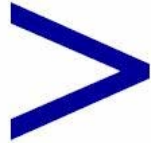


Hub  
Solution  
Designs



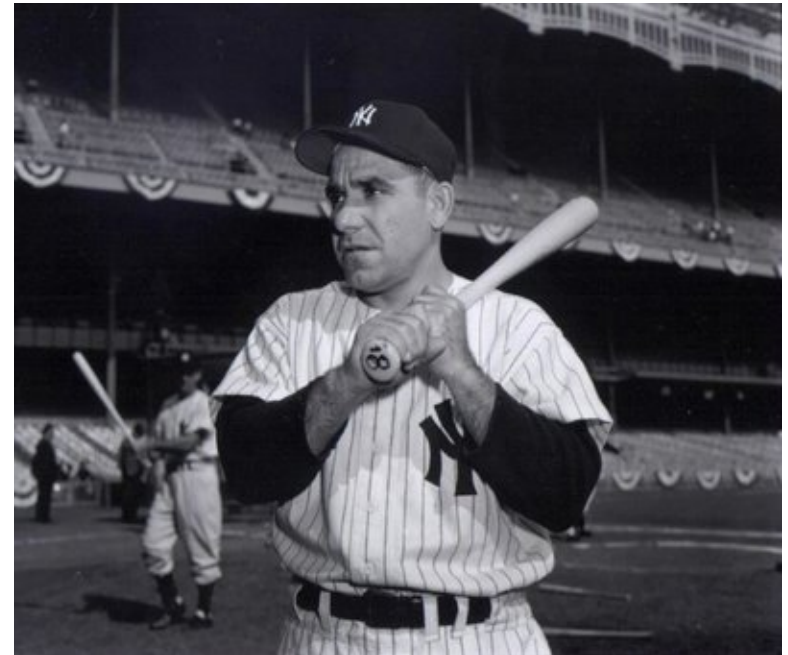
# Best Practices in Master Data Management and Data Governance

April 15, 2008

Dan Power, Hub Solution Designs, Inc.

As Yogi Berra said ...

“You’ve got to be careful if you don’t know where you’re going, ’cause you might not get there!”



Master Data Management (MDM) can be done successfully, but there will definitely be challenges

# Executive Summary

In today's discussion, we will:

- present some useful MDM and Data Governance best practices
- talk about what's worked and what hasn't
- cover the importance of a holistic approach
- discuss how to get the political aspects right
- give you some ideas on how to address more than just the technology elements

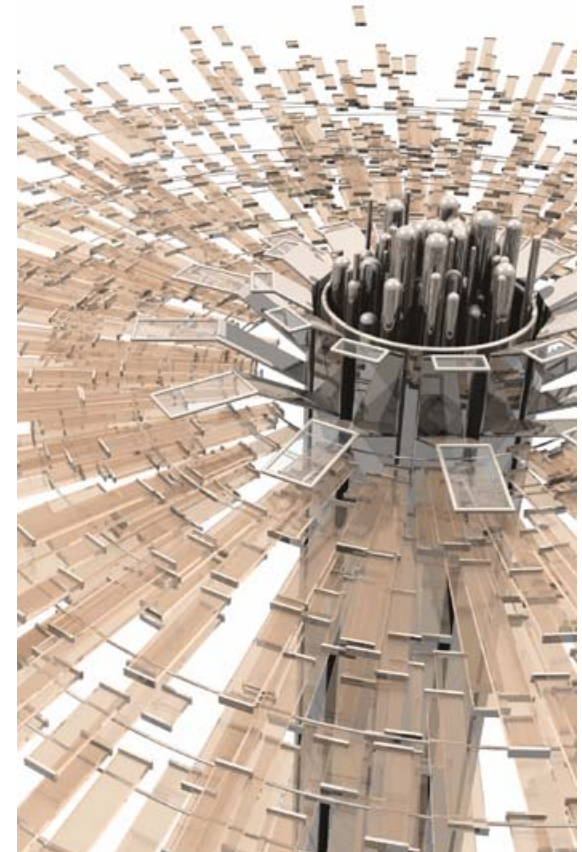
# Who am I?

