Domain Specific Reference Models
Reference frameworks for information models
Retail-H reference model
Application of the Retail-H reference model
Other domain specific reference models
Lessons learned
Reference frameworks for information models
Retail-H reference model
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Other domain specific reference models
Lessons learned
Many processes exist in a company

Necessity for an overall model that creates a relationship and enables a navigation through all (process) models

- „A system framework classifies relevant elements and relationships of an original on a high abstraction level in a chosen structure in any language. The purpose of an organizational framework is to arrange an overview of the original and to unfold the references of elements and relationships to other elements and relationships of inferior detail levels.“ [Meise (2001), p.62]

Model with a high degree of abstraction
Central focus: Clarification of overall relationship
Create unique wording and identifiers
Representation of new organization structure
  - Logo of reorganization
  - Static frameworks are not useful for a real motivation to redesign
  - Use of old names and notions is not meaningful to create a new awareness
No concrete modelling language is necessary for the framework design
Two important points must be considered for the construction:

- **Strategic component**
  - Development of an organization structure based on strategic considerations

- **Graphical component**
  - Transformation of the structure in a graphical form, with the goals:
    - Communicate a suitable overview
    - Order property
    - Communication platform
- **Device goal/strategy of process management projects**
  - content, scope, timeframe
- **Define macro-structure**
  - Market-oriented, external perception (market-based view), 80s
    - Branch and competitor behavior are focused
    - Strategies: cost leadership and product differentiation
  - Resource based, internal perception (resource-based View) – 90s
    - Focused on core competences
  - Combined strategy – today
    - classification organization in Market- and Core areas
- **Identification of core-, coordination- and support processes**
  - general process identification e.g. by using reference models
  - Individual process identification
Reorganization projects can only successfully realized with a commitment from the employees.

Reference frameworks can influence the behavior and attitude of employees

- Overcome attention gap
- Base-Rate-Fallacy
  - When rating probabilities, dynamic impressions will get more attention as raw data material (pictures vs. numbers)
- Perceivability Bias
  - Information blocks that are easy to recognize will get a higher weighting compared to hard recognizable ones
- In addition cognition is depending on:
  - Spatial order of elements (e.g. hierarchies)
  - Size relations
  - Form und colors
  - Fonts
Reference frameworks for information models

According to Meise (2000)

Domain Specific Reference Models

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Reference frameworks for information models

Retail-H reference model

Application of the Retail-H reference model

Other domain specific reference models

Lessons learned
The Retail-H reference model

- contracting
- order management
The Retail-H reference model

- contracting
- order management
- goods receipt
- invoice auditing
The Retail-H reference model

- contracting
- order management
- goods receipt
- invoice auditing
- accounts payable

Domain Specific Reference Models

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The Retail-H reference model

contracting

order management

goods receipt

invoice auditing

accounts payable

marketing
The Retail-H reference model

contracting
- order management
- goods receipt
- invoice auditing
- accounts payable

marketing
- selling
The Retail-H reference model

- Contracting
- Order management
- Goods receipt
- Invoice auditing
- Accounts payable

- Marketing
- Selling
- Goods issue
The Retail-H reference model

contracting
order management
goods receipt
invoice auditing
accounts payable

marketing
selling
goods issue
billing
The Retail-H reference model

contracting
  order management
  goods receipt
  invoice auditing
  accounts payable

marketing
  selling
  goods issue
  billing
  accounts receivable
The Retail-H reference model

contracting
order management
goods receipt
invoice auditing
accounts payable

warehousing

marketing
selling
goods issue
billing
accounts receivable
Domain Specific Reference Models

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The Retail-H reference model

Domain Specific Reference Models

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The Retail-H reference model

controlling

contracting
- order management
- goods receipt
- invoice auditing
- accounts payable

marketing
- selling
- goods issue
- billing
- accounts receivable

general accounting and asset management
- cost accounting
- human resources

Domain Specific Reference Models
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The Retail-H reference model

Domain Specific Reference Models

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The Retail-H reference model

strat. plan.
EIS
controlling

contracting

order management

goods receipt

warehousing

marketing

selling

goods issue

billing

accounts receivable

invoice auditing

accounts payable

general accounting and asset management

cost accounting

human resources

Domain Specific Reference Models

Mathias Eggert
The Retail-H reference model

- strat. plan.
- EIS
- controlling

- contracting
- order management
- goods receipt
- invoice auditing
- accounts payable

- marketing
- selling
- warehousing
- goods issue
- billing
- accounts receivable

- general accounting and asset management
  - cost accounting
  - human resources

Domain Specific Reference Models
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The Retail-H reference model

- Strat. Plan.
- EIS
- Controlling

Contracting
- Order management
- Goods receipt
- Invoice auditing
- Accounts payable

