Telework, telecommuting and telebusiness

Humans have always appreciated all forms of action at and from a distance. From primitive telekinesis of throwing rocks and yodel-hollering across the summits, to controlling Mars sojourners and having remote telephone and cybersex, they increasingly choose to spend most of their free time clicking away with their TV remotes and chatting on their cellular mobiles.

The "Telecommute America Week Celebration" (October 20–24, 1997) was bristling with dynamic networks, hotelling, mobile work, virtual corporations and everything "tele", from the notions of telecenters and telecottages to virtual telepresence and teleexperience. The age of teleinteracting has arrived.

Doing things at a distance... an economic substitution for being there: what is its attraction? Why is primary experience so often being upstaged by "secondary" ones?

Is it simply due to economic tradeoffs or is it part of a deeper, intuitive longing of humankind? Is it just a "male thing" – as all these teleexperiencing seems to be – or is it an all-encompassing (fe)malekind transformation?

The choice tradeoff seems to be ancient and fundamental enough: Do you want to go there in person or send a messenger? Whisper to her or write her a letter? Go and talk to him or use a phone? Go out or listen to radio or watch TV? Go to a local bookstore or browse the "Amazon.com"? Go shopping or use mail-order? Send the real crew or a robot? Make a speech in Peoria or get an ad on local TV? Or get your ad into their telephones? Go and "shoot it out" or launch a guided missile? These are all real tradeoffs and people make them all the time, either way it seems.

What determines these tradeoffs? Often it is simply cost and time. Increasingly it is the range of choices. Sometimes it is convenience, indulgence or laziness. Very often it is the sense of opportunity cost: if you are physically engaged in one thing, you can not possibly be engaged in another. Or can you?

People do not want to make tradeoffs. They want to have it all. It is natural. They want to be there even if they can not. They want to eat their cake and still have it. They want to have the experience, but not forego other experiences. The time is becoming more precious as there are more choices available. I do not want to pursue just one alternative when there are so many others to pursue.

I do not want to go shopping for one thing, because it takes so much time which I need to shop for other things. I do not want to thumb through all the catalogs instead – it takes so much time which I need to explore so many other things. I do not want to browse through Internet and its "Amazon.com"s because it ties me down. I want to have "virtual (software) agent" – or a "virtual slave"? – who does everything for me. What do I mean by "everything"? Do I read my own books, or do I have somebody (something) reading them to me? Can something use my personal "profile" and underline them for me? Then scan them, input them, process them, put them in my own (virtual) words...?

When is the virtual reality better than "real" reality – if there is such a thing? Whenever it is more interesting, offers more choices, saves time and imprints more intense and more indelible memory. When it virtually frees my time and energy for the preferred reality of my choice.

In other words, sometimes I do not want to go to a soccer game even if I love soccer so much. I prefer a teleexperience through my TV, especially if it is interactive and I can remotely control the cameras. I get a clear picture of the game, have as many instant replays as I want, get spectacular closeups, have a background announcing and can still sip my gin and tonic.

What do I miss? Traffic jams, anxiety, bad view, hot smells and fellow spectators I do not particularly care about. Pay-per-view TV has recognized this: for some sports events it is already charging more for viewing them in comfort on TV than for being there. TV monitors complement direct viewing from the most expensive subscriber suites, many spectators bring portable TVs into the bleechers (and actually follow them), larger public gatherings and conventions are habitually equipped with huge TV screens, and so on. Am I missing the "atmosphere", the other guy's wisecracks, the human waves of mass-spectators? Or do I crave a more customized, individualized experience?

Some researchers are still concerned about telework reducing these "socialization" opportunities, as if the traditional workplace was somehow designed for that purpose or even provided universally useful conditions for it. Without doubt, teleworkers are perceptibly more satisfied with their work.

The problem is with the transition from one organizational form to another. For example, being promoted on the basis of active politicking, hand-shaking and physical appeasement, rather than on the basis of conduct and results, may put teleworkers at a disadvantage within a still mostly traditional workplace. There is always a risk of not being present in a predominantly physical-presence-rewarding workplace. Removing all such problems and fears are framed by decades and generations.

A teleworker might feel lonely in the world of traditional commuters and avid "socializers", but not in the world of interconnected communities of other teleworkers. Traditional workplace could be a truly lonely place for those who still have to go and remain there, even if nobody calls (the Maytag–Repairman syndrome).

Why should the absenteeism and turnover be a problem in the (so desirable?) traditional workplace? Can we even start to define absenteeism and turnover within the teleworking mode? Telework naturally attracts and rewards self-motivation and task-orientation: in fact, it helps to enhance and develop such desirable traits.

