

1st IEEE Workshop on Flexibility in Process-Aware Information Systems

Barbara Weber, Univ. of Innsbruck, Austria

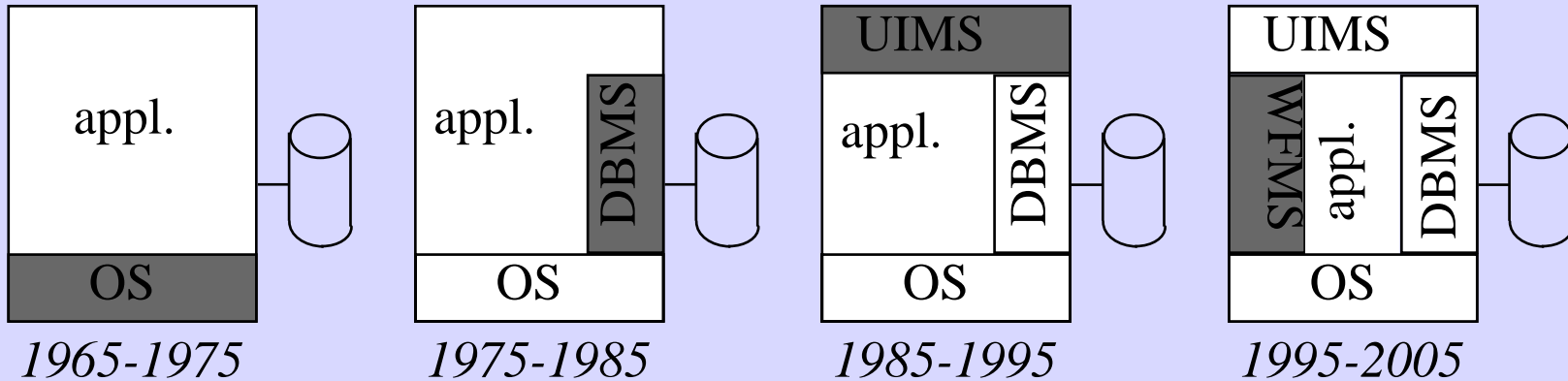
Manfred Reichert, Univ. of Twente, The Netherlands

Jan Mendling, WU Vienna

Workflow Flexibility – The Forlorn Promise

Hajo Reijers, Eindhoven University of Technology

The Flexibility Promise



“to change the structure of a business process independently from the content of the application”

The Reality

(based on an effectiveness study of WfMS between Eindhoven Univ. and Deloitte)

- Most organizations (management and end users) were very happy with the results (lead time, service time, ease of use, coordination)
- However, due to technical difficulties integrating WfM systems in a business environment none of the organizations touches the configuration once completed

Flexible Workflows for Digital Design in the Nano Era

Miriam Minor et al.

The Problem

Digital Design Process in the Nano Era are characterized by tight time to market requirements and the need to set up an error free production process that still allows flexible adaptation to meet customer needs.



The Approach

- *Flexible workflow technology* for the repeated reconsideration and adaptation of the ongoing design process
- A *context model* allows to assign context attributes to a (sub-)workflow definition for monitoring and authoring support

Dynamic Engines – A Flexible Approach to the Extension of Legacy Code and Process-Oriented Application Development

Werner Wild et al.

The Problem

- requirement to flexibly and quickly react to changes
- changes currently require highly trained IT experts

The Approach

- *Dynamic Engines* for the flexible support of business processes in highly dynamic business environments
- Support for the definition and execution of process logic (high-level and fine-grained) and business rules
- Simplifies the development of new applications as well as the extension of legacy applications

Enterprise System Introduction with Controlling Enabled Configurative Models

Christian Seel et al.

The Problem

Customization of enterprise systems is usually very costly and time consuming, e.g., due to severe consulting costs both for adapting the system and the organization

The Approach

- Use configurative reference models to streamline configuration
- Extension of the reference model life cycle with a controlling phase
- Extension of the meta-model of different model projections to support controlling

Adaptive Workflow Support for Search Processes within Fire Service Organisations

Andrea Freßmann

The Problem

- Information support for time critical processes in fire service organizations
- User requirements comprise information support, mobility of work, easy to use technology, consolidation of different information sources, search facilitation, and dynamic adaptation of best practices.

The Approach

- CAKE addresses these requirements by combining
 - computer supported cooperative work (CSCW) with
 - speech dialogue and search technology and
 - by offering adaptive workflows that can be reused by using case based reasoning.

On Representing Instance Changes in Adaptive Process Management Systems

Rinderle et al.

The Problem

In order to allow companies to adapt quickly to new requirements Process-Aware Information Systems must support flexibility at different levels (changes of the process model as well as changes of individual process instances)

The Approach

- ADEPT allows individual changes to process instances, changes of the process model and the migration of running process instances to the new version of the process model
- The authors propose the usage of a delta layer in order to represent process instance changes

Summary

The 5 research papers addressed various flexibility needs of Process-Aware Information Systems.

- The case based reasoning concepts used in the work of Freßmann show how workflow instances become a template for new instances as best practice recommendations.
- Model configuration such as discussed in Seel et al. takes a configurative model to build a design-time, company-specific model which is then utilized to instantiate individual cases of a process.
- The work of Rinderle et al. highlights how changes of an instance impact the template and vice versa.
- The works of Wild et al. and of Minor et al. raise the question whether a separation between process template and process instance is necessary at all.