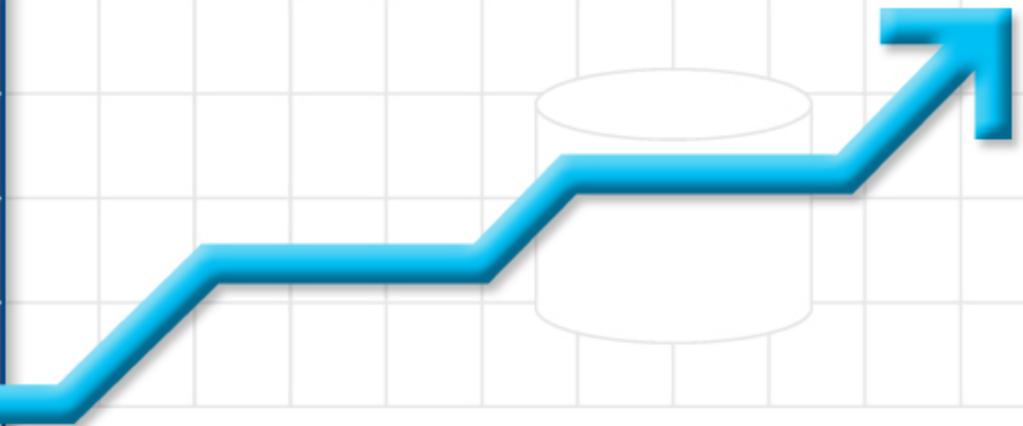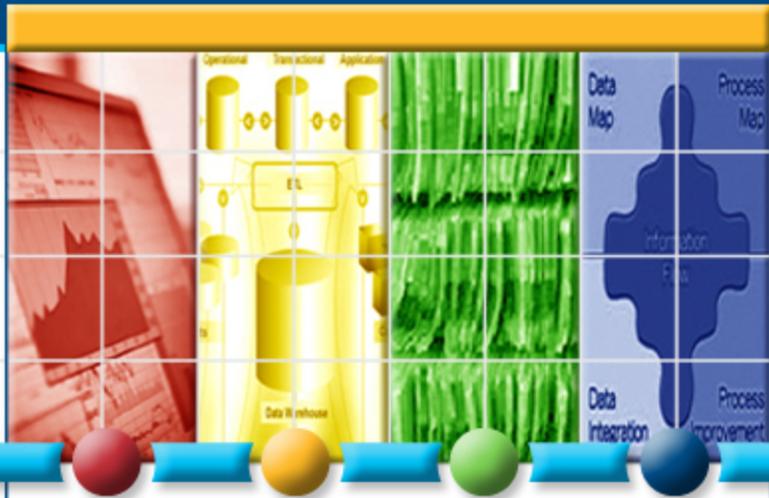## MDM for the Enterprise

# Thank you for attending the MDM for the Enterprise Seminar Series!

- Please do not distribute this presentations without permission from the speaker (see contact information within.) This is just intended as an additional reference for seminar participants.

- Keep in touch! What other MDM events, topics, articles or resources will help you? Email editor@searchdatamanagement.com with your thoughts.

# Get in the Game!
## Launching Your MDM Program

**Jill Dyché**,
Partner & Co-Founder,
Baseline Consulting

TechTarget MDM for the Enterprise Series

**www.baseline-consulting.com**

# Show of Hands!
*Answer all that apply…*

- I'd like to hear how the early-adopter companies have delivered MDM.
- I need to understand how MDM co-exists with other technologies.
- I'm here to understand the various components of MDM.
- Me and my team need to know where to start.
- My company needs MDM, and I'm looking for ammunition to pitch/position/fund it.
- I'd like to see example of other companies' MDM journeys.
- I'm looking for some "how-tos" around MDM.
- I'm here because one of our executives has just read an airline magazine.

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# Why MDM?



