VIRTUAL WORK: IMPLICATIONS FOR HUMAN AND ORGANIZATION DEVELOPMENT

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Summary

Some novel ways of working have developed toward the end of the twentieth century. Aided by computer technologies, people from different places work together. Separate enterprises manage as if they were one. Employees, vendors, customers, consultants and contractors of organizations work as if they were in the same location, aligned by the same organization, having the same ownership. We called these ventures "virtual organizations" because they work as if they are virtually in the same organization in the same location.

These virtual ways of working bypass traditional departmental silos and hierarchies, move across organizational boundaries, and create work environments with a value for speed and mobility. They promise easy access to both talent and markets but they require workers, managers and executives who have the key competencies to be successful in virtual environments. The virtual workplace relies on initiative, self-direction, horizontal communications and teamwork.

These virtual ways of working suggest a need for new ways for thinking about human

resources and their attendant issues of compensation, recognition, and reward. The following sections survey the nature of virtual work and suggest some emerging trends for those interested in human development in the virtual workplace.

1. Introduction: The Nature of Virtual Work

You may be in a remote location, without electricity, but you are not isolated. If you have a cell phone, or a laptop computer with an antenna, and some good batteries, you can engage in global commerce. Or, without making an investment in equipment, you can saunter into a public library or a cyber café and get "on-line" (go onto the Internet). Today, access to world markets is easy, fast, and becoming ubiquitous. Organizational scientists and human resource practitioners are beginning to discover what these technological developments imply for human and organizational development.

1.1. Technology Creates Virtual Work

Institutions and businesses are exponentially increasing the use of technology and electronics to communicate and organize. Technology provides mobility, flexibility and speed, not simply to respond to market opportunities and customer demands but to *create* them.

Technology enables people, located anywhere there is access to electronic communication, to engage in shared enterprises without being physically together. These non-physical (virtual) environments are emerging from two areas. New organizations are starting and growing new structures and managing in new ways in response to values for speed and reach. They are transforming compensation practices and changing the layout of the workplace and the habits of the "knowledge" workers. The second area is in traditional organizations where managers are trying to imitate new organizations by breaking down silos. Large, traditional organizations are exhorting executives to empower and employees to collaborate. They are embracing "Casual Fridays" and exploring how to "dot com."

These changes are altering the nature of relationships at work and the practice of management. There is evidence that the reciprocities between human and technological systems are changing the nature of organizational and employee development.

1.2. Virtual Environments and Teams

Larry is in London. Betsy is in Berlin. Ned is in New York. They have a project due. They go "on-line" (usually through the Internet) to coordinate their work and meet their shared goal. Technology permits, and business challenges demand, that people work in virtual environments.

The "bits" and "bytes" of working in virtual environments are electronically-communicating work groups — "virtual teams." Virtual teams (also known as e-teams) operate in their organizations asynchronously (at any time) and without co-location (any place). They rely on electronic communications and often use electronic team rooms provided by groupware (software for group discussions by computer).

A primary difference between teams and virtual teams is the reliance on electronic means of communications. This makes virtual teams a unique socio-technical system. Many expected these technologies to liberate people. For example, the ease of electronic access to and transmission of information is viewed by groupware developers as liberation from both constricting authority and the power of the status quo to restrict information. Also, many see potential for increased employee participation in decision-making through increased access to information.

However, technology is a two-edged sword. Liberation has a price. A cruise through Internet sites readily shows that on-line dialogues are often bantering. The computing power that pioneers thought would create community can be eroded by greed. Silicon Valley (a place in California where many Internet businesses began) symbolizes individual material wealth. While the norms are for individuality and wealth as preferable to resource-sharing, aspects of both co-exist in the paradoxes of emerging dot com businesses and cybernetic shareware values.

Authority is still an issue. Rank intrudes in virtual teams when team members simultaneously hold allegiances to both the team and its task and to position and rewards and recognition in other structures.

1.3. Organizational Impact of Virtual Processes

Some have predicted that informating processes and authority are on a collision course in virtual teams. There is evidence for this in three areas of human development: career management, organizational change, and the nature of teamwork.

The expectation of most managers is that electronic communication can improve group collaboration and decision-making. Certainly, that is what the makers of electronic collaboration hardware and software advertise. It is evident that the changes are more than speed and access. Working virtually changes an organization's focus from managing individuals to managing knowledge through use of collaboration. Accordingly, creating value with other people – without benefit of face-to-face relationship -- is a key competency. Further, participants are involved in projects and results and this changes the nature of career management from a phenomenon of jobs and progressions to a volatile mix of opportunities and availabilities.