- Founder of Hub Solution Designs, a consulting firm that specializes in Master Data Management & Data Governance
- Previously, was general manager for D&B's alliance with Oracle
- Have worked with Oracle's enterprise applications for more than 12 years
- Regularly advise clients on developing & executing high impact MDM strategies



# Master Data Management 101

- So what is MDM?
  - My definition
    - MDM is a set of **disciplines, processes and technologies** for ensuring the **accuracy, completeness, timeliness and consistency** of multiple domains of enterprise data - **across applications, systems and databases**, and **across multiple business processes, functional areas, organizations, geographies and channels**

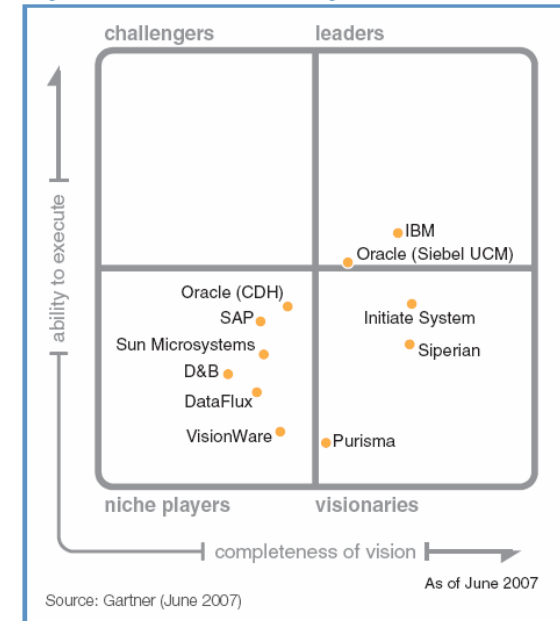


# MDM 101 (continued)

## – Gartner’s definition

- MDM is the **consistent and uniform set of identifiers and extended attributes** that describe the **core entities of the enterprise** and **are used across multiple business processes**. Some examples of core entities are **parties** (organizations or people), **places** and **things**. **Groupings of master data** include organizational hierarchies, sales territories, product roll-ups, etc.
- **MDM is a process** that may be **workflow-driven or transactional** in nature, in which **business units and IT departments collaborate, cleanse, publish and protect common information assets** that must be **shared across the enterprise**. MDM ensures the **consistency, accuracy, stewardship and accountability** for the core information of the enterprise.

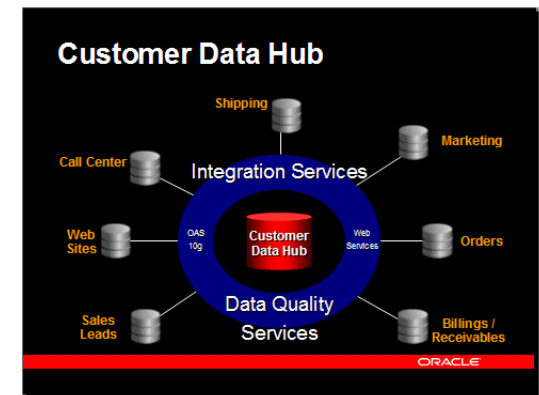
Figure 1.  
Magic Quadrant for Customer Data Integration Hubs, 2Q07





# E-Business Suite vs. Customer Data Hub

- If you have *E-Business Suite*, you have the underlying foundation of *Customer Data Hub* (the Trading Community Architecture or TCA) and the Customers Online “front end” to the TCA “Party & Account” registry
- There are some differences (in the “embedded Hub” vs. a separate Hub instance) but a lot of the MDM best practices we’ll discuss today still apply
- Ironically, lots of EBS sites use TCA & Customers Online very little or not at all



# MDM 101 – Five essential elements

- Five essential elements of a successful MDM initiative

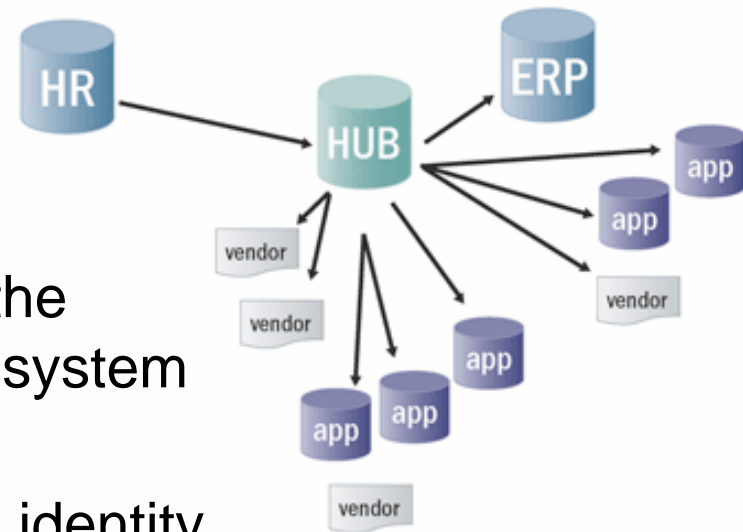
## 1. The MDM Hub itself

There are three major types:

