A Book Review:

Workflow Patterns: The Definitive Guide

By Nick Russell, Wil M.P. van der Aalst, and Arthur H.M. ter Hofstede

MIT Press, 2016 $40.34

Reviewed by Paul Harmon

As most readers know, workflow is the older name for what is now popularly called Business Process Management Software. Many will also know that the leading theorist of workflow software is Endhoven Professor Wil van der Aalst, whose book, coauthored with Kees van Hee, *Workflow Management: Models, Methods, and Systems,* is the classic text in the field. Under the circumstances, when Dr. van der Aalst and his colleagues offer a new book on workflow, it's worth careful attention.

Those familiar with van der Aalst's work know that he has used a set of workflow patterns – examples of the kinds of problems that workflow tools can deal with – to evaluate workflow tools. By comparing how each of several tools handle each of the patterns, we can judge the capabilities and flexibilities of each tool.

This book is contemporary in its focus, using the term BPMS as a synonym with workflow and discussing all of the latest developments in BPMS, including BPEL and case management. The heart of the book is focused on defining and considering each of the major patters. The patterns include:

- Control-flow Patterns
    - Branching Patterns
    - Synchronization Patterns
    - Repetition Patterns
    - Multiple Instances Patterns
    - Concurrency Patterns
    - Trigger Patterns
    - Cancelation and Completion Patterns
    - Termination Patterns

- Data Patterns
    - Data Visibility Patterns
    - Data Interaction Patterns
    - Data Transfer Patterns
    - Data-based Routing Patterns

- Resource Patterns
    - Creation Patterns
    - Push Patterns

Pull Patterns
Detour Patterns
Auto-start Patterns
Visibility Patterns
Multiple Resource Patterns

Each pattern is diagrammed as it is described. Thus, in addition to providing a comprehensive overview of the capabilities of BPMS products, the book provides process analysts with an excellent tutorial into how to use BPMS to diagram the kinds of process situations commonly encountered in business processes.

If you want to see a brilliant application of this approach, go to www.bptrends.com and do a search for Stephen A. White's 2004 article: "Process Modeling Notations and Workflow Patterns." In 2004 there was a lot of discussion about the relative merits of the UML process notation and the new BPMN notation. Stephen provided a comprehensive summary of the differences between the two approaches by comparing how each would implement each of the workflow patterns.

Anyone interested in the architecture or functionality of BPMS tools will want to acquire and study this book. In addition, business process analysts who want to really understand the kinds of workflow situations you may encounter should buy and study this book. You won't find a better way to learn about the range and the technical capabilities of process modeling tools.