Case Study 1: Virtual Enterprise Management Systems and C-Commerce Trends

Ernesto Mancia

BUS 4200: Enterprise Information Management Systems

Instructor: Rodney Heisterberg

July 9, 2017
Problem Statement

In today’s competitive global environment, successful companies must possess a high level of flexibility and rapid response capabilities within their supply and value chains (Song, Ji, Qi, Zhang, 2012). With a high level of agility and value as the end goal, companies are looking to expand beyond their “four walls” by blending virtual enterprise and collaborative commerce to create a business ecosystem that improve the transfer of information and collaboration between the company, suppliers, stakeholders and customers (Figure 1). However, the increase in business interactions within such ecosystems also brings its own challenges as the participants attempt to find the right balance between maintaining existing core business structures and implementing collaborative flexibility, trust and commitment.

Figure 1. Business Ecosystems

Figure 1. Business Ecosystem actors. James F. Moore, Death of Competition, John Wiley & Sons, 1996
**Challenges & Opportunities**

In order to achieve agility on a global scale, most competitive corporations focus their core capabilities on their value chain management which is increasingly linked to a large business ecosystem of suppliers and vendors. As each enterprise operates as a component in the network of suppliers, customer, engineers and other specialized service providers, the collaborations between multiple partners are becoming necessary and virtual enterprise is emerging as a result (Kim, Son, Kim, Baik, 2006). However, creating or being part of a business ecosystem based on virtual organizations alone does not guarantee increased productivity or agility. To achieve enterprise productivity and agility, the enterprise as a whole needs generate high level of trust and commitment and to work efficiently by forming the right teams, making the right decisions, allocating resources correctly and effectively coordinating activities across the entire organization and business ecosystem (Heisterberg & Verma, 2014).

Such coordination involves trade-offs between maintaining the existing core business structure and implementing the collaborative flexibility that helps a virtual organizations succeed. For example, traditional ERP and supply chain management offer complete structure and no flexibility, while collaborative tools such as email, IM and SMS offer complete flexibility and no structure for working towards business trust, commitment and efficiency. In the middle of these two is business collaboration technology which tries to find the right balance between flexibility and structure (Figure 2). Collaborative commerce software coordinates interactions among various business ecosystem enterprises, suppliers, manufactures, distributors and costumers, to improve acquisition, delivery and payment for goods and services (Lamont, 2005).
Figure 2. The trade-off between flexibility and structure in business interactions

![Figure 2](image)

Figure 2 The trade-off between flexibility and structure in business interactions. Welty, B., & Becerra-Fernandez, I. MANAGING TRUST AND COMMITMENT IN COLLABORATIVE SUPPLY CHAIN RELATIONSHIPS. Communications Of The ACM. 2001

A collaborative virtual enterprise solution should also help build and maintain a high degree of trust and commitment between and within the virtual enterprises by leveraging the latest social tools and media available through their information technology partners.

**Business Solutions**

The introduction of information technology in business transactions has helped significantly reduce information disparity, transactions costs and foster business relationships by providing enterprises with the ability to transact, negotiate and interact through electronic means; by eliminating geographical barriers. The latest advancements in this technology has recently provided buyers and sellers with a high level of transparency by creating a tightly knit web between all the partners in the value and supply chain. Managers and business leaders are no longer tasked with projects that only involve their direct reports and internal business partners, but now include colleagues working within other businesses in the virtual enterprise. This
“physical” disconnected has made it harder for leaders to manage and foster trust and commitment within their virtual project teams. Therefore, it’s important that a collaborative commerce framework based virtual enterprise system promotes trust and commitment through the use of interaction technology that create real value for its users. According to Welty and Becerra-Fernandez (2001), trust and commitment can be managed within a collaborative commerce framework that contains the following concepts (Figure 3, Heisterberg & Verma, 2014):

- A strong definitions of roles - clearly define customer and performer
- A defined process of all business interactions necessary to achieve fulfillment of the customer request.
- Conditions of satisfaction - focused on completely satisfying the customer.

Additionally, the collaborative commerce framework should reflect the best of consumer-style social models, which preserves both context and history, is flexible and provides the appropriate media required for a given communication; preserving the ease and fluidity of e-mail, IM and SMS (Heisterberg & Verma, 2014). This interplay between trust and technology can reduce transaction costs and encourage trust, commitment and in turn, efficiency and agility within the virtual enterprise system and business ecosystem.
Lessons Learned

Application-to-application technologies, such as supply chain software, ERP systems and, to some extent, virtual enterprise systems are algorithmic; they provide information about the present and past. Person-to-person interaction technologies, such as collaborative commerce software, provide information about the present and the future commitments people have made to do work (Welty & Becerra-Fernandez, 2001). It’s this person-to-person interaction that is key to any virtual enterprise system’s success. Although the word “virtual” implies a physical disconnect, the disconnect should be transparent from a social and collaborative point-of-view. The individuals and entities that a deeply invested in the virtual enterprise systems should feel the same level of trust and commitment with all the members of the business ecosystem as they do with their own internal business partners.
**Why I Care**

With most of the inefficiencies eliminated from internal systems, companies must look for further process improvements outside of the enterprise. Therefore, it would not be prudent for future managers or business leaders, like myself, to continue working in isolation when executing business functions, despite their capability, knowledge and experience (Heisterberg & Verma, 2014). Business ecosystems founded on virtual enterprises and collaborative commerce will continue to play an important role within the business environment. It’s important for me to not only understand the technical aspect of what make virtual enterprise systems tick, but most importantly, the social aspects that make them valuable business tools.
References


