



# MASTER DATA MANAGEMENT ROLES - THEIR PART IN DATA QUALITY IMPLEMENTATION

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**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.

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# **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

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### Therefore, Master Data Management....

#### IS NOT

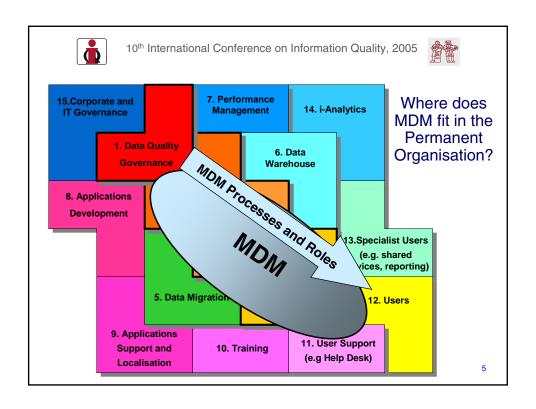
- Data Entry, Administrative Cost
- · An IS led initiative
- · Running the Data Centre

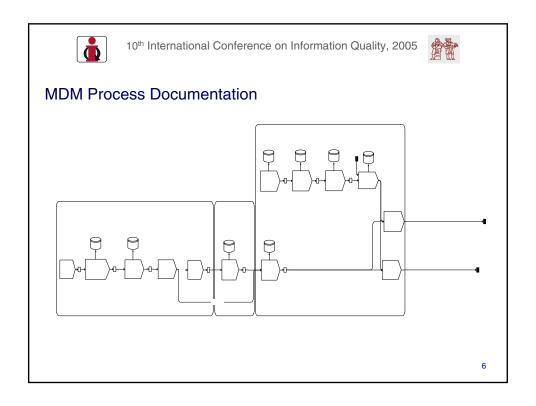
#### IS

- 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

### **COULD BE**

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









### 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

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### Generic master data roles

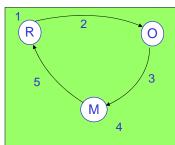
- Business user / Master Data Change Requestor
  - Business user that raises a master data change request
  - Collects and provides the required information to enable maintenance
- Business Data Owner
  - Authorises the creation and maintenance of master data
  - Absolute responsibility for the quality 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
- Reguests 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)
- 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



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# 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

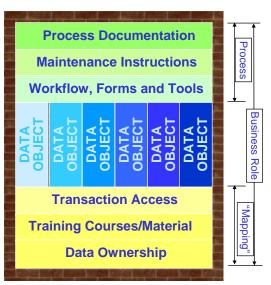
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### Standard Local MDM Business Roles



#### **Benefits**

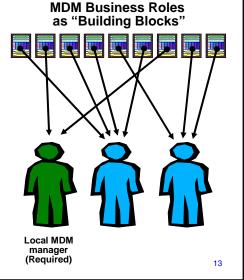
- Link between Processes and Data Objects
- Structured documentation for both Maintainers and their correspondents
- Clear distinction of Master Data and Operational transactions
- Clear Mapping of MDM to individuals
- Logical construction of an MDM Training curriculum
- Recognisable MDM contact points 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





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# Grouping for an MDM Organisation

### ..through "Networked" MDM

Mapping of MDM Business Roles "building Blocks"

Concentration
of MDM Roles

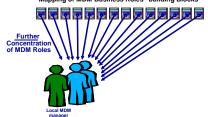
Local MOM manager

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

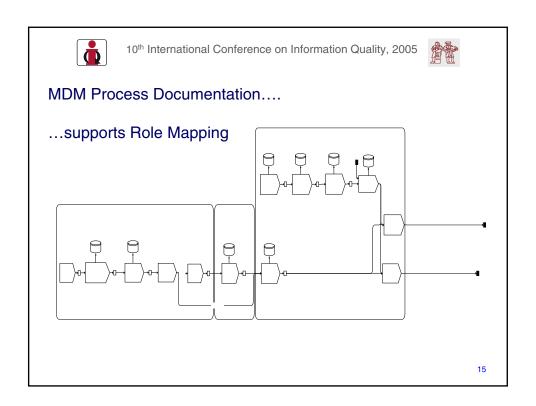
### . to "Grouped" MDM

Mapping of MDM Business Roles "building Blocks



Additional Benefits versus "Networked" MDM

- More specialised MDM staff
- Improved quality monitoring
- Reduced span of control for MDM manager
- Easier to deal with







#### 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

Business Role: MDM\_PM\_Additional\_Material

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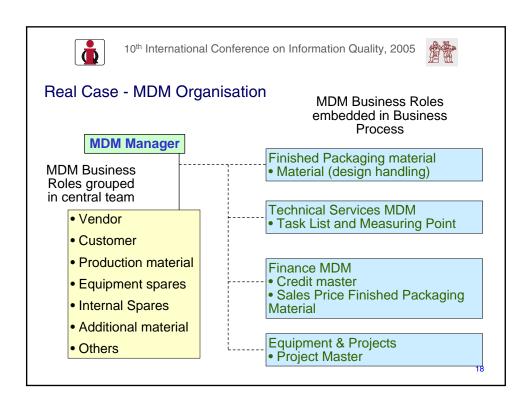
### Personal Criteria for Master Data Maintainers - 2

