Virtual Organization

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INTRODUCTION

Virtual organization has been well documented as both a tool for organizations to seek further profitability through the removal of traditional barriers, as well as a method to extend the provision of services to clientele in a manner previously achievable by only large, multinational corporations (Markus 2000). The widespread implementation of information technology and its many applications in modern business has moved the act of management towards a virtual focus, where managers are able to complete tasks through the use of teams in varying physical locations, with members that may or may not be employees of that firm, sharing a wide variety of data and information. With so many companies now employing virtual organization techniques, referring to a company as "virtual" or to its components as possessing "virtuality" lacks the clarity and specificity needed when using these firms as examples for others. The variety of methods through which a firm can achieve virtuality represents a span nearly as wide as the business community itself.

BACKGROUND

The earliest definitions of a virtual organization appeared when the concept of *virtuality* was applied to studies of management, before information technology existed in a refined state to support the theory. Giuliano (1982) saw that with the addition of telecommunications and networking technology, there was little need for work teams to assemble at the same time or even at a contiguous location. A structured concept of virtual organization was formed by Mowshowitz (1994, 2002), who defined virtual organization in previous work as a group of employees communicating and being managed electronically through *metamanagement*. This concept defines the way in which a *virtual task* is managed and further categorizes a virtual organization as a series of virtual tasks, completed by virtual teams in strategic global locations. As each team has a certain commitment to the parent organization, the similarity in purpose and communication style allows for clear distribution of work across multiple groups of organizational members.

As with Net-enabled organizations, the concept of virtual organizations has gained prominence among researchers and practitioners. As shown by the recent work of Schultze and Orlikowski (2001), virtuality can be understood through the perception of time and space. This article extends the scope of the virtual organization in terms of 'virtual space', a metaphor used in *time* and *space* (beyond the constraints of the actual location we belong to) dimensions (Allcorn, 1997). As opposed to the virtual organization, time and space dimensions are constrained in traditional or 'real' organizations. Time constraints occur in real organizations due to the operational time dimension of such organizations, while space dimension occurs due to constraints of location.

It is true that a virtual organization inherits the attributes of virtual dimensions—a newly defined concept of time and space. In other words, a virtual organization does not exist in our time and space, but rather exists only in virtual space (the perceptual world), which is only a metaphor of our consciousness and not reality. A virtual organization, in this sense, is the metaphor of our designed and structured consciousnesses that exists in virtual space to perform the intended actions of interest. However, the most important thing in a virtual organization is to identify the role of human actors who get involved in both the physical and the perceptual world (Orlikowski, 2002). I attempt to explain the relationships between the human actors, the real and virtual organizations, and our perceptions of these concepts.

DUALITY OF HUMAN MINDS

Metaphors play a very powerful role in structuring virtual organizations, because terms like 'virtual' and 'virtuality' originate from symbolic languages (Faucheux, 1997). These metaphors provide the meaning of existence, thus we can treat the organization like a real organization in virtual space. Continuous analogical processes between virtual and real organizations explain the existence of virtual organizations because there exist similarities and discrepancies in them (Ahuja & Carley, 1999). A virtual organization, operating within virtual space imagery, exists in our consciousness, while an actual organization physically exists in various

forms (more tangible or definable manner) such as culture, politics, resources, and so forth (Morgan, 1986). Although a virtual organization exists in our consciousness, it is associated with its physical counterpart in the 'real' world such as a parallel virtual organization and bureaucratic hierarchical organization counterpart (Allcorn, 1997). However, there is a possibility that a 'real' organization will exist only when its virtual counterpart exists in the human mind. Mowshowitz (1994, 2002) described this as 'a dominant paradigm' of virtual organization due to its unique advantages in the efficiency, cost, and effectiveness of goal-oriented activity. Surprisingly, human minds streamline these two opposing ideas of real and virtual worlds—thus, it becomes obvious that humans possess duality of existence in both the real and the virtual world.

