Master Data Management

Master data management (MDM) solutions **reconcile and manage 'golden records'** in an organisation, such as customers, accounts, products and suppliers (to name a few). When taking on an MDM challenge, the **primary decision** to make is on which side of the business to affect changes – the **operational** or **analytics** side.

Operational MDMs are **real-time** in nature and rely on **online service bus architectures (SOA)** and **custom back-end system integration**. These systems typically involve an **end-to-end rework** of both **operational IT systems** and the **business processes** they support.

The **benefit** of this approach is that **all data** is available for online consumption and the organisation can use it as a **driver for other digital projects**, such as mobile application development.

ANALYTICAL DATA MASTER ARCHITECTURE
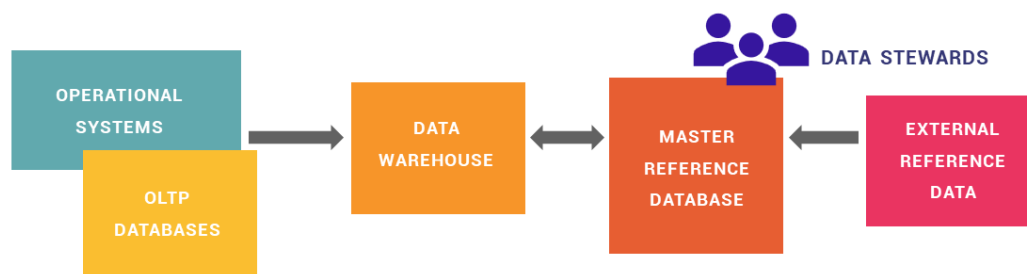
Analytical Master Data Architecture[1]

A second approach, **Analytical MDMs**, are more appropriate for organisations that are focused on analytical outcomes. Analytical mastering involves **reconciling 'golden records'** from existing disparate source systems on a **batch basis**.

[1] DAMA Data Management Body of Knowledge v2

Key benefits:

- Low impact on operational source systems
- Resolution is made post-fact in the data warehouse

Analytical MDMs are a solid way to jumpstart an **Operational MDM** as it addresses the key step of consolidating and cleaning customer records.

The steps involved in undertaking an **analytical mastering solution** would be tailored to each client, but would generally entail the following **stages and steps**:

1. ANALYSIS + DESIGN   **2. DEVELOP**   **3. TRANSITION**
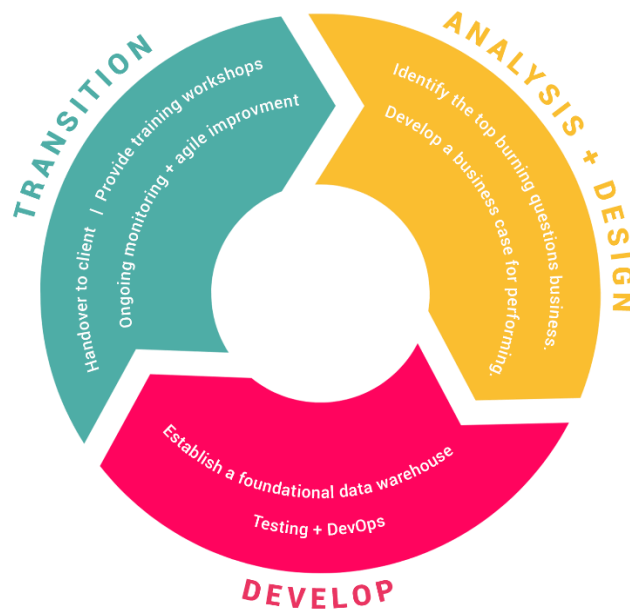
STAGES	STEP	HIGH-LEVEL TASKS
1. ANALYSIS & DESIGN	**1. Understand reference and master data management challenges**	1. Hold brainstorming workshops with business stakeholders 2. Identify and analyze business unit's key business entities (i.e. customers, accounts, products, suppliers, etc.)

2. Define and maintain the data architecture	1. Diagram out the current state of data landscape 2. Define a to-be integration architecture 3. Update and maintain the existing organisation data architecture (as required)
3. Establish the 'golden record' definitions	Assess 'golden records' field requirements and meta data for each
4. Identify matching rules between entities	Assess differing system reference formats that will be used for matching purposes
5. Develop to-be data model	Assess any required hierarchies and relationships between entities

2. DEVELOP

1. Establish infrastructure	1. Provision server infrastructure 2. Procure, install and license software. (Look to leverage existing software licences) 3. Implement data connectors to internal and external sources
2. Source and consolidate 'golden records'	1. Stage and load 'golden records' from disparate source system 2. Reconcile mismatched entities using data quality tools and through interactions with business users
3. Replicate and distribute reference and master data into a data repository	1. Implement updates to operational systems through data connections or API interfaces (as required) 2. Publish master data and reference data to analytical systems 3. Testing for both development and user acceptance testing

3. TRANSITION

Manage changes to reference and master data	1. Hand over the operation of the master data management system to business users 2. Provide for end-user training

Proposal / Call to action

Ilion is looking to help financial services organisations **optimise their return of investment** in **data**, centred around financial products and services. Our executive team have extensive experience in financial analysis for banks, credit risk and stress testing, and data management.

We see an overlap in these areas that provide a sweet spot for a return on investment made.

When you are working on your next financial analytical undertaking, please don't hesitate to call us. We would be happy to help you find a solution that is optimal for your organisation.

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