**Persistent Hub** (stores all of the critical data from each source system into the central hub)

**Registry Hub** (stores only the identity information and foreign keys required for matching in the hub)

**Hybrid Hub** (uses a mix of both styles)





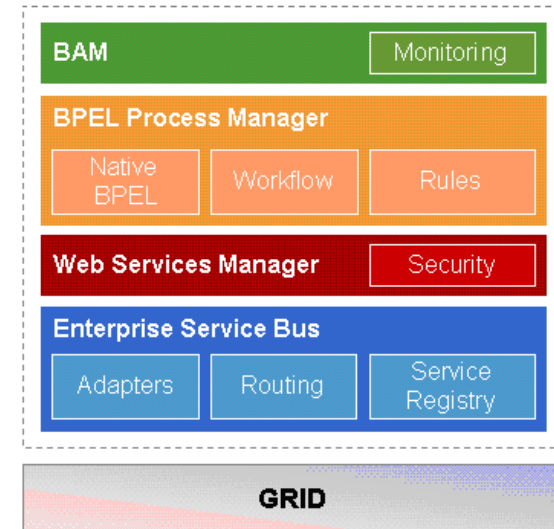
# MDM 101 – Five essential elements

## 2. Data integration or middleware

Important to be able to synchronize data into and out of the hub

Doesn't have to be real-time

Whole point is to build a “Single Source of Truth” for a given domain, so **having out-of-date information in your hub, or not synchronizing data quality improvements back to your source systems, can defeat the whole purpose of the program**

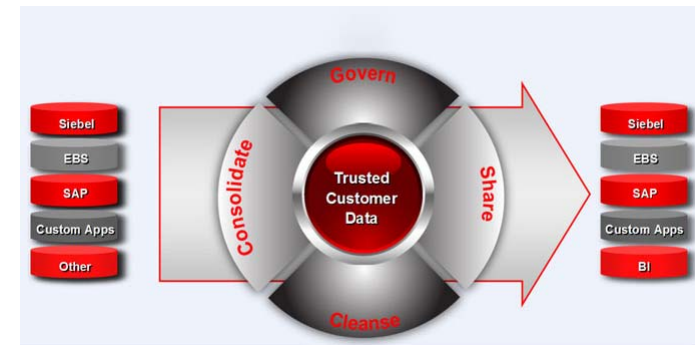


# MDM 101 – Five essential elements

## 3. Data Quality

Most companies realize quickly that they're starting off with a **much lower level of data quality** than expected

So a robust data quality tool can be vital in standardizing and correcting data, plus filling in missing information



A good data quality tool can make the difference between a failed project and a successful project

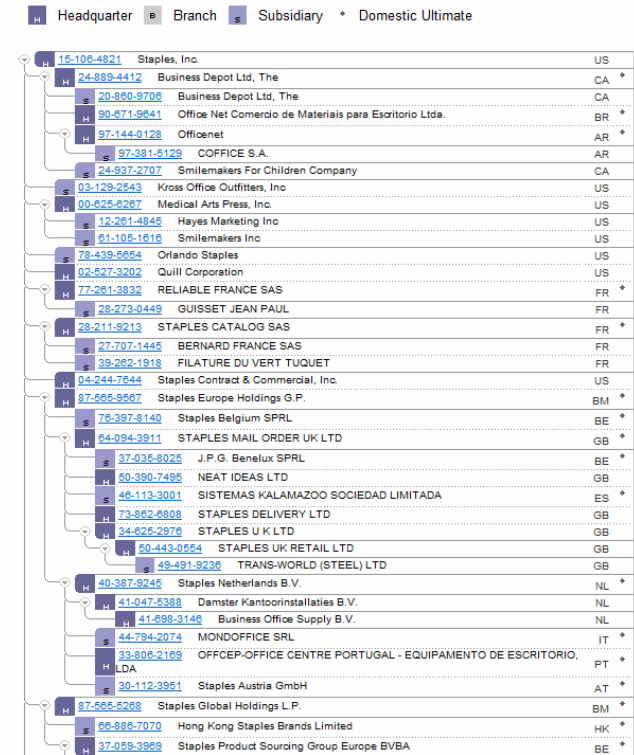
# MDM 101 – Five essential elements

## 4. External Content (also known as enrichment)

Having worked for D&B, I constantly saw the value of providing information you don't already have

