Fulfilling user-needs, improving quality and efficiency using GSIM and other standards

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The vision

Statistical information must help users in the “turbulent information-sea”

Metadata about content and quality must
a) help users in their knowledge processes
b) give users precise information about our products

International standards and standard software must enable
a) Cost efficient solution with few resources
b) Sustainable long term solutions
c) Common terminology
Vision: Integrated and reusable metadata

- **Statbank**
- **Methods**
  - Documentation/quality
  - Papers on methods
- **Concept**
  - Concept database
- **Variable/dataset**
  - Variabeldatabase
- **Classifications**
  - Classification database
Claims in the paper

Common reusable metadata require improved understanding of

1. metadata-terminology
2. the use of in production processes in GSBPM
3. the role of metadata in relation to users
4. systematic use of Business Process Management and Enterprise Architecture
### Metadata-terminology and frames of reference

<table>
<thead>
<tr>
<th></th>
<th>Frames of reference of producers</th>
<th>Frames of reference of users</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General terminology for statistical metadata</strong></td>
<td>Complex metadata terminology. E.g. instance variable vs represented variable, logical record</td>
<td>Simplified metadata terminology. E.g. classification, variable, concept, population</td>
</tr>
<tr>
<td><strong>Domain specific metadata</strong></td>
<td>Domain specific metadata E.g. detailed definition of income of person</td>
<td>Domain specific metadata tailored for various users. E.g. short and long definition of income for a person</td>
</tr>
</tbody>
</table>
Metadata portal

Unit Types

Arbejdssted
BBR enhed
Bolig
Bygning
Ejendom
Firma

Company - no of employees

Husstand
Job
Person

Person gender conceptual variable
Person's age at onset of disability conceptual variable
Person's address
Civil status conceptual variable
Metadata and business processes

Enter initial metadata: Needs etc
Define basic metadata: concepts, variables etc
Use metadata in the construction of components
Use components in the production processes
Enter quality information – results of analysis
Use metadata in dissemination
Use metadata for evaluation
## From GSIM to DDI and implementation in Colectica

<table>
<thead>
<tr>
<th>Level</th>
<th>Scope of model and standards used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual 1</td>
<td>Selected terms from GSIM: concept, variable, dataset etc.</td>
</tr>
<tr>
<td>Conceptual 2</td>
<td>Selected terms from DDI 3.2 complying with GSIM terms</td>
</tr>
<tr>
<td>Logical</td>
<td>Selected elements from DDI 3.2 used for implementation</td>
</tr>
<tr>
<td>Physical</td>
<td>Logical model extended with Colectica implementation details</td>
</tr>
</tbody>
</table>
Conceptual model
Selected elements from GSIM
Logical model using DDI 3.2 implemented in Colectica.

Basic parts comply with GSIM
Conclusions

• No simple road towards the vision for metadata
• Important to have a precise understanding of metadata terminology, the use of metadata in processes and metadata in relation to users.
• Systematic use of Business Process Management and Enterprise Architecture is important
• Need for international standards and cooperation to succeed with the implementation (e.g. this workshop, cooperation between Nordic countries)
Thanks for your attention

Remember:

• DDI conference in Cologne 6-7 December 2016
The End!