

# Implementing MDM: Factors Influencing Timelines & Typical Project Risks



## Applies to:

SAP Master Data Management (MDM). For more information, visit the [Master Data Management homepage](#).

## Summary

This article highlights factors that influence the timelines of MDM implementation project and typical risks involved in MDM implementation.

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## Factors Influencing Timelines of MDM Implementation

The factors influencing estimation of time-lines for a typical MDM Implementation project are as stated under:

### Data Modeling / Structure of Repository

SAP provides standard repository & maps for Vendors, Customers, Materials, BP and Article. These repositories contain standard data elements. Z elements/tables defined by the client have to be added to the repository.

Identifying the complete list of Z fields/tables to be included in MDM and modeling the elements in the repository can be a time-consuming & complicated activity. Further, any modification to the repository will lead to modification of standard import maps, standard syndication maps and the standard XI configuration being used in the scenario.

### Count of Master Records

The count of master records has an effect on cut-over data import time and consolidation time. If 'consolidated master data' forms a part of any project deliverable, then the number of master records will have a significant impact on the project timelines.

### Count of Source Systems

Extracting data from source systems requires the following deliverables:

- Creating/Using an extraction program in source system.
- Configuration in XI.
- Import Maps and Ports in MDM.

SAP provides standard extraction programs, standard XI configuration and standard import maps for SAP R/3. However, in case of non-SAP source systems, some or all of these deliverables might have to be created and configured.

### Count of Destination Systems

Pushing data to destination system requires following deliverables:

- Syndication Maps and Ports in MDM
- Configuration in XI

SAP provides standard XI configuration and standard syndication maps for SAP R/3. For non-SAP destination systems, some or all of these deliverables might have to be created and configured. In addition, standard MDM repository does not have status fields to hold acknowledgement message that might be returned by the destination system on reception of data. Hence, you may want to add acknowledgement fields for each destination system.

### Does data enrichment scenario exist?

Some scenarios might demand data enrichment using 3rd party application. Identify those scenarios and determine whether direct Import of data is possible. If not, custom Java development or configuring of 'MDM Data Enrichment Adapter' might be required.

### Example of Enrichment scenario

A new 'Vendor creation request' is initiated by Purchase department providing basic information comprising of the VAT number and other details. Based on the VAT number, Vendor details, history, performance statistics needs to be pulled from a 3rd party system/application which has been exposed as a web-service. In such a scenario, MDM Enrichment Adapter can be configured to co-ordinate activities between MDM import server, XI and MDM Syndication Server to achieve the enrichment and process the request further as per business requirement.

### Does extension scenario exist?

Extension Scenarios are common in 'MDM for Materials' implementation. Such requirement demands modification to 'Qualified Tables' using MDM Java or ABAP API's.

### Example of Extension scenario

In case of the client having multiple plants, materials are created and assigned to only those plants where required. If the business process demands assignment of an existing material to a new plant, it technically means, copying material data from a reference plant and material combination to a new plant. This is called as 'Material extension to plant' scenario.

### Workflow Creation Tool

Workflows in MDM can be created using either of the below mentioned technologies:

- **MDM WORKFLOWS:** MDM Workflows reduce the development time; have limited functionality and cannot be used in complicated scenarios.
- **GUIDED PROCEDURES:** Guided Procedures enable creation of workflows that can call processes/objects from multiple systems. Custom functionality can be achieved by calling Java code from Guided Procedures.
- **BUSINESS WORKFLOWS:** Business Workflow is a proven technology for implementing workflows in SAP. Exposing and calling these workflows from MDM demands integrating Business Workflow with UWL. Development of these workflows has to be done in SAP system.

## Typical Risks involved in MDM Implementation

The typical risks involved in MDM Implementation are as listed below:

### Authority to Finalize the 'To-Be Business' Processes

Core team member may or may not be the processes owners. Identify the process owners and get the 'To-Be' business processes approved before developing the deliverables.

### Master Data vs. Transactional Data

In some scenarios, the client might find it convenient to maintain transactional data in MDM repository. However, though such a requirement can be mapped, may lead to major performance bottleneck due to the constant import/modification & syndication required to keep the transactional data updated.

### Finalizing Repository Structure

Ensure that the repository structure is finalized at the end of prototyping phase. The finalized data model should be well documented and Signed-Off by the client. Any change to the structure there after will result in linear increase in the implementation time of the project. This is because; any modification to the structure might result in modification to all or some of following components:

- Repository structure
- All Import maps created on the relevant table/field
- All syndication maps created on the relevant table/field
- All Validations/Assignments created on the relevant field

The above also applies to change in display fields. Hence, the display fields for a table should also be finalized in the prototyping phase.

### Acceptance of the New System by End-Users

Data modeling in MDM has a major impact on how users create new masters records in MDM. At times, the repository may have been designed to optimum use of Qualified tables and other similar feature-rich tables in MDM. However, if the End-User finds it difficult to create data as per the repository design, the whole purpose of implementing MDM might be defeated.

### Proper Sizing / Bandwidth

Server Sizing is of utmost importance in MDM implementation project. MDM server loads a sizable amount of data in-cache to enable various search functionalities and to minimize the probability of disk accesses. This demands availability of enough memory (RAM). Also, when importing data into repository through MDM Import server, several resource intensive steps like parsing, transformation, database write etc. are performed. Efficient & speedy import demands proper server sizing. Further, ensure that the recommended bandwidth is available.

## Related Content

Workflow for Master Data Management – How, Why and What to Choose

<https://www.sdn.sap.com/irj/sdn/go/portal/prtroot/docs/library/uuid/60559952-ff62-2910-49a5-b4fb8e94f167>

Setup and Use of the SAP NetWeaver Master Data Management Enrichment Controller

<https://www.sdn.sap.com/irj/sdn/go/portal/prtroot/docs/library/uuid/9018dc62-23a8-2910-b7ae-9023670c3a53>

Enterprise Data Management with SAP NetWeaver MDM

<http://www.sapressbooks.com/product.cfm?account=&product=H1973>

For more information, visit the [Master Data Management homepage](#).

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