Taming the Wild West of Data

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Overview

- Business Alignment
- Architecture
- Charting the Landscape
- Data Maturity
- Q&A
Food for Thought

“Organizations that do not understand the overwhelming importance of managing data and information as tangible assets in the new economy will not survive.”

- Tom Peters, 2001
Business/IT Misalignment

- Symptoms
  - Short term projects, not strategic
  - Proliferation of disparate systems
    - ERP, mismatched departmental solutions
    - SAAS (externally controlled and managed)
    - Obsolete Legacy Systems - No decommissioning strategy
    - No integration strategy (point to point interfaces)
    - Poor Data Quality + Analytics = ?
  - No long term architecture focus
Why Architecture?

Evolution:
38 years of construction
147 builders
No Blueprints
No Planning

Result:
7 story
65 doors to blank walls
13 staircases abandoned
24 skylights in floors
160 rooms, 950 doors
47 fireplaces, 17 chimneys
Miles of hallways, secret passages in walls
10,000 window panes (all bathrooms are fitted with windows)
Charting the Landscape

- Identify candidate databases
- Reverse engineer existing databases into models
- Apply naming conventions to logical layer
- Analyze redundancies & gaps
- Classify through metadata
- Data lineage / chain of custody
Naming Standards

Embarcadero DataU Conference

7
Data Classification: Attachments
Determine Data Lineage

• Source of truth
• Chain of custody
• Transformations
Why?

- Map the Data Landscape
- Conventions being used
- “A picture is worth a thousand words”
- Basis for establishing metadata repository
- Data Classification
  - Reference, Master, Transaction
# Data Maturity

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Data Governance</th>
<th>Master Data Management</th>
<th>Data Integration</th>
<th>Data Quality</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
<td>None</td>
<td>no formal master data classification</td>
<td>ad-hoc, point to point</td>
<td>Silos, scattered data, inconsistencies accepted</td>
<td>Unaware / Denial</td>
</tr>
<tr>
<td>1</td>
<td>Initial</td>
<td>Project Level</td>
<td>Non-integrated master data</td>
<td>Reactive, point-to-point interfaces, some common tools, lack of standards</td>
<td>Recognition of inconsistencies but no management plan to address</td>
<td>Chaotic</td>
</tr>
<tr>
<td>2</td>
<td>Managed</td>
<td>Program Level</td>
<td>Integrated, shared master data repository</td>
<td>common integration platform, design patterns</td>
<td>Data cleansing at consumption in order to attempt data quality improvement</td>
<td>Reactive</td>
</tr>
<tr>
<td>3</td>
<td>Standardized</td>
<td>Division Level</td>
<td>Data Management Services</td>
<td>Middleware utilization: service bus, canonical model, business rules, repository</td>
<td>Data Quality KPI’s and conformance visibility, some cleansing at source.</td>
<td>Stable</td>
</tr>
<tr>
<td>4</td>
<td>Advanced</td>
<td>Cross Divisional</td>
<td>Master data stewards established</td>
<td>Data Excellence Centre (education and training)</td>
<td>Prevention approach to data quality</td>
<td>Proactive</td>
</tr>
<tr>
<td>5</td>
<td>Optimized</td>
<td>Enterprise Wide</td>
<td>Data stewardship council</td>
<td>Data Excellence embedded in corporate culture</td>
<td>Full data quality management practice</td>
<td>Predictive</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Continuous Improvement</th>
<th>Expansion</th>
<th>Transformation</th>
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</thead>
<tbody>
<tr>
<td>Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expanson</td>
<td></td>
<td></td>
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<tr>
<td>Transformation</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology &amp; Infrastructure</th>
<th>Primary IS Focus</th>
<th>Information &amp; Strategic Business Enablement</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>Risk</td>
<td>LOW</td>
</tr>
<tr>
<td>LOW</td>
<td>Value Generation</td>
<td>HIGH</td>
</tr>
</tbody>
</table>
Information

• The “I” in “IS”
• The foundation for all applications, analytics and organizational decision making.
• How does your foundation look today?
Thank you for attending!

• Learn more about the ER/Studio product family:
  http://embt.co/ERXE5pg