Tutorial: Designing and Implementing Enterprise Data Governance Programs

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Your Presenter:

Steve Putman has over 25 years of experience supporting client/server and internet-based operations from small offices to major corporations in both functional and technical roles. He is a thought leader in the fields of Data Governance, Master Data Management, Big Data, and Semantic Technologies.
Today’s Agenda:

• Data Governance Defined
• Data Governance Framework
• Organizational Roles
• Implementation Steps
What We Hear

Why We Hear It

- Integrating data for across systems is required. A consistent and unified view of product and customer does not exist
- Data Management maturity is impacting IT productivity
- Changing regulatory landscape
- Changing customer expectations
- Data Governance and data ownership is not local to the data creators

“we need to know immediately how good a new web promotion is working”

“products change so fast, I have the same name for 3 different products with different features”

“we’ve got a lot of really cool stuff stored in spreadsheets that we can’t do anything with”

“we need Rosetta Stone for our data”

“there are processes here – both business and technical – that just won’t die”
Data Governance Overview

“The organizing framework for establishing strategy, objectives, and policies for corporate data.”

-Dyché & Levy

“The overall management of the availability, integrity, and security of the data employed in an enterprise. A sound data governance program includes a governing body or council, a defined set of procedures, and a plan to execute those procedures.”

“Forrester”

“The process by which an organization formalizes the ‘fiduciary duty’ for the management of data assets.”
Data Governance Overview

Align data governance to support the clients’ business strategies and/or key initiatives.

Build organizational structures and skills to foster a sustainable Data Governance program.

Create sustainable methods for defining business definitions, business rules, and policies for corporate data.

Treat both data and content as assets that deserve oversight, policies, management, and deployment.

Select technologies that streamline data governance and data management processes (e.g., corporate portals, data stewardship dashboards, data profiling tools).
What Data Governance Does

- Establishes business stakeholders as information owners
- Positions enterprise data issues as cross-functional
- Aligns data quality with business measures and acceptance
- Removes IT from business/data conflict ownership
- Ensures data is managed separately from applications
- Expands change management to include data

Requires planning, monitoring, and measurement
SAS Data Governance Framework

Corporate Drivers
- Strategic Priorities: Customer Focus, Compliance Mandates, Mergers & Acquisitions, etc.
- Business Challenges: At-Risk Projects, Data Quality Improvements, Operational Efficiencies, etc.

Program Charter
- Program Objectives
- Guiding Principles
- Decision-making Bodies
- Decision Rights

Process & Policy

Data Stewardship Roles & Tasks
- People: Council, Stakeholders, Stewards, Accountability, Authority
- Process: Measurement, Communication, Operating Procedures
- Mechanisms and Tools: Monitoring & Reporting, Data Quality, Entity Definitions, Lineage, Data Profiling, Standardization

Data Management
- Data Architecture
- Data Movement & Integration
- Metadata Management
- Data Quality
- Data Administration
- Security & Access

Data Lifecycle Management

Data Governance Execution Process

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Data Governance Program Roles

**Executive Sponsorship**
- **Strategy**: Protect, enhance, and fund the program

**Data Governance**
- **Tactics**: Provide oversight, create policies and procedures, assess compliance, manage risks

**Data Stewardship**
- **Operations**: Develop & support the asset per governing policies & standards

**Data Management**
Data Governance Organizational Framework

Enterprise Data Governance Steering Committee
- Executive Leadership
- Corporate Strategy & Objectives, Alignment
- Resolve Escalated Conflicts, Ensure Funding, Support

Data Governance Councils
- Key Business Stakeholders
- Determine DG Priorities, Funding Needs
- Establish Information Policies

Data Stewardship Teams
- Develop Data Standards & Guidelines
- Identify Opportunities for Improving Quality & Utility
- Ensure Compliance with Defined Policies

Data Management Teams
- Implements Processes and Solutions
- Sets and Enforces Data Management Standards
- Provides Data Expertise

Program Management
- Centralized role; not domain specific
- Coordinates governance across domains
- Facilitates SC meetings
- Communicates governance standards and guidelines
- Ensure alignment across governed data domains
- Monitors status and progression of EDG
- EDG Reporting

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Critical Success Factors:

• Treat as an ongoing program – not a project
• Allow time to design the program
• Define objectives
• Start small – but start somewhere
• Allow for process and cultural considerations
• Commit to communication and training
Data Governance Implementation Steps

Define the objectives of the program and set a framework for how and when decisions will be made.

