EIM104

Introduction to SAP Master Data Governance

Markus Kuppe, Product Management, SAP Master Data Governance
November, 2012
Disclaimer

This presentation outlines our general product direction and should not be relied on in making a purchase decision. This presentation is not subject to your license agreement or any other agreement with SAP. SAP has no obligation to pursue any course of business outlined in this presentation or to develop or release any functionality mentioned in this presentation. This presentation and SAP's strategy and possible future developments are subject to change and may be changed by SAP at any time for any reason without notice. This document is provided without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. SAP assumes no responsibility for errors or omissions in this document, except if such damages were caused by SAP intentionally or grossly negligent.
Master data challenges
Materialize across the organization

- **Reduced Sales Effectiveness**
  Lack of consolidated view of customer data across all channels
  Customer transactions are compromised due to limited view of the facts

- **Sub-optimal Procurement Decisions**
  Lack of transparency relating to suppliers and products
  High costs due to insufficient supplier selection and rationalization

- **Delayed Go-to-Market Process**
  Failure to capitalize on market opportunity when introducing new products
  Lack of real-time collaboration with front office, thus hindering customer services

- **Ineffective Business Decisions**
  Lack of consistent information impedes to make critical decisions supporting innovation
  Compromised business dynamics with negative impact on managing resources effectively
All lines of business are impacted by master data quality

<table>
<thead>
<tr>
<th>Organizations &amp; Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financials</strong></td>
</tr>
<tr>
<td>CFO</td>
</tr>
<tr>
<td><strong>IT</strong></td>
</tr>
<tr>
<td>CIO</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
</tr>
<tr>
<td>(S)VP of Sales, (S)VP of Sales &amp; Marketing</td>
</tr>
<tr>
<td><strong>Supply Chain</strong></td>
</tr>
<tr>
<td>VP of Supply Chain, VP of Planning</td>
</tr>
</tbody>
</table>

### Challenges

- Inconsistent financial master data across the enterprise
- Manual efforts to update financial master data in local financial systems
- Risk of non-compliance to IFRS, SOX etc.
- Slow group closes
- Lack of transparency about changes (Who, what, when, why?)
- High master data maintenance costs
- Need for multiple systems to manage master data in different domains
- Lack of flexibility in dynamic business environments
- Lack of consolidated view of customer data across all channels
- Customer transactions are compromised due to limited view of the facts
- Lack of transparency relating to suppliers and products
- High costs due to insufficient supplier selection and rationalization
- Loss of potential for benefit realization (i.e. discounts, conditions, central contracts)
- Limited availability of up-to-date master data in my business network
SAP Master Data Governance
Centrally govern master data on top of SAP Business Suite

SAP MDG is a natural extension of the business processes running in SAP Business Suite, providing out-of-the-box, domain-specific master data governance to centrally create, change and distribute master data.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>Enables governance, compliance and transparency through integrated staging, approval and central audit trail</td>
</tr>
<tr>
<td>Consistent Data</td>
<td>Delivers consistent definition, authorization and replication of key master data entities for SAP. Eliminates error prone manual maintenance processes for master data in multiple systems</td>
</tr>
<tr>
<td>Integration</td>
<td>Native integration with SAP Business Suite and SAP ERP</td>
</tr>
<tr>
<td>Re-use</td>
<td>Re-use of SAP data model, UI and existing business logic and configuration for creation and validation of master data</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Integrates with SAP BusinessObjects Data Services for data quality and data enrichment as well as SAP BusinessObjects Information Steward for data remediation</td>
</tr>
<tr>
<td>NW MDM &amp; MDG</td>
<td>Can complement and extend SAP NetWeaver MDM</td>
</tr>
</tbody>
</table>
SAP Master Data Governance
Process flow archetype

External Providers

SAP Master Data Governance

1. Maintain
   - Central maintenance of master data in staging area

2. Validate
   - Re-Use existing business logic
   - Integrate external services
   - Data Enrichment, Address Cleansing, Duplicate Check