- **Customer contacts**
- **Corporate contacts**
- **Product lists**
- **Sales revenues**
- **Payment data**

**SFA Database**



- **Sales revenues**
- **Customer segments**
- **Promotion history**
- **Campaign responses**
- **Customer value scores**

**Marketing Database**



- **Customer contacts**
- **Trouble ticket history**
- **Survey responses**
- **Payment data**

**Contact Center Database**

## When's the last time we contacted John Smith?

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# The Need for MDM
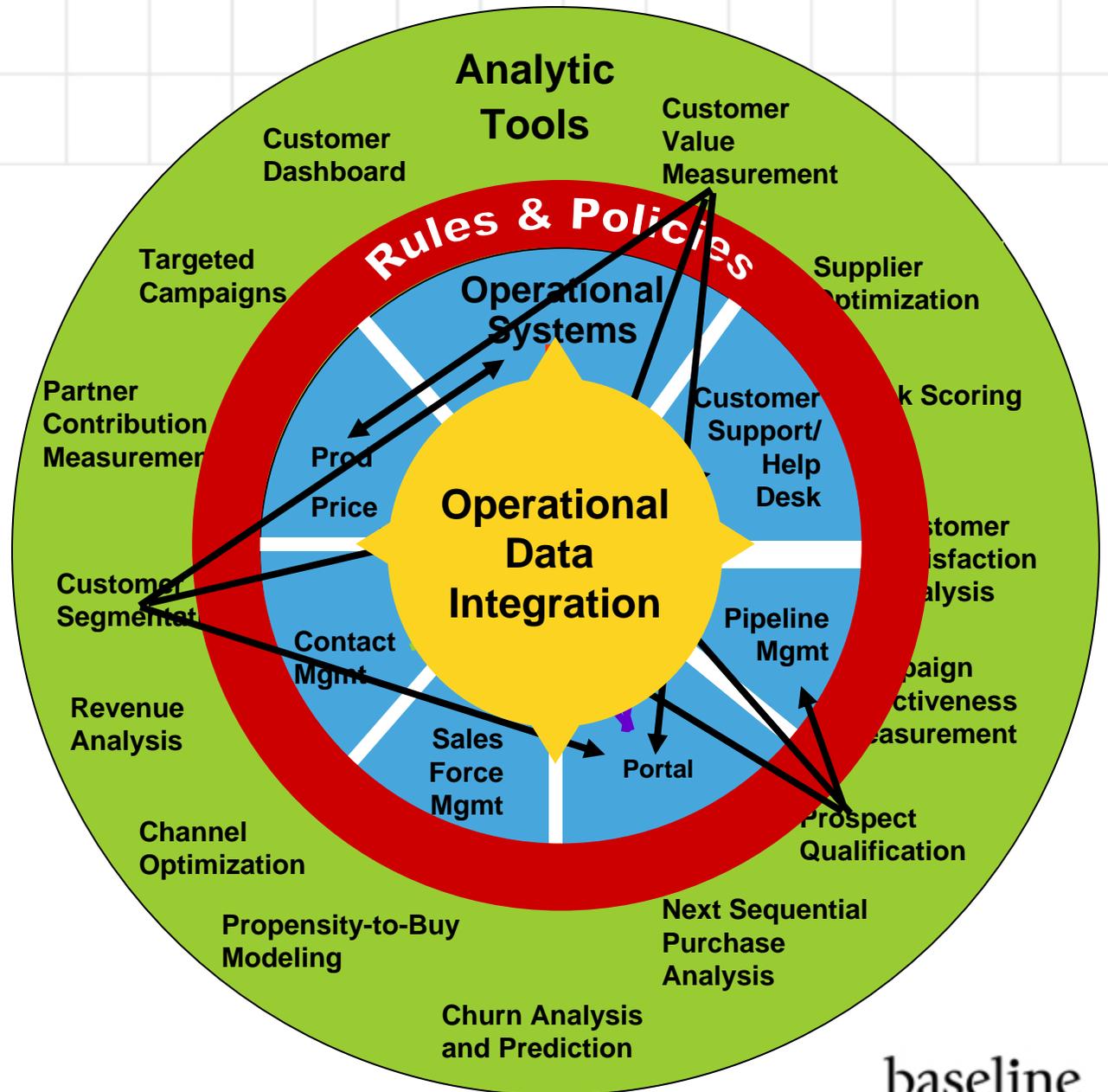
# What is Master Data?

