Chapter 19
Lightweight Workflow

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ABSTRACT

This chapter describes lightweight workflow as a possible approach to counter many of the issues related to the introduction and sustained use of operational workflow management systems. Aside from a description of the essential features of lightweight workflow, this chapter also provides a reflection on the application of lightweight workflow in practice. Lightweight workflow is a very relevant direction to be aware of for practitioners who consider the use of workflow technology. Researchers may find inspiration from this chapter to further the adoption of workflow management technology.

INTRODUCTION

Workflow management systems (WFMSs) are among the core technologies associated with process management. At the introduction of this technology, some two decades ago, many expected that the technology would be widely adopted by industry (White & Fischer, 1995; Koulopoulos, 1995). But despite its supposed effectiveness to support operational business processes in their execution (van der Aalst & Hee, 2002), it is fair to say that the technology has not lived up to this expectation yet.

It can be argued that the reason for this is that the application of a WFMS makes business process execution too rigid, obstructing users to react freely to the breakdowns occurring during their evolution (Bowers et al., 1995). Some blame the rigidity on the use of formal workflow models; others on the strict coupling between modeling and execution (Dourish et al., 1996). Especially the lack of flexibility to deal with unforeseen situations is a very widely felt shortcoming of many commercially available

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A workflow management system (WFMS) is a software system that supports the specification, execution, and control of business processes (Jablonski & Bussler, 1996; van der Aalst & Hee, 2002). Conceptually, it can be said to do so by separating the logistics of the business process – as managed by the WFMS – from the content of the process – which is managed with other applications and carried out by various types of performers. The logistic side of a business process is taken care of by a WFMS on the basis of a predefined workflow plan, which can be used to hand out work items to the right performers in the right order, at the right time. The advantages of using a WFMS in this way are fourfold (Reijers et al., 2003):

1. Less coordination effort: The WFMS liberates human actors from the routine work they need for coordination – it’s the WFMS that will take care of this.
2. Higher quality: The WFMS will offer to actors at least the work which is required to deliver the preferred quality of service – the plan describes what should be done at a minimum.
3. Higher efficiency: The WFMS will offer to actors at most the work which is required to produce an acceptable result – if the plan did not cover a step under certain conditions, it is in principle not required for the case under consideration.