3. Approve
   - Collaboration
   - Adaptable Workflow
   - Auditable Change Process

4. Replicate
   - Automatic replication to non-SAP and SAP systems

5. Adapt
   - 3rd party systems
   - Business Suite systems
   - Adaptation / Enrichment in local systems

External Services

External Providers

Business Processes
User centered design
Work center provides work lists, search and applications
Creating a change request
Let the system check for business consistency and duplicates
SAP Master Data Governance capabilities
Facilitating utmost business process performance
Element 1
Deliver out-of-the-box

- Low TCO
- Flexibility
- Ease of consumption
- Best Practice
- Process Transparency
- Integration

- Full Integration to SAP Systems as a client
  Offer integration services for non-SAP client systems
- Workflow flexibility closely integrated to
  a framework for defining business rules
- Deliver roles on a web based UI
  Deliver process-centric solution
  Deliver predefined Data Quality Services
- Deliver a Data Model proven by
  several applications & industries
- Reuse of existing processing logic
- Out-of-the-box data replication mechanisms,
  using stable mechanisms
Element 2
Integrated object model

Out-of-the-box delivery of proven data models for operational and financial master data

Financials
- Chart of Accounts
- GL Account
- Consolidation Unit / Group
- Cost Element
- Org. Units: Company, Profit Center, Cost Center

Material
- General Data & Descriptions
- Units of Measure
- EAN, UPC
- Classification
- Sales Data
- Plant Data
- Valuation & Costing

Supplier & Customer
- Business Partner Attributes
  - Central Data
  - Roles
  - Bank Details
  - Identification
  - Tax Numbers
  - Industry Sectors
  - Addresses with Usage and Versions
  - Business Partner Relationships
- Supplier Attributes
  - General Data
  - Comp. Code Data
  - Purchasing Data
- Customer Attributes
  - General Data
  - Comp. Code Data
  - Sales Area Data
  - Tax Indicators
Element 3
Governance, collaboration...

- Linear or distributed & workflow based
- Has roles and responsibilities and also task authority (e.g., create, change, approve)
- Can be adapted and tailored based on customer needs
- Possibility to extend the process by adding business logic and thereby bringing in data quality
- Data in process stored in a separated repository, will be transferred to operational database after final approval
- Flexible enough to respect the distributed responsibilities existing in a company across various business units
Element 3

…and data quality

Prevent creation of duplicates for increased effectiveness and efficiency
- Checked early and embedded in the process
- High detection quality of matching using Enterprise Search or SAP BusinessObjects Data Services

Validations
- Re-use of existing validation logic in SAP ERP
- Custom validations can be modeled and programmed (e.g. code lists, simple checks, or modeled rules via SAP BRF+)

Address Enrichment
- Simple check and selection lists
- Integration with content provided by SAP BusinessObjects Data Services
- Automatically adding Tax Jurisdiction Code re-using existing interfaces / providers
Element 4
Robust data replication

Replication
- Automatic or manual replication to SAP & non-SAP
- Peer-to-peer or mediated

Replication Techniques
- DRF controlling replication mechanisms like
  - ALE for SAP ECC, R/3 and non SAP systems
  - SOA service for SAP and non SAP systems
  - RFC and File for SAP and non SAP systems
- CIF for SAP SCM, and MW for SAP CRM & SRM

Replication Features
- Flexibility to replicate selected data only to a specific client system by defining filters (controlled by DRF)
- Support different object IDs or customizing keys in hub and client systems (mapping in MDG or NW PI)
- Monitoring and error handling
Element 5
Reusability & extensibility

**Reuse standard content**
- Reuse existing data structures and functionality of SAP Business Suite

**Enhance functionality**
- Be able to enhance MDG functionality based on predefined content (e.g. plant or sales data) or customer-specific extensions

**Extend data structures**
- Provide easy-to-use extensibility capabilities for enhancing nodes and fields
  - data model
  - user interface
  - processes
  - data replication
SAP Master Data Governance for financial data
Speed-up your financial close with consistent and reliable data

