

## Chapter 7.12

# The Roles of Online Intermediaries in Collective Memory–Supported Electronic Negotiation

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### ABSTRACT

Following the emergence of the Internet, electronic negotiation has become an alternative to face-to-face negotiation. The rise of websites such as electronic marketplaces or electronic brokerages also fueled the popularity of electronic negotiation. The current forms of negotiation support systems (NSS) used to support many electronic negotiations offer very little support for historical negotiation data. In order to address this issue, the idea of a collective memory support in negotiations has been proposed in recent years. This paper highlights the use of an online intermediary as an effective location from which collective memory support can be offered. The paper proposes that an intermediary based collective memory support will increase confidence in negotiation, reduce overall negotiation time, and strengthen trust between negotiators.

DOI: 10.4018/978-1-59904-831-4.ch017

### INTRODUCTION

The emergence of the Internet has welcomed thriving electronic commerce as evidenced by the rising trend of both the business-to-business (B2B) and business-to-customer (B2C) trade. Both B2B and B2C transactions were expected to be over \$7 trillion annually by 2005 (Grover and Teng, 2001). By 2006, 75 percent of Fortune 1000 companies were expected to increase their investments in e-commerce to draw new customers and increase customer satisfaction rather than reduce the cost of sales (Sarner, 2004). This has convinced that the emergence of the Internet not only supports electronic transactions, but also acts as the platform through which services to businesses and customers are delivered (Kim, Jayaraman, and Rao, 2003). One of the emerging business enterprises to facilitate electronic transactions among parties is online intermediaries or e-marketplaces which have

become increasingly popular over the years as an alternative to traditional forms of commerce (Lee, 1998, Walczak, Gregg, and Berrenberg, 2006). Electronic brokerage, one form of online intermediary, accounted for more than 33% of the retail stock trades (Konana, Menon, and Balasubramanian, 2000). They were expected to generate 48% of online sales by 2005 (Forrester Research, 2001).

The emerging class of middlemen and intermediaries is expected to change the industry structures (Langdon and Shaw, 2002). As the World Wide Web has become the most popular information dissemination channel (Yang and Chung, 2003), the growth of the Internet has largely redefined the role of these intermediaries in the market. The emergence of online networks increases free flow of information and enables direct communication among buyers and suppliers, thereby reducing or replacing the role of the traditional intermediaries. The buyer-supplier interaction becomes easier and faster, and the transaction cost gets reduced (Grover and Ramanlal, 1999). However, the proliferation of the worldwide network enables the integration of multiple markets. As a result, the market becomes more consolidated as a whole, and the overall size of the market increases, thereby involving many participants or competitors (Grover and Ramanlal, 1999) and expanding the amount of information available.

This increased amount of available information creates the problem of information overloading (Yang and Chung, 2003). This reveals the need for an online intermediary to organize the huge pool of information and facilitate the transactions among the parties. Moreover, the need for an online intermediary is enhanced in the B2B environment, where the interaction among businesses involves several steps before the business activity can be finalized in the form of a written agreement. An example is a contract, such as outsourcing or partnership formation, which is the final outcome of the negotiation among business parties. The rising number of participants,

such as application service providers who offer a similar service in the electronic market, increases the customer's effort in searching for the provider who can offer the service that meets the customer's expectation the most, e.g., in terms of service reliability or price.

Although business agreements can be achieved through face-to-face interactions, electronic negotiation has emerged as an alternative following the widespread use of the Internet. This alternative not only encompasses the functionalities of traditional negotiation, but also reduces the inconvenience that may be experienced in the face-to-face negotiation. For example, with an asynchronous medium such as e-mail, a negotiator does not have to respond or propose a counteroffer immediately after receiving the proposal from the opponent (Maruca, 2000). As a result, the negotiator can evaluate the offer thoroughly, can negotiate with multiple partners simultaneously, and may achieve a better negotiation outcome within a shorter overall time period. The emergence of electronic negotiation in electronic commerce does not, however, lessen the need for an intermediary. The intermediary can facilitate the search for a prospective partner for negotiation, and mediate the negotiation activities. Although businesses may search for a possible candidate and initiate the negotiation by themselves, time and cost constraints may not allow the companies to find the best candidate or benefit the most from the negotiation. Furthermore, once the negotiation is initiated, both parties have to overcome the conflicting interests of the opponent in order to complete the negotiation successfully. This calls for the use of a negotiation support system (NSS) by the online intermediary so that the negotiation process can be coordinated and accelerated.

In addition to using the NSS, the concept of employing a collective memory for negotiation has been advocated in literature (Jamil and Paul, 2001; Maruca, 2000). The support from this collective memory, it is argued, provides more meaningful information or knowledge to

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