Organizational change is more unintentional than planned. Organizations straddle dilemmas around acquiring and rolling out systems while maintaining the legacies of prior systems. While technology is fast, it is not necessarily productive, particularly when first implemented. Few information technologists are prepared for helping line organizations manage transformations of habit and culture. Organizational change consultants also struggle with managing technologies and new ways of working because the learning curve for technological savvy is steep and because their knowledge and tools derive from theories built in and for older paradigms.

Teamwork is similarly confounded. While hope for the potential of electronic communication is evident in the writings of those who develop the tools, technology can both empower collaboration and manufacture consent. The outcomes depend on the role power plays in virtual teams and this area is not well researched or understood.

Like traditional teams, virtual teams reduce barriers to achievement, improve the quality of products or services, and enhance competitive advantages of mobility and speed. Unlike traditional teams, they also break down organizational traditions and rituals of face-to-face communications and meetings. Some management consultants and theorists believe these new ways of working hold promise for changing corporate cultures and managerial values.

What happens to work relationships when there are no job descriptions to legitimate power? What happens to authority when teams break down the conventional, bureaucratic chains of command? What happens to humans as social beings when they relate primarily electronically? These phenomena are too new, and research too limited, for firm conclusions to be made.

What is the impact of virtual organizations on their members, their environments, their customers, their processes and their corporate values? There is evidence that electronic communication cuts across organizational boundaries and changes relationships. Every day, more and more virtual teams manage to complete tasks and engender trust despite the difficulties posed by geographic dispersion. Relationships of expertise and information are contributing to work product without a need for close supervision. Communications from remote areas of the enterprise are directly available to top management, without filters. The focus of attention is the work and the results in contrast to traditional values for position, department and hierarchical relationships.

It is power, and how it is understood and employed, that raises issues for development of people and executives in virtual environments. Power based on charisma or authority of position may hold value in face-to-face environments but inside virtual workplaces, power is in expertise and contribution. Virtual teams break down space, time, traditions, relationships and structures but they also are composed of individuals who have organizational "homes" with allegiances and resources and means of recognizing and rewarding employees. Virtual teams straddle virtual and traditional organizations and their competing values. Straddling this bridge, they are vulnerable. If power networks and visible attention can command recognition and resources, what happens to people who are out of sight? Will the answers lie in management theories and practices?

2. Organizational Research and Virtual Teams: A Western View

Understanding the potential for virtual management and development to deviate from traditional management and development requires an appreciation of the western context of management science and traditional notions of leadership and executive power. Virtual teams are viewed in the literature as part of a thirty year trend toward increasing use of teams and attempts to let teams be empowered and self-directed. It is a human frailty to understand what appears to be new in contrast to what one thought was going on before. Virtual teams and power in organizations are discussed in the nascent literature in terms of western, particularly American, notions of management and organizational processes.

2.1. Teamwork Increasing

Organizations are increasingly using teams to accomplish work. Teams are

recommended for their egalitarian values. They have the ability to cut across bureaucratic silos in organizations, to be more creative, participatory, and implicitly more democratic, than traditional forms of organization. Through programs and policies of empowerment, corporate teams are replacing the traditional hierarchy for achieving business objectives. Within the context of these trends, virtual teams are beginning to play a role in corporate knowledge management while they grow in response to the globalization of business.

The growing trend towards teams has been matched by concomitant energy to research teams. Organizational scientists have investigated the forming of teams, productive disruptions in teams, learning in teams, cooperation in teams, autonomy in teams, humor in teams, team boundaries and teams crossing boundaries in the organization. Researchers are also developing ways to study teams as open systems and as systems operating outside the boundaries of space and time. Scholarly journals, particularly those for information technology, have published research on virtual teams; and a journal (www.virtual-organization.net) was launched to provide for scholarly exploration of virtual organizing and electronic business.

2.2. Structure and Hierarchy

The research suggests that teams, even empowered ones, do not necessarily eliminate hierarchies. They dissolve structures in pursuit of speed and efficiency but structures are not necessarily hierarchies. Organizational structure can disappear in the fluidity of teamwork while hierarchy remains. When hierarchy operates outside of structure, the legitimization of power is at issue. In organizations that employ virtual teams in addition to other ways of working, there are manifest conflicts regarding who and what gets resourced, recognized and rewarded.

The advocates of virtual teams suggest that shared purpose gives the work structure and that expertise is the key competency. However, the evidence is mostly anecdotal. Scholars have called for more research on how teams make sense of their tasks and decisions when in horizontal, non-hierarchical settings. Further, we need to know more about what happens to power when organization is horizontal, not vertical.

While virtual teams offer opportunities to understand vertical organizing processes, they are difficult to observe since they are not co-located and often communicate asynchronously. Consequently, scholars and advocates of virtual teams tend to rely on fifty years of organizational research on related concepts of groups and teamwork.

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Biographical Sketch

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