Data Quality in Cooperative Information Systems

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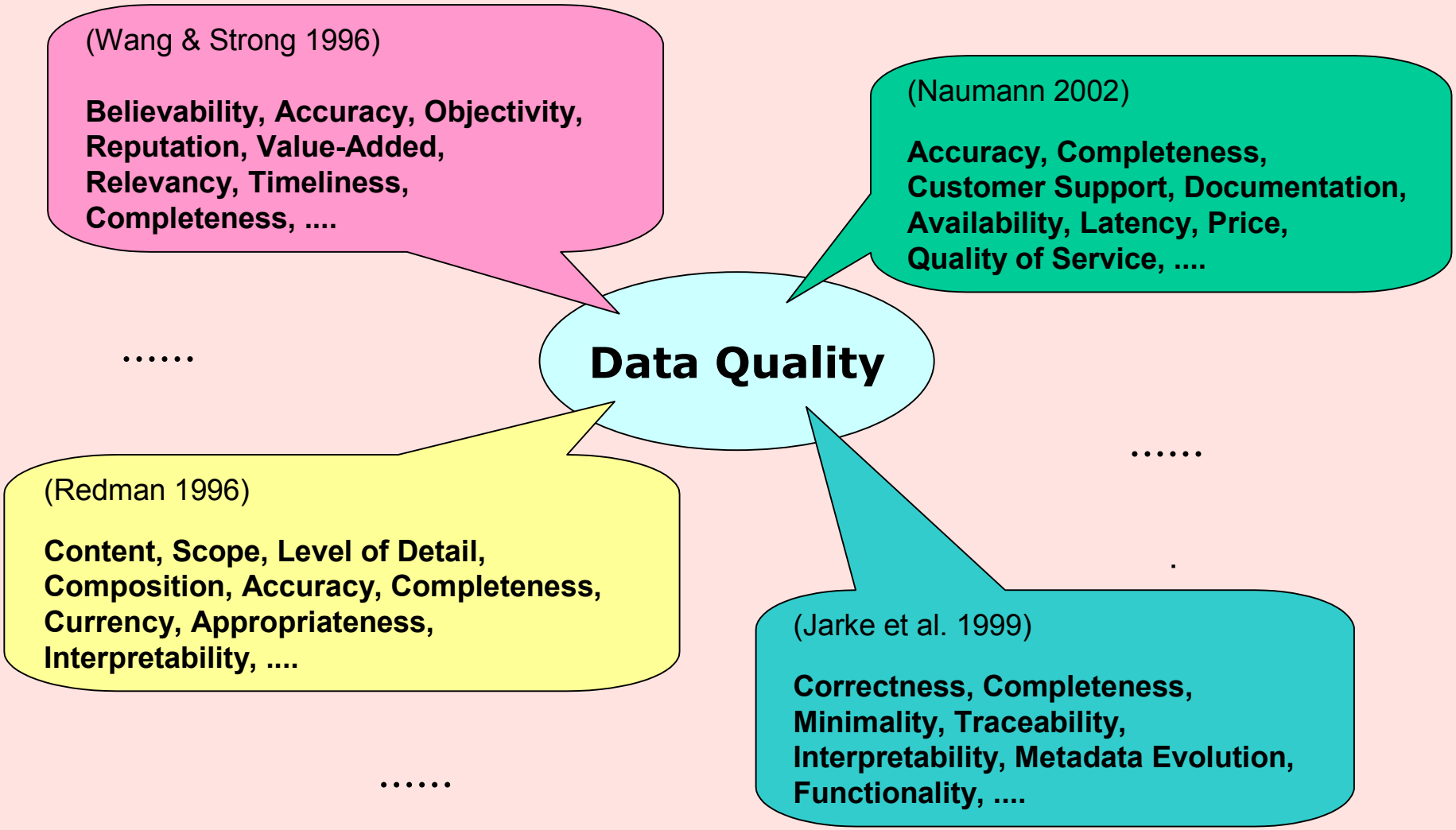
Data Quality: a Multidimensional Concept