Includes...

• Objectives
• Guiding Principles
• Organizational Framework
• Roles and Responsibilities
• Program Charter
• Identify Key Participants
Determine how decision making bodies will operate and how compliance and progress will be measured.

Includes...
- Operating Procedures
- Communication and Training
- Metrics
Data Governance Implementation Steps

Kick off initial program – begin small and expand. Refine program as it matures.

Includes...
- Execute Operating Model
- Policy Development and Approval
Data Governance Implementation Steps

Regular policy decision making becomes part of regular requirements and implementation process.

Includes...

- Policy Monitoring
- Decision Making
- Benefit Measurement
Linkage to MDM Initiatives

- It is always recommended to establish Data Governance in the context of a ‘small controlled project’
- Implementing an MDM solution in a phased approach makes a perfect springboard to move Data Governance forward
Some Notes About MDM

- MDM is a business process, not just a system
- MDM is more than just building a single master list of reference details - *the coding is the easy part*
- Agreeing to and standardizing business rules and values is the hard part – *this requires a business discussion*

*Data governance provides the organizational framework, authority and processes to make the hard decisions required for MDM*
Data Governance Implementation Steps

Data Governance

- Establishes
- Implements

Data Steward

- Recommends
- Monitors

Policy/Standard
- Ownership
- Decision Rights
- Usage
- Access
- Creation/Changes
- Process
- Communication
- Quality
- Etc...

Processes/Tools
- Definition
- Usage
- Sharing
- Acceptance
- Security
- Profiling
- Movement
- Quality
- Etc...

Data Lifecycle Management

Data Architecture
- Data Movement & Integration
- Metadata Management
- Data Quality
- Data Administration
- Security & Access

Data Governance

Data Management

- Determines
- Implements

Data Administration

Data Quality

- Etc…
Data Glossary
- Decision rights
- Data usage

Match/Merge
- Unmerge
- Survivorship
- Data quality
- Decision rights

Adopt Consumer Hub data as governed
- Establish decision rights
- Establish data usage guidelines

Formalize Customer Domain Governance

Data Stewardship

Customer Hub Data

Business Rules

Reporting Requirements

Data Governance Sample Timeline

Consumer Hub Implementation

Measure & Monitor
<table>
<thead>
<tr>
<th>Decision/Activity</th>
<th>DG Council</th>
<th>Data Steward</th>
<th>Data Expert</th>
<th>Data Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Quality and Validation</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>C</td>
</tr>
<tr>
<td>Matching</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>C</td>
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<tr>
<td>Survivorship</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>C</td>
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<tr>
<td>Data Provisioning</td>
<td>C</td>
<td>A</td>
<td>R</td>
<td>I</td>
</tr>
</tbody>
</table>

RACI Legend
R = Responsible (Do the Work)
A = Accountable (Ensure the Work is Done/Approver)
C = Consulted (Provide Input)
I = Informed (Notified, Not Active Participant)
Guiding Principles:

- Data will be managed as a shared enterprise asset
- All systems that create/maintain master data will integrate with MDM; no new point-to-point interfaces will be developed
- MDM will become the system of record for shared master data for all systems and applications
- Cross-functional data standards and business rules will be defined and applied to all master data
- Make Data Quality improvements measurable and a key to success
- Design for future and implement for now
- Data Governance encompasses information policy, data, application access, technology, and change management
- Master data and definitions will be maintained centrally
Key Considerations:

- Plan the program
- Document objectives and guiding principles
- Identify decision making bodies
- Identify how decisions will be made
- Empower the right level/people to make decisions
- Implement and measure against policies
- Identify how policies will be measured and maintained
- Communicate program milestones and successes
Thank You!

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