Meta-Information Quality

The MIT Total Data Quality Management Program
IQ 2001 Conference

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Outline

- Meta-Data Quality (MDQ) is a prerequisite for IQ
- Challenges in MDQ
- Opportunities in MDQ
- Communication & Education Through MDQ
- Continuous innovation in MDQ capabilities
Meta Data Quality is Foundational Layer

- Knowledge & Intelligence Quality
- Information Quality
- Data Quality
- Meta-Data Quality
What is Meta Data?

• It is the Who, What, When, Where, Why, How… about the data.
• Documents the data definition and business description.
• Data Dictionary and beyond for full support of DQ
• Meta-Data is the database and data for understanding IQ by all users
Meta-Data Documents the Integration

Data Warehouse

Atomic Data Store
- dimension tables
- reference tables

Data Marts
- fact tables
- relational tables

Transformation Processes
- Load Record Image

Source
- Extraction Process

Development Tools

Data Access & Presentation Tools

Metadata Repository
Meta-Data Quality Challenges

• The infrastructure and processes to capture Meta-Data are viewed as overhead.
• The infrastructure is fragmented and often complex.
• The business requirements for Meta-Data are not understood.
• Requires all the same policies, and practices to support IQ.
Meta-Data Quality Opportunities

• Think Big - Start Small - Evolve
• Iterations to add capability to MDQ initiative
• Use each project to enhance content and functionality
• Meta-Data must have Quality
  – Concise
  – Complete
  – Accessible
Communication & Education

- Meta-Data communicates the documented details about the data.
- Educating and learning are key to IQ.
- Knowledge about the data enables the users.
- Meta-Data can be segmented to support the needs of technical and business users.
Meta-Data Quality leads to IQ

- Meta-Data Quality is a foundation for IQ
- IQ initiatives require Meta-Data Quality
- Meta-Data is critical tool to support IQ
- Meta-Data is necessary for institutional learning
- We need to continually innovate Meta-Data Capabilities to drive IQ improvement