Towards OLAP over Federated RDF Sources
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1. BI and the Semantic Web
- Business Intelligence tools need to analyze data published on the Web
- OLAP-style analysis of Linked Data may help in better decision making

2. Objective
Design, develop, and evaluate an approach for performing OLAP over federated RDF sources.

3. System Architecture
- Global Conceptual Schema (GCS) – high-level view of the system (expressed in QB4OLAP)
- Source Discovery/Schema Builder – discovery of data sources and construction of the GCS
- Distributed Query Processor (DQP) – retrieval, in parallel, data from several federated data sources
- Semantic Query Processor – conversion of MDX to SPARQL which is sent to the DQP

4. QB4OLAP: Global Conceptual Schema and Observations Examples

5. Source Discovery

6. Publications
Submitted:
D. Ibragimov, K. Hose, T. B. Pedersen, E. Zimányi. Towards Exploratory OLAP over Linked Open Data – A Case Study. BIROTE 2014
In Progress:
D. Ibragimov, K. Hose, T. B. Pedersen, E. Zimányi. Executing Aggregate SPARQL Queries over Federated Endpoints