

# Governance Initiatives through Reference Data and Metadata

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## Our Company

- Technologies across Business Service Management , IT Infrastructure & Operations, Applications Management, and leader in Information Management and Metadata Management
- US\$400 million privately-held enterprise software company
- More than 1,400 employees, over 90 offices around the world
- Presence in more than 50 countries – offices in 30+ countries
- More than 8,500 worldwide customers

## Our Value

- Customer-focused development
- Flexible licensing models
- Breadth of solutions
- Federate literally anything to anything

## Our Goal

- To provide software solutions that help clients optimize IT from a quality-of-service and a business perspective



- A Tale of Data Governance



## What's in it for you?

Understanding of the interplay between Data Governance (DG), MDM and Metadata and how to leverage it to initiate DG in your own organization

- Many long-winded definitions in the industry from DMBOK, Wikipedia, DG Institute, KiK Consulting etc.
- One well-known vendor of Data Governance (DG) software: “DG is the business process of defining, implementing, and enforcing data policies”

Consensual Data Management  
in Support of Business Goals



## What might some of the business goals be?

Confidentiality, Risk, Audit, Compliance, Security, Quality, Consistency, Metadata Management, Integrity, Availability, and MDM

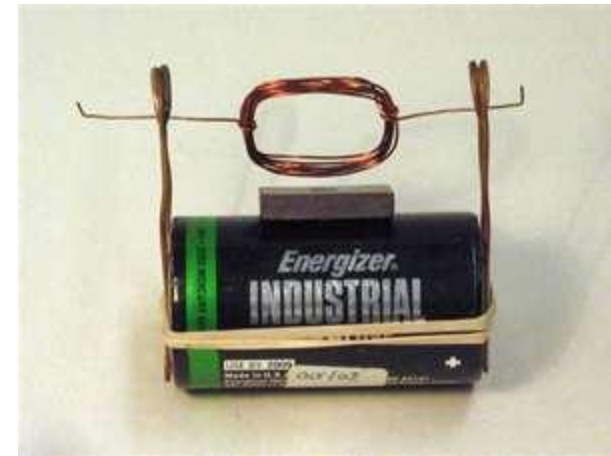
- **Organizational** – Different groups within an organization must communicate and coordinate well with one another – layers of interconnected complexity with large number of stakeholders and independent agendas
- **Data quality, MDM, and data migration/integration** – Applications and data must speak to one another, and this must be addressed up front and planned for in any Governance initiative
- **Cost** – Data governance initiatives must be implemented in such a way that costs are recouped and business value is proven
- **Ownership of data** – Territorial political tension
- **Big Bang approach** – all problems cannot be solved at once
- **Lack of support from top management**
  - Need strong business case – the more complex the case and DG structure the higher the barrier for buy-in.
  - Generally wait for an event/trigger like data breach, or govt. mandate, or loss of revenues etc.





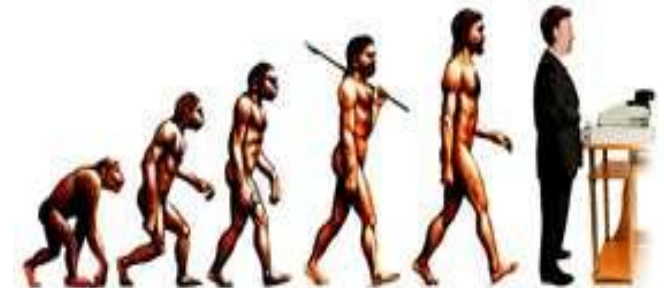
- Need to assess maturity (if DG existing at all) and create/implement a DG program or an enhancement thereof
- Scoping Data Governance -> How much, where, how, what policies, intensity of stewardship, level of accountability,
- Governance Council, Steward, Accountability and RACI setup
- Ownership, Buy-in
- Stewards and council teams need ramp-up time
- Proof of concept is required – leading to iterative deployment

Reduce complexity by starting simply and delivering benefits early



- Business Program not a Technical Project / its not technology but a business process
- CSFs : Executive support, Committed staff, have measurable goals, define scope, communicate, be consistent/transparent/collaborative/supportive
- DG council must clearly understand and articulate what the DG program is and its business value
- Successful DG generally Initiated inside IT and will evolve outwards to include business community

DG deployment should be evolutionary, iterative, minimally-invasive (i.e. use existing, create just sufficiently, and none unwanted) and pay for itself



# How can Master Data Management help Initiate Data Governance?

“Without Effective Governance, a MDM initiative will probably fail, so it is vital that program managers create the MDM governance framework early.”