It could be something as straightforward as SIC codes, or as complex as corporate family trees and credit ratings

STAPLES, INC. Corporate Hierarchy



When you “don't know what you don't know”, working with an external content provider can be a big help

# MDM 101 – Five essential elements

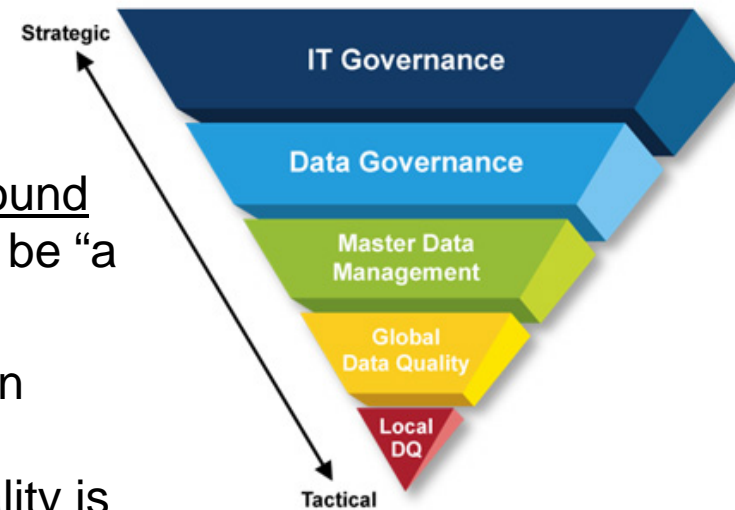
## 5. Data Governance

This is actually the most important

Without the people and processes around your hub, the technology will (at best) be “a solution in search of a problem”

The business won't accept the solution unless they're driving it, and resolving difficult questions of ownership or quality is going to take some type of cross-functional group, with an executive sponsor, business data stewards, IT support, etc.

Bringing together all of these elements is hard enough – don't try to do it without a data governance organization



Courtesy: Baseline Consulting

# MDM 101 – Major Players

- So who are the major players in the MDM software market?
  - There are **three "mega-vendors"** who offer MDM platforms (Oracle, IBM and SAP) and **three smaller vendors** (Siperian, Initiate Systems and D&B/Purisma)
  - There are some other vendors (like Tibco, Teradata and Kalido) that we don't have room to discuss here

# MDM 101 – Major Players

## Oracle



[www.oracle.com/master-data-management/index.html](http://www.oracle.com/master-data-management/index.html)

- **Products**
  - Oracle Customer Hub, Oracle Product Hub
  - Hyperion Data Relationship Management
- **Thoughts**
  - Customer Hub bundles both Customer Data Hub and Siebel Universal Customer Master; client can choose which one to deploy
  - Oracle is the worldwide market share leader (according to ARC Advisory Group), with a 40% share, compared to IBM at 8.8%
  - Oracle has a compelling vision & product roadmap, with today's Fusion Middleware and tomorrow's Fusion Hub products driving a Service-Oriented Architecture (SOA) strategy for the enterprise



# MDM 101 – Major Players

## IBM



[www.ibm.com/software/sw-bycategory/subcategory/SWB60.html](http://www.ibm.com/software/sw-bycategory/subcategory/SWB60.html)

- **Products**

- IBM InfoSphere Master Data Management Server
- WebSphere Customer Center, WebSphere Product Center

- **Thoughts**

- Became a major player through acquisition & internal development
- Leader in Gartner's June '07 Magic Quadrant in terms of "Completeness of Vision" and "Ability to Execute"
- Robust SOA, data quality & Extract/Transform/Load capabilities
- Strong in industries like Banking, Insurance, Retail and Telecomm.
- Moving towards handling multiple data domains in a single hub

# MDM 101 – Major Players

## SAP



[www.sap.com/usa/platform/netweaver/components/mdm/index.epx](http://www.sap.com/usa/platform/netweaver/components/mdm/index.epx)

