

# Integrating MDM and Business Intelligence

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## Integrating Master Data Management (MDM) and Business Intelligence

This presentation

- Why do you need MDM?
- Where does MDM fit?
- Key MDM scenario for BI?
- Styles of MDM
- Why Microsoft Master Data Services
- Microsoft Master Data Services Demo

*“Master data management (MDM) is a technology-enabled discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, semantic consistency and accountability of the enterprise’s official shared master data assets. Master data is the consistent and uniform set of identifiers and extended attributes that describes the core entities of the enterprise including customers, prospects, citizens, suppliers, sites, hierarchies and chart of accounts.” Gartner*

## Who do you need MDM?

Plus some truths...

- Is invalid data and data mapping impacting your business?
- Do you have IT issues with data and data quality?
  - IT got pretty good at dealing with data quality, but the problem never went away – we just got better at hiding it (and spent a lot of money along the way). The business now does not know there is a problem and thinks of data quality as an IT problem.
- Do you wish business people could simply maintain hierarchies themselves instead of constantly changing data warehouse mapping specifications and rules?
- Do other systems than BI/DW need access to consistent and consolidated data about things, people, places or abstract entities such as accounts?
- Some truths:
  - MDM is not “too big to do”. You can do it one domain at a time and see real benefits.
  - MDM is not only for large complex organisations.
  - Even having a single ERP or enterprise application does not remove the need for MDM.
  - Even if you have an enterprise data warehouse, you still need MDM. MDM is about more than data; it is also about people and processes.

## Key MDM scenario for Business Intelligence

### Data Warehouse Management

#### Data Warehouse / BI

Enable business users to manage the hierarchies and dimensions used to present and aggregate data in the data warehouse and data marts.

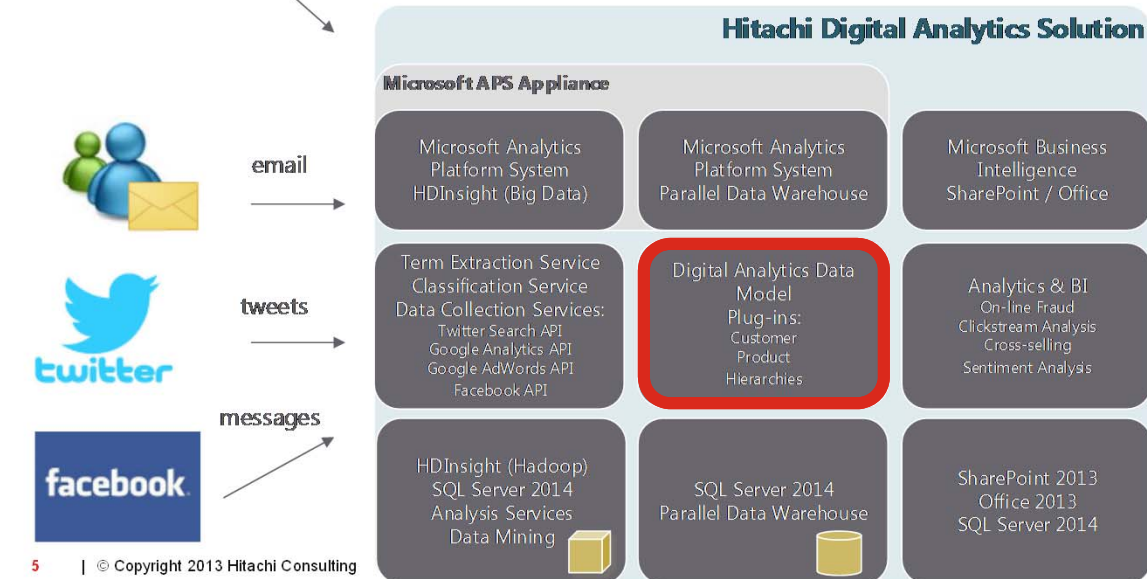
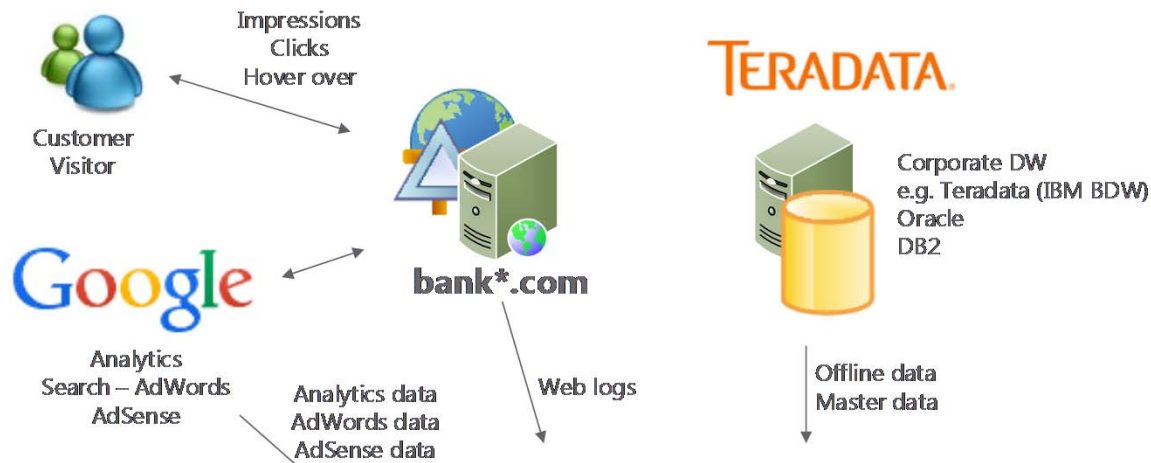
Example:  
Business users complain that the product hierarchy in the ERP solution does not reflect how they want to report data, and that it is always inaccurate as the business changes and re-organises.