Manage Financial Data Centrally

- Out-of-the-box master data governance application to centrally create, change and distribute financial master data with focus on SAP Business Suite
- Upfront accuracy of chart of accounts and other elements such as general ledger, hierarchies, org units etc.
- Change requests organized as Editions to steer approval process
- Deliver consistent data across corporate group and local systems
- Pre-built validation against SAP business logic
SAP Master Data Governance for material data
Integrated, centralized product/material data for process excellence

Material Processing
- Workflow-driven creation and change process for Materials
- Change requests steer the maintenance & approval process of new or changed data
- Document changes for audits
- Work lists organize due changes
- Adaptable user interfaces and validations can be different per workflow step if needed

Distribution
- Changes are kept inactive until approval
- Then distributed to operational systems via DRF using ALE or SOA

Scope of Master Data
- Search, display, change, creation of single material master data
- Mass processing of changes
- File upload e.g. for initial load or system consolidation
- Broad out-of-the-box coverage of material attributes – incl. central and classification data as well as organizational unit data (can even be extended by customers as needed)
SAP Master Data Governance for supplier data
Manage mission critical data for procurement organizations

Supplier Processing
- Workflow-driven creation and change process for Suppliers
- Change requests steer the maintenance & approval process of new or changed data
- Document changes for audits
- Work lists organize due changes
- Adaptable user interfaces and validations can be different per workflow step if needed

Distribution
- Changes are kept inactive until approval
- Then distributed to operational systems via DRF using ALE or SOA

Scope of Master Data
- Search, display, change, creation of single supplier master data
- Mass processing of changes
- Data quality services such as duplicate check and address validation
- File upload for initial load, system consolidation, or supplier on-boarding
- Broad out-of-the-box coverage of supplier attributes (can even be extended as needed)
SAP Master Data Governance for customer data
Enable consistency towards your clients across all business units

Customer Data Processing
- Workflow-driven creation and change process for Customers
- Change requests steer the maintenance & approval process of new or changed data
- Document changes for audits
- Work lists organize due changes
- Adaptable user interfaces and validations can be different per workflow step if needed

Distribution
- Changes are kept inactive until approval
- Then distributed to operational systems via DRF using ALE or SOA

Scope of Master Data
- Search, display, change, creation of single customer master data
- Mass processing of changes
- Data quality services such as duplicate check and address validation
- File upload for initial load, system consolidation, or on-boarding
- Broad out-of-the-box coverage of customer attributes (can even be extended as needed)
SAP Master Data Governance application foundation
The basis for your central master data management

Extend SAP’s data model

Standard models provided
Pre-configured data models, user interface configurations, workflows, and data distribution are available

Changes expected
You can extend the existing models with your own master data attributes, change the UI configuration to your users’ needs, and customize the workflow and distribution to define your specific governance processes

Define your own
Tools allow you to define new objects and related processes in order to govern your own master data domains
SAP Master Data Governance
High-level architecture overview

Optional EIM Parts
- Information Steward
- Data Services
- Enterprise Search
- NetWeaver MDM
- SAP Information Management Suite

Central System for Master Data Processes
Portal / NetWeaver Business Client

SAP Master Data Governance
User Interfaces, Roles, Work Centers
- Workflows
- Staging
- Validation

SAP Master Data Governance
- Change Request, Governance Model, Search & DQ Adapters,
  UI Framework, Analytics, Replication, Key / Value Mapping

SAP ERP 6.0
AS ABAP 7.3x

Client Systems
- ERP
- SRM
- CRM
- SCM
- On Premise Apps
- Cloud Systems
- 3rd Party

Integrate services for data cleansing, matching & consolidation
Tight integration into SAP Business Logic and leveraging standard AS ABAP
Client systems are integrated via various channels (such as SOA, ALE, RFC, File)

