The following exchange occurred on Feb. 1, 1997, in response to questions from *Training & Development* magazine [publication of the American Society for Training and Development (ASTD)]. The responses of Dr. Yogesh Malhotra, the Chairman and CKO of Global Risk Management Network, delve into some key aspects of today's Virtual Organizations, particularly, human issues, information technology, control and trust. Featured in the May 1997 *Training and Development* special issue cover story (pp. 30-37) entitled 'On Becoming Virtual'. For more on Virtual Corporations, see [http://www.brint.org/](http://www.brint.org/).

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Virtual Corporations, Human Issues & Information Technology

*Training & Development* Magazine's Interview with
Dr. Yogesh Malhotra
Founding Chairman and CKO
BRINT Institute

Discuss Forum on This Topic

What do virtual companies do about trust? Are managers worried about supervising employees, and if so, how do they go about "monitoring" off-site workers?

The key issue is not "monitoring" itself, but if it is of any relevance given the key purpose of the virtual organization. Given that the key objective of virtual corporation is to provide for ultimate adaptability and flexibility, monitoring may not be of much use. The key emphasis is on [what is generally termed as] empowerment and self-control of the employees. In this new model of work, the employees are expected to make decisions and judgments based on the demands of the specific situations. Given greater responsibility of the employees, such organizations are focusing on developing the judgmental ability of such employees. For instance, some companies such as Nordstrom have only one line policy manual: "Use your best judgments under all situations." The human resource department and the supervisor's responsibility is to facilitate the realization of what good judgment is. Similarly virtual corporations such as Verifone emphasize a lot on sharing the corporate philosophy with their remote employees. This issue is related to the company's broad vision and strategic goals which are communicated through the shared culture and common corporate values. What I am referring to is the 'clan control,' as first termed by William G. Ouchi.

I am not suggesting that the virtual organizations cannot use technology for "monitoring" employee's work. The sophistication of technology permits managers, if they prefer, to monitor every single key stroke or phone call of the employees, and many companies are doing so. However, employees complain of being spied upon 24-hours a day and generally complain of stressful consequences. The traditional "monitoring" by means of 'observing' every move of the employee may not necessarily be conducive to the agility that is the key objective of the virtual corporation.

One may compare the above description with bringing up of a teenager by the parent. One could either use the technology (such as pagers, cell phones, etc.)
for continuously monitoring each movement of the child, or one may rely more on the sharing of the family values.

The key issue in both cases is keeping the channels of communication open for allowing the exchange of issues related to values and then hoping that the values are strong enough to drive out the need for continuous 'monitoring' in the traditional sense. Also, given the demands of changing knowledge requirements, the managers may not be in the best position to keep pace with the quick changes in the field and would need to entrust the related decision-making to the employees.

Many companies are doing so by encouraging continuous communication, and having occasional face-to-face group interactions for sharing of experiences and ideas - either in person or using technologies such as video conferencing.

**Is there a change of power in a virtual organization? In other words, does a company become more or less hierarchical?**

As mentioned earlier, the key objective of the virtual organization is to cater to maximal agility: provide anything, anytime, anywhere, anyhow. Such organizations are using the maximal capabilities of both technology and humans to meet this objective. While technology is being used for accumulation, sharing and communication of information, the activities of judgment and decision-making are being entrusted more to the employees who are most familiar with the work situation. Hence, certainly there is a power shift in the modal virtual organization.

However, this shift is also related to the diminishing number of middle management layers. A certain major company has only three designations: the CEO, the secretary and the associate. Some companies, such as Microsoft, are using stock based incentives for both empowering the employees and giving them a greater sense of achievement. Many other organizations are increasingly sharing the corporate information - including financials - with even the line workers so that they can better relate to the company's challenges.

In terms of information sharing and decision-making, the virtual company is moving towards a more even division of power. This issue is related to the issues of empowerment and self-control mentioned earlier.

Another factor related to flattening hierarchy is the focus of the virtual organization on its core competencies. Many companies are outsourcing most activities that they consider non-core or non-strategic to third parties or external vendors. Outsourcing of such activities is causing concerns about loss of control. The increasing emphasis of such inter-firm collaborations is more and more on relationship building and relying on an electronic handshake than on going through the traditional protracted legal paperwork. Again, the jury is still out on this issue.

