Building the Bullet-Proof MDM Program
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Agenda
- Understanding the critical components and prerequisites of your MDM program
- Identifying the critical and non-critical players on your MDM team
- Establishing success criteria and ensuring measurement to illustrate your project’s success
- Determining the skills and experience you will need to jump-start MDM Q & A

About Your Instructor
- Leads Baseline’s IT Consulting practice
- Presents at key industry conferences: DAMA, Data Governance, MDM/CDI, and TDWI
- Currently working on data integration issues and architecture programs with clients
- Judges industry best practice awards including TDWI Best Practice awards
- Columnist for DMReview’s monthly “Ask the Experts” column
- Sample Clients: CheckFree, GlaxoSmithKline, Microsoft, Charles Schwab
Data is a Moving Target

- New data is being introduced daily—from both internal and external sources
- The number of relationships our customers can have with us is increasing
- Households and companies may have multiple hierarchies
- Different operational systems see data in different ways
- Data integration requirements transcend reporting
- There's more data than ever

Different Types of Data Integration

- **Synchronization**
  - Data is shared between systems one another via custom code or specialized software

- **Data Warehouse**
  - Data is transformed and loaded onto a specialized platform for business intelligence and analytics

- **Master Data Management**
  - Subject-area data is reconciled and integrated dynamically across diverse systems

Master Data, Defined

**Definition**

Master Data Management Data (MDM) is the consolidation of methods, processes, controls, and automation necessary to standardize and integrate subject area data originating from different sources.
MDM In Context

How is company ID represented? Is this the standard company name? Do they prefer this name? Do we store this with or without dashes?

How do we deal with multiple customer IDs? What happens if the name changes (acquisition, legal activity, etc.)? Which address is this (HQ, Finance, ???) How many do we save?

MDM involves data standardization as well as data integration and identification.

The Golden Record

Legacy

Cust. Id | Company Name | Industry | Credit | Fed Id | Address
---|---|---|---|---|---
30391-244 | Acme Federated | Retail | Net 55 | 010553452 | 123 Oak St., Eves, IL 30319

CRM

Cust. Id | Company Name | Industry | Cust Type | Fed Id | Address
---|---|---|---|---|---
14239 | Acme Supplies | Mail Order | K2 | 013491234 | 123-A Oak St., Eves, IL 30319

Online

Cust. Id | Company Name | email | Fed Id | Address
---|---|---|---|---
14239 | Acme Corp | John@acme.com | 013491234 | 123-A Oak St., Eves, IL 30319

ERP

Cust. Id | Company Name | Industry | Credit | Fed Id | Address
---|---|---|---|---|---
23716 | Acme Supplies | Mail Order | K2 | 013491234 | 1234 Hwy 5, Los Osos
The Details of MDM

<table>
<thead>
<tr>
<th>Content</th>
<th>Relationship</th>
<th>Processing</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Subject Area Details</td>
<td>• Party Identity (&quot;Like&quot; Attributes)</td>
<td>• Match and Identification</td>
<td>• Data Mgmt Configuration</td>
</tr>
<tr>
<td>• Identification Attributes</td>
<td>• Groupings (Rules/Logic)</td>
<td>• CRUD Processing</td>
<td>• Data Change And Approval</td>
</tr>
<tr>
<td>• Item Names</td>
<td>• Hierarchy (Parent/Child)</td>
<td>• Data Correction</td>
<td>• Security / Access</td>
</tr>
<tr>
<td>• Definitions</td>
<td>• Relationship Rules / Situations</td>
<td>• Data Change Logging</td>
<td>• Data Maintenance</td>
</tr>
<tr>
<td>• Value Representation</td>
<td></td>
<td>• Survivorship Rules</td>
<td></td>
</tr>
<tr>
<td>• Format Standardization</td>
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</tbody>
</table>