© 2012 SAP AG. All rights reserved.
## SAP MDG deployment options

Consciously decide for a central hub or co-deployment

### Deploy SAP MDG...

... as standalone system / master data hub

- **SAP MDG**
- **SAP ERP**
- **SAP SCM**
- **3rd party, NWAs**
- **SAP SRM**

### ... on top of an operational ERP

- **SAP MDG & SAP ERP**
- **SAP ERP, SCM, CRM, SRM ...**
- **3rd party, NWAs**

### Customers typically choose to...

... create a dedicated master data hub and distribute to all operative systems from there, or

... co-deploy(*) with their single instance SAP ERP (or pick one of their SAP ERP’s as the master for a particular domain) and create and distribute master data from there

*) if speed of innovation in their ERP systems does not allow for quick introduction of SAP MDG, some customers create a separate system first, and re-combine later
SAP RDS for master data governance with information stewardship

Create and maintain high quality master data to support mission-critical business processes

Description:
- The SAP rapid-deployment solution for master data governance with information stewardship allows customers to profile, validate, and monitor customer, supplier, and material master data, and to remediate data problems in a governed process.

Key Functions and Features:
- Data-quality monitoring cockpit for SAP Master Data Governance
- Direct and transparent insight into the current level of data quality
- Continuous monitoring and integration with processes in SAP Master Data Governance to remediate data issues
- Increased and governed quality of master data in SAP ERP
- Accuracy and reliability of all master data

Customer Pain Points/Qualifiers:
- Reduced sales effectiveness
- Inappropriate customer and material master data limit sales cycles, including cross- and up-selling
- High marketing costs
- Inaccurate customer attributes lead to higher campaign costs
- Suboptimal customer service
- Inconsistent view of a customer profile limits customer services
- Suboptimal supplier relations
- Inaccurate view of a supplier profile hinders effective sourcing and price negotiations
- Unreliable analysis
- Inconsistent master data impedes reliable analysis and decision making processes

Value Proposition:
- For some time, master data management has been seen as a technology to create a single, unified view of data across an organization. It has driven these efforts most often, and many initiatives have failed because of the poor quality of input data, inaccurate or nonaligned reporting, internal disagreements, and broken processes. That means that they have failed due to lack of governance and involvement of the business.
- This rapid-deployment solution focuses on providing predefined content in SAP® Information Steward software for profiling and assessing the quality of master data in SAP ECC (table views, validation rules, and so on) and continuous monitoring and integration with processes in the SAP Master Data Governance application to remediate data issues (such as jobs in SAP BusinessObjects Data Services software).

Target Market:
- Industry: Cross
- Customer role: Head of sales, Head of services, Head of operations
- Customer type: Existing customers
- Customer size: Large and midsize enterprises

Target Audience:
- CIO
- LoB Information Technology
- LoB Sales, Service, and Marketing
- LoB Supply Chain
- LoB Manufacturing

Cross/Up Sell Opportunities:
- SAP NetWeaver MDM rapid-deployment solution for customer data integration

Material Numbers:
- 7011828 SAP Master Data Governance, Customers
- 7011827 SAP Master Data Governance, Supplier
- 7011829 SAP Master Data Governance, Product
- 7011320 BA&T SAP BusinessObjects Information Steward
- Service material number: 50111795

Pricing and Deal Size Range:
- Solution is licensed by regular price list items. Licensees are entitled to Use the functionality specified herein.

Competitors:
- Informatica
- DataFlux (SAS)
- Trillium Software
- Oracle

Differentiation vs. Competition:
- Fully integrated with SAP ERP
- Master Data creation and data problem remediation happens in an integrated, governed process
- Pre-configuration combined with proven implementation methodology lowers implementation time and risk

Implementation Details:
- Go live in 8 weeks

For More Information:
http://service.sap.com/rds-mdg

The combination of SAP Master Data Governance, SAP BusinessObjects Information Steward, and SAP BusinessObjects Data Services allows customers to execute profiling tasks (column) to create statistical information and analyze the master data in SAP ECC and SAP Master Data Governance in detail. For ongoing monitoring and assessment of the data-quality level, validation rules can be defined and applied to the data sets on a regular schedule.

