Chapter XII

Evolving E–Health Systems: Symbiotic Constructs Between Corporate and E–Healthcare Worlds in International Space

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ABSTRACT

The 21st century continues to witness the transformation of organizational systems globally through the deployment of Information and Communication Technologies (ICT). The emerging future is witnessing the convergence of artificial intelligence, biotechnology, nomadic information systems, and nanotechnology. This promises to further transform the nature of inter-organizational systems between the corporate and public sectors. The evolution of e-health systems is a case in point. In the light of the Wuli-Shili-Renli (WSR) approach, this key informant study explores the strategic perceptions of corporate ICT and health care executives in Canada and Sweden. Public governance values play critical roles in evolving and sustaining symbiotic e-health networks in Canada and Sweden. The chapter exposes the unique transgenic dimensions of evolving e-health systems. The findings and implications of the study underscore the need for further international e-business research on the socio-cultural domains in which inter-organizational systems evolve.

INTRODUCTION

The 21st century continues to witness the transformation of organizational systems globally through Information and Communication Technologies (ICT), which drive and evolve systemic goals. The implementation of ICT, such as business intelligence systems, data mining and warehousing, e-business systems, e-procurement systems, knowledge management, security systems and
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systems integration, continue to compel the corporate sector to engage in forging inter-organizational systems (Li, 2007; Senge, Carstedt and Porter, 2001). With the cogent and ubiquitous developments such as nomadic systems and wireless and wearable technologies, the emerging future is witnessing the convergence of artificial intelligence, biotechnology and nano-technology (Orlikowski and Iacono, 2001; Pearson, 2001). Strategic dyadic partnerships, with its characteristics of longevity, management control and direction, mutual beneficence and stability, exemplify one type inter-organizational system. The literature underscores the role of strategic symbiotic networks in fostering efficiencies, sectorial growth and social actualization through innovation and knowledge management and transfer internationally (Amaravadi and Lee, 2005; Burgelman and Doz, 2001; Etemad, Wright, and Dana, 2001; Fedor and Werther, 1995; Kodama, 2001; Oliver, 2001; Robinson, Savage and Campbell, 2003). These linkages have the potential to liberate thinking beyond closed organizational paradigms and embrace complex changes and uncertainty inter-organizationally and proactively (Dickson, Farris and Verbeke, 2001; Murray and Zhu, 2003; Urbaczewski, Jessup, and Wheeler, 2002).

The health care sector is no exception to the inter-organizational change imperatives driven through ICT innovative advances. Regionally integrated e-health networks promises less resource duplication, lower operational costs, reduced clinical waiting times and lengths of stay and greater quality care, in the face of care provider and clinician shortages. E-health is the transformational wave of the future in health care systems (Adewale, 2004; Gutierrez, 2001; Sahney, 2003). The upcoming generation of consumers and providers instinctively understand the transformational power of ICT to improve delivery efficiencies and quality of health care regionally through inter-organizational interactions (Caro, 2005). On the basis of extant literature, this paper proposes a conceptual model of symbiotic e-health networks. The model dimensions are posited on a key informant approach and content analysis of the strategic perceptions of international ICT and health care executives interacting through dyadic partnerships. The findings and implications of the study underscore directions for future e-business research.

**INTER-SECTORIAL DYDADIC RELATIONSHIPS: GENERIC AND THEORETICAL PERSPECTIVES**

This paper posits that strategic partnerships and alliances are, in essence, symbiotic information networks. These are, in essence, mutually advantageous inter-organizational systems between informational cultures differing in values, missions, perceptions and evolutions. Moreover, these informational cultures incubate and thrive in informational cultural polities, which are articulated through the governance sector. Networks are systems of interconnected individuals and organizations through which informational and resources flow (Ford, Wells and Bailey, 2004). These networks interact and coalesce through an exchange of informational, relational and transactional capital and sustained through transactional and transformational processes. Moreover, these processes are articulated through skills sets exercised through system participants, called executives. Coupling of different sectors occurs when relational capital and transactional capital is leveraged through transactional and transformational skill sets. Where the capital and process resources are inadequate, a supra level (governance sector) foster and leverage evolving symbiotic information network. Symbiotic information networks are the result of the interplay of management and technical processes.

The extant literature on inter-organizational systems, strategic alliances and partnerships is germane to the evolution of symbiotic informa-