Evaluating Organisational Readiness for Virtual Collaboration

Peter Gall

Edith Cowan University, Australia

Janice Burn

Edith Cowan University, Australia

INTRODUCTION

This chapter endeavours to clarify some of the concepts related to the virtual organisation and to move away from the definition of a "virtual organisation" as one with few or no tangible assets, existing in virtual space created through information communication technologies (ICT) (Warner & Witzel, 2004). The authors focus on the concept of an organisation, which is "virtually organised," employing ICT for the majority of its communication, asset management, knowledge management and customer resource management, across a network of customers, suppliers and employees (Venkatraman & Henderson, 1998). The authors consider the concepts of virtual organisations and virtual organising and develop an instrument that can be used to evaluate organisational readiness to exploit virtual networks. The instrument can be used initially to measure the value of virtual models to the organisation and then reapplied to measure the extent to which these values are actually embraced.

VIRTUAL ORGANISATIONS

Extensive review of the research literature provides myriad descriptions, such as virtual organisation (Mowshowitz, 1986), virtual company (Goldman & Nagel, 1993), virtual enterprise (Davidrajuh, 2003; Hardwick et al., 1996), virtual team (Lipnack & Stamps, 1997) virtual factory (Upton & McAfee, 1996), virtual organising (Venkatraman & Henderson, 1998), hubs (Friedheim, Jr., 1999), clusters (Dearlove, 2001) and relationship enterprises (Walters, 2000). The most recent literature even makes a distinction between the virtual organisation and organisational virtualisation. Breu and Hemingway (2004) claim that previous literature pertaining to virtual organisations focuses on organisational design (e.g., Chesborough & Teece., 1996; De Sanctis & Monge, 1999; Cramton, 2001; Griffith et al., 2003), while in contrast organisational virtualisation addresses the transition from the traditional bricks-and-mortar to a virtual organisation (Boudreau et al., 1998; Dutton, 1999). Additionally, the authors address the problem from two perspectives: inter-organizational and intra-organizational, but few consider the integration of these two forms (Travica, 2005). The authors of this chapter consider this to be a vital distinction and, further, one that should be addressed in this research.

Based on a literature review encompassing work from 1986 to 2005, there seems to be one point of commonality: the development of the virtual organisation continues to be a focus of organisations seeking competitive advantage in increasingly global marketplaces. (Travica, 2005; Lundquist, 2004).

The common theme seems to be the concept of organisations being compelled to consider their degree of virtuality. Even though there has been a proliferation of terminology, all authors appear to agree that ICT is a prerequisite, facilitator and even the core of the new emerging virtual organisation paradigm (Burn et al., 2002; Franke, 2000); a view supported by Talukder (2003), who believes that the virtual organisation is a non-traditional, interconnected and customer responsive organisation, which mainly operates through ICT in the global market.

The virtual organisation forges temporary links among otherwise independent entities that add value to an economic system (such as the supply chain of a large manufacturer). These virtual links arise and dissolve as needed to reduce transaction costs, increase efficiency and respond more quickly to the needs of customers and initiatives of rivals (RAND, 2004). Organisations in the public and private sector alike face ongoing pressures to become more flexible and responsive to change, and are looking increasingly to virtual forms of organisation to reduce organisational slack, facilitate cross-functional learning, focus on core competencies and lower costs (Dutton, 1999).

Partnerships in virtual markets are temporary alliances of enterprises that come together to share skills and resources in order to attend a business opportunity and whose cooperation is supported by computer networks (Vlachopoulou & Manthou, 2003). Partnerships in a virtual environment are enabled by sophisticated ICT that makes business information transparent, seamless and within reach (Folinas et al., 2001). ICT enables the virtual organisation by mediating the dynamic assignment and coupling of requirements with the resources (Kishore & McLean, 2002).

The virtual organisation of the future will be much more dynamic and sensitive to the need for tuning operational parameters of the enterprise as a whole, optimising the whole chain of value creation (Walters, 2004). Enduring virtual organisations or enterprises do not simply appear, they are structured alliances that are based upon an acceptance that no one organisation will possess all of the capabilities or competencies required for success (Kay, 2000). Virtual companies, particularly those with strong consumer offerings, will define themselves by the services they offer customers via the unified platforms of voice, video and the Web (Lundquist, 2004).

