13 Tools and Capabilities for Becoming Virtual

Paul Jackson and Jane Klobas

13.1 Introduction

In this book, we have introduced a framework for conceptualizing the process of virtualization and used it to study knowledge processes and virtualization in a single organization. In this chapter, we consider what we have learned from studying Unit 2 that can be of value to other organizations that are considering becoming virtual. Unit 2 did not achieve its goal of virtualization. But, as is often the case, breakdown reveals more about what is required for success than smooth traveling. The specific aspects of virtualization that the research team studied during the project provide additional insight into the risks of virtualization and the conditions and processes that might be adopted by successful virtualizing and virtual organization. We conclude this research by reviewing the lessons learnt from the individual research projects. We then draw on these, along with the analysis presented in Chap. 12, to summarize lessons for organizations planning to take advantage of network technologies to improve their ability to operate effectively across space, time and structure. Finally, we comment on the potential value for managers and researchers of the virtual alignment model (VAM) and the methods developed to track virtuality and capabilities in the study.

13.2 Virtualization and Knowledge Work

Even under optimal conditions, knowledge work is fragile, vague and poorly understood. In building new theory in Chap. 4, Jensen and Jackson suggested that the construct of social uncertainty may explain why staff did not contribute to or become involved in the Dialogue Forum or embrace virtualization. Uncertainty in the social arena, with its resulting focus
on the individual and the in-group led to withdrawal of consent and participation, eroding social cohesion and reducing contribution to the larger social groups of TPC and Unit 2. This uncertainty is cognitive, not affective, and may not be noticeable as behavioral hesitancy or personal diffidence, but it will lead to reduced participation. It is a function of distance and space, but also of trust, identity, ontology, rate of change and power relations. If virtual work relations are not to lead to this withdrawal of participation in knowledge processes, then managers must attend to and enhance the other constituent elements: raise trust, work at maintaining shared meanings and ensure that clear lines of command and legitimation exist.

Communities of practice have been proposed as one method of maintaining knowledge sharing across spatial and legal boundaries, by providing group membership criteria such as common interest or purpose. In Chap. 5, Bernini and Klobas used social network analysis to investigate the effect of communities of practice on organizational commitment. They found that members of a strong community may indeed have a lower level of organizational commitment, preferring to place their loyalty with their community rather than the broader organization. Managers should be aware of this effect. Efforts to develop and encourage communities should be balanced and open, and managers should consider developing strategies of inclusion for the larger group.

In Chap. 6, Jackson developed a metadata description of the structure of organizational memory. This blueprint could be helpful in developing access to explicit or tacit content using directories, content management systems and ICT. This is potentially a practicable approach for supporting virtual knowledge work.

In Chap. 7, Jackson and Klobas extended the notion of transactive memory systems (TMS) to cover organizations, rather than small groups, and found that the maintenance and use of personal knowledge directories (who knows what, where to find something) play a significant part in knowledge work. TMS appear to increase in importance as staff become more distributed, particularly where knowledge is hard to codify and share using technology. Organizations that provide means and opportunities for the mutual maintenance and updating of these personal directories and facilitate communication between distributed staff when knowledge retrieval is required are likely to operate more effectively than those where these opportunities are limited. Virtualization provides a threat to TMS because working across distance and time limits these opportunities.

The importance of access to knowledge sharing technology, as well as its perceived value, was underlined by Renzi, Klobas and Jackson in Chap. 8. While systems must be perceived to be relevant, and the attitudes of