This approach allows getting trend information on the data-quality level and early alerts about bad data entering SAP ECC. For a complete overview of the current data-quality level of master data, a data steward can set up a data-quality scorecard that consolidates the results of the ongoing data-quality measurement into a single diagram. Using this rapid-deployment solution, users can validate and remediate master data by using the functions of SAP Master Data Governance.
What’s new in SAP Master Data Governance?
SAP MDG 6.1 – ramp-up started in September 2012

Increased Data Model Coverage for Material, Customer and Supplier

Enhanced Application Foundation facilitating integration and configuration

Improved Data Quality through seamless analytics and remediation

- **Material Data Model, additional coverage**
  - Basic data extension, Plant data, Sales Org / Distribution Channel data, Valuation data, Tax Classification data and Long Texts.

- **Customer Data Model, additional coverage**
  - Partner Functions, Dunning Areas, Withholding Tax Types, Sales Area Data, Tax Indicators and Company Code Data

- **Supplier Data Model, additional coverage**
  - Partner Functions, Dunning Areas, Withholding Tax Types and Purchasing Org Data 2

- **Business Partner enhancements**
  - Person / Group data (in addition to organizations), Relationships, Contact Partners

- **Integration improvements**
  - Inbound processing of Material master data via Enterprise Services for enhanced data model
  - Data quality remediation through integration with Information Steward or other 3rd party services
  - Support of client maintenance for suppliers via Supplier Lifecycle Collaboration (SLC)

- **Configuration improvements**
  - Definition of Governance Scope: remove or add entity types / attributes
SAP Master Data Governance 6.1
Summary of the key capabilities

Master Data Governance for Financial Data
• Create or change Chart of Accounts, GL Accounts, Companies, Profit and Cost Centers, Cost Elements and respective hierarchies
• Data distribution to operational systems via Services (SOA) or ALE

Master Data Governance for Material Data
• Create or change a broad range of material master data attributes, including governed classification
• Mass data upload and mass change capabilities
• Data quality services such as duplicate check
• Data distribution to operational systems via SOA or ALE

Master Data Governance for Supplier and Customer Data
• Create or change a broad range of supplier or customer master data attributes as well as the underlying business partner attributes
• Mass data upload and mass change capabilities
• Data quality services such as duplicate check and address validation
• Data distribution to operational systems via SOA or ALE

Master Data Governance for Custom Objects
• Framework for data modeling, UI configuration, validation, and distribution of custom-defined master data objects
Benefits through SAP Master Data Governance

Up-front, central creation of master data enables high data quality and leads to significant business improvements.

Out-of-the-box, process-centric applications provide centralized governance for master data domains such as financial data, supplier data, customer data, material data.

Native integration with SAP Business Suite using existing business logic and infrastructure leads to low TCO.

SAP Master Data Governance provides flexibility, from configurable workflows and extensible data models, up to custom built applications.
## Other SAP MDG sessions at TechEd Las Vegas

