Chapter IV

Requirements Engineering for Integrating the Enterprise

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Abstract

In an era of global economy, an enterprise must demonstrate agility in order to stay competitive. Agility requires continuous monitoring of the ever-changing business landscape and quick adaptation to that change. Often times, this means businesses must merge to form strategic partnerships allowing them to provide new products and services. Such partnerships create the need for critical information to flow seamlessly across the newly formed enterprise and be available on demand for effective collaboration and decision making. However, the legacy business information systems that each partner brings into the newly formed enterprise typically have a very narrow focus serving the needs of a single business unit within an enterprise. As such, it becomes necessary to integrate multiple different systems before the right information can be delivered to the right person at the right time. Integrating disparate systems from a technical perspective is not hard to achieve since the Web-services standard is fairly mature and provides an open infrastructure for software...
systems to interoperate. One must, however, first understand the need and level of cooperation and collaboration among the different segments of an enterprise, its suppliers, and its customers in order for this integration to be effective. This chapter motivates the need for model-driven requirements engineering for enterprise integration, reviews the research to date on model-driven requirements engineering, and examines a case study on integrating health-care providers to form integrated health networks to gain insight into challenges and issues.

Introduction

The global economy and electronic commerce are creating new opportunities for conducting business. It is becoming commonplace for organizations to form strategic partnerships for collaboration with other organizations and creating value propositions that will give them a competitive edge. Information technology can play a key role in such endeavors, enabling disparate segments of the newly created enterprise to work together effectively by providing the right information to the right person at the right time. Such a seamless flow of information has become possible through the use of Internet and Web services. The technologies have in fact created innovative ways of conducting business. Interactions are now possible between the following entities.

- **Customers and businesses:** This allows customers access to business services and goods over the Internet in the comfortable setting of their home at virtually any time of the day, and allows businesses to disseminate promotional information to their customers. Customer-to-business (C2B) and business-to-customer (B2C) applications have become almost essential for any business to stay competitive.

- **Businesses and suppliers:** This allows the creation of electronic supply chains. These supply chains automate the flow of goods, raw materials, and parts, creating a sort of assembly line with each participating business entity along the way adding some value to create the final product. Business-to-business (B2B) applications make it possible to optimize this flow so that warehouse space and business capital can be used in the most efficient manner and the product demand can be fulfilled in real time.

Technology, however, is only an enabler; it creates the opportunity but cannot provide guidance for how the business is to be conducted to take advantage of the opportunity. It, therefore, becomes important to understand the new business model...
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