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Chapter XIII

Continuous Demand Chain Management: A Downstream Business Model for E-Commerce

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ABSTRACT

The demand side of supply chain management has drawn considerable research attention, with focus on disintermediation and syndication models. In this chapter, we evaluate new business models for establishing a continuous demand chain structure to streamline the logistics between the vendor and its direct consumers. The Continuous Demand Chain Management (CDCM) model of E-Commerce is one in which the physical products for sale are delivered directly to the customer without the use of a third party logistics provider, such as a common carrier, and in which the physical product may be continuously "pulled" from the seller. We present three submodels of CDCM. The CDCM Model A *applies to business-to-consumer (B2C) online sellers of physical goods who own or control their own delivery vehicles, and may*

provide further services to extend the value proposition for the buyer. The online grocer is a typical example of businesses in this category. The CDCM Model B *applies to business-to-business (B2B) sellers of physical goods, who also own a significant portion of their delivery fleet and deliver goods on demand to local distributors or business customers. Office supply E-Merchants provide an example of this model. The* CDCM Model C *applies to businesses that typically provide virtually instantaneous delivery of third party goods to consumers or businesses. Businesses in this category own or control their own delivery fleet and add value by delivering items within very short periods of time, usually one-hour delivery. In order to analyze these models, we conducted structured interviews with key senior managers of one representative business each in the* CDCM Model A *and* Model B *categories. We extensively surveyed recent literature on companies in the* CDCM Model C *category. We use the results of our study to analyze different aspects, such as revenue streams, cost structure, and operational peculiarities of businesses following the CDCM model and, finally, discuss the long-term viability of the sub models.*

BACKGROUND: E-COMMERCE BUSINESS MODELS

Traditionally, E-commerce activities may be business-to-consumer ("B2C," such as direct book sales to the general public by Amazon.com); business-to-business ("B2B," such as corporate procurement or supply chain management using a secure extranet); consumer-to-consumer ("C2C" such as a public auction at Ebay.com); or, within a business, (such as an employee intranet or an enterprise resource planning (ERP) system), where an electronic environment enables organizations to reengineer their internal and external functions and activities, increasing both efficiency and effectiveness. This taxonomy has been more recently extended with B2G (business-to-government), A2B (unattended appliance-to-business) (Charny, 2000), B2E (business-to-employee, as in the corporate intranet), and others.

As with older ("brick and mortar") markets, e-buyers must find sellers of products and services; they may need expert advice prior to purchase and for service and support afterwards. Similarly, e-sellers must find buyers, and they may provide expert advice about their product or service. Both buyers and sellers may automate handling of their transaction processing and "electronic financial affairs." Several categories of new types of businesses have evolved to take advantage of the unique opportunities within this new environment. There are a number of ways these new business models can be viewed. The following sections categorize these emerging business models.

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