<table>
<thead>
<tr>
<th>ID</th>
<th>Type</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIM101</td>
<td>1h Lecture</td>
<td>SAP Enterprise Master Data Management – Strategy and Road Map</td>
<td>Olivier Claude</td>
</tr>
<tr>
<td>EIM104</td>
<td>1h Lecture</td>
<td>Introduction to SAP Master Data Governance</td>
<td>Olivier Claude</td>
</tr>
<tr>
<td>EIM119</td>
<td>1h Lecture</td>
<td><strong>COLGATE PALMOLIVE</strong>: SAP Master Data Governance – A Data Governance and Value-Generation Solution</td>
<td>Pratik Talwar</td>
</tr>
<tr>
<td>EIM222</td>
<td>1h Lecture</td>
<td><strong>INTEL</strong>: From Concept to Solution – The Master Data Story at Intel</td>
<td>Jolene Jonas</td>
</tr>
<tr>
<td>EIM206</td>
<td>1h Lecture</td>
<td>SAP Enterprise Master Data Management and SAP Information Steward</td>
<td>Michael Briles</td>
</tr>
<tr>
<td>EIM210</td>
<td>1h Lecture</td>
<td>Monitoring Cross-System Master Data Governance Processes</td>
<td>Scott Braker-Abene</td>
</tr>
<tr>
<td>EIM110</td>
<td>1h Lecture</td>
<td>Managing Big Data with SAP HANA – Solution Strategy</td>
<td>Roman Rytov</td>
</tr>
<tr>
<td>EIM261</td>
<td>2hr Hands-On Workshop</td>
<td>SAP Master Data Governance – Framework Configuration and UI Personalization</td>
<td>David Quirk &amp; Simer Grewal</td>
</tr>
<tr>
<td>EIM262</td>
<td>2hr Hands-On Workshop</td>
<td>Workflow Design in SAP Master Data Governance</td>
<td>Vikas Lodha &amp; Simer Grewal</td>
</tr>
<tr>
<td>EIM264</td>
<td>2hr Hands-On Workshop</td>
<td>Flexible Governance – Govern Your Own Objects in SAP Master Data Governance</td>
<td>David Quirk &amp; Scott Braker-Abene</td>
</tr>
</tbody>
</table>
### Other SAP MDG sessions at TechEd Madrid

<table>
<thead>
<tr>
<th>ID</th>
<th>Type</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIM101</td>
<td>1h Lecture</td>
<td>SAP Enterprise Master Data Management – Strategy and Road Map</td>
<td>Markus Ganser</td>
</tr>
<tr>
<td>EIM104</td>
<td>1h Lecture</td>
<td>Introduction to SAP Master Data Governance</td>
<td>Markus Kuppe</td>
</tr>
<tr>
<td>EIM206</td>
<td>1h Lecture</td>
<td>SAP Enterprise Master Data Management and SAP Information Steward</td>
<td>Lars Rueter</td>
</tr>
<tr>
<td>EIM210</td>
<td>1h Lecture</td>
<td>Monitoring Cross-System Master Data Governance Processes</td>
<td>Lars Rueter</td>
</tr>
<tr>
<td>EIM110</td>
<td>1h Lecture</td>
<td>Managing Big Data with SAP HANA – Solution Strategy</td>
<td>Roman Rytov</td>
</tr>
<tr>
<td>EIM261</td>
<td>2hr Hands-On</td>
<td>SAP Master Data Governance – Framework Configuration and UI Personalization</td>
<td>Michael Boettcher &amp; Markus Ganser</td>
</tr>
<tr>
<td>EIM262</td>
<td>Workshop</td>
<td>Workflow Design in SAP Master Data Governance</td>
<td>Michael Boettcher &amp; Andreas Seifried</td>
</tr>
<tr>
<td>EIM264</td>
<td>2hr Hands-On</td>
<td>Flexible Governance – Govern Your Own Objects in SAP Master Data Governance</td>
<td>Lars Rueter &amp; Andreas Seifried</td>
</tr>
</tbody>
</table>
Resources: Enterprise Information Management with SAP

- Understand the big picture of SAP’s enterprise information management offerings
- Explore step-by-step instructions for working with SAP Data Services
- Learn how to perform the most important tasks in SAP Master Data Governance, SAP Information Steward, SAP NetWeaver Information Lifecycle Management, and SAP Extended Content Management
- All royalties donated to Doctors Without Borders

Enter 6Y8DF3 as your discount code when ordering at SAP PRESS
Further Information

SAP Public Web & SAP Community Network
Community for SAP Master Data Governance. Find resources including best practices, presentations, blogs, forums, videos, e-learning, wikis and more.

SAP Education and Certification Opportunities
SAP: www.sap.com/education
MDG: https://training.sap.com/search?query=master+data+governance

Watch SAP TechEd Online
www.sapteched.com/online
Feedback

Please complete your session evaluation for EIM104.

You may contact me at Markus.Kuppe@sap.com.

Thanks for attending this SAP TechEd session.