Master Data Stewardship & Governance

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Master Data Stewardship & Governance MDM Tech Talk

- We are currently on boarding all of the participants.
- We have the lines muted and the presentation will begin at 10AM EST as scheduled.
- Please post any questions to the “ALL” group in the chat

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What can an Information Governance Program really do?

Support innovative uses of internal and external data through the partnership with lines of business, as well as technology to drive new revenue and/or driving efficiencies

Data quality processes to “Certify Data” used in targeting, risk and relationship management

Fast access to high quality data via self service to support “on-demand” expectations

Flexibility to modify models to test, corroborate or improve insight into changing business conditions

Integration and reuse enabling investments to be leveraged across the enterprise via a shared data foundation

Access to business and technical definitions and lineage to incent reuse and data confidence

Innovate

Responsive

Business Outcomes

Data Quality

Adaptable Insights

Transparent

Spend Smart
Information Governance is based on eleven interconnected disciplines

- **Targets**
  - Business Value

- **Enabler**
  - Organizational Structure and Awareness
    - Stewardship
    - Data Risk Management and Compliance
    - Rules & Policies

- **Core Disciplines**
  - Data Quality Management
  - Information Lifecycle Managements
  - Data Security & Privacy

- **Supporting**
  - Data Architecture
  - Classification & Metadaten
  - Auditing & Reporting

Information Governance is the orchestration of People, process and technology in order to unleash corporate data and raise the value derived from it.

Source: http://www.infogovcommunity.com
End-to-end Governance Story

Policy Administration
- Business-level policy trees
- Embedded, prescriptive policies
- MDM Policy Tree administered in InfoSphere Governance Catalog

Policy Implementation
- Configuring and/or customizing policies and business rules
- Active integration in customer applications, BPM data stewardship, DataStage flows, etc
- MDM Policies administered in BPM/IA/ODM

Policy Monitoring
- Define metrics to evaluate success of policies and governance
- Monitoring enabled via Governance Dashboard

Policy Enforcement
- Performed systemically with or without human intervention
- Data stewardship workflow enabled in BPM by the IBM Stewardship Center
Logical Architecture

Administration
- Governance Catalog
  - Governance Policies
  - Governance Rules
  - Glossary Terms

Implementation
- Rules Engine
  - Rule Implementation

Enforcement
- Stewardship Center
  - Task Management
  - Governance Workflows
  - Process Monitoring

Monitoring
- Governance Dashboard
  - Dashboards

Data Platform
- MDM
- RDM
- IA
- Data Stage

Governance Team
- Governance Officer
- Rules Author
- Lines of Business
- Data Steward
InfoSphere Information Governance Catalog

A meaningful directory of governed information

Features

- Comprehensive catalog of information assets
- Governed business vocabulary
- Enables the creation of stewards & assignment of responsibilities for information domains
- Supports Collections of assets for team collaboration
- Links business terms and information governance rules to information assets and operational rules
- Integrates with other products for operational governance
- Displays end-to-end lineage across information assets
- Customizable interfaces
How does it all tie together?

Policy

Business Rule

Information Governance Requirements

Business Metadata

Category

Business Lineage

Business Term

Technical Metadata

Data Element

Data Lineage

The „What“

The „How“

Operational Metadata

Data Rule

Execution Statistics

The „Results“
Flexible Rules Implementations

- Provides the implementation of the business definitions of the governance program
- Rules are executed by the enforcement points defined within the system
- Governance program rules implemented through robust rules technologies
- Can be enforced at various enforcement points throughout the infrastructure
- Can be implemented in a number of components
  - Within Governance Processes
  - Within a shared library
- Can be written in BPM, ODM or IA

```sql
if all of the following conditions are true:
- ssnValue is "NULL" then set ssnIsNull to true:
else set ssnIsNull to false:

if all of the following conditions are true:
- ssnChar1 is one of {"0","1","2","3","4","5","6","7","8","9"}
- ssnChar2 is one of {"0","1","2","3","4","5","6","7","8","9"}
- ssnChar3 is one of {"0","1","2","3","4","5","6","7","8","9"}
- ssnChar4 is one of {"0","1","2","3","4","5","6","7","8","9"}
```
IBM Stewardship Center

