THE VALUE PROPOSITION OF A METADATA DRIVEN DATA GOVERNANCE PROGRAM

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Agenda

• Introduction
• Business need
• Informatica as the solution
• Share experiences
• Architecture
• What to watch out for
• Conclusion
Introduction

• Fidelity Senior Business and Technology management recognizes that data is a business asset and a competitive differentiator.

• Data Governance
  • Data quality
  • Data consistency
  • Data definitions
  • End-to-end lineage

• Metadata Management is a key tool within the Data Governance framework.
Describe Metadata

• Metadata provides contextual information
  • business description
  • owners, stewards, and custodians
  • technical attributes
  • location and lineage
  • transformations and calculations

• A managed metadata environment ensures that everyone who works with data can efficiently find it, learn what it means, where it came from, and how it is used.
Business Need

• Data is critical to the business

• Associates across business units share obstacles:
  • No authoritative source
  • Concealed rules
  • Ambiguous or inconsistent terminology
  • Difficulty estimating projects accurately
  • Inefficient processes
Business Challenge

- **Business users:**
  - Lack confidence in data
  - Manage disparate metadata
  - Must comply with regulations

- **Technical users spend time:**
  - Tracing lineage
  - Researching impact of changes
  - Testing excessively
Informatica Metadata Manager as the solution

- Metadata Manager application contains features that are important to the PWI metadata solution:
  - Business glossary
  - Audit trail
  - Robust Security Model
  - Third-party adaptors with pre-built metamodels
  - Extensible metamodels
  - Custom metamodel and scanner capability
  - Graphical lineage diagrams
  - URL API
  - Tight integration with PowerCenter
  - Ability to schedule scans from UI
Understand Data

- Requirement: manage data definitions for BI system
- Solution: Metadata Manager to model, manage, and extract definitions

Stewards manage business glossary

Mouse-over report fields to expose definitions – adding context where it is most needed
Standardize Metadata Procedures

- One business unit responsible for definitions invoked on three distinct web sites.
- Definitions should be consistent
- Consolidate to a single business glossary:
  1. Single, common glossary model
  2. Interim step is to link entries
  3. Consolidate terms and definitions
Share Metadata Across the Enterprise

- Automation to keep metadata current
- Extending the glossary model
- Common terms are defined only one time and definitions are displayed consistently across Fidelity web pages.

<table>
<thead>
<tr>
<th>Term</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FID</td>
<td>✔</td>
</tr>
<tr>
<td>NB</td>
<td>✔</td>
</tr>
<tr>
<td>HT</td>
<td>✔</td>
</tr>
<tr>
<td>Alpha: aa bb cc</td>
<td>✔ ✔ ✔</td>
</tr>
<tr>
<td>Beta: xxx yyy zzz</td>
<td>✔ ✔ ✔</td>
</tr>
<tr>
<td>Gamma: 11 22 33</td>
<td>✔ ✔ ✔</td>
</tr>
</tbody>
</table>
Impact Analysis

<table>
<thead>
<tr>
<th>User</th>
<th>Traditional Analysis</th>
<th>Using Metadata Manager</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems Analyst</td>
<td>20 hours</td>
<td>30 minutes</td>
<td>97.5%</td>
</tr>
<tr>
<td>Business Analyst</td>
<td>32 hours</td>
<td>1 hour</td>
<td>96.9%</td>
</tr>
<tr>
<td>QA</td>
<td>26 hours</td>
<td>1 hour</td>
<td>96.2%</td>
</tr>
</tbody>
</table>

- Assessing scope for a change to the business logic for a single data field in an administration system, projected the analysis effort to be 20 hours.
- Using the metadata system, impact analysis was conducted.
- Spreadsheet and a graphic image of the impact were downloaded just short of 30 minutes.
- Three examples from this business unit are charted.
Architecture – Metadata is a Part of PowerCenter

*Not required for initial implementation: supports profiling, graphic reports, dashboards
Architecture – Conceptual Metadata Flow
## What to Watch Out For

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metadata gets stale</td>
<td>✓ Metadata part of SDLC</td>
</tr>
<tr>
<td></td>
<td>✓ High degree of automation</td>
</tr>
<tr>
<td></td>
<td>✓ Some manual maintenance unavoidable</td>
</tr>
<tr>
<td>Lack of support from Business</td>
<td>✓ Use-cases analysis – regarding time, effort, and accuracy.</td>
</tr>
<tr>
<td></td>
<td>✓ Central administration</td>
</tr>
<tr>
<td>Low adoption of metadata program</td>
<td>✓ Support is necessary at executive level</td>
</tr>
<tr>
<td></td>
<td>✓ Business led Data Governance</td>
</tr>
<tr>
<td>Metadata management is a secondary initiative</td>
<td>✓ Standardized metadata as a best practice</td>
</tr>
</tbody>
</table>
Best Practices Followed

• Metadata program aligned with key data strategies.

• Reduce cost of extraneous documentation with concise, searchable, and reusable artifacts.

• Make metadata maintenance a part of business process and SDLC.

• Ensure sponsor commitment to ongoing program before metadata initiative begins

• Keep information up-to-date through automation.

• Don’t boil the ocean - prove value with local successes. Deliver iterations beginning with basic, foundational capabilities.
Business and Technical Benefits

• Improved efficiency and accuracy of analysis

• Enterprise-wide understanding and proper usage of business terms

• One-stop shop for end-users to find data definitions and perform impact analysis

• KPIs affected:
  • Impact analysis in minutes instead of days
  • End-user self service
  • Measure quality and completeness of metadata

• Financial benefits:
  • Confident scope estimation of proposed changes
  • Targeted testing reduces effort
  • Reduce effort for training and knowledge transfer
Questions?