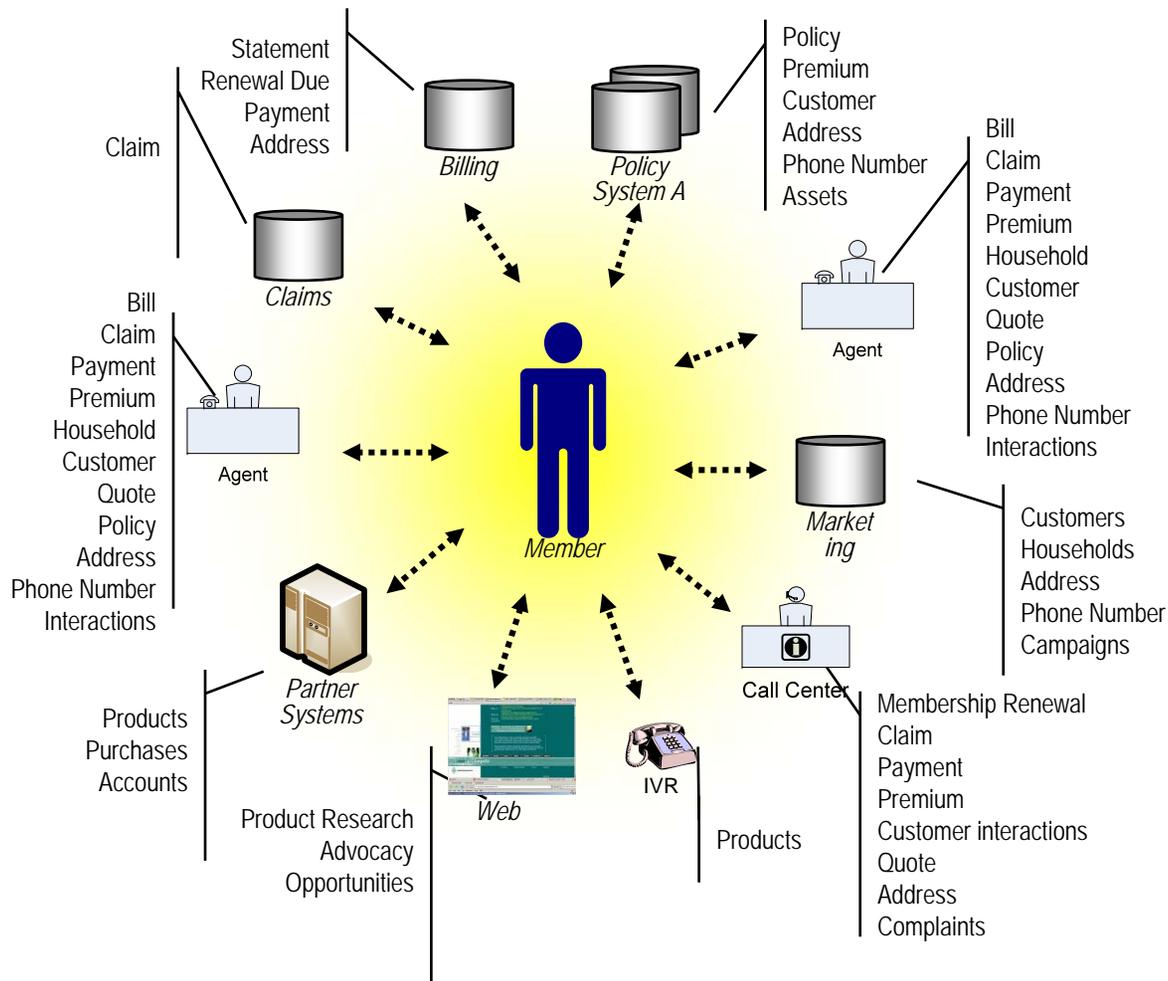*Transaction data* records the data from that event, e.g., "deposit amount."

*Reference data* is the set of facts that describe what was involved in the transaction, e.g., "customer" or "credit card."

*Metadata* further annotates the information that was involved in the event, e.g., "negative balance."

A *transaction* is a business event that occurs at a point in time.

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# MDM: The Before and After



Source: *Customer Data Integration: Reaching a Single Version of the Truth (Wiley)*

- <u>Member information is duplicated</u> in different product systems

- <u>Product systems</u> hold sparse or unstructured customer data

- <u>Customer Service Reps</u> need Member information about all interactions regardless of channel

- <u>Marketing system</u> uses member demographic and household data; derives campaign and value data from analytical and marketing processes

- The <u>IVR</u> captures member interactions and inquiries

- The member <u>Self-Service application on the Web</u> captures member interactions, inquiries, communication preferences and may create new relationships

- <u>Claims system</u> captures a member's claim history, involved parties (who may also be customers), claim status and payment information

# Typical Drivers for MDM

- Party Authentication
- Support of Multiple "Personas"
- Smarter target marketing
- Customer Retention
- Sales Process Improvements