A centralized collaborative platform for responding to governance events across the ecosystem

Features

- Define People and Processes for Enterprise Governance
- Define the people responsible for creating, reviewing and publishing DG artifacts
- Define the people responsible for responding to DG events
- Fully extensible and customizable workflows
- Fully customizable user interfaces, leveraging REST API

- Rich mobile user experiences
- Expertise Location
- Powered by industry leading BPMN engine
- Support for workflow centric data stewardship
- Support for traditional maintenance of master data repositories
- WYSIWYG UI builder and D&D workflow design tool
- Cloud based process design experience available
Centralized platform for responding to events

Master Data Events
- Suspect Duplicates
- Change Requests

Data Integration Events
- Policy violations
- Data load failures
- Transcoding Failures

Data Quality Events
- Data Rule Failures

Human Events
- Issue resolution

Reference Data
- Change Requests
- Life cycle Management

Governance Artefacts
- Change requests
- Life cycle management

Custom Events

IBM Stewardship Center

Collaboration

Data Steward
Governance Officer
Lines of Business
Information Governance Dashboard

View real-time status of policy compliance and operational metrics

- Real time compliance reporting
- SQL Views of the metadata repository
- Out of the box BI reports
- Updated data quality metrics
- Drill-down from Information Governance Policies & Rules
- Extensible to include custom metrics
IBM Stewardship Center
IBM Stewardship Center Ecosystem

- **Reactive Data Stewardship**
  - React to changes in Master Data and initialize a process to route it for action:
    - Link / Unlink / Creation / Deletion / Persistence / SDP

- **Proactive Data Stewardship**
  - Monitor and remediate DQ issues on the fly
Dashboards provide business users with a
- single integrated task list
- on the fly metrics and reports
- collaborative platform
- single place to monitor the health of your data and processes

- Fully customizable to allow for custom dashboards and themes
- The new face of MDM Data Stewardship
Single inbox and remediation portal for all data quality tasks
Users are presented an prescriptive UI

Optimized to remediate the type of data quality task assigned to them

*Ex. MDM Information Governance rule violation task*
Users are presented an prescriptive UI

Optimized to remediate the type of data quality task assigned to them

*Ex. MDM Entity Resolution task*
Mobile

Improve productivity with streamlined communication

- Stewardship Center is mobile enabled

Attach supporting documents and images to any process task

Improve productivity through dynamic communication of activities – reduce “back channel” emails, messages, etc.
Social

- Next Generation Data Stewardship is socially enabled

Dynamic activity notifications facilitate real-time collaboration and responsiveness.
**Expertise Location**

- Locate experts quickly and collaborate across lines of business

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### Complete Loan Rejection Form

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<th>Options</th>
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<td>/ /</td>
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<td>Primary account number</td>
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<td>Group number</td>
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<tr>
<td>Third reason for rejection</td>
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<td>Credit score source</td>
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<table>
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<tr>
<td>Reason for credit check</td>
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<tr>
<td>Relationship</td>
<td>Married, Single, Divorced/Widowed</td>
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<td>Secondary account number</td>
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<tr>
<td>Credit score</td>
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<tr>
<td>Number of credit cards</td>
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<td>Rejection date</td>
<td>/ /</td>
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**Connect to other pre-defined & discovered Experts to get help with your task**

- Benjamin Short
  - @Mention
  - Collaborate
  - Chat
- Craig Moser
  - @Mention
  - Collaborate
- David Van
  - @Mention
  - Collaborate
- Elizabeth Jensen
  - @Mention
  - Collaborate
- Cliff Vers
  - @Mention
  - Collaborate
- Lauren Shupp
  - @Mention
  - Collaborate
Active Collaboration

- Real time collaboration

Wendy is in “view” mode and can see Jane’s edits real time!