Hence, change of power and change in the hierarchical structure are two related, but not synonymous, issues with respect to the virtual organization.

**How are companies helping employees to deal with new technology and new ways of communicating?**

The picture is quite fuzzy on this. Companies are investing in the new technology and communication infrastructures. However, as underscored by many industry
case studies, such as those done by Shoshana Zuboff and Wanda Orlikowski, the more important issue is the development of a culture and shared values that can facilitate the adoption of such technologies and communication. Investment in advanced technologies may not necessarily result in improved communication by, and between, the employees.

It is also crucial for the managers to understand how to combine the technology mediated interactions with occasional face-to-face interactions with the employees. Often the top managers and the developers of technology, such as the information technology experts, assume too much about the anticipated use of the technology by the employees. The crucial point is to realize that employees may need hand-holding in the beginning for realizing the anticipated benefits of technology. Regardless of the use of technology, the underlying issue of 'connectedness' is what needs to be emphasized. For most employees, interacting in a virtual mode via mediating technologies may be totally new and may cause anxieties in terms of issues such as performance and evaluation. Such issues need to be addressed upfront.

A related issue is that of training of the employees in the use of new technologies. As mentioned earlier, managers may often assume too much about how, and for what, the technologies would be used by the employees. The key issue is of motivating the employees' understanding and appreciation of technology within the overall context of communication and information sharing. Hence, company culture and values again play an important role in this respect. Issues such as 'netiquette' need to be addressed when employees communicate through technologies such as e-mail, voice mail, cellular phones, pagers, portable laptops, desktop computers, fax modems, Internet, world wide web and Intranets. In addition, issues related to some basic understanding of technology problems and online support need to be addressed. Some companies are making use of software programs that can remotely diagnose and correct problems with equipment such as computers while others provide round-the-clock technical support through information databases, faxback services and human technicians.

Several companies are developing repositories of company information that are accessible to employees through easy to comprehend user interfaces on intranets and the Internet. Companies are also using technologies such as groupware and intranets to facilitate communication and information sharing. Companies such as Ford are using virtual global teams for designing the latest car models. In other cases, companies are operating on a 24-hour day in which the design of computer chips is communicated at the end of the work day to another part of the world where the work continues uninterrupted.

With the increasing demand for network based technologies, the ongoing challenge for most companies is to provide an infrastructure that allows instant access and communication. This objective is currently constrained by limited bandwidths particularly in case of visual and graphic data.

In sum, the virtual company depends upon the technological infrastructure as well as the cultural infrastructure that facilitates the use of new technologies. In my view, neither of the two is less important.

**How do employees feel about losing real human contact? How can a virtual organization build community?**

This is a crucial issue that most companies are attempting to address. Industry reports suggest that in many cases, employees who are used to working in social
work settings may encounter anxiety and stress when they work remotely or from home offices. One pertinent issue is of continuous monitoring by the employer which may drive the employee toward burnout resulting from round-the-clock electronic access.

The loss of human contact is being balanced by maintaining continuous communication as well as by holding occasional face-to-face meetings for information sharing and support. In several cases the human contact at the workplace is being replaced with increased contact with clients and customers in the field. In the case of telecommuters who work from home, loss of human contact at workplace poses a different set of problems. However, many employees prefer this option if they need to take care of their children, homes or relatives. Also, some such cases may offer the option of flextime, i.e., the employees may determine their own work hours while working from home. The relevant issue is that of self-discipline and self-control and companies can certainly benefit by helping the employees realize these.

Answering the issue of community is critical for the virtual organization to operate effectively. The issue of cultural infrastructure and information sharing needs to be addressed with the same urgency as the issue of technological infrastructure. As suggested earlier, a culture characterized by 'clan control' needs to precede the development of a virtual community. The key question is if it is possible within a corporate setting. Based on my participation in several virtual networked communities, I am optimistic about the feasibility of building a community around shared values and common issues. The key issue is not about the latest information technologies, but if those technologies are used within, and for facilitating, a culture of information sharing, relationship building and trust.

»Discussion Forum on This Topic