**MDM empowers business users to take ownership of business hierarchies and data quality.**

- ERP Hierarchies :
  - Typically organise products into like attributes.
  - More often aligned with requirements of the finance department for accounting purposes.
- Business Intelligence Hierarchies :
  - More often aligned with requirements of sales and marketing, with multiple views required to enable comparison of old vs new.

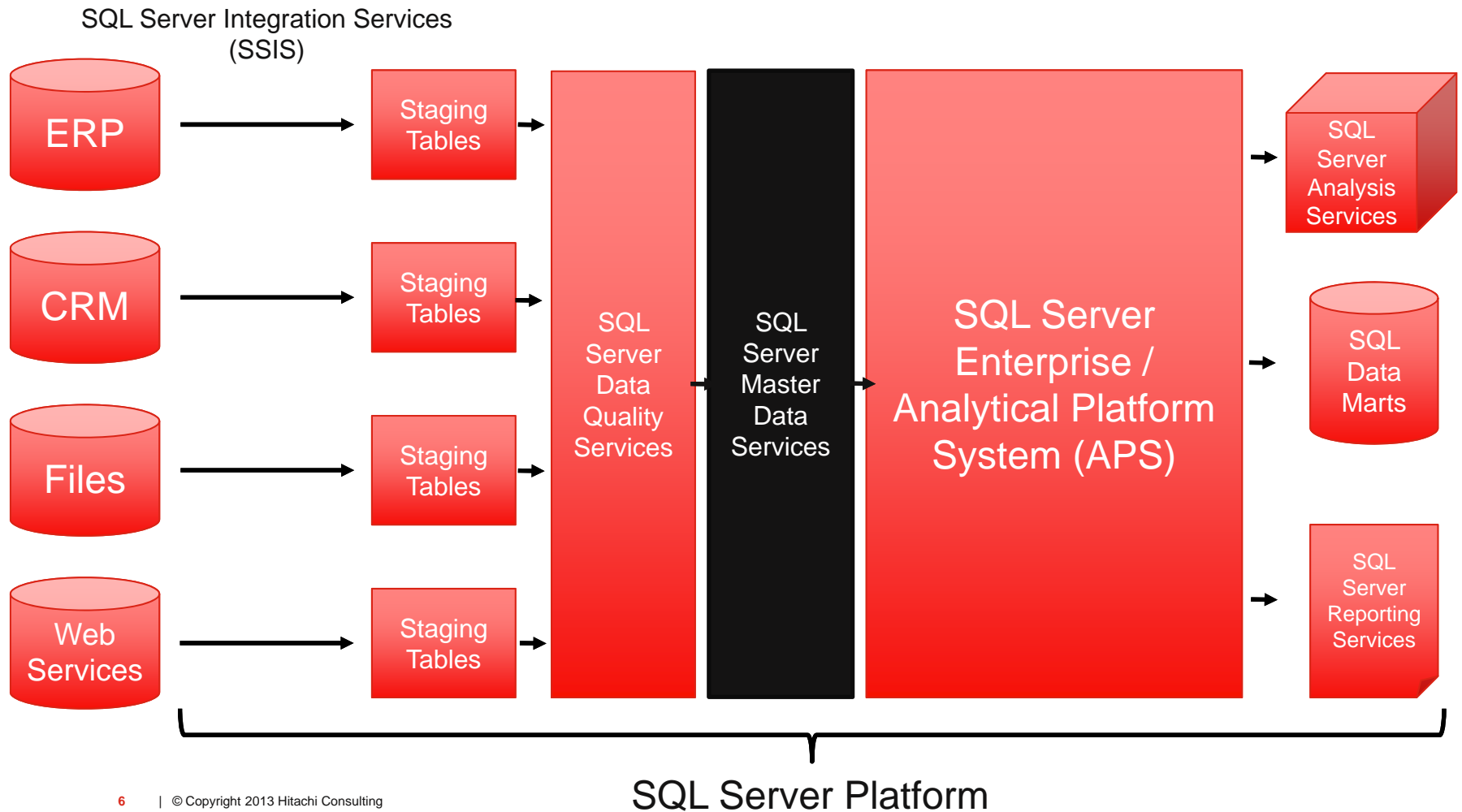
## Where does MDM fit?