Jane can make Wendy an editor

Jane is the editor… Wendy can see her changes as she types
A Modular Extendable Framework

- Toolkits provide the building blocks of business processes
- Toolkits can be plugged in to extend the base capability of BPM
- Each process uses a collection of toolkits
  - Custom toolkits
  - System toolkits
- Toolkits can contain: UI controls, entire screens, integration services, libraries, images, resource bundles
- The MDM Application Toolkit provides MDM specific capabilities
MDM Application Toolkit - Bringing MDM Specific capabilities into BPM

- A rich library of MDM specific capabilities
  - MDM Integration Services
  - MDM UI Controls
  - MDM Workbench Integration
  - Productized integration
  - Using BPM pluggable framework
- Eclipse RCP based tooling platform.
- Drag and drop integration services, decisions and coaches onto the canvas.
- Integrated test and debug environment
- Data passed between steps and users by shared variables.
- Rich set of OOTB integration services
- Fully pluggable framework to add more
coach designer

- WYSIWYG editor for coach Uis.
- Rich suite of OOTB coach views
- Data driven
- Fully extensible web 2.0 development platform
  - Custom HTML controls
  - Custom extension points
  - Custom CSS
  - Custom async calls
- Modular
  - Re-use same screen across multiple processes
- Vast user community providing pluggable coach views.
## Suspect Management/Preview Collapse

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</table>
MDM Tree

- Displays a Tree view of MDM data
- Works with physical/virtual MDM and uses both relationship and hierarchy services
- Drag and drop and delete to manage the hierarchy
- Use with the MDM Application Toolkit integration services to load and update MDM data
- Filters allow display of different types of data
- Build coaches with multiple MDM trees on one page to manage multiple hierarchies
MDM Diagram

- View multiple MDM records as related to their entities
- Drag and drop records amongst entities to link and merge the records
- Use with the MDM Application Integration Services to visualize your master data relationships
- Customizable layouts
MDM Workbench Integration

Import MDM Data Model into Process Designer – Development tool integration

- BPM applications are data driven – Every control is bound to a BPM variable
- MDM Workbench can export data model in a format to be imported into Process Designer

• MDM Application Toolkit integration services require these business objects to be used as parameters when calling MDM.
Steps to Build an MDM Workflow Process

1. **MDM Workbench**
   - Configure MDM domain and services
   - Export data types as WSDL

2. **Process Designer**
   - Import MDM data types
   - **Configure** Business Process
     - User interface
     - Integration services
   - Custom code where required
   - Test

3. **Process Portal**
   - Deploy your process
   - Monitor for improvement

**MDM Application Toolkit**

- 20%
- MDM AT provides significant saving on the most expensive part of a project.
- Allows development team to focus on function not on integration

- 70%
- Rough comparison: Search MDM > Search Results > MDM details
  - With BPM and MDM AT: 10 Minutes
  - With BPM and no MDM AT: 1 day
  - Hand coded: 3-4 days

- 10%
Demo – Stewardship Center

- Stewardship Center Demo: Business User
  - [https://www.youtube.com/watch?v=Uv8loslJ2k4](https://www.youtube.com/watch?v=Uv8loslJ2k4)

- Stewardship Center Demo: Data Steward
  - [https://www.youtube.com/watch?v=w16YQCXCJhM](https://www.youtube.com/watch?v=w16YQCXCJhM)

- Stewardship Center Demo: Data Steward Manager
  - [https://www.youtube.com/watch?v=vN00NGr_8Hc](https://www.youtube.com/watch?v=vN00NGr_8Hc)

- MDM Application Toolkit Demo: Build an app from scratch
  - [https://www.youtube.com/watch?v=IYvDwkQCvCQ](https://www.youtube.com/watch?v=IYvDwkQCvCQ)
Questions?

- For more information:
  - DeveloperWorks
  - MDM Tech Talks on Youtube