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Computers in Industry 49 (2002) 47–58

**COMPUTERS IN
INDUSTRY**

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B2B eMarketplaces and small- and medium-sized enterprises[☆]

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Abstract

Since February 2000, we have seen numerous announcements from large companies such as General Motors, Boeing, Ford and British Airways saying they are creating or participating in Business-to-Business (B2B) eMarketplaces. Clearly, these companies believe they are going to derive benefits in supply chains from these trading exchanges. In analyzing the situation, the potential benefits to large organizations are obvious. However, the benefits to suppliers, who are usually SMEs, are less obvious. This paper draws on the author's experience in working with Boeing to build an aerospace hub in Asia, and addresses the problems that face SMEs when they are asked to participate in exchanges. The paper includes an outline for a realistic business case that includes supplier considerations, and ends with a proposal for creating an exchange environment that makes it easier for SMEs to participate.

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Keywords: Marketplace; Exchange; Hub; Supplier relationship management (SRM); Private exchange; Public exchange; Consortium exchange

1. Introduction

The exchange advocate (usually a large supply chain prime) stresses the joint benefits of participation. That is, benefits are promised for suppliers as well as the prime. These benefits are usually presented as greater access, more opportunities, and a “leveling of the competitive playing field.” However, is this the case? Is it possible that rather than leveling the playing field, eMarketplaces could reinforce the advantages of big companies? Supply chain cost reduction for the prime is a direct threat to those suppliers who are

delivering less added value, since they most likely will be replaced by a competitor in the eMarketplace.

This paper analyzes eMarketplace incentives from the point of view of the SME, focusing on two related factors:

- the profit squeeze, and
- the technology squeeze.

The first concept, the profit squeeze, is related directly to the economic incentives for participating in trading exchanges. How do suppliers maintain profit margins while supply chain costs are being reduced? The second concept, the technology squeeze, relates to the pressures faced by suppliers as they receive multiple exchange participation mandates from many large supply chain leads.

The presentation argues that exchanges cannot be successful unless there are benefits for large companies and SMEs, which is different from the prevailing

[☆] Keynote address at the Fourth International Conference on Stimulating Manufacturing Excellence in Small and Medium Enterprises, Aalborg, Denmark, 2001. Accepted for publication in *Computers in Industry*.

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Electronic Marketplace

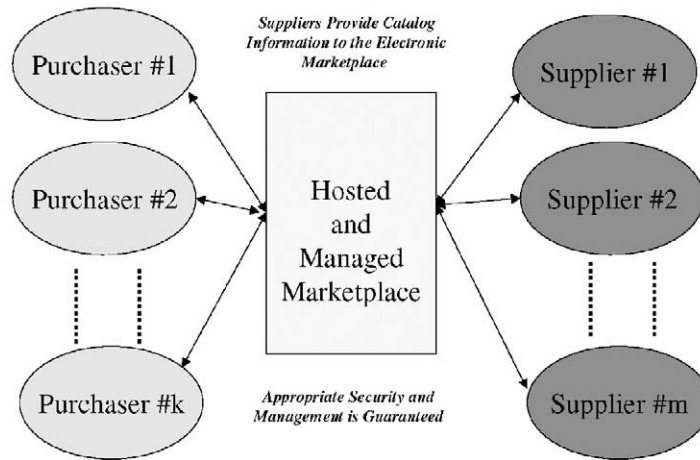


Fig. 1. Marketplace/exchange concept.

approach to exchange implementation. SMEs will always participate at some level, especially if an important business relationship must be preserved. However, if larger profit margins are available by exercising traditional distribution channels, suppliers will focus on traditional channels; hence, diminishing projected exchange transaction volumes. This paper identifies areas of common benefit for large companies and SMEs, and provides some insight into the future of public and private eMarketplaces, including a proposal for locating an exchange at a first-tier supplier, where the business model is more favorable to SMEs.

2. Marketplaces, exchanges, and hubs

While these terms are often used interchangeably, they generate confusion among managers. The following conventions are used in this paper. A marketplace is a virtual location for buyers and sellers to meet to execute a commercial transaction. Stahl provides a typical definition:

Vertical electronic marketplaces gather multiple products and services to bring new levels of efficiency to various industries: chemicals, autos, plastics, aviation, seafood, steel, medical products, paper, and many more. These marketplaces cut

costs for business purchasers through increased choice and price competition, while giving sellers a place to unload inventory [1].

The exchange could be public (open and neutral) or private (a dedicated supply chain). A number of services could be offered by an exchange, including spot purchasing, auction capabilities, catalog hosting, or other procurement and non-procurement related offerings. The concept is illustrated in Fig. 1.

By the convention of this paper, a hub is a more specialized concept, providing document exchange among organizations.¹ The general concept is what is known as any-to-any document swap. A business document is received in one format, translated to another format at the hub, and passed to another trading partner. In most cases, some opportunity for financial settlement is also provided. The document could be any flavor of XML, X12, EDIFACT, e-mail, fax, or even a proprietary format. The hub could be inter- or intra-organizational, providing information as required to support eBusiness transactions. Of course, the hub concept is most valuable for processing routine release/delivery orders that are executed under an existing contract.

¹ An exchange is more comprehensive than a hub. A hub is typically focused on the execution of release or delivery orders against a pre-existing contract. An exchange may be used to establish a contract (e.g. through an auction) or to facilitate spot purchasing (e.g. from a catalog).

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