

Chapter 5.5

Electronic Intermediaries Managing and Orchestrating Organizational Networks Using E-Services

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ABSTRACT

Organizations increasingly cooperate in organizational networks. Electronic intermediaries can provide all kinds of e-services to support the creation and management of such networks. While there has been substantial discussion on intermediaries matching demand and supply, there has been little analysis in relation to the management and orchestration of organizational networks. In this article we analyze an intermediary that uses e-services for orchestrating a network in the consumer electronics industry. The empirical results show that the coordination and management of networks requires specific expertise and skills which result in the rise of intermediary specialized in orchestrating such organizational networks. The primary value creation activity of the intermediary is leveraging the products, activities and knowledge of the specialized com-

panies and providing e-services for orchestrating the organizational network to create short lead times, improve customer responsiveness and ensure adaptability.

INTRODUCTION

Organizations increasingly find that they must rely on effective supply chains formed in networks, to successfully compete in the global market and networked economy (Hagel-III, Durchslag, & Brown, 2002). During the past decades, globalization, outsourcing and all kinds of information and communication technology have enabled many organizations to successfully operate solid collaborative networks in which each specialized business partner focuses on only a few key strategic activities.

From a system's point of view, a complex network structure can be decomposed into individual components and firms that have to be coordinated (Fan, Stallaert, & Whinston, 2003). In such a network complimentary resources exist in a number of cooperating and sometimes competing companies. One of the main advantages for companies cooperating in a network is the ability to deliver products by selecting the resources and appropriate companies who are able to deliver these service elements (Provan & Milward, 1995). The aim of networks is to provide a range of products, which a single organization is not able to offer.

Such a network needs to be coordinated that can be done by using of all kinds of e-services. E-services are services that are produced, provided and/or consumed through the use of ICT-networks and also includes e-services for supporting the purchasing and delivery of physical goods (Scupola, 2008). Such e-services are provided and used by various organizations in a network to coordinate their interdependent activities. The larger the number of companies the more complex becomes the management of organizational networks. Furthermore the coordination overhead increases the friction costs. To satisfy and respond quickly to customer demand, effective management is necessary to strengthen the competitiveness of the network.

It is often predicted that by using the Internet the number of traditional intermediaries will be reduced (Gellman, 1996; Malone, Yates, & Benjamin, 1987) and new types of electronic intermediaries will come into existence (Del Aguila-Obra, Padilla-Melendex, & Serarols-Tarres, 2007; Janssen & Verbraeck, 2005; Sarkar, Butler, & Steinfield, 1995). Recently it is suggested that intermediaries have evolved from being merely matchmakers to providers of a set of e-services (Bhargava & Choudhary, 2004; Wise & Morrison, 2000). Bhargava and Choudhary investigated information intermediaries and Wise and Morrison analyzed intermediaries in business exchanges. In

this research we focus on intermediaries providing e-services to manage organizational networks.

Although there is much research in the field of intermediaries operating electronic markets and involved in matching supply and demand there is little work analyzing the range of e-services provided by intermediaries in the management and orchestration of organizational networks. We opted for case study research to analyze how and why e-services are used. Case study research is well-suited for investigating a contemporary phenomenon in its natural setting, especially when boundaries between phenomenon and context are not clearly evident (Yin, 1989) and answering 'how and 'why' questions (Checkland, 1981). This paper explores the concept of orchestrating intermediaries and demonstrates the potential by analyzing a case study in the consumer electronics industry. In the following section an overview of the relevant, state-of-the-art theoretical frameworks around intermediaries is provided. Based on these theories a case study is analyzed and discussed in section. Next, the findings are discussed in the light of these theories. Finally, conclusions and recommendations are drawn.

THEORETICAL BACKGROUND

Intermediaries

The organizational network setting can be described using three main types of players, which can be labeled as intermediary, service provider and service requester. *Service providers* can be all kind specialized organization involved in the delivery of a physical product or service. This implies that also manufacturing and assembling companies are viewed as service providers, as they provide a set of services that result in the production and delivery of a product. *Service requesters* are the consumers who buy the product or services. An intermediary can be defined as an autonomous organization aimed at bringing to-

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