

# THE SPECIFICS OF SUPPLY CHAIN INTEGRATION WITH SMALL AND MEDIUM-SIZED ENTERPRISES

## Posebnosti integriranja dobavne verige z malimi in srednje velikimi podjetji

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### Abstract

Although larger organizations have invested significant amounts of money to integrate their supply chains, the development of supply chain integration with small and medium-sized enterprises (SMEs) is slow-moving. For SMEs, integration is a significant problem due to high costs and technology requirements. Hence, they follow a different approach to integrate their supply chains. Full integration of supply chains from the procurement of raw material to the distribution of finished goods is considered to be a crucial issue as nowadays the competition among enterprises is about supply chain efficiency, which is based on tighter cooperation of all partners in the supply chain process. This paper attempts to explore this topic by exploring how SMEs integrate their supply chains and by identifying the benefits of integrating supply chains.

**Keywords:** supply chain, integration, SMEs, e-business

### Izvleček

Čeprav so velika podjetja investirala znatne vsote denarja v integracijo svojih dobavnih verig, se integracija dobavnih verig z malimi in srednje velikimi podjetji (MSP) razvija zelo počasi. Za MSP je integracija velika težava zaradi visokih stroškov in tehnoloških zahtev. Prav zato pri integraciji svojih dobavnih verig uporabljajo drugačne pristope.

Popolna integracija dobavne verige, od nabave surovin do dostave končnih izdelkov, je v današnjem času ključnega pomena, saj temelji konkurenca med podjetji na učinkovitosti dobavne verige, kar zahteva tesnejše sodelovanje vseh partnerjev v njej. V prispevku skušamo raziskati, kako MSP integrirajo svoje dobavne verige in katere so koristi, ki izvirajo iz te integracije.

**Ključne besede:** dobavna veriga, integracija, mala in srednje velika podjetja, e-poslovanje

## 1 Introduction

In an increasingly international marketplace, many companies are finding that prosperity is best achieved from specialization, as opposed to diversification. Although the majority of the world's largest companies continue to provide multiple services to numerous markets, they now purchase many components and goods from smaller companies that serve one particular niche. As the global marketplace continues to develop, SMEs provide an effective tool for economic growth through participation in global supply chains.

SMEs drive economic development by creating a valuable source of employment; they account for 60% to 70% of employment in OECD countries. Unfortunately, SMEs fail much more frequently in these economies. They repeatedly encounter barriers to internationalization, although several of these obstacles could be eliminated through successful integration into the international supply chain.



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It appears that larger firms have to be smarter in their e-business initiatives, differentiating between chains and within chains on the type of information they wish to integrate and how they achieve this (Harland, Caldwell, et al., 2007). Within chains, if SMEs are to remain strongly connected, this cannot easily be devolved to intermediaries such as e-exchanges as SME engagement with them is low. It also cannot be easily passed over as a black box technology without support. Rather, larger firms need to build appropriate information integration bridges to smaller supply chain members, which might require using different technologies that enhance the flows and capture of tacit, informal information. Strong bridges to SMEs would carry mutual trust. Trust toward the trading partner is a major factor leading firms to share knowledge with partners (Ke & Wei, 2006).

#### 4 Conclusion

Conflict exists over how SCM affects SMEs. On one hand, SCM can provide quality, cost, customer service, leverage, and even risk reduction benefits for the SME. On the other hand, SCM exposes the SME to greater management and control hazards while reducing its private differentiation advantages. True vertical integration is generally not an option for the SME; SMEs are unlikely to need to consider antitrust implications in their alliances; SMEs are more vulnerable to holding specific assets and more sensitive to contract costs; SMEs are usually in a worse bargaining position; SMEs have less reputation, instilling less trust, due to newness; SMEs face greater spillover problems as their advantages are more knowledge and product based and there are likely to be cultural differences between SMEs and larger enterprises.

Different authors have demonstrated that a considerable gap exists between larger enterprises and SMEs in nearly all aspects of current and future SCM-related methods. If this gap is not reduced, SMEs are likely to lose transaction efficiency compared to their larger counterparts. Compared with larger enterprises, SMEs are less satisfied with the methods applied today and less optimistic about the future requirement fit. They are less concerned with methods supporting SCM on product quality, rationalization of operations, and capital cost rationalization. SMEs are also less focused on system integration with other actors in the supply chain; and less centered on EDI and e-based solutions both upstream and downstream the supply chain. Generally, larger companies expect their business to be more technology driven in the years to come whereas SMEs expect less change. In conclusion, SMEs appear to be far behind in the technology and system adoption that is considered vital to sustain SCM implementation. Thus, SMEs face a significant risk of losing competitive power. SMEs seem to be lagging far behind larger companies in terms of competing by means of effective supply chains.

Many developing countries are plagued by an insufficient business infrastructure. Telecommunications systems

are outdated or cost-prohibitive to most SMEs, technologies are antiquated, and access to the internet is often non-existent. Developing a stronger, modernized infrastructure dramatically improves the capability of SMEs within these countries to trade internationally. Moreover, specific development of an internet-capable landscape, which offers instant access to a global network of consumers and producers, can enhance SME participation in international supply chains and the global marketplace. The presence of transnational corporations (TNCs) provides a critical means through which SMEs can specialize and carve out a niche in the international supply chain (also known as a backward linkage). Integrating with TNCs will help SMEs when joining international supply chains.

However, the technology is only one part of the story. Those who wish to create e-business-enabled supply chains must appreciate and support the business models of chain actors and participants, which vary by size of chain actor and position in the supply chain. A traditional operations management focus on the component parts of the supply process will fail to deliver supply chain integration if strategies in the chain are not aligned. It is likely that some information integration bridges to and within supply chains should carry education, training, and investment support to strengthen ties with critical smaller firms.

SMEs have a reputation as boosters of employment, economic growth, and economic dynamics. One of the most important means through which SMEs are able to make these contributions is their ability to realize innovations. Therefore, in both developed and developing countries, many efforts have been made during the last few decades to stimulate SMEs to realize innovations. SMEs have been encouraged to make use of funding schemes and to utilize the services of knowledge centers. However, despite these efforts, knowledge is lacking about the nature and extent of SME support needs and the mechanisms for delivering it effectively. This holds true for supply chain integration needs as well.

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