#### 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

- Team member profile: "Completer-finisher", Coach, Implementer.
- 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 - 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

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### **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

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### 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





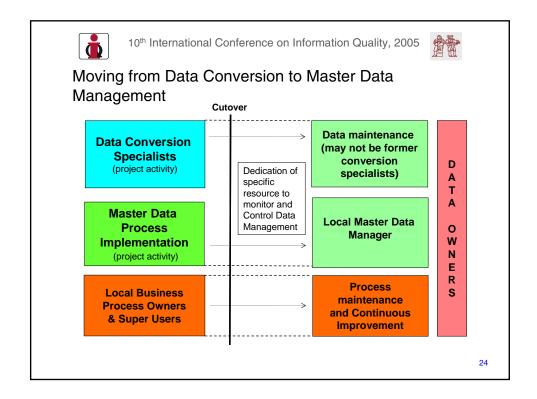
# Why can there be Confusion?

#### **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
- hut
  - Mass change for conversion
  - "day to day" for MDM
- ...but (some)
  - Different skills and training







### 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 Cutover
- Maintenance may not suit "data conversion" profile

#### Beware

 There may not be a future role for all conversion team

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### A Roadmap for Implementing MDM Business Roles -1

### **Preparation**

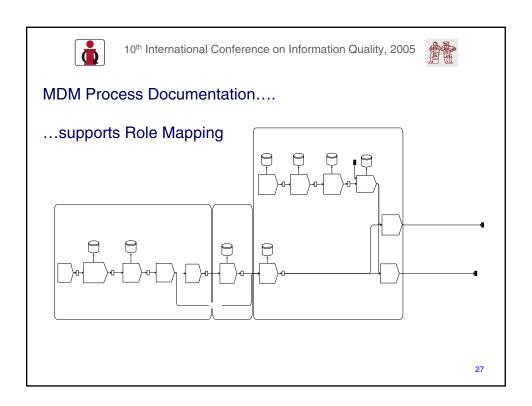
- Document Processes, determine Critical points
- Document Master Data Object Metadata
- Identify Transactions and Objects between control points
- Integrate design knowledge on objects and transactions involved
- For site(s) involved, perform Stakeholder Management

#### <u>Analysis</u>

- Assess Role and Process Scope for the business
- Undertake mapping Process

MDM Role Definition: MDM\_EQ+Parts\_Extension

	Dependencies	Is directly dependent on MDM_Global_Eq+Parts_Oreation, which sets up the basic
	· .	(client level) data (see separate role definition).
		Dependent Nodes: MDM_EQ+Parts_Sales_Pricing_MC
	Local sub-	<ul> <li>MDMMenage Materials Determination/ Replacement</li> </ul>
	process flows	<ul> <li>MDMManage Transfer Prices for Spare Parts (Purchase prices) - Market</li> </ul>
	Ľ.	Company
- /	7	<ul> <li>MDMDefine and Extend Equipment and Parts - Market Company (previously</li> </ul>
		Manage Global Supply Chain Configuration Consistency - Market Company and
		then Define and Maintain Product Data - Market Company)
/		<ul> <li>Manage Equipment Transfer Prices - Market Company</li> </ul>
/		<ul> <li>Prepare (New) Materials and Products for Sales - Equipment &amp; Parts - Market</li> </ul>
	l	Company (previously Prepare Equipment and Parts Materials for sales - Market
	l	Company)
	l	<ul> <li>Prepare Standard Project Structures - Market &amp; Product Company</li> </ul>
		Manage Rebuilding kits (MC)
<u> </u>	Related Business	The following objects are principally for use in a Market Company
_	Objects	<ul> <li>Material master: MSTK - TechSales - Create</li> </ul>
		<ul> <li>Material master: MSTK - TechSales - Extend</li> </ul>
		Material determination : MSTK
		<ul> <li>Purchase info records - MSTK - TechSales - Create</li> </ul>
		<ul> <li>Purchase info records - MSTK - TechSales - Extend</li> </ul>
\		<ul> <li>PP condition: TS ZP00 - MIR Plant Note also, that on creation, the purchase</li> </ul>
\	l	price condition "MR" is input via this data object
\	l	<ul> <li>BOM: Parts – Market (incorporating content relevant for BOM Rotation Units)</li> </ul>
\		<ul> <li>Purchase info record: MCON&amp;MSTK - Global Eq - MC</li> </ul>
. `	<b>\</b>	PP condition: EQZP00 - MIR Plant
\		<ul> <li>PP condition: EQZPVQ—PlantInfRedVar</li> </ul>
\	<b>Y</b>	
\	,	•
\	Training Courses	APPROXIMATE AND APPROXIMATE AN
\	1	MDEC;2500 (used in Cluster Training)
7	Business Data	Spare Parts Master Data Owner is most specific. In small markets could be combined
•	Ownership	with Services Master Data Owner for a position accountable for all Technical Services
	Service Level	As per agreement SLA: Parts Extension made in localisation review meeting
		ropa ageara com raio ma aumade in tuda saturi eve wineding
	Agreement (SLA)	







# 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

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Business Role: MDM\_PM\_Additional\_Material

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### 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"

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# **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