Discovering Analytical Concepts from User Profiles

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The Vision: Enabling the user assistance possibilities for next generation BI systems by means of metadata. The metadata need to be considered as a first-class citizen and managed in a dedicated BI subsystem for user assistance purposes.

Analytical Metadata Framework: Based on the findings from a survey, we propose an analytical metadata framework to support the user assistance activities and their automation in the context of next generation BI systems.

SM4AM: A Semantic Metamodel for Analytical Metadata to support the exploitation, reuse, and integration.

Current Focus: The (semi-)automatic schema enrichment of existing QB data sets with the additional QB4OLAP semantics. Steps:
1. Redefinition of the cube schema.
2. Specifying the aggregation functions.
3. Definition of the dimension hierarchies.
4. Annotation of the cube instances.

Further reading:

Next Steps: The use of AM and SM4AM for the query recommendation area as a proof of concept for our claims.