

Introducing  
Microsoft SQL Server  
Master Data Services

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New SQL TS

if you have questions about SQL Server, BI or not, please let me help you

Announcements

Kimball University, Dimensional Modeling in Depth, Feb 23-26,  
[kimballuniversity.com](http://kimballuniversity.com)

SQL 2008 R2

late April

Reporting Services – Report Parts, Shared Data Sets, KPIs, Sparklines,

Maps

PowerPivot (aka Gemini)

StreamInsight – real-time, operational BI

MDS – mdm platform, Stratature

Notes on Presentation:

Presentation then Demo

Organized for Open Discussion



## Business Intelligence

Went back-and-forth with starting point

MDM on periphery of BI

If build DW, familiar with MD challenges



## Bus Matrix

Rows = FACTS

Cols = DIMS

Facts – processes & events

Dims – describe things associated with processes & events

- represent critical entities

- some more critical than others (across facts)

- e.g. Customers, Products

## Mapping to Source Data

- Dups,

- Missing Records & Values

- Junk values

- Conflicting values

- Disconnected/Misaligned Records

## Biggest Problems in DIMS

We make compromises in DW design or ETL layer

- Impacts DW delivery

- Can derail DW



This = MD Problem

MD = “the critical nouns of a business”

= in DW, most critical conformed dimensions

= in OLTP, entities repeatedly tied to most critical business events and processes

Examples: Customers, Products, Employees, Facilities, Assets, Legal Entities

MD = “glue that binds our business together”

Consistency & Accuracy key to avoiding problems



Here is example of a MD problem

<http://www.publicbroadcasting.net/kera/news.newsmain/article/0/0/1595893/news/Dallas.Uncertain.About.Number.of.Buildings.City.Owns>

Most examples don't make news

DW struggles to implement critical dimensions

Customer who's bill keeps being sent to wrong address

Product for which we quote wrong price, or discontinue but keep taking orders

Each occurrence is minor

In aggregate, undermine our effectiveness

Disruptions, inefficiencies, missed opportunities



Solution is simple = just need a list

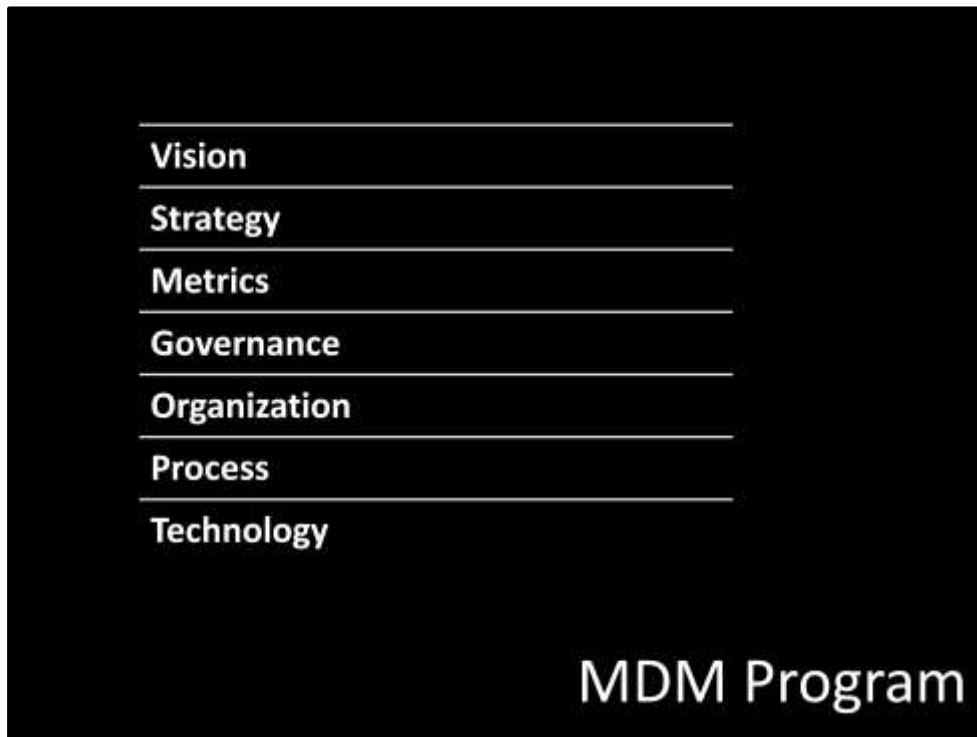
Accurate

Use it consistently

But processes/systems complex

Keeping simple list not so simple

Need MDM program



Gartner – 7 components of effective MDM program

**Vision** – What does effective MDM look like in your organization? Why is it important to you?

**Strategy** – Where are you today? What steps will you take to achieve vision? What are the critical barriers to address?