- Regulatory and Compliance
- Mergers and Acquisitions
- IT Asset Management
- "Straight Through Processing" Initiatives
- Risk Management

**MDM Drivers**

**CRM**

**Corporate Initiatives**

**Data Warehouse & BI**

**Operational Excellence**

- "Single Version of Truth" projects
- Real-Time and Right-Time BI
- Existing Report Improvements
- BAM/BPM
- Data Quality Improvements
- ETL Efficiencies

- Core Business Processes
- Global Master Data
- Developer Productivity
- Formalized Requirements
- Governance and Financial Transparency

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# Master Data As An Enterprise Service



**Billing**

**Operational CRM**

**ERP System**

**Marketing Data Mart**

**Disparate Contact Databases and Spreadsheets**

**Trouble Tickets**

**Different Data Sources**

**INTEGRATION SERVICES**

**MDM Hub**

**Data Steward Administrative Dashboard**

**Web Services**

**Data Warehouse**

**Data Marts**

**Web Apps**

**Packaged Apps**

**Knowledge Worker**

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# A Simple MDM Use Case

**1** *A customer logs onto the company's web site and updates their mailing address and opts out of sales contacts*

**2** *A sales rep wants to contact that customer and needs to retrieve information*

**CRM System**

**Internet Site**

**MDM Hub**

**4** *The data warehouse refreshes all changed customer addresses*

**3** *The Billing system sends out the invoice to the customer (at the new address)*

**Billing System**

**Data Warehouse**

**BI Applications**

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# Matching, Merging, and Rules, Baked In!

**Legacy**

| Cust. Id | First Name | Middle | Last Name | DOB | SSN | Address |
|---|---|---|---|---|---|---|
| 30391-244 | William | James | Sosulski | 04/12/39 | 563-49-1234 | 123 Oak St., Eves, IL 30319 |

**CRM**

| Cust. Id | First Name | Middle | Last Name | DOB | SSN | Address |
|---|---|---|---|---|---|---|
| 30391244 | William | J. | Sosulski | 4-12-39 | 563491234 | 123 Oak St., Eves, IL |

**Online**

| Cust. Id | First Name | Middle | Last Name | DOB | SSN | Address |
|---|---|---|---|---|---|---|
| 14239 | Bubba | J. | | April 12 | | BubbaJ@bubbagroup.com |

**ERP**

| Cust. Id | First Name | Middle | Last Name | DOB | SSN | Address |
|---|---|---|---|---|---|---|
| 3721B | Willaim | James | Corp. | April 12 | 56349123 | 3224 Pkwy G, Los Osos |

**Data Warehouse**

| Cust. Id | First Name | Middle | Last Name | DOB | SSN | Address |
|---|---|---|---|---|---|---|
| 30391-244 | William | James | Sosulski | 04/12/1939 | 563-49-1234 | 123 Oak St., Eves, IL 30319 |

| 1001 | 30391-244 | 30391244 | 14239 | 3721B | 30391-244 | William | James | Sosulski | 04/12/1939 | 563491234 | 123 Oak Street | Eves | CA | 91403 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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# MDM Means Loosely-Coupled
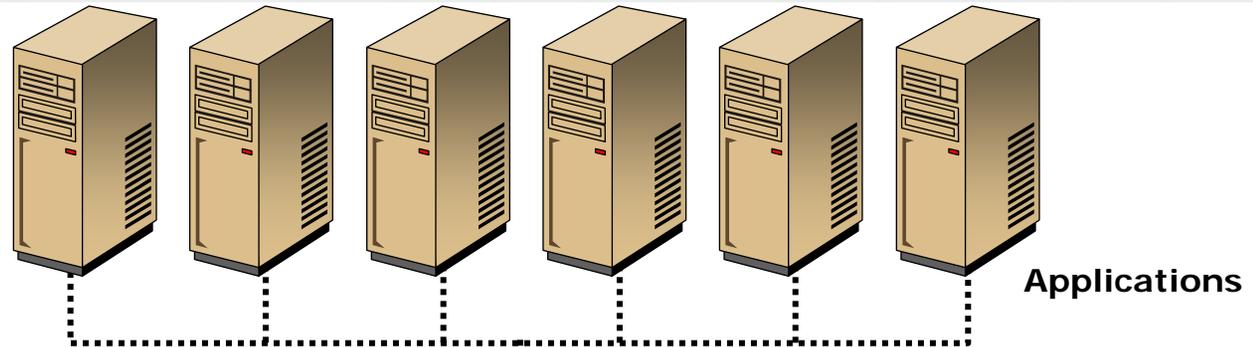