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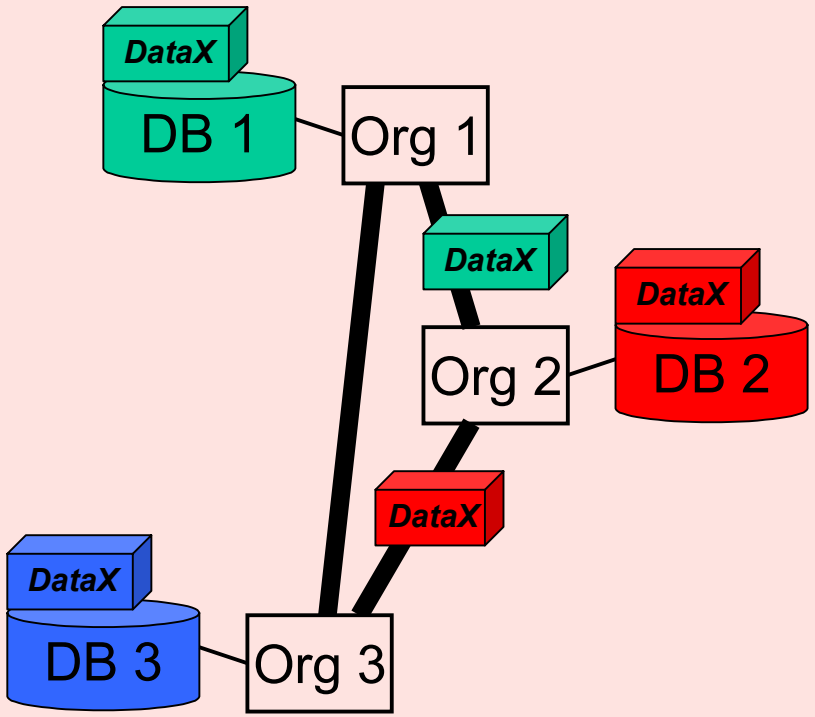
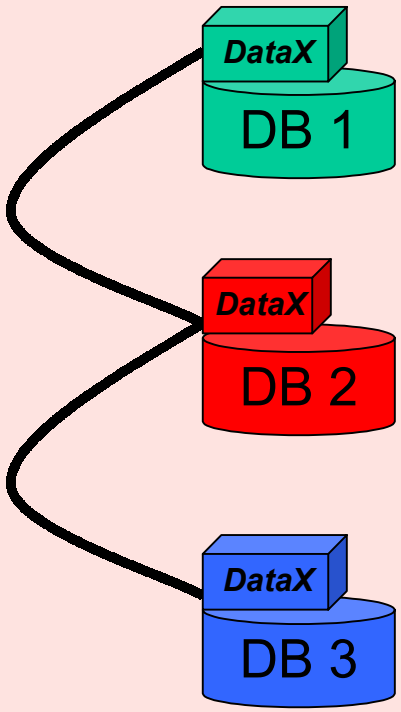


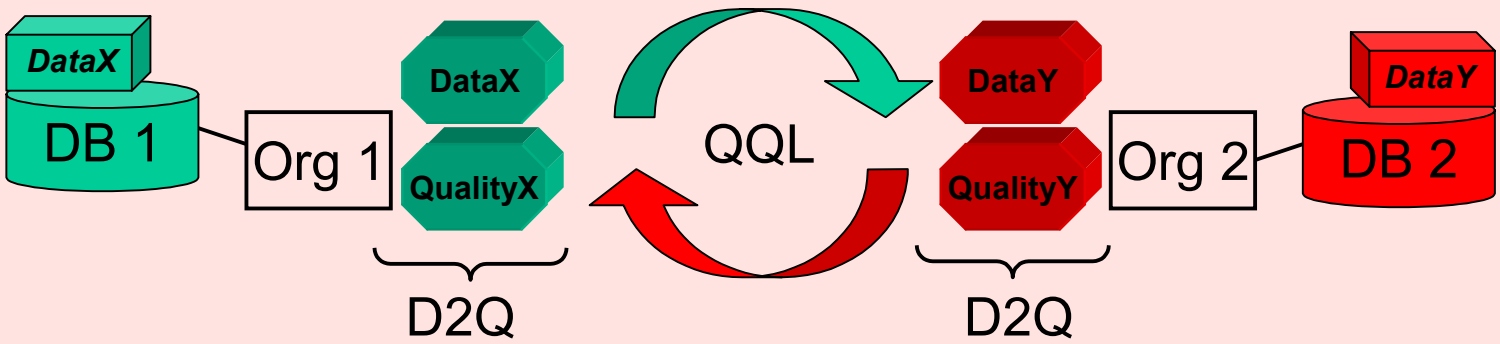
PITFALL
Exchanges of low quality data deteriorate the quality in each DB