A typical scenario



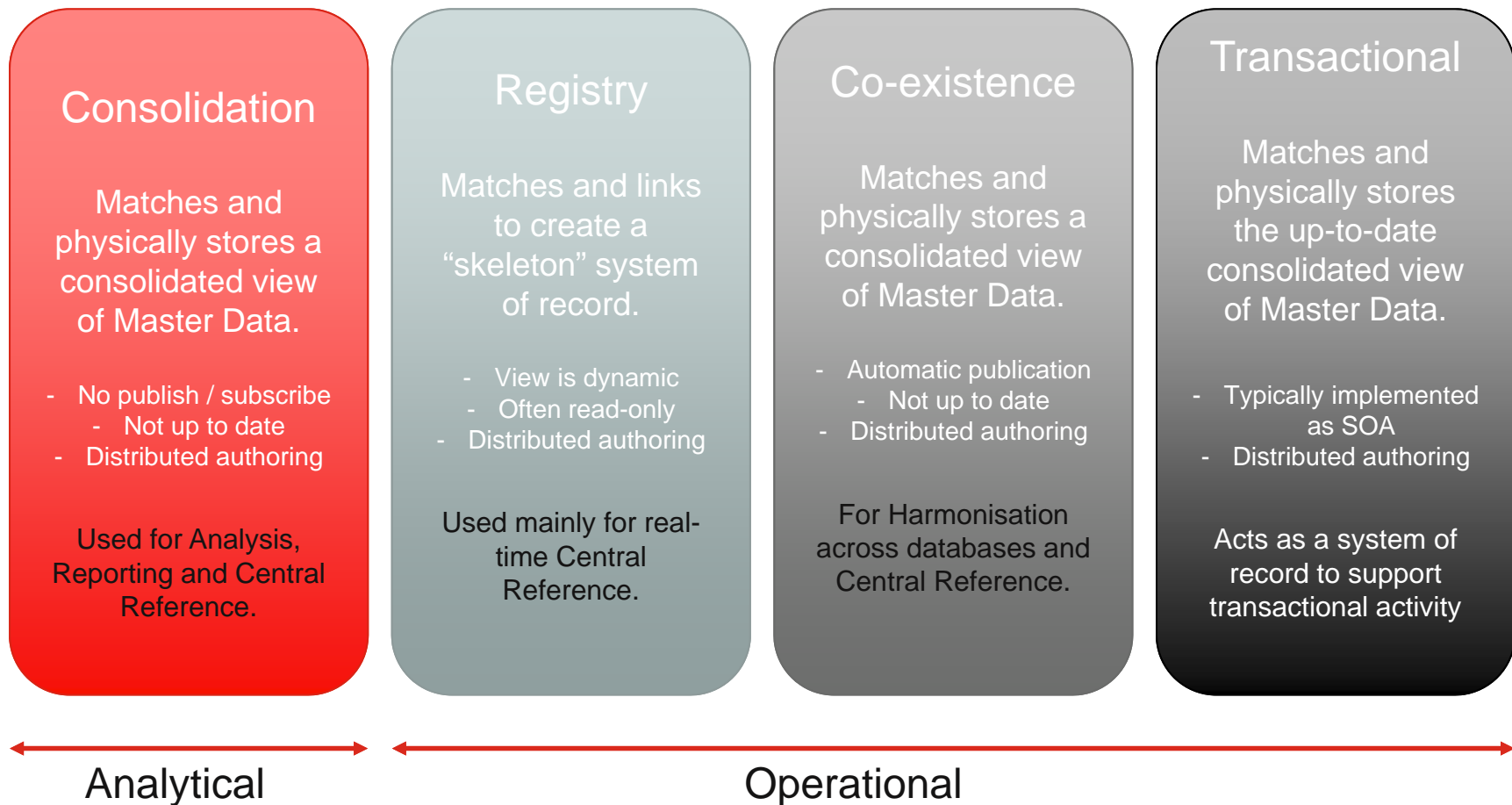
## Where does MDM fit?

A typical data / processing flow using Microsoft SQL Server Master Data Services



## Styles of MDM

### Architectural Styles of MDM



## Why Microsoft Master Data Services

- It is part of SQL Server – there is no separate software license fee
  - SQL Server 2008 R2 Enterprise Edition
  - SQL Server 2012 BI Edition
- However, you don't need to use the SQL Server database to use MDS
- Excellent hierarchy management using a web/browser user interface and Excel
- Easy to install and implement
- Strong business rules capability, including full audit trail and notification
- Single windows based security model (integrated windows authentication)
- Web Services SDK / API to enable workflow, with integrated versioning
- Typically a fraction of the cost of implementing solutions from SAP, Oracle, Informatica etc.



## Microsoft Master Data Services Demonstration

A typical scenario linking transactional data to product master data.

- Defining and maintaining a product hierarchy.
  - Web UI
  - Excel UI (Add-in)
- Using domains to link entities.
- Business rules.
- Importing data into Microsoft MDS.
- Exporting data from Microsoft MDS.
- Consuming MDS data in Microsoft PowerPivot and Power View for Excel.



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Thank you.