier will turn out to be 'at the moment'. We will no doubt come up with the pressures, technologies, suitable attitudes (such as 'what was so great about meeting face to face?') and processes that will move working in the 'team

information space' through the same iterative changes that have happened to physical organisations. Before long it will seem natural and normal, especially to those who 'grew up digital'.

Identify Effective New Processes Before Buying the Hard and Software

Team leaders need to assess what technology they need before investing millions on hardware and software that does not get used. New technologies seldom completely replace old technologies. Companies still write letters, produce annual reports and send faxes. Each new technology adds a different dimension and usually speeds up a previous process. However, in deciding what to invest in, we advise team leaders to be pragmatic and support the view that:

> *'First understand the processes (that need to happen) and then see how technology can enable those processes.'*[19]

If a team needs to collaborate often on creating written reports at a distance, then investing in a replicative database facility such a Lotus notes is essential. If a very high profile dispersed team needs to work on very contentious issues and change core processes within the organisation, then setting up a fully supported meetings facility with immediate access to company data and home offices will be worthwhile.

Our sense is that, even at this moment, most international companies are making do with the basic toolkits of telephones, with conferencing services, voice mail systems, faxes, some group video-conferencing facilities, internal e-mail, internal networks, shared databases and increasingly interactive databases like Lotus notes. We believe that few international companies so far have *widespread* use of computer supported group decision making tools or desktop videoing, virtual offices and high (modem) speed integrated digital voice and data facilities. We also believe that because of the way that technology is often provided instead of introduced, most technology is under-utilised (eg using Lotus notes for e-mail only instead of concurrent document building[20]).

Research is beginning to back up many people's experience that there is a much better uptake and usage of communication technology if the technology grows with the people involved. British Petroleum Exploration, for example, set aside a large sum of money to support a virtual teamwork project. Led by a 'non tech.' who had already demonstrated his passion for organisational change and teamwork in Alaska, the project's aim has been to entice the organisation with pilot projects that showed spectacular results in productivity. Planned over a few years for experimentation, consolidation, spreading of critical mass and becoming profitable, part of their task has been to provide proactive help and coaching, not only on technical support issues but also on attitude change. Super coaches challenge managers and employees on a one-to-one basis, to

think through how the technology is changing the way they work and how it can improve the speed and quality of their work. They are using some very sophisticated technology.

Of course there needs to be a dynamic interchange and growth between both the new technologies, the expected increased productivity and people. Even so, the message to over-excited information technology departments is experiment, tickle the rest of the organisation and demonstrate the effectiveness of new products. Do not impose them.

Whether teams meet and work apart or never meet, responsibility for the success of company-wide technology rests with team members and leaders, with creative IT departments and imaginative support mechanisms and with senior management. Wellcome senior managers insisted that all team leaders and members had open diaries on their e-mail to ease transatlantic scheduling. They then decided that they themselves should be exempt so that they could personally decide what to do with their time.

> *'The process (of establishing effective technology) should be viewed as a dynamic interchange between the intentional changes designed by management, the ongoing and developing organisational structures, the emerging and newly created interests created through the technical system and the capabilities and constraint of the system technology.'*
>
> F. A. Dubinkas

Summary of Key Learning Points

- *Understand the best uses of current technology.*
- *Enjoy reading about and fantasising on future technology.*
- *Realise that many of the same cultural and contextual differences and inequalities will apply, however sophisticated the technology.*
- *Understand that technology is not good at conveying emotions and so does not readily support trust building, establishing robust relationships, or making value judgements and difficult decisions.*
- *Think through the criteria of whether to meet or not.*
- *Set a firm rhythm for working together and apart.*
- *Do not expect technology to cut the travel budgets. Look for gains in extraordinary results.*
- *Create horizontal communication to break the dominance of 'national' vertical channels.*
- *Assist geographically dispersed outliers.*
- *Understand that being a virtual team leader has its own issues.*
- *When choosing technology:*
  - *Work out the processes that you need to support and then buy the technology – realise that technology cannot create good collaboration;*
  - *Pay attention to how the technology is introduced;*
  - *Work on the changes in technology, team members' skills and work habits and productivity simultaneously.*
- *Create informal channels alongside technical and task channels.*
- *Start with pilot studies where technology will make a dramatic difference to routine tasks and decision making, and anticipate international problems.*