- **Products**
  - SAP NetWeaver Master Data Management
- **Thoughts**
  - A relatively late bloomer; was initially focused on mastering the “Product” domain
  - Companies in SAP's traditional "sweet spot", such as global manufacturers, consumer packaged goods companies, European-headquartered firms and SAP’s installed base, have been pretty receptive, however
  - Recent acquisition of Business Objects should help SAP broaden its vision beyond product-oriented hubs

# MDM 101 – Major Players

## Siperian



[www.siperian.com](http://www.siperian.com)

- **Products**
  - Siperian MDM Hub
- **Thoughts**
  - Siperian MDM Hub is a robust product; can identify & manage relationships among multiple types of data, such as customers, products or accounts, across multiple applications and businesses
  - Has done very well in the financial services, pharmaceutical & life sciences industries; had 300% growth from '06 to '07
  - Just received a \$25 million round of financing in January, to support additional expansion in Europe and further development of its channels and products

# MDM 101 – Major Players

## Initiate Systems



[www.initiatesystems.com](http://www.initiatesystems.com)

- **Products**

- Initiate Master Data Service
- Targeted solutions including *Initiate Organization, Initiate Consumer, Initiate Citizen, Initiate Patient, Initiate Provider*

- **Thoughts**

- Founded in 1995; filed with the SEC to go public in Nov. '07
- Has 140+ customers in production, in industries such as health care, financial services, government, retail and technology
- Marquee customers include Microsoft, Intuit, Capital One, Countrywide, Wells Fargo, Humana, Hyatt Hotels, Barnes & Noble, CVS, and SuperValu

# MDM 101 – Major Players

## D&B/Purisma

[www.purisma.com](http://www.purisma.com)



- **Products**

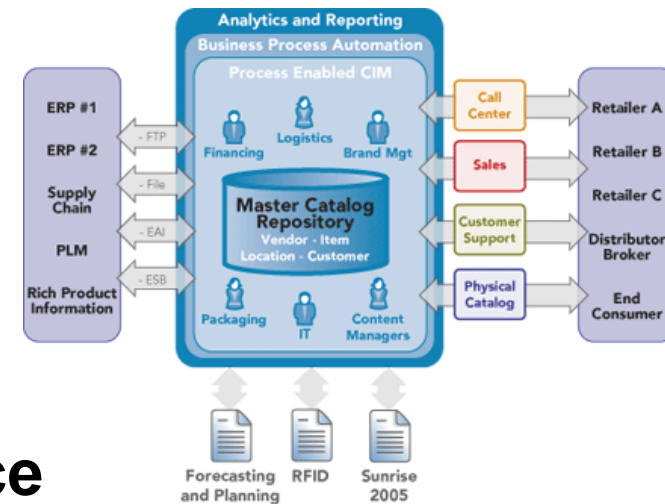
- Purisma Data Hub
- MyData for D&B

- **Thoughts**

- Purisma acquired by D&B in Nov. '07; a good strategic fit for both companies – allowing D&B to become more of an MDM player; giving Purisma the chance to extend its market reach
- Customer domains of MDM requires enrichment with external data
- Purisma provides useful data stewardship & hierarchy management
- Over time, Purisma can include product features that streamline the task of working with D&B's somewhat complex data set

# MDM 101 – Why Does All This Matter?

- So why are companies doing these MDM initiatives?
  - Most frequently, it's to **solve a specific business problem**
  - Certain industries have had compelling external “**compliance events**” (like Basel II or HIPAA)
  - But companies in every industry are looking to **increase revenues, reduce costs, improve customer service & decision making, and get more ROI from their technology investments**





Let's get into best practices ...

“90% of the game is half mental.”



What tends to work and what tends not to work?

# MDM Best Practice #1

- Active, involved executive sponsorship
  - This is true for many projects, but especially so for MDM
  - To champion a change, towards managing master data as a true corporate asset, is going to mean significant cultural disruption
  - In most companies, that type of change is best driven “top down”



Your executive sponsor doesn't have to be involved in everything, but when the rubber meets the road, you need the “corner office” in your corner

