MASTER DATA MANAGEMENT ROLES - THEIR PART IN DATA QUALITY IMPLEMENTATION

Alan Duff
A Duff International Associates Ltd
aduffintlass@btconnect.com

Executive Summary/Abstract: Timely implementation of a Master Data Management (MDM) Organisation is essential and requires a structured design. This presentation covers the way MDM processes and roles can link the business users to metadata and enable improved master data management, through disciplined organisation alignment and training. As organisations implement integrated ERP systems, the attention on master data is often limited to Data Migration. Therefore, a plan for recovery is frequently required.

Objectives of this presentation

- What do we mean by MDM?
  - Where does MDM fit in the Permanent Organisation?

- Organisational Integration
  - MDM Roles as an organisational “building block”
  - Benefits and application
  - Where does MDM fit in extending an ERP Implementation Project (“Rollout”)?

- A Roadmap for implementing MDM Roles
  - Rollout
  - Too late? Now what? Does it apply to non ERP cases?”
What do we mean by Master Data Management?

Formal and Documented Processes, Roles and Responsibilities supporting EFFECTIVE data entry, quality assurance and continuous improvement of the master data supporting Business Systems

Therefore, Master Data Management….

IS NOT
- Data Entry, Administrative Cost
- An IS led initiative
- Running the Data Centre

COULD BE
- Competitive Edge
- Means to Influence Supply Chain Partners, …., Consumers
- Way to Monitor Business Health, Conformance to Processes

IS
- Added Value to the Data Entered
- Business Process, “homeless”
- Means to Control an Asset
- An enabler for operational excellence
- An enabler for Business Intelligence
- An enabler for Performance Management
- Base for Information Quality
MDM Processes and Roles

Where does MDM fit in the Permanent Organisation?

MDM Process Documentation
Organisational Integration

- **Generic Roles**
  - Describe general responsibilities in Master Data Maintenance
  - Can vary from process to process
  - Structured around the Maintainer, who has SAP access determined by MDM Business Roles

- **MDM Business Roles**
  - Specific responsibilities for the Maintainer, based on Business Processes, focus for data ownership
  - Links MDM activities and hence master data objects
  - Structures Supporting Documentation
  - Completes set of activities to provide full data details needed
  - Determines
    - System Access (SAP, MDM Web applications)
    - Training Requirements

Generic master data roles

- **Business user / Master Data Change Requestor**
  - Business user that raises a master data change request
  - Collects and provides the required information to enable maintenance

- **Business Data Owner**
  - Authorises the creation and maintenance of master data
  - Absolute responsibility for the quality and accuracy of local Master Data – likely to be an “Approver”
  - May delegate to a “Provider”

- **Master Data Maintainer**
  - Creates and maintains MD in SAP according to approved requests, meeting business expectations for this service
  - These roles can be within a dedicated team or distributed within the business
What the changes mean for MDM

- Maintenance will be concentrated on fewer people (one, plus formal backup)
  - More experience, greater knowledge, consistent method
  - Greater quality and consistency, more effective data input
- The Data Owner will probably not maintain their data
  - Owners and requesters can focus on business
- Requests will need to be made for data creation/change
  - Longer lead time to complete the process, but done properly
  - Service levels must be agreed

Scenario:
1. Collect the data - Requestor / Data Owner
2. Send to Data Owner for approval (as Requestor was not the Data Owner)
3. Data Owner sends to MDM (Completing the MDM data form)
4. Maintainer checks consistency, enters data
5. Maintainer confirms to Requestor
   cc. Relevant parties (data owner) if needed

Service Level Agreements (SLA)

Objective: Mutually agree terms for delivery of an MDM Service
Covers timing and hours of cover, quality should also be monitored

Key steps
- Define other parties concerned (Data Owners, Data Requestors)
- Meet to define scope of request process (e.g. format of request, its quality/completeness) and expectation of Owners/Providers
- Define time-scales and ensure common comprehension of start and finish points for each party
- Document agreement
- Measure achievement of SLA as a Key Performance Indicator (KPI)
  - Timing
  - Quality
Managerial Master Data Roles