OPPORTUNITY
Same data in different organizations enable quality improvement by comparisons

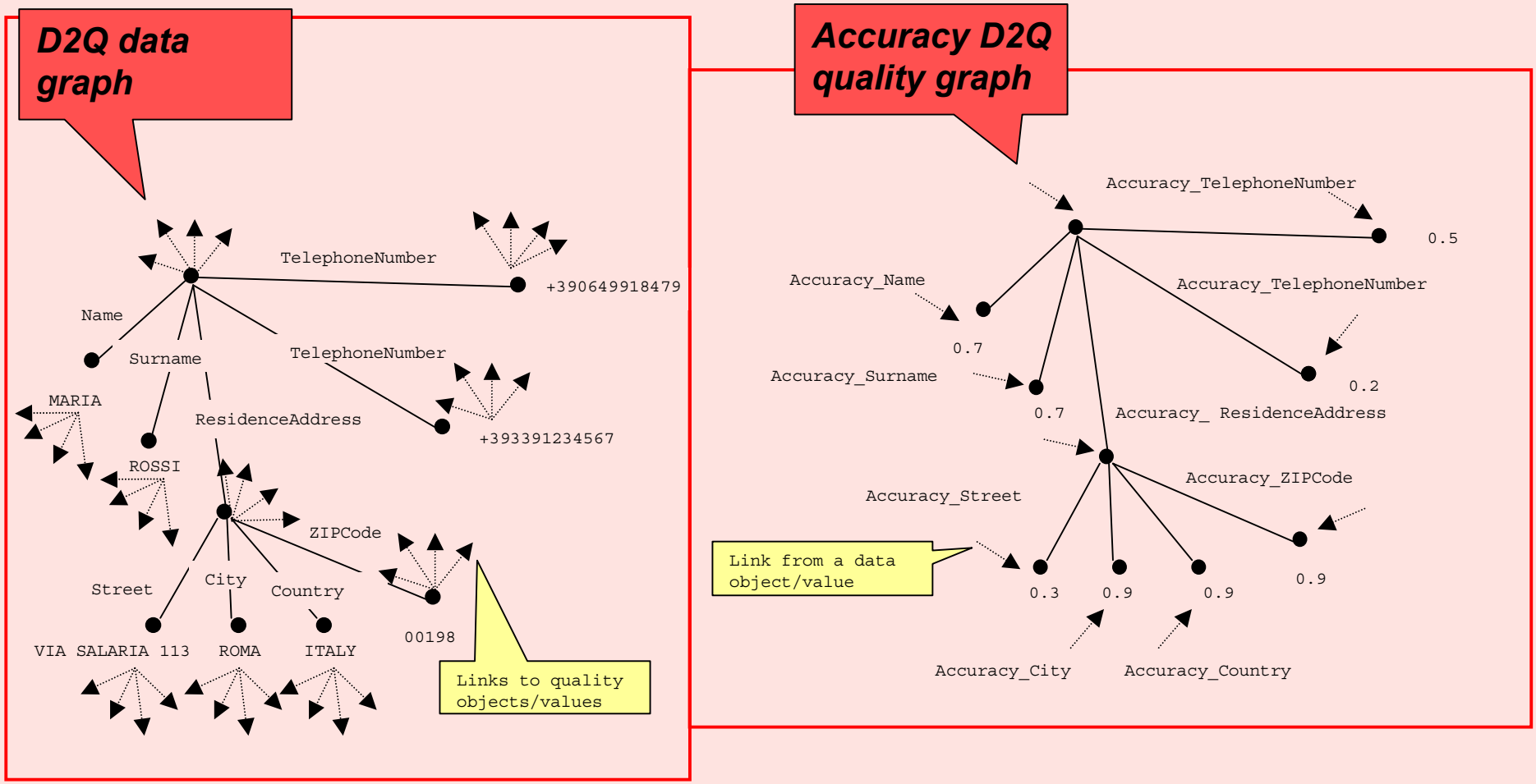
Data and Data Quality Model and Quality Query Language