Organisations who exploit the potential to develop their own "automated network" are variously described as virtually organising or virtual organisations. Virtualisation allows one organisation to appear as many or many to appear as one, becoming increasingly adaptive, focussing on dramatically improving the speed and economics of business change to meet new market conditions (Yockelson, 2004).

Virtualisation is an approach to ICT that lets businesses pool resources so utilisation is optimised and supply automatically meets demand (Bittman, 2004). The authors contend that optimisation relies on external readiness, that is, how effectively organisations manage their degree of external readiness to collaborate virtually.

This viewpoint is supported by Robey et al. (2000), who recommend using ICT to improve an organisation's efficiency of, and ability for, gathering and sharing information across geographical (external) divides, enabling greater horizontal and vertical connections among partners and suppliers. Sharing information across geographical divides could be expressed as a readiness to collaborate.

Most of the literature reviewed for this chapter does not appear to support a distinction. One exception is the TEMPLET model, which does contain enabling dimensions, but is nevertheless very broad comprising both internal and external categories; technology, information management, process and organisational structure (Meister, 2000). The authors have identified literature that focuses on external readiness to collaborate virtually.

READINESS

Readiness is defined as the aptitude of an economy or an organisation to use ICT to migrate traditional businesses to the new economy (Bui et al., 2002). Ereadiness criteria spans a wide range, from telephone penetration to online security to intellectual property protection, translating into whether a country's business environment is conducive to Internet-based commercial opportunities.

This could be equally relevant to major ICT dependent organisations in identifying their degree of readiness to collaborate. It has been suggested that APEC member economies should examine their strategies along six dimensions: immediacy, re-intermediation and innovation-based economy, integration/internetworking, virtualisation, convergence and discordance (Bui et al., 2002).

Strategies can also be used to provide key insights on actions necessary within an organisation, where a well conceived virtual readiness assessment will map the organisation's regional and global position. Improving competitive strengths and promoting those areas where a country or organisation, by its history, culture or nature, has an advantage over others will increase competitive advantage. While a number of different instruments exist to evaluate the readiness of economies and organisations to utilise ICT effectively and participate in the global market through e-business initiatives, none of the models was judged by the authors to be specific enough to enable organisations to identify their degree of readiness to "collaborate virtually." The authors identified three models as shown in Figure 1 that meet this criterion and identified commonalities between all three, which were then used to create an extended instrument-the virtual enterprise readiness instrument (VERI).

6 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <u>www.igi-global.com/chapter/evaluating-organisational-readiness-virtual-</u> collaboration/17656

Related Content

Sixth Sense Technology: Advances in HCI as We Approach 2020

Zeenat AlKassimand Nader Mohamed (2017). International Journal of Virtual and Augmented Reality (pp. 18-41).

www.irma-international.org/article/sixth-sense-technology/188479

What Lecturers Say Helps and Hinders Their Use of a Virtual Learning Environment to Support Face-to-Face Teaching

Sue Moron-Garcia (2008). Virtual Technologies: Concepts, Methodologies, Tools, and Applications (pp. 222-237).

www.irma-international.org/chapter/lecturers-say-helps-hinders-their/30921

Onsite Proactive Construction Defect Management Using Mixed Reality Integrated With 5D Building Information Modeling

Pratheesh Kumar M. R., Reji S., Abeneth S.and Pradeep K. (2020). *International Journal of Virtual and Augmented Reality (pp. 19-34).*

www.irma-international.org/article/onsite-proactive-construction-defect-management-using-mixed-reality-integrated-with-5d-building-information-modeling/262622

Lessons Learned from the Design and Development of Vehicle Simulators: A Case Study with Three Different Simulators

Sergio Casasand Silvia Rueda (2018). International Journal of Virtual and Augmented Reality (pp. 59-80). www.irma-international.org/article/lessons-learned-from-the-design-and-development-of-vehicle-simulators/203068

A Review of Augmented Reality in K-12 Education Environments

Adam C. Carreon, Sean J. Smithand Kavita Rao (2020). *International Journal of Virtual and Augmented Reality* (pp. 32-61).

www.irma-international.org/article/a-review-of-augmented-reality-in-k-12-education-environments/283064