- Local MDM Manager
  - Controls local Master Data activities
  - Responsible for SLA and KPI implementation
  - Resolves most Local Master Data issues
  - Escalates unresolved issues
  - Assures training and knowledge retention on MDM
  - Maintains Local documentation
  Reporting to Local Master Data Sponsor for MDM
  Workload: high at first? Depends on site size and role scope

- Management support from Local Master Data Sponsor
  - Accountable for local MD quality, procedures and local KPIs
  - Ensures local MD organisation satisfies business users
  - Local management team e.g. Financial Director or Quality Manager
  Workload: ½ day/month

Standard Local MDM Business Roles

Benefits
- Link between Processes and Data Objects
- Structured documentation for both Maintainers and their correspondents
- Clear distinction of Master Data and Operational transactions
- Clear Mapping of MDM to individuals
- Logical construction of an MDM Training curriculum
- Recognisable MDM contact points for the User Community, network of Owners.
Distribution of MDM Business Roles

- Assess which MDM Roles apply to Business
- Assign each MDM business role to one person + formal backup
- Each person may be assigned more than one MDM business role
- Focus Master Data ownership around the Maintenance Process

Grouping for an MDM Organisation

Benefits versus no MDM organisation
- Specialist MD knowledge
- Focus for data ownership
- Access Control
- Documentation support
- Forms and workflow as required
- Escalation point for MD issues

Additional Benefits versus “Networked” MDM
- More specialised MDM staff
- Improved quality monitoring
- Reduced span of control for MDM manager
- Easier to deal with
MDM Process Documentation….

…supports Role Mapping

Personal Criteria for Master Data Maintainers - 1

General
- Demonstrates ownership of assigned responsibilities. Confident, autonomous, tenacious attitude.
- Should extend to applying preventative not just remedial and corrective measures
- Good risk and situation judgement, leading to balanced escalation. Reports risks and issues to Management (not majority of occasions)
- Rigorous, disciplined approach to work. Good process awareness. Adheres to procedures at all times.
- Demonstrates flexibility as needed in work, but not on day-to-day procedure. More a controlled, agreed and authorised modification to procedure (spirit of continuous improvement)

Team Work and Relationships
- Builds and maintains effective working relationships with other teams that support the delivery of quality work
- Demonstrates good partnership with colleagues, supports others
- Interacts effectively with others both individually and in group environments
Personal Criteria for Master Data Maintainers - 2

For all the above
- Patient, Resilient, Objective (in face of challenge/conflict)
- Logical, process-based approach to problem resolution
- Good interpersonal style to diffuse tensions and deliver coaching points
- Shares ideas
- Credibility, trust and professionalism
- Essential elements for MDM as a service related activity, with significant business impact

Overall
- Personal: Attends to detail, while “aware of big picture”, Tenacious, resilient, positive outlook. Willing to admit to being interested in master data, possibly “inspired” or “passionate” about it!
- Business / Technical skills: Probably Business background, with good feeling for, and understanding of business systems.
- Specific ERP knowledge useful, but not essential (can be learned). Business analyst a good background

Real Case - MDM Organisation

MDM Business Roles grouped in central team

- Vendor
- Customer
- Production material
- Equipment spares
- Internal Spares
- Additional material
- Others

MDM Manager

MDM Business Roles embedded in Business Process

- Finished Packaging material
  - Material (design handling)

- Technical Services MDM
  - Task List and Measuring Point

- Finance MDM
  - Credit master
  - Sales Price Finished Packaging Material

- Equipment & Projects
  - Project Master
Real Case – Global and Local Organisations

- **Central MDM Teams**
  - Setting / Coordination of global standards
  - Interacting with local teams
  - Global Work flow

- **Local MDM Teams**
  - Red dots representing concentrated Master Data Team on local sites
  - Interacting with global teams
  - Local Work flow

- **MDMc Community**
  - Builds the framework for local / global Teams
  - Represents the network for MDM

Best Practice Principles for MDM

Build quality into data management processes
- Clearly documented processes and roles
- Ownership by data object, ongoing Quality Control
- For master data not managed in a centralised function, empowered “data entry at source” within a control framework

Focus on Expertise
- Staff dedicated to Data Quality Management, clear responsibilities
  - Training, coaching, continuous improvement
  - Defined and limited access for Master data
  - The right profile
  - Yet avoiding the “ivory tower” by using network of business links to owners
- Provide (multi-level) user support for master data and business intelligence
Where does MDM fit in ERP Implementation Projects?