- A model according to which cooperating organizations exchange data with associated quality values: Data and Data Quality Model (D2Q)
- A query language according to which cooperating organizations request for data with associated quality values: Quality Query Language (QQL)

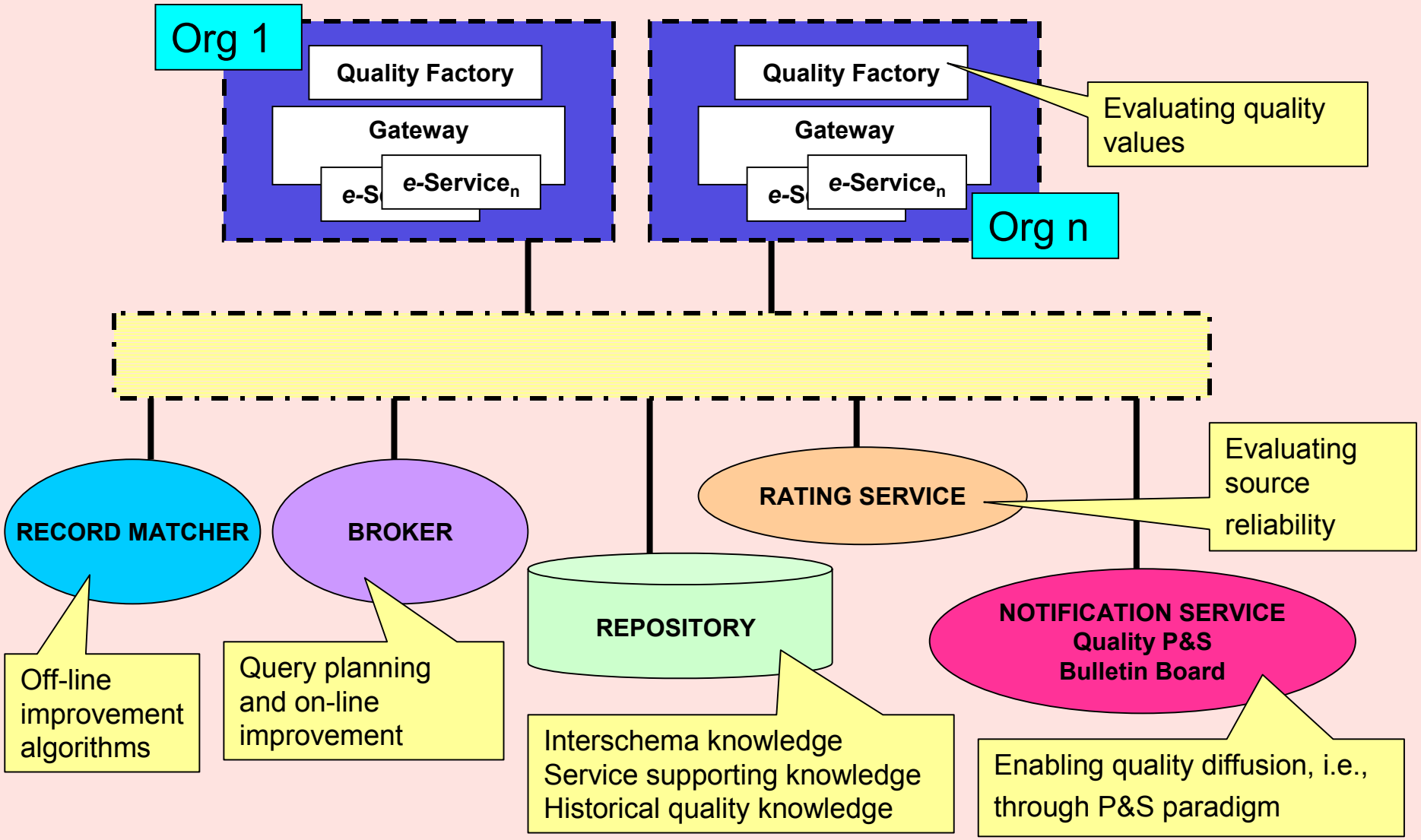


Preliminary Results

- Model and Query Language XML-based
- Coupling of Data Graphs and Quality Graphs (one for each dimension)



An Architecture for Quality Improvement in Cooperative Information Systems



Strategies for Quality Improvement