**Applications**
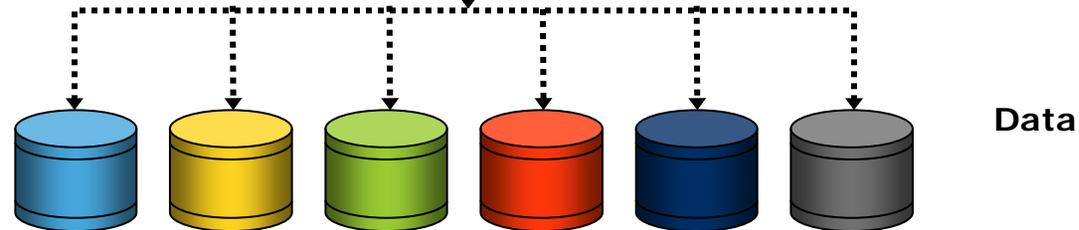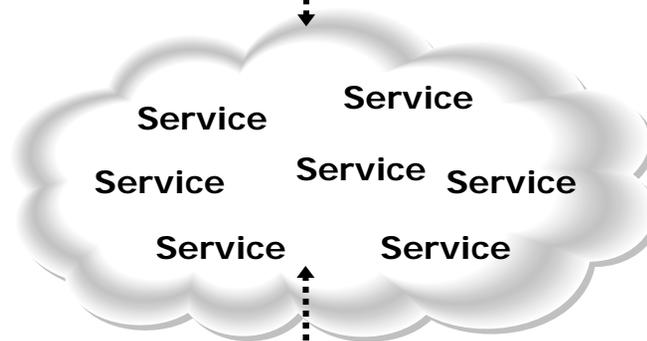
Loosely-coupled applications invite new issues around:

- Data integration rigor
- Data stewardship
- Metadata management
- Business rules management
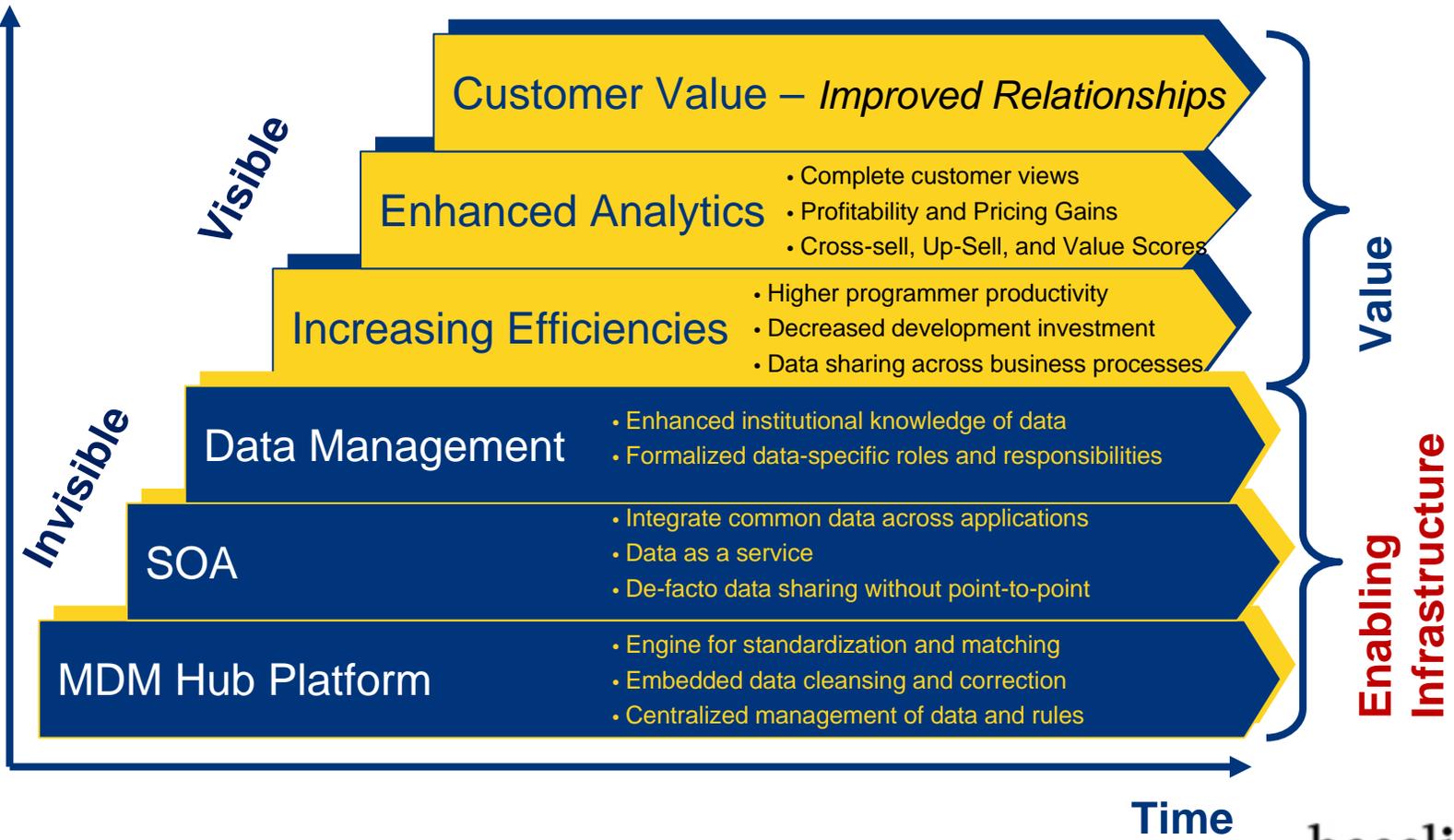- Search
- Data governance