# MDM Best Practice #2

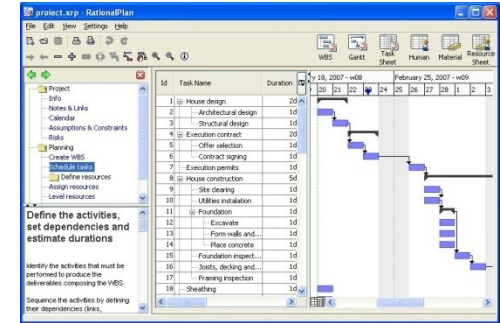
- The business should own data governance and MDM
  - As tempting as it is to start & finish with the technology, it doesn't work
  - When MDM is driven by IT, the business may not understand or buy in
  - It's hard, but start by building interest and demand (recruiting) in the business
  - Otherwise, the business won't be committed and getting funding will be tough



MDM's nature (an ongoing program, rather than a "once & done" project) means that even if the initial project is funded, the business may not pick it up in Year 2 & beyond

# MDM Best Practice #3

- Strong project management & organizational change management
  - Given the political angst these initiatives cause, make sure you can't be derailed by opponents pointing to sloppy project management or avoidable change management issues
  - If the project is "buttoned up", then it's much harder for champions of the status quo to throw stones at you, and you'll make it easier for follow-on projects to succeed



Deliver value, on time and on budget, and you'll ensure user adoption and achieve the expected ROI

# MDM Best Practice #4

- Use a holistic approach – people, process, technology and information
  - This may be the most important best practice of all
  - Start with the people, politics & culture, then move on to the data governance and stewardship processes



You'll succeed if you invest the time in creating a Data Governance team; recruiting the right senior executives as sponsors; designing your processes for managing master data, and reporting how the MDM initiative helped the company achieve its strategic objectives



# MDM Best Practice #5

- Build your processes to be ongoing & repeatable; plan for continuous improvement
  - People still think their project will “go live” and be done
  - Your company will be creating, updating & using master data as long as it’s in business
  - If everyone relies on this data, but no one’s accountable for its quality, over time, it will become more and more chaotic & unusable

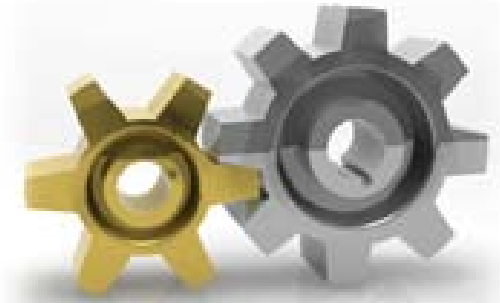


So plan for a “way of life”, not a project ...



# MDM Best Practice #6

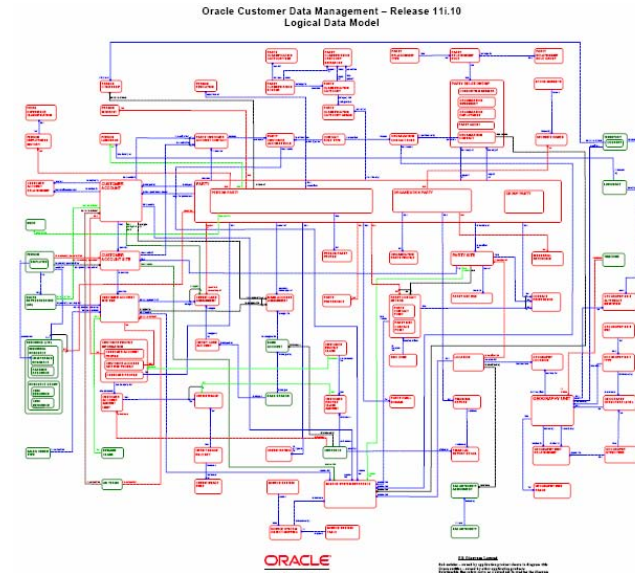
- Management needs to recognize the importance of a dedicated team of data stewards
  - If there's no dedicated data stewardship function, no one lives & dies with the accuracy, completeness, timeliness and consistency of the critical information the business runs on
  - Before you start, convince management of the need for a small team of data stewards



Otherwise, the "lights are on, but nobody's home"; master data repositories don't manage themselves

# MDM Best Practice #7

- Understand your hub's data model and how it integrates with internal systems and external providers
  - Some teams don't spend the time to understand their hub's data model, or to take inventory of and map their internal source systems
  - So when issues crop up late in the project, it's very disruptive



These problems might be avoided by really understanding your hub, and then mapping it back to your source systems and external data providers