Although traditional organizational loyalty and commitment of teleworkers is probably weakened, it grows even stronger in the direction of profession, process team, expert group affiliation and other networks. Any company which rewards autonomy, professionality and task-performance will recover most of the oldfashioned loyalty and commitments as well.

The concept of functional "department" is not useful in the teleworking mode and will be abandoned. The notions of supervision and span of control are also being redefined. Supervisor–subordinate relationships are much less effective and necessary in teleworking, requiring a task-centered/goal-setting management. Face-to-face communication is less needed among self-motivated employees, as is true with any independent agents.

The "gender problem" is not clarified by teleworking. While teleworking men tend to be highly skilled professionals, teleworking women tend to be semi/unskilled data-entry clerical workers. Perceptions of work status are still differentiated: men view telework and home office as high-status mode to be sought for and even envied if unattainable; women tend to view their physical commuting to a remote workplace as a status symbol and telework-at-home as a lowerstatus mode. Go figure.

Predictably, union objections to telework prevail and are increasingly motivated by the loss of influence over the remote worker. Autonomous, independent and selfmotivated worker or citizen has never been a good "material" for unionization.

Especially "knowledge workers" and "knowledge companies" are benefiting the most from teleworking in the knowledge era.

If by knowledge we understand the ability to coordinate one's action towards purpose(s), then knowledge production potential of telework is truly unsurpassed. With the exception of home-based manufacturing, work at distance is by definition mostly information processing and remote coordination of action. This cuts the reliance on "non-coordinating" information exchanges at the coffee machine and the war-stories based semi-tribal community thus engendered. New forms of communication emerge, based on effectively organized exchanges of coordinative information - knowledge. Traditional "tribal" networks of the water cooler are thus effectively transformed into strategic alliances of highly autonomous agents. "Café Slavia" intellectuals are truly a useless and dying breed of autodidacts.

Also, the expensive and wasteful processing of confused and haphazard "coffee-machine" information is replaced by virtually instantaneous and continuous transfers in a targeted, purposeful mode.

Unintended and inefficient socialization opportunities of the traditional workplace are replaced by desired, necessary and meaningful socialization modes of people who have shared enough information already and decide to go ahead with a face-to-face meeting, especially between employees and their customers and suppliers. Employee-to-employee socialization has to be to the benefit of the company and both parties involved.

Most difficulties with telework are to be found in the transitional or experimentation stages: traditional corporation remains traditional in its organization, values and habits, but it already tinkers with all kind of high technologies which require qualitatively different support nets – not only doing things differently, but also doing different things. Mismatched technologies and their support nets are likely to confuse and mislead workers, managers and researchers as well. So, quite rapidly, e-mail is being transformed into e-business and telework into telebusiness.

It is clear that telecommunications allow direct teleinteraction with customers, employees and suppliers. There is no need for intermediaries, operators, code-punchers and other bottlenecksforcing customers "on hold". All transactions are secured by SET (Secure Electronic Transaction). The Web market is going to reach over 550 million within the next three years.

Corporate business systems are connected *directly* with the corporate constituencies, via the Web, intranets and extranets, by providing *self-service* Web sites for customers. The *self-service society* has become reality.

Processing a traditional airline ticket costs \$8; processing an e-ticket is \$1. A bank over the counter transaction costs \$1.07; the same e-transaction costs only 1¢.

Self-service and work at home is now the most potent job-generating sector, moving the self-reliant population towards most productive and efficient selfservice activities, reducing the pressures on energy, ecology, human stress, traffic congestion and the costintensive physical commuting we have inherited from the turn of the century. Clearly, individual or corporate telecommuning presents a powerful alternative to the medieval concept of "railroads, highways and bridges".

One should stop and ponder how can a modern politician advocate both electronic superhighways and "roads and bridges", all at the same time and at the end of the twentieth century? Modern production is primarily based on processing of information, not on hauling of goods, humans and machinery over large distances. One can more effectively "haul the information" and produce goods and provide services locally. Information and knowledge travel effortlessly through electronic superhighways and through telecommunications networks.

Citizens and employees working at home are in control of their time, can take care of their children, can invest in home-technologies; they do not have to pay excessively for gasoline, insurance, kindergartens and waste most of their precious off-work hours traveling back and forth over those physical "roads, rails and bridges".

There are so many ways of being there.

Milan ZELENY Graduate School of Business Fordham University at Lincoln Center New York, NY 10023 USA