The Issues and Details

- Management is becoming more enlightened about data—they just don’t know what to DO
- Most companies have multiple relationships with their customers
- The more valuable the customer, the more complex the relationship
- Product data is more complex than customer data, and the rules and algorithms are different
- MDM should be loosely-coupled from applications
- MDM should be tightly-coupled with data quality
- MDM is an effective way to move toward business terms and away from database terms
The Critical Components

- Data standards are necessary to enable identification, matching, cleansing, and integration
- Data quality improvement and accuracy is driven by business metrics and decision making. *Perfection is not accuracy*
- Data governance positions data tactics to support business policy. It’s not optional for MDM
- Business needs and application requirements identify MDM function and process definition. Technology selection occurs last
- Improving data usability requires team members from both technology and business disciplines

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The MDM Development Habitat

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Organizations in the MDM Habitat

- **Data Management**
  - This team owns and supports data models, metadata management, and data requirements. They are typically strong and experienced in gathering data requirements
- **Data Governance**
  - Many of the issues that aren’t easily resolved through project methods (data quality problems, interface issues, etc.) can be addressed through the company’s data governance process.
- **Application Development**
  - Development stakeholders that will use and leverage the MDM hub to support their application requirements
- **IT Architecture**
  - The enterprise IT architecture organization should participate in the design review processes to limit surprises. This ensures that MDM project conforms to company’s development standards.
Identifying the Key Players

MDM Project Manager
The administrative and technical project lead. Participates in the requirements activities and ensures all stakeholders are held accountable for delivery.

MDM Architect
An IT architect familiar with the company’s standards that owns the roadmap for technical delivery. Participates in data analysis and design steps and supports integration and development activities.

MDM Developer
Technical team member focused on the two core development activities: application interface development and hub configuration. Typically team members will work on one area or the other.

MDM Data Steward
Team member supporting developer questions on accessing the hub and understanding the hub’s various data elements.

MDM Administrator
The CDI Administrator configures the hub, working on data loading issues as well as ongoing data maintenance activities.
A Typical IT SDLC

System Development Lifecycle
- Exists to support a repeatable, consistent development process
- Includes participation from all stakeholders (management, development, and end users)

Most SDLCs are IT-built and focused on application processing
- Typically lacks data rigor details (data testing, data acceptance, data certification)
- Can easily master data management activities with minor adjustment

An MDM-Specific Framework

Six Steps Connecting Idea to Delivery
- Data Requirements
- Data Analysis
- Integration Design
- Integration Development
- Data Validation
- Deploy Solution

Incorporating MDM
MDM Success Criteria

Establishing a set of critical success metrics allows your project to expand MDM from a project-centric activity to an enterprise-oriented value creator

- Data policy ownership positioned with the business stakeholder organizations (and not IT)
- The existence of a data management standards to support the data quality and integration function delivered by MDM
- Establishing a subject area data master independent of an individual application
- Identifying MDM/application onboarding criteria (for all systems)
- Operational and analytics systems being responsible for MDM adoption
- Publishing data quality details to illustrate data improvement (not perfection)

Do You Need MDM?

Some Key Indicators

- "We've gotta stop having the 'who owns the data?' conversation."
- "Fixing the data in a single system is pointless; no one owns data across all of the systems."
- "The CRM identifies customers differently than the billing system. We spend too much time reconciling the differences."
- "The owners of the operational systems won't even speak to me anymore."
- "Everyone agrees data quality is poor, but no one can agree on how to fix it."
- "Are you kidding? We have multiple versions of the single-version-of-the-truth."

Your Call to Action

Leverage the data management skills and practices you've established for your EDW team.
Adjust your SDLC and expand the details relating to data requirements, profiling, and analysis.
Plan on providing training and education to your CDI development team.
Position MDM as an infrastructure project that enables business programs—not as an end-user system
MDM development is different: think functional requirements and business rules
Use MDM/CDI as a pretext to begin the data governance conversation
Be ready to claim a "bigger slice of the pie"
Thank You!

For More Information, Please Contact Baseline:

www.baseline-consulting.com

See the MDM/Data Governance Channel on BI Network:

www.b-eye-network.com