Data Migration
Definition: Process to extract legacy data, cleanse, transform (convert) and load data to the future system
- (Hopefully) a long established, project activity
- Known to be "critical path" - always intensive
Driven by Dedicated Data Migration Team

Master Data Management
- Considered later
- Implements Process and Procedure for Master Data Management
- Applies after Go live (strictly from "Promote to Production" of data)
  - Combines Maintenance with Process for Master Data
  - Adopts the Database created by Conversion (at "Data Cutover")
Driven by Change Management / Organisation Alignment and (if appointed) the MDM Manager

Issues relating to Migration and MDM

- Potential Confusion Between Roles and the Individuals doing them
- Need to clarify relationship of MDM Manager to Migration Team
- Evolution of Project Roles to Longer Term

Risks:
- Overload of individuals
- Duplication of Training, Project Involvement
  Or
- Overallocation of resource
Why can there be Confusion?

**Similarities**
- Both act on Database
- Both Use Business Rules
- Some Data Owners same
- Same “Profession”

**Differences**
- ...but
  - Different times, method
  - Conversion acts on transactions too
  - Different activity drivers
- ...but
  - Conversion has “technical” aspect (Special tools)
  - MDM includes Organisation
- ...but
  - Mass change for conversion
  - “day to day” for MDM
- ...but (some)
  - Different skills and training

Moving from Data Conversion to Master Data Management

Data Conversion Specialists
(project activity)

Data maintenance (may not be former conversion specialists)

Local Master Data Manager

Local Business Process Owners & Super Users

Process maintenance and Continuous Improvement

Dedication of specific resource to monitor and Control Data Management

Cutover
Transition from Conversion to Ongoing MDM Roles

Background
- Conversion team typically includes dedicated experts
- They do NOT deliver end-user training, but are fully utilised until Cut-over. Projects should provide additional effort to cover MDM implementation

However
- Where highly concentrated MDM implemented, large benefit in using these staff as maintainers, provided jobs aspirations fit well

Pros
- Reduced knowledge transfer
- Synergy in creating MDM Documentation
- Staff are already data-aware, credible and motivated on data-quality

Cons
- Potential overload up to Cut-over
- Maintenance may not suit “data conversion” profile

Beware
- There may not be a future role for all conversion team

A Roadmap for Implementing MDM Business Roles -1

Preparation
- Document Processes, determine Critical points
- Document Master Data Object Metadata
- Identify Transactions and Objects between control points
- Integrate design knowledge on objects and transactions involved
- For site(s) involved, perform Stakeholder Management

Analysis
- Assess Role and Process Scope for the business
- Undertake mapping Process
MDM Process Documentation….

…supports Role Mapping

A Roadmap for Implementing MDM Business Roles - 2

**Design to Cutover**
- Assign Maintenance roles to Data Team
- Document Keying instructions for transactions, metadata for the data objects concerned
- Train (only) the maintainers on the Master Data Transactions
- Determine the communication method
- Inform and coach Data Requestors and Owners on the Way of Working
- Set up Data Integrity Reporting

**Cutover to Go-Live**
- Dual Maintain legacy and new Systems
Too late Implementing MDM Business Roles – now what?

Likely Situation
Master Data Transactions dispersed in Business
Implementation is “complete”
- no more resource or coordination
- No change manager
Lots of “fire-fighting”
Note: All apply to any system implementation – not just ERP

Plan for Action
Assess weak-spots
Isolate MDM processes and transactions concerned
 Undertake Preparation steps
Map to limited staff, change manage current users during Analysis
Execute Design to “cutover”

Conclusions

- MDM sits at the “heart” of Business Processes
- Roles are fundamental to link Processes to Master data Objects
  - Security of Transactions
  - Link to Training Curriculum
  - Focus for Ownership, MDM Communication Tools
- Implementations frequently overlook MDM
  - Lost knowledge transfer from data migration
  - Difficult “Go-live” if MDM left uncontrolled
  - Recovery in recently implemented or long-standing systems can be through focus on limited roles