Chapter 16

Functional Requirements – Workflow

OVERVIEW

In Chapter 4, we reviewed how workflow management systems might be considered an integral component of IDCM architecture. We discussed the high-level functionality of workflow management systems and considered some of their capabilities.

We noted that workflow management systems extend the functionality of core document and Web content repository services by enabling the controlled distribution of documents for review and approval. Furthermore, they also support controlled processes for publishing new or updated content to Internet and intranet Web sites.

Our primary objective in this chapter is to extend our discussion on the role of workflow within the context of IDCM by reviewing the types of functional requirements to be specified when analyzing and determining business and technology options for integrating workflow with document and content repositories.

REQUIREMENTS ANALYSIS

The analysis of requirements and development of specifications for the use of workflow for business process automation, including document/Web content review and approval processes, should follow a similar approach to the framework proposed by Sommerville (2001, p. 98), which we discussed in Chapter 10. This approach encompasses user and system requirements, with the latter being divided into three subsets: functional, nonfunctional, and domain (Sommerville, 2001, p. 100).
User Requirements

Approach

We discussed an approach to analyzing and determining user requirements for IDCM solutions in Chapter 11. The principles of defining user requirements at the strategic, operational, and tactical levels applies to workflow management applications, with the general exception of ad hoc workflow processes. The outcome of this analysis is a specification that contains the business models and the specific application requirements for the workflow management system.

Process Modeling

It is important to model and define the workflow routines required, or at best, a sample of workflow modules required when seeking proposals from suppliers, so that there is a clear understanding of the types of workflow processes envisaged for document or Web content review and approval. This will give an enterprise better understanding of its own requirements for workflow and will assist suppliers in giving a firm price when submitting proposals for the development of initial workflow modules.

Organizations may find business process modeling tools useful when analyzing and modeling workflow requirements. The techniques and tools that might be useful during the development of a requirements specification were discussed in Chapter 6. The acquisition of business process modeling tools (which might be available as part of a workflow product) provides enterprises with a tool for the definition of existing and required workflow processes. The complexity of the workflow requirements may dictate the type of functionality required from the process modeling toolkit, ranging from an uncomplicated drawing tool to more sophisticated business process modeling tools that provide simulation and analytical functionality.

Change Management

There are potential cultural and political implications that may need to be managed during consideration of workflow. Workflow systems have the capability to enable owners of the workflow to stipulate time constraints and also provide the tools by which to monitor the progress of workflow during the entire business process and obtain performance reports. Individual employees, workgroups, or staff associations may view planned implementation of workflow as a means of imposing management controls over the users of the system, i.e., the employees.

Enterprises also need to consider the interactions of individuals within social groups and interactions between groups, and there is a need for clear and open communication from project initiation to project completion. Enterprises need to closely examine the cultural and political implications of introducing workflow, and this is best carried out during a feasibility study, when business and technology solution options are considered.

Functional Requirements

The functional requirements of the workflow management system are defined in a specification that sets out expected functionalities, how they meet user requirements, and how they support the business process model. We discuss some key points that are relevant to functional requirements analysis for workflow systems in the remainder of this
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