This article discloses the social aspects of a virtual organization and identifies the role of human actors in a virtual organization (or 'consciousness' in Faucheux, 1997). This consciousness exists in the perceptual world that we create beyond the limits of time and space (Allcorn, 1997). However, its counterparts exist in various forms (entities) in the real world. To bridge the gaps between the consciousnesses and the entities, there exists a need for human interveners who possess dual identities in both virtual and real worlds. This research provides the meaning of virtual organization, and proceeds to explain the relationship between the consciousnesses (virtual organizations) and entities (real organizations) with human intervention (human actors).

Schultze and Orlikowski (2001) examine rhetorical oppositions between real organizations and virtual organizations, and in doing so apply metaphors to the discourse. The visions or views of two opposing elements are not divergent or dichotomous; rather, they offer substitutes for the opposition through a process referred to as dualism. As Orlikowski (1991) proposed in her earlier paper, "The Duality of Technology," this dualism is not mutually exclusive. The dualism originated from the work by Giddens (1984) in *The Constitution of Society.* Giddens's (1984) structuration theory integrated two main streams of sociology—objectivism and subjectivism. It appears that the structuration theory adopts the notion of phenomenology, as it seeks to make explicit the implicit structure and meaning in human experiences (Sanders, 1982). Phenomenology searches for the essence of what an experience *essentially is* and is the intentional analysis between objective appearance and subjective apprehension. Structuration theory (the process of structuration of an organization) seeks a complementary essence in the structure of organization science and in the process of struggles between objectivism and subjectivism. Interestingly, the conflict of objectivism and subjectivism was reflected in metaphors, as Lakoff and Johnson (1980, pp. 189) stated:

"Objectivism and subjectivism need each other in order to exist. Each defines itself in opposition to the other and sees the other as the enemy. Objectivism takes as its allies: scientific truth, rationality, precision, fairness, and impartiality. Subjectivism takes as its allies: the emotions, intuitive insight, imagination, humaneness, art, and a 'higher' truth…They coexist, but in separate domains. Each of us has a realm in his life where it is appropriate to be objective and a realm where it is appropriate to be subjective."

Human actors have very important roles in both phenomenology and metaphors due to their valuable experience. The key differentiator between objectivism and subjectivism is always human experience. Another important fact (usually overlooked by researchers) is that the use of metaphors appears in both the physical world and in the perceptual world (Harrington, 1991) because the terminology 'organization' itself results from *dead* metaphors. Tsoukas (1991) describes the process in which metaphors "have become so familiar and so habitual that we have ceased to be aware of their metaphorical nature and use them as literal terms." It implies that the metaphors of virtual organizations are *live* metaphors (Tsoukas, 1991), "knowing that these words are substitutes for literal utterances" that use dead metaphors (organization per se). Therefore, live metaphors are used to describe virtual organizations in another dimension where we can do things that are not possible in the real world because the virtual world operates without the constraints of time and space, unlike the real world.

The process of structuration involves the reciprocal interaction of human actors and institutional properties of organizations (Giddens, 1984); as Orlikowski (1991) pointed out, "The theory of structuration recognizes that human actions are enabled and constrained by structures, yet these structures are the result of previous actions." Because we live in both real and virtual worlds, we have both objective and subjective understandings of each world—dual identities. Figure 1 shows the relationship between real organizations and virtual organizations in the presence of human interveners. Both real and virtual organizations consist of rule resource sets that are implicated in their institutional articulation, thus these rule resource sets act as structures of the organizations (both virtual and real), where a structure is the medium and the outcome of organizational conduct. The structural properties do not exist outside of the actions of the organizational actors. Therefore, structural properties, related to space and time, are implicated in the production and reproduction of the organizations. In other words, both real and virtual organizations undergo structuration across the different sets of dimensions of time and space based on the perspectives of each human player.

The model in Figure 1, which is adopted from the duality of technology of Orlikowski (1991), depicts four processes that

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