

## Chapter 7.9

# E–Business Models in B2B: A Process–Based Categorization and Analysis of Business–to–Business Models

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### ABSTRACT

The business models in the business-to-business (B2B) e-commerce and their effectiveness have been a major topic of research in the recent years. Due to the variety of existing models, it seems difficult to find a widely accepted categorization that can be analysed and assessed. An in-depth study that provides a process-based approach to B2B e-commerce is presented and illustrated with examples from industry. A comparative examination of both the buy and the sell side based on a process-related approach provides extensive insights for further comparative research

and evaluation of products/services and models. Selling services and e-procurement using Web-electronic data interchange (EDI) as sub-models are clarified using real-world examples. Problems and trends in the B2B area form the conclusion of the examination with suggestions for further research.

### INTRODUCTION

The economic impact of the Internet is like the oil shock in reverse. The jump in oil prices during the 1970s increased inflation and pushed

the world into recession. However, the Internet reduces the cost of information. This has positive economic effects, since it makes it easier for buyers and suppliers to compare prices and eliminate the middlemen between firms and customers, lowers transaction costs, and reduces entry barriers. Economists have an interesting argument: the main reason why firms exist is to minimize transaction costs. These reduced transaction and communication costs can lead to both bigger and smaller optimal firm sizes. Smaller firms can buy services cheaply from outside, and this reduces the barriers to entry.

The Internet can link up supply chains, make it easy to place and track orders, and display specifications at the click of a mouse. Hence few companies are willing to miss out on the benefits e-commerce offers. So, it is certain that the Internet reduces costs, increases competition, and improves functioning of the pricing mechanism. The Internet moves the economy closer to the theory of perfect competition, which assumes abundant information, zero transaction costs and no entry barriers. Analysts feel markets should become more efficient as the Internet increases the flow of information between buyers and sellers. This, in turn, should ensure efficient allocation of scarce resources.

E-commerce increases competitive intensity by allowing business customers to consider every available alternative to every offering. Suppliers no longer compete with two or three familiar competitors but with every company in the world that has a web site and a comparable product or service. E-commerce also undermines traditional sources of advantage based on asymmetries of information. In the past, sellers derived some advantage by knowing more than their buyers. Such an advantage came from knowing more about the product, the cost availability of raw materials and components, and the efficiency of their own manufacturing processes. Each step in the supply chain had a lock on its own information, which made each link more defensible but the chain as a whole less efficient.

The Internet does away with much of this privileged access to information, shifting the competitive emphasis away from secrecy and toward transparency and the absolute comparative value of the offering. Distribution and sales channels have always conveyed a certain amount of information back to suppliers. However, bandwidth, precision, ease, speed, and manageability of the information flowing in both directions are orders of magnitude greater on the Internet. The interactive exchange of information, design requirements, component specifications, cost tracking, logistics oversight, service requests and troubleshooting advice permits an unprecedented level of customization. Competition on this level will necessarily become the rule.

As B2B e-commerce becomes one of the most profitable applications for the Internet, we need to understand the implications of the many technological and market changes that will usher in an entirely new way of doing business. The B2B e-commerce revolution includes e-procurement, B2B exchanges, and business infrastructure relationships.

E-procurement involves firms selling supplies, equipment, materials, and services with a streamlined online purchasing function that often eliminates traditional intermediaries, thereby reducing costs and cycle times while offering greater flexibility and responsiveness to changes in demand. Web-based supply chain management networks improve coordination between trading partners by linking a firm's forecasting and production planning systems with its suppliers' and distributors' systems. They can create dramatic savings and quality improvements.

B2B exchanges include various categories of marketplaces, including vertical market portals ("vortals"), hubs, and various types of auctions. A single infomediary (i.e., an industry consortium or a third party) brings together many buyers and sellers within a specific vertical market, such as plastics, steel, or industrial chemicals, charging a commission on all transactions. Hundreds

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