Service
Service
Service
Service
Service
Service
Service

**Data**

**Customers  Partners  Prospects  Leads  Suppliers  Vendors**

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# MDM: Not Just Infrastructure!



**Customer Impact**

**Visible**

Customer Value – *Improved Relationships*

Enhanced Analytics
- Complete customer views
- Profitability and Pricing Gains
- Cross-sell, Up-Sell, and Value Scores

Increasing Efficiencies
- Higher programmer productivity
- Decreased development investment
- Data sharing across business processes

**Value**

**Invisible**

Data Management
- Enhanced institutional knowledge of data
- Formalized data-specific roles and responsibilities

SOA
- Integrate common data across applications
- Data as a service
- De-facto data sharing without point-to-point

MDM Hub Platform
- Engine for standardization and matching
- Embedded data cleansing and correction
- Centralized management of data and rules

**Enabling Infrastructure**

**Time**
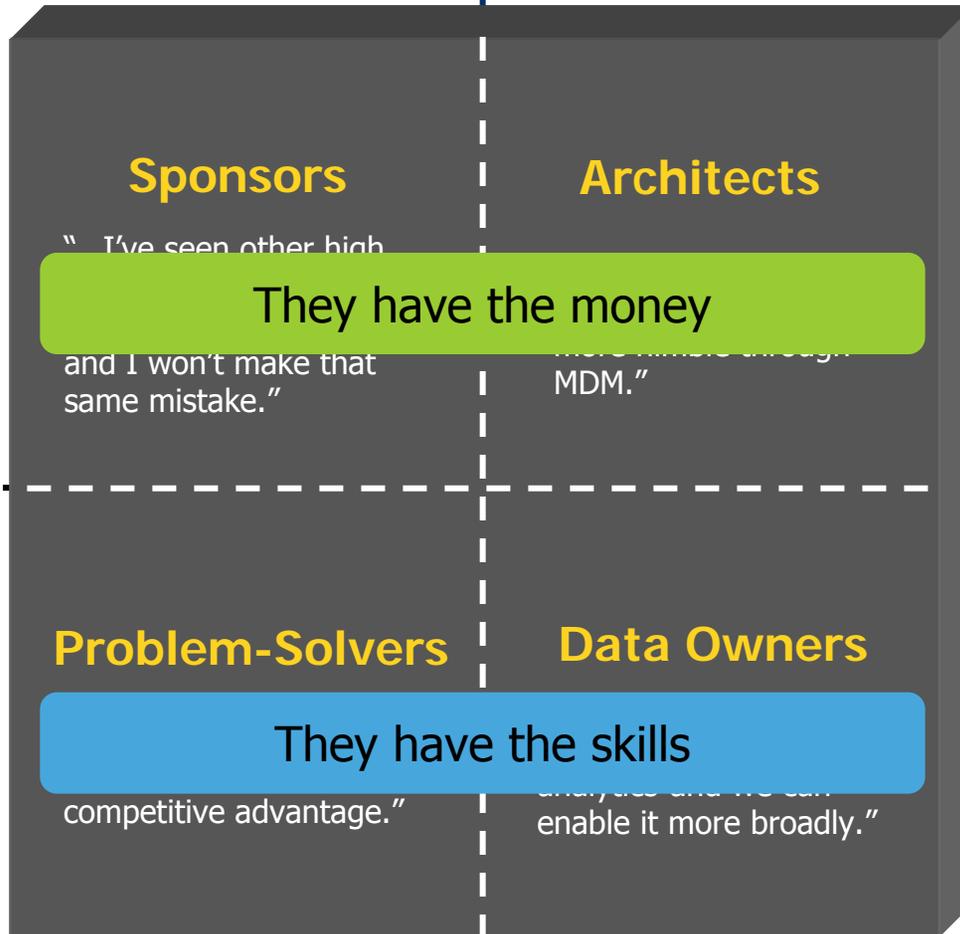
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# MDM: Who's Buying?

