Chapter 5.2 Intelligent Networking and Business Process Innovation: A Case Study Analysis of Home Box Office and Dell Computers

Richard A. Gershon Western Michigan University, USA

ABSTRACT

Today, innovation is much more about much than just developing new products. It is about reinventing business processes and building entirely new markets to meet untapped customer needs. This chapter will examine the subject of business process innovation which involves creating systems and methods for improving organizational performance. Special attention is given to the topic of intelligent networking which represents the combination of software, technology, and electronic pathways that makes business process innovation possible for both large and small organizations alike. A central tenet is that the intelligent network is not one network, but a series of networks designed to enhance world-wide communication for business and residential users. Two very different kinds of intelligent networks are discussed in this chapter. The first involves satelliteto-cable television networking where the emphasis is on program distribution to the end consumer. The second is a supply chain management network where the emphasis is on just-in-time manufacturing. Each of the said networks represents a highly innovative business process and share the common goal of improving organizational performance. The information presented in this chapter is theory-based and supported by a case-study analysis of Home Box Office, Inc. and Dell Computers.

INTRODUCTION

International business has been transformed by the power of instantaneous communication. The combination of computer and telecommunications have collapsed the time and distance factors that once separated nations, people and business organizations (Friedman, 2005). The information economy involves the full integration of transnational business, nation-states and technologies operating at high speed. It is a global economy that is being driven by free-market capitalism. The basic requirements for all would be players is free trade and a willingness to compete on an international basis (Friedman, 2005). The once highly centralized business has given way to the transnational corporation (TNC) that operates in multiple countries throughout the world. Instead of time and communication being highly synchronized, today's working professional lives in a digital world of asynchronous and virtual communication that allows for the international collaboration of projects regardless of time zones, geographical borders and physical space (Gershon, 2002). The driving force behind such changes is that today's information economy is built on what Noam (2001) calls a "network of networks." (pp. 1-2). We don't talk to people, we network with them.

The Intelligent Network

The intelligent network represents the combination of software, technology and electronic pathways that makes business process innovation possible for both large and small organizations alike. The intelligent network can be likened to the internal nervous system of an organization. It provides the basis for the seamless integration of information and communication both internal and external to the organization. The combination of high-speed voice, data and video communication allows today's business enterprise the ability to coordinate the production, marketing and delivery of products on a worldwide basis.

The Foundation Principles. A central argument of this chapter is that the intelligent network is not one network, but a series of networks designed to enhance worldwide communication for business and residential users (Noam 2001). What gives the network its unique intelligence are the people and users of the system and the value-added contributions they bring to the system via critical gateway points. Systems theorists refer to this as a the principle of network wholism (Gershon, 2004). As an example, the Internet has become greater than the sum of its parts. The exponential growth of the Internet is due to the many contributions of its users in terms of search engine design (Google); electronic commerce, (eBav, Amazon.com etc.); social networking; (Facebook, My Space etc.); speed and throughput (cable modems, DSL etc.) Today, the Internet has created a new business model that maximizes the potential for instantaneous communication to a worldwide customer base. It has fundamentally changed how retailtrade is conducted in terms of information gathering, marketing, production and distribution.

Intelligent Networking and Organizational Decision Making Process. The intelligent network has had a major effect on the spatial reorganization for today's highly complex organization. Time and distance factors have become less important in determining where a company chooses to locate (O'Hara-Devereaux, & Johansen, 1994; Poole, 1990). One important consequence is that organizational hierarchies tend to beflatter, thereby, allowing direct communication between and among organizational players (Huber, 1990). What's important to remember, is that intelligent networks are not stand alone entities. Rather, intelligent networks are part of a greater human and organizational decision-making process (Monge & Contactor, 2003; Monge & Eisenberg, 1987). Technology alone is rarely the key to unlocking economic value. Companies create real wealth

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/intelligent-networking-business-processinnovation/44147

Related Content

Multi-Agent Architecture for Developing Cooperative E-Business Applications

Mahmoud Brahimi, Lionel Seinturierand Mahmoud Boufaida (2010). *Business Information Systems: Concepts, Methodologies, Tools and Applications (pp. 377-396).* www.irma-international.org/chapter/multi-agent-architecture-developing-cooperative/44084

Information Technology Prosumption Acceptance by Business Information System Consultants

Magorzata Pakowska (2014). Frameworks of IT Prosumption for Business Development (pp. 119-141). www.irma-international.org/chapter/information-technology-prosumption-acceptance-by-business-information-systemconsultants/78771

Ontology-Based Registries: An E-Business Transactions' Registry

Aikaterini Maria Sourouni, Spiros Mouzakitis, George Kourlimpini, Dimitris Askounisand John Psarras (2011). *E-Strategies for Resource Management Systems: Planning and Implementation (pp. 106-117).* www.irma-international.org/chapter/ontology-based-registries/45100

Ontology as Information System Support for Supply Chain Management

Charu Chandra (2008). *Handbook of Ontologies for Business Interaction (pp. 254-277).* www.irma-international.org/chapter/ontology-information-system-support-supply/19455

Application Service Provision: A Working Tool for Inter-Organizational Systems in the Internet Age

Matthew W. Guahand Wendy L. Currie (2005). Inter-Organizational Information Systems in the Internet Age (pp. 99-133).

www.irma-international.org/chapter/application-service-provision/24489