**Metrics** – How will you know you are effective? How will you demonstrate business value? (justify program)

**Governance** – How do stakeholders get engaged? How are conflicts resolved? Who will adjust vision & strategy?

**Organization** – How will day to day management of MD proceed? Who are data stewards? What their responsibilities?

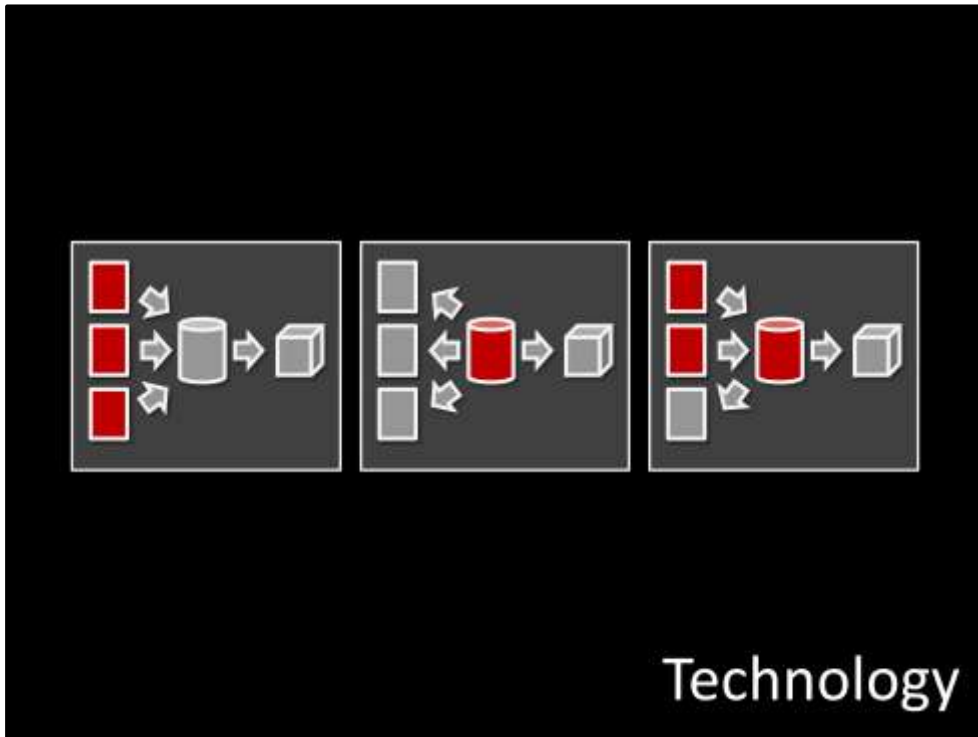
**Process** – How will data be created, read, updated, deleted? How will systems & people interact with data? How will problems be resolved?

**Technology** – What technology required to support all this?

Notice technology on the bottom.

While tech is important, it is last piece of the puzzle.

Lead with technology is putting cart before horse → recipe for failure



Three major architectures for MDM tech  
 (Describe Process w/ each)

- (Left) Repository Arch (least invasive)
- (Mid) Registry Arch (most invasive)
- (Rt) Hybrid Arch

What is right solution for your org?  
 Depends on needs & will to execute  
 Needs change overtime

That takes us to MDS



MDS is platform, not a solution

We do not prescribe an arch

You define processes

You define models

You determine integration

MDS used to build tailored system

Flexibility is key differentiator

As is price-point (available with SQL Server EE/DC license)

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**Data Modeling**

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**Validation**

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**Integration**

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**Notification & Workflow**

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**Versioning**

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**Audit & Security**

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**Master Data Services**

Features of MDM tech:

Modeling

Validation– future=DQS

Integration & Synchronization – bulk import/export & web API

Email-based notification

SharePoint workflow integration

Model versioning – to help w/ major changes

Transaction Audit (& Rollback)

Model Security – Model objects & members

Performance, scale, & availability features of SQL Server



Exploring MDS today

Download CTP 3 & install MDS – x64 only

MSDN provides system requirements

Samples available with installs

More how-to documentation in the works

R2 RTM – 4/21

Now is time to start exploring vision, strategy, etc.



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Demo

# MDS Logical Architecture