## Enterprise

- Executives charged with making a strategy-enabling initiative happen
- Example: "Voice of the Customer" Program

- Managers who see how integrated data can help drive cost efficiencies or revenues
- Example: "Single Version of the Truth"

## Line of Business

|  | **Sponsors** | **Architects** |
|---|---|---|
| | " I've seen other high | more nimble through MDM." |
| | **They have the money** | |
| | and I won't make that same mistake." | |

|  | **Problem-Solvers** | **Data Owners** |
|---|---|---|
| | **They have the skills** | |
| | competitive advantage." | analytics and we can enable it more broadly." |

Business                    IT

- VPs or Directors who have funding for system enhancements and modernization
- Example: "Integration Center of Excellence"

- Mid-level managers or practitioners who are already data experts who see the benefits of MDM
- Example: A Product Hub to consolidate disparate item masters

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# The Challenges of MDM Adoption

- **MDM means centralized management, not centralized data**
  - Data management rigor allows for location flexibility
  - Master (Data Management) ≠ (Master Data) Management
- **MDM implementation is different**
  - System on-boarding means prioritization
  - Functional requirements are back
- **Good MDM projects plan against long term goals; deliver against short term needs**
- **Data governance, data stewardship, and data management are still confusing terms—but each improves MDM (and vice versa)**
- **Executives need to get off the dime**
  - Everyone agrees that "data is an asset"
  - No one knows what that looks like in their organization
  - Roles and measurements must change before behaviors do

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# The Challenges of MDM Adoption:
## Data "Ownership"



*"You have no idea how political this place is."*

# Opportunity Costs of NOT Doing MDM
## *Lack of Data-Driven Decisions Impacts Business*

**Impacts**

- Inability to respond to changing business needs
- Unclear decision-making processes
- Lack of "trusted authorities" of information
- Business and IT conflicts
- Disaffected or disengaged business users
- Conflicting or suspect reports
- Data not accurate, meaningful, or accessible
- High development costs (dollars, resources, & time)
- Overinvestment in technology
- Overworked subject matter experts
- System performance and scalability problems
- Projects delayed & over budget
- Time-to-market for products and strategic decisions perceived as too long
- "What have you done lately?" syndrome

Customer Intimacy

Product Innovation

Operational Excellence

Revenue Growth

Cost Control

Productivity

Regulatory and Legal Compliance

Staff Support

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# MDM Best Practices

- Find a sponsor—but find the right kind!
- Map MDM functionality to business problems
- Don't bog the business down in architecture conversations
- Understand how the MDM development process is different (see Evan's presentation!)
- Know how MDM applies to your industry
- Deliver the "quick wins:"

"We did a lot of work quickly, which meant not soliciting a lot of business input up front. We followed more of an iterative prototyping approach to data deployment. We delivered some information, then got feedback, then did it again. This helped our salespeople figure out what they wanted..."

