Supporting the BPM lifecycle with FileNet

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Outline

• Introduction

• Evaluation approach

• Evaluation of FileNet

• Conclusions
Business Process Management

“Supporting business processes using methods, techniques, and software to design, enact, control and analyze operational processes involving humans, organizations, applications, documents and other sources of information.”

BPM life-cycle

Configuration

Design

Execution

Diagnosis

Control

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FileNet

• FileNet P8 BPM Suite (Version 3.5)

• Reasons for selection:
  – One of the leading BPM systems
  – Positioning of vendor as full supporting tool

• Evaluation of support in each of the five phases of the BPM life-cycle
Outline

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Evaluation approach
Evaluation approach

Process definition:
- the process structure
- the resource structure
- the allocation logic
- the interfaces

Graphical editor not enough:
also experimentation with designs
and evaluation of designs
Evaluation approach

Detailed specification of the selected design to realize it in the corresponding system

No force to bypass editor

All technical details are handled in the configuration phase
Evaluation approach

- Context data is added to the process definition:
  - information on arriving cases
  - availability and behavior of internal/external resources and services

Traditionally the heart of a WFM system
Evaluation approach

Monitoring of individual cases for feedback on status

Aggregation of execution data to obtain performance of the workflow

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Evaluation approach

Focus on aggregated data to reveal weaknesses

Domain of:
- process mining
- business process intelligence
- data warehousing
- classical data mining

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Evaluation approach

It is not sufficient to support each of the five phases in isolation.

Example: simulation tool

Interoperability
Outline

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Evaluation of FileNet

... with the evaluation approach

For five workflows we made a pass through the BPM life-cycle with support from the FileNet P8 BPM Suite.
Design in FileNet – process designer

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Design in FileNet – process simulator
### Design in FileNet

<table>
<thead>
<tr>
<th>Required support</th>
<th>FileNet support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make redesign</td>
<td>-</td>
</tr>
<tr>
<td>Model designs</td>
<td>Process designer</td>
</tr>
<tr>
<td>Evaluate designs</td>
<td>Process simulator</td>
</tr>
<tr>
<td>Compare designs</td>
<td>-</td>
</tr>
<tr>
<td>Input from diagnosis</td>
<td>(only arrival data)</td>
</tr>
<tr>
<td>Output for configuration</td>
<td>Through process designer</td>
</tr>
</tbody>
</table>

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## Configuration in FileNet

<table>
<thead>
<tr>
<th>Required support</th>
<th>FileNet support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model detailed designs</td>
<td>Process designer</td>
</tr>
<tr>
<td>Input from design</td>
<td>Through process designer</td>
</tr>
<tr>
<td>Output for execution</td>
<td>Transfer of process definition</td>
</tr>
</tbody>
</table>

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Execution in FileNet – process engine
## Execution in FileNet

<table>
<thead>
<tr>
<th>Required support</th>
<th>FileNet support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workflow engine</td>
<td>Process engine</td>
</tr>
<tr>
<td>Capture context data</td>
<td>Process engine</td>
</tr>
<tr>
<td>Input from configuration</td>
<td>Transfer to process engine</td>
</tr>
<tr>
<td>Output for control</td>
<td>Transfer from process engine</td>
</tr>
</tbody>
</table>
Control in FileNet – Process administrator
Control in FileNet – Analysis report
# Control in FileNet

<table>
<thead>
<tr>
<th>Required support</th>
<th>FileNet support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor specific cases</td>
<td>Process administrator</td>
</tr>
<tr>
<td>Aggregation of execution data</td>
<td>Analysis engine</td>
</tr>
<tr>
<td>Monitor performance</td>
<td>Process analyzer</td>
</tr>
<tr>
<td>Input from execution</td>
<td>Transfer to analysis engine</td>
</tr>
<tr>
<td>Output for execution</td>
<td>-</td>
</tr>
<tr>
<td>Output for diagnosis</td>
<td>Through analysis engine</td>
</tr>
</tbody>
</table>

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## Diagnosis in FileNet

<table>
<thead>
<tr>
<th>Required support</th>
<th>FileNet support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reveal weaknesses</td>
<td>Process analyzer</td>
</tr>
<tr>
<td>Identify improvement points</td>
<td>-</td>
</tr>
<tr>
<td>Input from control</td>
<td>Through analysis engine</td>
</tr>
<tr>
<td>Output for design</td>
<td>- (only arrival data)</td>
</tr>
</tbody>
</table>

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Outline

• Introduction
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• Conclusions

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Conclusions (1)

Process designer
Configuration

Design

Process designer
Process simulator

Process analyzer
Diagnosis

Process administrator
Process analyzer

Process engine
Execution

Control

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Conclusions (2)

- Conclusions are in line with the support expected from a WFM system
- Opportunities to improve support for entire BPM life-cycle

- Further research: Transforming BPM theory into BPM system support
Future work

• Development of redesign tools to close the gap between redesign theory and practice

More details at:

www.petrinetjes.nl

&

www.process-redesign.org

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For a detailed illustration, see:

M. Netjes, H.A. Reijers, W.M.P. van der Aalst.
FileNet’s BPM life-cycle support.
BPM Center Report BPM-06-07,
www.BPMcenter.org, 2006