Empowering Enterprise Data Governance with BSG

Christophe Debruyne\textsuperscript{1}, Pieter De Leenheer\textsuperscript{2,3}, Robert Meersman\textsuperscript{1}

\textsuperscript{1} Semantics Technology and Applications Research Lab, Vrije Universiteit Brussel, Brussels, Belgium
\textsuperscript{2} Business Web and Media, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands
\textsuperscript{3} Collibra nv/sa, Brussels, Belgium

\textbf{Problem}

For a Linked Data service market to flourish, one has to consider the data governance aspects. Especially in a business context, domain rules are important. One such important domain rule is an \textit{conceptual identification structure}. Enabling communication and interoperation between \textit{autonomously} developed information systems – each represented by stakeholders – requires an ontology. Community involvement is primordial and thus appropriate methods and tools are needed. One can draw inspiration from database modeling techniques.

\textbf{Business Semantics Management}

- Fact-oriented, adopting SBVR (Business rules)
- Two complementary cycles
- Ontology engineering vs. implementation

\textbf{Business Semantics Glossary}

- Built around wiki technology
- Community driven
- Natural language facts and definitions
- Export/Import from RDFS/OWL via MOF

\textbf{Case: Flemish Public Administration}

- Flanders Research Information Space program
- Virtual environment for research information
- Goals: central repository and lowering administrative burden of research institutions
- How: annotating existing databases and automatic linking of data (via conceptual identifiers)

Use Business Semantics Management and Glossary to capture the knowledge and business rules in an ontology

Transform the ontology in BSM/SBVR into RDFS/OWL, in turn linked with existing vocabularies

Publish data gathered by FRIS as Linked Data on the Web, with D2R Server (http://www4.wiwiss.fu-berlin.de/bizer/d2r-server/)

Annotate instances with exported ontologies

Use business rules to \textit{automatically link} data about