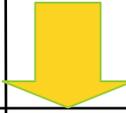*- Scott Sullivan, CIO and CFO, Pitt Ohio Express*

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# MDM: Incremental and Evolutionary

| | FY 2007 | FY 2008 | FY 2009 | FY 2010 |
|---|---|---|---|---|
| **Sales** | **Q1** CRM: B2B Contacts | | | **Q3** CRM: Employee Data (2) |
| **Product** | | **Q2** SCM: Product Catalogue | | **Q2** Order Entry: Product Catalogue (2) |
| **Supplier** | **Q4** SCM: Supplier Data | | | **Q4** Contracts: Contract Data |
| **Call Center** | | **Q1** CIF: Consumer Contacts | **Q1** Call Center: B2B Contacts (2) | |
| **Finance** | **Q3** Billing: Consumer Contacts | | **Q4** HR System: Employee Data | **Q1** Financials Packae: Chart of Accounts |
| **Marketing** | | **Q4** Marketing Automation: Consumer Contacts (2) | **Q3** D&B: B2B Contacts (3 | |

*Data Governance Policy and Prioritization*

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# MDM: Top Down or Bottom Up?

*Our information management practices are characterized by...*

| | | | |
|---|---|---|---|
| *"Nothing gets funded around here without executive approval."* | ⬇ | ⬆ | *"There's a high-profile project that's perfect as a 'beta' for data governance."* |
| *"Consensus is an important component of our culture."* | ⬇ | ⬆ | *"An idea has to be proven before it's accepted."* |
| *"Business requirements are critical, and we have a rigorous and sanctioned requirements process."* | ⬇ | ⬆ | *"We're all too familiar with 'shadow IT' around here."* |
| *"We have a fairly mature enterprise data model."* | ⬇ | ⬆ | *"Our environment is still very silo-ed."* |
| *"Our company understands and practices change management."* | ⬇ | ⬆ | *"Change management concepts are considered too "soft" for us."* |
| *"We have universal success measures that map back to core philosophies."* | ⬇ | ⬆ | *"Our measurements are only as good as the organization that's defined them."* |

**The essential question for Top-Down versus Bottom-Up is:**
**"To what extent do you initially plan on enlisting the business for MDM support, funding, or approval?"**

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# What We're Telling Our Clients

- Assess and pitch the *business benefits* of MDM

- Leverage the *data management* skills and practices you've established in your BI team

- Start a *data governance initiative* (whether or not you can get business support initially)

- Plan on providing *training and education* to your MDM developers

- Identify *a small, controlled project* on which to test MDM—but design it to support long-term master data

- Strengthen MDM before you begin via *clear roles* and a *solid development framework*
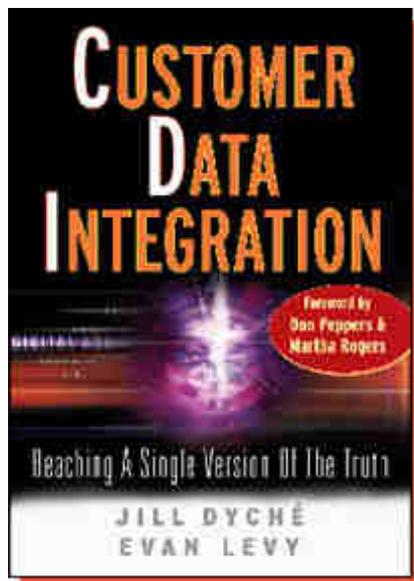
**Analytic Data**

**Operational Data**

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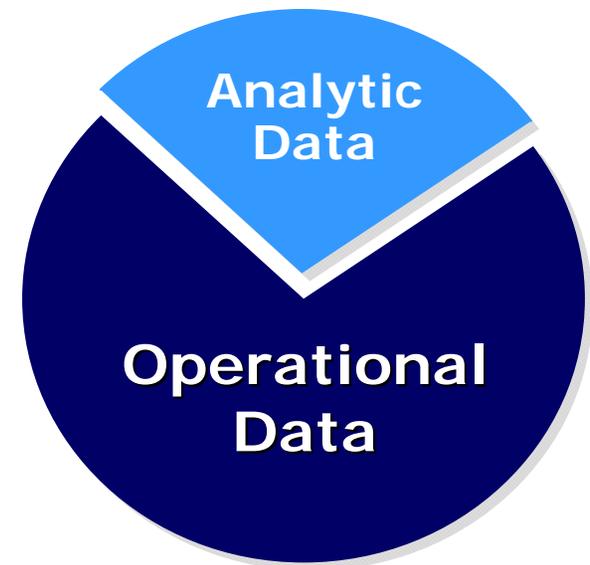
# *Thank You!*

## *For more on MDM, see Baseline's website!*

**See our latest MDM white papers**

**on SearchDataManagement.com**

**JillDyche@baseline-consulting.com**

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