# MDM Best Practice #8

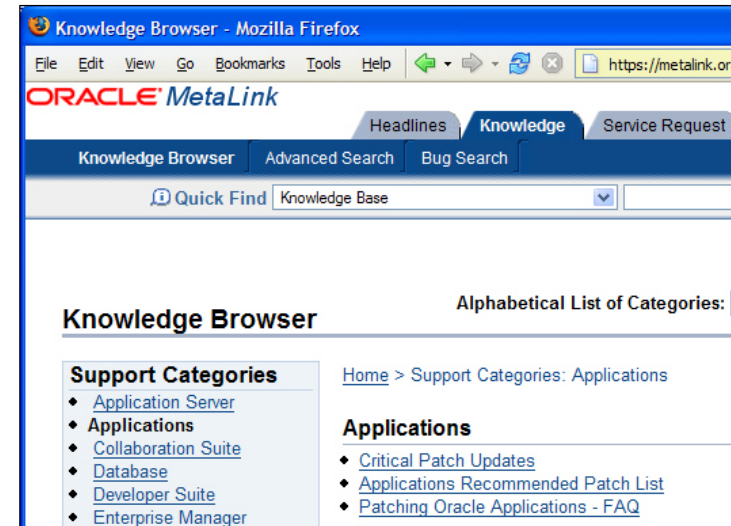
- Resist the urge to customize
  - As the hubs mature, it's easier to resist the temptation to customize
  - Sometimes pushing the vendor to improve future releases is a better strategy than customization
  - When you do customize, do it carefully; make sure your changes are “upgrade-friendly” and documented



Most vendors are still revving their products once or twice a year, so you don't want to get “rev locked” on an older version

# MDM Best Practice #9

- Stay current with vendor-provided patches and updates
  - Plan for at least one upgrade during the initial implementation
  - Build “upgrade competency” into your team
  - Nothing’s worse than contacting the vendor, and to hear a problem is “fixed in the latest release”, but you can’t apply it for months or years



Vendors are constantly fixing problems reported by other customers; make sure you’re in a position to take advantage of those fixes, and have the discipline to do it

# MDM Best Practice #10

- Test, test, test and then test again
  - Your MDM hub is going to be different from every other hub in the world
  - You've got a unique variety of source systems - and some of those may be custom and won't exist anywhere else
  - Most vendors are doing much better at testing and QA, but the burden of testing remains squarely on the implementing company and the project team

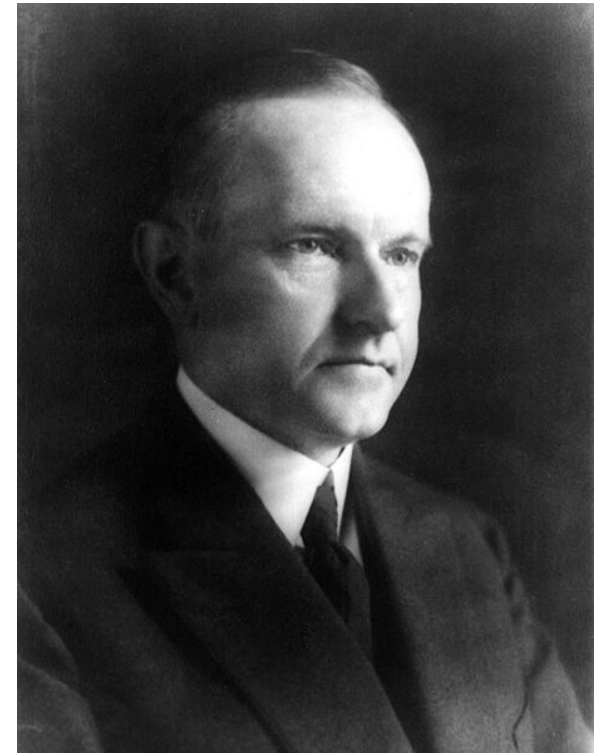


Don't assume that just because something's in general release, that it will work perfectly at your site



# MDM is a journey, not a sprint

- “Nothing in this world can take the place of persistence. Talent will not; nothing is more common than unsuccessful people with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent.” – *Calvin Coolidge, 30<sup>th</sup> president of the United States*



# Questions?



# Contact Info.

Dan Power

(781) 749-8910

powerd@hubdesigns.com

Hub Solution Designs, Inc.

[www.hubdesigns.com](http://www.hubdesigns.com)

[blog.hubdesigns.com](http://blog.hubdesigns.com)

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