

Chapter 8.13

Evolving E-Health System Symbiosis: Theoretical Constructs in International Realpolitik Space

Denis H. J. Caro

Université d'Ottawa, Canada

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 nano-technology. This promises to further compel inter-organizational and inter-sectorial interactive transformations. The health care sector is no exception to the inter-organizational dynamic imperatives driven with ICT innovative advances. This article proposes a conceptual model of symbiotic e-health networks in a meta-cultural domain that goes beyond the realm of extant literature on dyadic relationships. 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 for the model and further information management research are underscored. The underlying meta-cultural frame is characterized by public governance values and the article explores its perceived role in sustaining symbiotic e-health networks in Canada and Sweden.

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, knowledge management, data mining and warehousing, supply chain management, systems development and implementation, systems integration, and security systems continue to compel different sectors to engage in chal-

lenging inter-organizational relationships (Senge, Carstedt, & Porter, 2001). With the cogent and ubiquitous developments in nomadic information systems and wireless and wearable technologies, the emerging future is witnessing the convergence of artificial intelligence, biotechnology, and nano-technology (Orlikowski & Iacono, 2001; Pearson, 2001). This promises to further propel inter-organizational and inter-sectorial interactions. Strategic dyadic partnerships, with its characteristics of longevity, management control and direction, mutual beneficence, and stability, exemplify one type inter-organizational relationship. The literature underscores the critical role of strategic inter-sectorial partnerships in fostering efficiencies, sectorial growth, and social actualization through innovation and mutual organizational learning (Burgelman & Doz, 2001; Etemad, Wright, & Dana, 2001; Kodama, 2001; Nooteboom, 2000; Oliver, 2001; Robinson, Savage, & Campbell, 2003). These linkages have the potential to liberate thinking beyond closed organizational paradigms and embrace complex changes and uncertainty extra-organizationally and proactively (Dickson, Farris, & Verbeke, 2001).

The health care sector is no exception to the inter-organizational change imperatives driven through ICT innovative advances. Regionally integrated e-health networks promise 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. On the basis of extant literature, this article 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 international research in information management.

INTER-SECTORIAL DYADIC RELATIONSHIPS: GENERIC AND THEORETICAL PERSPECTIVES

This article 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 organizations. Networks are systems of interconnected individuals and organizations through which informational and resources flow (Ford, Wells, & 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. Tight 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 agents) 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 strategic partnerships and alliances is germane to the evolution of inter-sectorial symbiotic information networks that incubate in meta-cultural information domains. In so doing, the article subsumes a realist approach,

11 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:

www.igi-global.com/chapter/evolving-health-system-symbiosis/9426

Related Content

Market Transparency in Business-to-Business e-Commerce: A Simulation Analysis

Yasin Ozcelikand Zafer D. Ozdemir (2011). *International Journal of E-Business Research* (pp. 62-78).

www.irma-international.org/article/market-transparency-business-business-commerce/59915

Effects of Electronic Word-of-Mouth on the Potential Customer's Emotions and Product Image

Outi Tuisku, Mirja Ilves, Jani Lylykangas, Veikko Surakka, Sanna Rytövuori, Mari Ainasojaand Mikko J.

Ruohonen (2017). *International Journal of E-Business Research* (pp. 1-14).

www.irma-international.org/article/effects-of-electronic-word-of-mouth-on-the-potential-customers-emotions-and-product-image/188600

The New Generation of Knowledge Management for the Web 2.0 Age: KM 2.0

Imed Boughzalaand Moez Limayem (2010). *Encyclopedia of E-Business Development and Management in the Global Economy* (pp. 1211-1220).

www.irma-international.org/chapter/new-generation-knowledge-management-web/41284

Are Signals a Solution to Perceived Risk and Opportunism in Mobile Shopping?: Gender Differences and Similarities

Sonia San-Martín (2015). *The Evolution of the Internet in the Business Sector: Web 1.0 to Web 3.0* (pp. 1-24).

www.irma-international.org/chapter/are-signals-a-solution-to-perceived-risk-and-opportunism-in-mobile-shopping/122152

Technology Acceptance Dynamics and Adoption of E-Payment Systems: Empirical Evidence From Jordan

Ahmed Al-Dmour, Hani H. Al-dmour, Rawan Brghuthiand Rand Al-Dmour (2021). *International Journal of E-Business Research* (pp. 1-20).

www.irma-international.org/article/technology-acceptance-dynamics-and-adoption-of-e-payment-systems/273199