# Chapter 2.10
# Outsourcing and Multi–Party Business Collaborations Modeling

**Lai Xu**
*Utrecht University, The Netherlands*

## ABSTRACT

To remain competitive, enterprises have to integrate their business processes with their customers, suppliers, and business partners. Increasing collaboration includes not only a global multinational enterprise, but also an organization with its relationship to and business processes with its business partners. Standards and technologies permit business partners to exchange information, collaborate, and carry out business transactions in a pervasive Web environment. There is however still very limited research activity on modeling multi-party business collaboration underlying semantics. In this article, we demonstrate that an in-house business process has been gradually outsourced to third parties and analyze how task delegations cause commitments between multiple business parties. Finally, we provide process semantics for modeling multi-party collaborations.

## INTRODUCTION

Outsourcing has been a worldwide phenomenon for the past four decades (Gereffi & Sturgeon, 2004). Growth of outsourcing is driven by a number of business forces such as competition escalation, organizational reengineering, and new technology trends. Over the past decade, the number and quality of suppliers offering price-competitive and high-quality services has increased significantly. The organization is able to focus on the company's main skills.

In addition, large sizes of organizations are no longer a necessary advantage in production of products or services, and neither is small size—quality, flexibility, agility, and the ability to meet diverse consumer demands count for more (Drucker, 1992). Firms now respond to change by outsourcing when they face heightened competition pushes. Traditionally, after the part of business services is assigned, the initial

organization can hardly monitor or get to control of the outsource services. Even a minor change of service is not easy.

The advent of global digital networks, the Internet, the World Wide Web, and more recently, Web services, has drastically lowered the cost of coordination between firms and improved the possibilities for organizations and individuals to communicate in an effective and standard manner. New environment, newer technology, and rapid technological change provides an avenue for reducing human and equipment resources that do not fit with a company's strategic direction for meeting the latest needs with up-to-date resources at competitive rates by outsourcing those business processes. Furthermore, the current technologies are also allowed to get control of outsource business processes.

Rather than outsourcing an entire business process to a single supplier, multi-souring--using more than one supplier--is used. A classic example is Alcatel. Alcatel has outsourced supply chain management and R&D functions to Wipro, and its SAP and ERP environment work to Infosys (Pinto & Harms, 2005).

Business process multi-outsourcing causes business collaboration. As business collaboration increases between different enterprises, the need for semantics also increases as a mediator between the structure and content of the different knowledge bases. There will be a need, not just for semantics to mediate the structure and content, but also for the services themselves. Semantics of multi-party business collaboration has been recognized as a major problem for a long time, but relatively little fundamental research has been devoted it. From the semantic perspective, we model the way organizations cooperate in a multi-party involved situation. A high-level view of the collaboration is provided, in terms of the parties involved, the roles they perform and the way they are related, also in terms of business functions they fulfill and the interactions between those.

In the rest of this section, we argue the reasons why multi-party business collaboration needs to be modeled. In the rest of this article, we provide the definitions of outsourcing, business transactions, and business collaborations. The following section starts by elaborating how an in-house business process has been gradually outsourced by using a multi-party business collaboration case. Moreover, we explain the issues in multi-party business collaboration modeling. We furthermore define all concepts needed for modeling multi-party business collaborations. We first introduce our meta-model of multi-party business collaboration language, which defines the attributes and relationships of the modeling concepts. Then, multi-party collaboration language is given with a concrete graphical syntax. We also evaluate related work in this area. The article concludes with a summary and directions for further research.

## The Benefits of Multi-Party Business Collaboration Modeling

Outsourcing business processes is highly complex. They consist of several organizations interconnected through networks and working together using sophisticated computer applications. When trying to understand, reorganize, or develop systems to support multi-party business collaborations, one is confronted with that complexity. As in any modeling activity, modeling multi-party business collaboration can help to deal with this (Rechtin & Maier, 1997; Wolstenholme, 1990).

There are many possible reasons to create a model of multi-party business collaboration. The goal of multi-party business collaboration modeling may be

- To understand the functioning of an existing multi-party business collaboration.
- To provide a starting point for analysis of requirements of design and for the redesign of an outsourcing business process.

18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/outsourcing-multi-party-business-collaborations/36166

## Related Content

### Scales and Dynamics in Outsourcing

Iva Miranda Piresand Torunn Kvinge (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications  (pp. 340-349).*

www.irma-international.org/chapter/scales-dynamics-outsourcing/36152

### An Application of Multi-Criteria Decision-Making Model for Strategic Outsourcing for Effective Supply-Chain Linkages

N. K. Kwakand Chang Won Lee (2007). *Outsourcing Management Information Systems (pp. 324-343).*

www.irma-international.org/chapter/application-multi-criteria-decision-making/27995

### Outsourcing and Multi-Party Business Collaborations Modeling

Lai Xu (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications  (pp. 558-577).*

www.irma-international.org/chapter/outsourcing-multi-party-business-collaborations/36166

### Transformation from the Information Age to the Conceptual Age: Impact on Outsourcing

A.B. Patki, Tapasya Patkiand Mahesh Kulkarni (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications  (pp. 2293-2301).*

www.irma-international.org/chapter/transformation-information-age-conceptual-age/36278

### Information Technology as a Service

Robin Qiu (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications  (pp. 71-88).*

www.irma-international.org/chapter/information-technology-service/36138