Marketing
- Selling
- Goods issue
- Billing
- Accounts receivable

General accounting and asset management
- Cost accounting
- Human resources

Domain Specific Reference Models

Mathias Eggert
The Retail-H reference model

strat. plan.
EIS
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goods issue
billing
accounts receivable

general accounting and asset management
cost accounting
human resources

Domain Specific Reference Models

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Example Contracting

Domain Specific Reference Models

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Application of the Retail-H reference model

Example Contracting

- Contracting
  - Master data maint., suppliers
  - Master data maint., products
  - Master data maint., conditions

Domain Specific Reference Models

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Application of the Retail-H reference model

Example Contracting

Condition

New product has been included into assortment
New supplier has been created
Condition changes have occurred

Maintain calculation schema

Deduction sequence is to be maintained
Conditions of schema are to be maintained

Determine deduction sequence

Deduction sequence is maintained

Determine condition type

Invoice condition

Subsequent condition

Process object:

Condition

Multi-layer order management

Domain Specific Reference Models

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New product has been included into assortment

New supplier has been created

Condition changes have occurred

Maintain calculation schema

Deduction sequence is to be maintained

Determine deduction sequence

Deduction sequence is maintained

Determine condition type

Invoice condition

Subsequent condition

Multi-layer order management

Domain Specific Reference Models

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New product has been included into assortment.
New supplier has been created.
Condition changes have occurred.

Maintain calculation schema.

Deduction sequence is to be maintained.
Conditions of schema are to be maintained.

Determine deduction sequence.
Deduction sequence is maintained.

Determine condition type.

Invoice condition
Subsequent condition

Multi-layer order management.

Example Contracting

Domain Specific Reference Model

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New product has been included into assortment.

New supplier has been created.

Condition changes have occurred.

Application of the Retail-H reference model

Example Contracting

Maintain calculation schema.

Deduction sequence is to be maintained.

Conditions of schema are to be maintained.

Determine deduction sequence.

Deduction sequence is maintained.

Determine condition type.

Determine condition type XOR.

Invoice condition XOR.

Subsequent condition XOR.

Multi-layer order management.

Domain Specific Reference Models

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New product has been included into assortment

New supplier has been created

Condition changes have occurred

Application of the Retail-H reference model

Example Contracting

Maintain calculation schema

Deduction sequence is to be maintained

Conditions of schema are to be maintained

Deduction sequence is maintained

Determine deduction sequence

Determine condition type

Invoice condition

Subsequent condition

Multi-layer order management

Domain Specific Reference Models

Mathias Eggert

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (EUR)</th>
<th>QU</th>
<th>KoValue</th>
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<td>1.49</td>
<td>1 p.</td>
<td>14.90</td>
</tr>
<tr>
<td>gross value</td>
<td>1.49</td>
<td>1 p.</td>
<td>14.90</td>
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<tr>
<td>RGR0 group rebate %</td>
<td>2000- %</td>
<td></td>
<td>0.30-</td>
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<tr>
<td>Net value incl. Rebate</td>
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<td>1 p.</td>
<td>14.60</td>
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<tr>
<td>NA VS not ded. input tax</td>
<td>0</td>
<td></td>
<td>0.00</td>
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<tr>
<td>NAVM not ded. input tax</td>
<td>0</td>
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<tr>
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<td>1.46</td>
<td>1 p.</td>
<td>14.60</td>
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<tr>
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<td>0.44-</td>
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<tr>
<td>VKP0 VKP incl. tax</td>
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<td>7.20</td>
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<td>VKP1 VKP excl. tax</td>
<td>0.63</td>
<td>1 p.</td>
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<tr>
<td>profit margin</td>
<td>0.79</td>
<td>1 p.</td>
<td>7.86</td>
</tr>
</tbody>
</table>
Application of the Retail-H reference model

Example Contracting

Condition

- New product has been included into assortment
- New supplier has been created
- Concession changes have occurred

Maintain calculation schema

Deduction sequence is to be maintained

Determine deduction sequence

Invoice condition

Subsequent condition

Multi-layer order management

Domain Specific Reference Models

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Application of the Retail-H reference model

Reference modelling: Retail-H model with the ARIS-Toolset

Domain Specific Reference Models

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Application of the Retail-H reference model

Reference modelling: Retail-H model with the ARIS-Toolset

Domain Specific Reference Models

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- Reference frameworks for information models
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- **Other domain specific reference models**
- Lessons learned
Other domain specific reference models

The Y-CIM Model

Domain Specific Reference Models

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Other domain specific reference models

Public Administrations

Domain Specific Reference Models

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Lessons learned
Lessons learned

Why do we need reference models?
- High abstraction level
- creates a relationship between the elements
- enables a navigation through all (process) models

How to create reference models
- Strategic and
- Design aspects

What is the Retail-H reference model?

How can we apply the Retail-H reference model?
- Contracting example
- ARIS toolset

Other domain specific reference models
Lessons learned

Domain Specific Reference Models

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