

Going Virtual

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INTRODUCTION

Virtuality is a socially constructed reality mediated by electronic media (Morse, 1998). Virtuality has overcome the stage of being considered a “false” reality, and is now being recognized as a process of becoming through information and communication technologies (ICTs), one of the main changing trends in a world in which ownership of assets is overrated.

Organizations such as Amazon, Google, Cisco Systems, IBM, Intel Capital, Orange, and Hewlett-Packard are some of the innovative enterprises that have adopted virtual teams in order to accelerate access to global business. For example, most of the people working in product development in Orange Group, one of the UK’s leading mobile phone service providers, work in virtual teams. The World Bank is also using virtual teams that collaborate across national and technical boundaries to meet organizational objectives. IBM, in a way to open up the innovation process, is pulling a technology-enabled global team (around 100,000 people) together for the online equivalent of a town meeting (Business Week Online, 2006) that will hopefully lead to idea generation by the whole IBM population, and powerful innovations in IBM.

Characterized mainly by the dimension of time-space distantiation (Giddens, 1991) virtuality has an impact on the nature and dynamics of knowledge creation (Thompson, 1995), innovation (MacKenzie, 2006), social identity (Papacharalambous & McCalman, 2000), and organizational culture (available at <http://www.etw.org/2003/Archives/telework2001-proc.pdf>).

The relentless advancement of ICT, in terms both of new technology and the convergence of technology (e.g., multimedia), is making virtual networking the norm rather than the exception. Socially, virtual communities are more dispersed, have different power dynamics, are less hierarchical, tend to be shaped around special interests, and are open to multiple interpreta-

tions, when compared to face-to-face equivalents. To successfully manage virtual communities, these differences need first to be understood, second, the understanding related to varying organizational aims, and third, the contextualised understanding needs to be translated into appropriate managerial implications.

In business terms, virtuality exists in the form of lifestyle choices (home-working), ways of working (global product development teams), new products (virtual theme parks), and new business models (e.g., Internet dating agencies). Socially, virtuality can take the form of talking to intelligent agents, combining reality and virtuality in surgery (e.g., using 3D imaging before and during an operation), or in policy making (e.g., combining research and engineering reports with real satellite images of a landscape with digital animations of being within that landscape, to aid environmental policy decisions).

Defining virtuality today is easy in comparison with defining, understanding, and managing it on an ongoing basis. As the title “Going Virtual” suggests, virtuality is a matter of a phenomenon in the making, as we enter into it during our everyday lives, as the technology develops, and as society changes as a result of virtual existences. The relentless advances in the technical complexity which underlies virtual functionality and the speeding up and broadening of our lives as a consequence of virtuality, make for little time and inclination to reflect upon the exact nature and effect of going virtual. As it pervades the way we live, work, and play at such a fast rate, we rarely have the time to stop and think about the implications of the phenomenon.

The aim of what follows is, therefore, to reflexively generate an understanding of the techno-social nature of virtuality, on the basis that such an understanding is a prerequisite to becoming more responsible for its nature and effects, and more successful in making the most out of it. Ways of looking at virtuality are followed by some thoughts on the managerial implications

of “going virtual,” especially in relation to increased innovation.

A TECHNOSOCIAL VIEW OF VIRTUALITY

Marx foresaw how the power of technological innovation would drive social change, and how it would influence and become influenced by the social structure of society and human behaviour (Wallace, 1999). This interrelationship means that an understanding of virtuality needs to start from the theoretical acceptance of virtuality as a social reality, considering it involves human interaction associated with digital media and language in a socially constructed world (Morse, 1998). More specifically, Van Dijk (1999) suggests that going virtual, in comparison with face-to-face interaction, is characterised by:

- A less stable and concrete reality without time, place, and physical ties;
- More abstract interaction which affects interpretation of information, and, consequently, knowledge creation;
- A networked reality which both disperses and concentrates power, offering new ways of exercising power and new working relationships;
- Diffused and less hierarchical communities and interaction due to the more dynamic flow of knowledge and greater equality in participation;
- A reality often shaped around special interests.

Each of these areas is explored below, with the aim of drawing out the issues such that the managerial implications can be discussed in the following section. The emphasis is not on the technology, but on the sociomanagerial implications of how the technology promotes and moulds social existence within virtual situations, and how this context can provide the potential for creativity and continuous innovation.

A LESS STABLE AND CONCRETE REALITY

Arguably, the most fundamental characteristic of virtuality is the first on this list, namely time-space distantiation (Giddens, 1991). Prior to the development

of ICTs, the main mode of communication between individuals was face-to-face interaction in a shared place and time. The presence of a shared context during face-to-face contact provides a richness, allowing for the capacity to interrupt, repair, feedback, and learn, which some see as an advantage (Nohria & Eccles, 1992, cited by Metiu & Kogut, 2001). In a virtual context, individuals interact at a distance and can interact asynchronously in cyberspace through the mediation of ICTs. The absence of shared context and time has an impact on communication (Metiu & Kogut, 2001; Thompson, 1995).

A MORE ABSTRACT REALITY

In virtuality, a narrowed range of nonverbal symbolic cues can be transmitted to distant others (Foster & Meech, 1995; Sapsed, Bessant, Partington, Tranfield, & Young, 2002; Wallace, 1999), albeit technology advancement is broadening the spectrum. Social cues associated with face-to-face copresence are deprived, while other symbolic cues (i.e., those linked to writing) are accentuated (Thompson, 1995). The additional meaning found in direct auditory and visual communication, carried by inflections in the voice tone, gestures, dress, posture, as well as the reflexive monitoring of others' responses, is missing. Human senses such as touch, smell, and taste cannot be stimulated (Christou & Parker, 1995). Virtuality is a more abstract form of reality. These symbolic cues convey information regarding the meaning individuals assign to the language they use, as well as the image they want to project while expressing themselves. In this sense, man first went virtual when language evolved, given language was arguably the first abstract space man inhabited.

Understanding the social impact of mediated interaction is helped by thinking in terms of the spaces within which individuals interact (Goffman, 1959, cited by Thompson, 1995). A distinction is made between individuals interacting within and between easily accessible front regions, separated in space and perhaps in time from their respective back regions into which it is difficult, if not impossible, to intrude.

In a face-to-face context, social interaction takes place in a shared front region, a setting that stays put geographically speaking, (e.g., an office, a class), which can be directly observed by others and is related to the image the individual wants to project. Actions

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