

## Chapter 5.7

# Open Source Software Business Models and Customer Involvement Economics

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### ABSTRACT

This chapter is focused on the business economics of open source. From a strategic perspective, open source falls into a category of business models that generate advantages based on customer and user involvement (CUI). While open source has been a novel strategy in the software business, CUI-based strategies have been used elsewhere before. Since the success of e-commerce and e-business, CUI-based strategies have become far more prevalent for at least two reasons: Firstly, advances in information technology and systems have improved feasibility of implementation of CUI strategies and secondly, CUI-based economics appear to have often become a requirement for e-business profitability. This chapter presents a review of CUI-based competition, clearly delineates CUI antecedents and business value consequences, and concludes with a synopsis of managerial implications and a specific focus on open source.

### INTRODUCTION

Open source software applications and source code are developed cooperatively in an Internet-based peer-to-peer network or community of programmers (Hars, 2002). Some call the open source development process, therefore, also as peer-to-peer production (Wikipedia.org, 2006). The open source model has caught the attention of business strategists and financial analysts (and executives and shareholders of software firms), because open source developers devolve most property rights to the public, including the right to use, redistribute and modify the software free of charge. Some industry observers argue that this approach will emerge as the prevalent way to design and write software; others have been more cautious seeing open source as a niche model (Hars & Ou, 2001; *The Economist*, 2006).

Open source is new and old at the same time. It is a new concept in the software industry. However, the attractiveness of open source is rooted in mechanisms and economics that have fueled

business success in many other areas before. From a business strategy perspective open source fits into a broader category of business models based on customer and user involvement (CUI) that can provide superior economics.

A very visible example of this category of business models is Ikea, the Swedish furniture maker and retailer. Among consumers Ikea is known for its stylish yet affordable furniture. Among some business strategists and researchers Ikea is a prominent example of the economics of customer involvement, which has emerged as a key source of competitive advantage, particularly in the e-commerce area. Broadly speaking customer or user involvement describes a strategy that emphasizes engaging customers and user in business operations.

## BACKGROUND

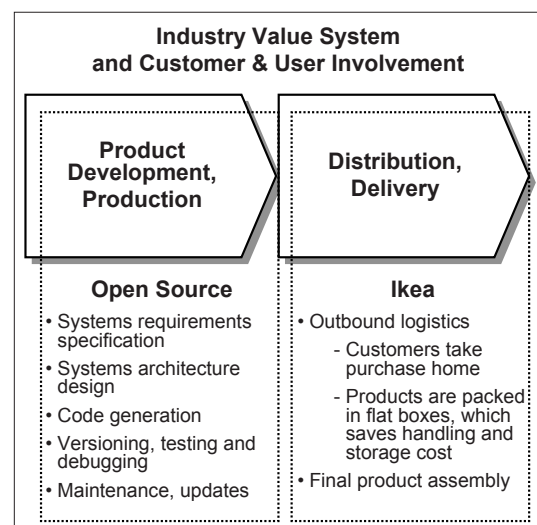
### “Ikea Economics”

In the case of the Swedish furniture maker and retailer, Ikea, customer involvement is integral to doing business and creating economic advantage. Ikea customers are involved in business operations in that they pick their purchase off the Ikea warehouse shelf, drive it home and assemble it themselves.

Figure 1 depicts a two-tier industry system following Porter’s value chain schematic (Porter, 1985). A product has to be developed, made, distributed, sold, and delivered. In the case of Ikea outbound logistics or delivery and final assembly are “outsourced” to the customer (see Figure 1). This saves Ikea cost compared to the competition that sells assembled pieces, which are bulky and, therefore, have to be home delivered. Furthermore, because Ikea furniture is assembled at the final destination, a customer’s home, products can be shipped in flat boxes without negative space, which further saves handling and storage cost throughout the entire supply chain and channel system. But

the advantage of customer involvement doesn’t stop here with merely lower cost. Customer involvement economics can be an enabler of other economic advantages. In the Ikea example, the cost advantage due to customer involvement is used or leveraged by splitting savings with the customer, effectively lowering product prices, often below the price of the competition. The lower sticker price makes stylish design affordable for a larger market, which increasing Ikeas market potential. This larger footprint, in turn, allows Ikea to benefit from another economic advantage, the one that has been the main economic engine of mass production, namely scale economies. In other words, at Ikea customer involvement has worked as a starter to ignite an economies of scale engine. This combination of customer involvement economics and scale economies have helped Ikea become the world’s largest furniture maker and retailer with 221 stores in 34 countries as of Spring 2006 (<http://franchisor.ikea.com>, 3/31/06). It also turned its founder, Ingvar Kamprad, into a multi-billionaire. *Forbes* magazine recently estimated Mr. Kamprad’s fortune at \$28

Figure 1. Open source and Ikea: Two examples of customer and user involvement



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