– Gartner, *“The Seven Building Blocks of MDM: A Framework for Success”*, May 27, 2009

“Through 2015, 66% of Organizations that initiate a MDM program will struggle to demonstrate the value of MDM. To succeed, MDM needs a major focus on governance, organization and process. The creation of an effective governance decision rights matrix, policies and processes that focus on the master data lifecycle is key.”

– Gartner, *“Predicts 2011: Master Data Management is Important in a Tough Economy, and More Important in Growth”*, November 11, 2010

- Information is a valuable asset ..Master data is a more valuable information asset
- Why?
  - Master data is widely shared and repeatedly used across all enterprise systems to execute critical business processes
  - Business becomes very reliant on master data – as it is supposed to be
- DG fulfills the promise of MDM – i.e. reduce cost, increase revenues, manage risk, enable compliance



Inconsistent master data can disrupt business operations and drive up costs due to manual intervention

- MDM offers a path to non-intrusive governance - don't have to worry about governing the enterprise data initially, start with the master copy
- Creates an opportunity for stand-alone DG that can be low in foot-print, and have very low organizational barriers and enables evolutionary DG starting with small iterations, and increasingly growing bigger.
- You can start with just enough DG policies that is required to govern your master data

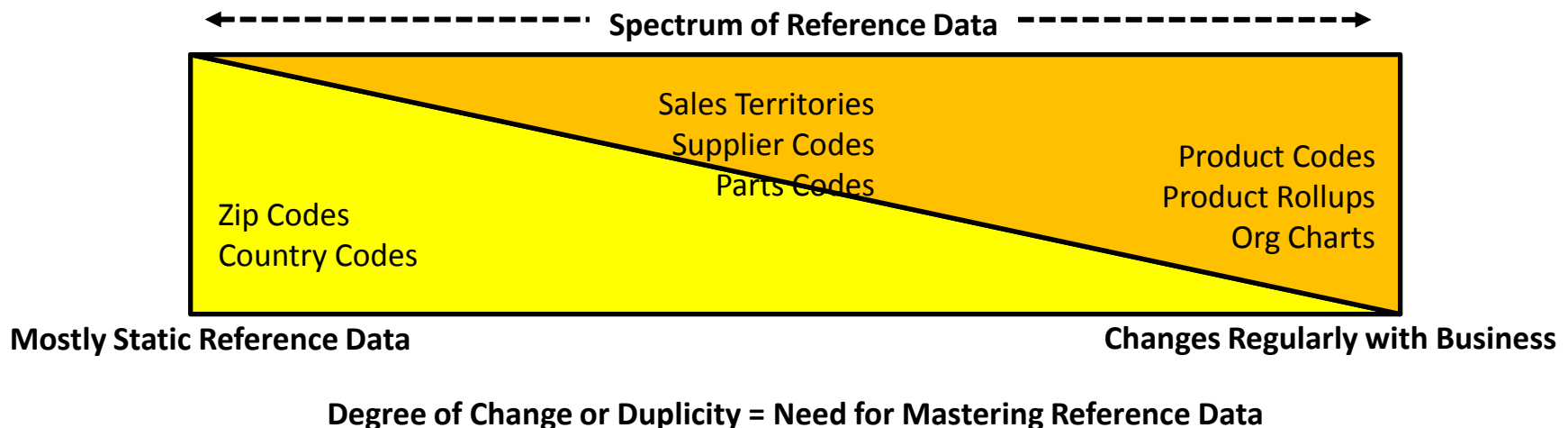
MDM accelerates DG by mitigating ownership and political tensions from governing master data – as well as invites business participation in DG due to centralized nature of master data



# How can Reference Data Management help Accelerate Data Governance initiatives?

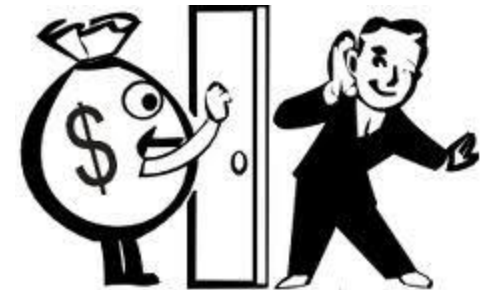


- Data that operational systems refer to..something that does not change frequently, like code tables or lookup tables
- Reference data management (RDM) is a subset of MDM
- **Why bother with mastering Reference Data?**
  - Firstly, enterprises end up, over a period of time, with multiple copies of reference data
  - Secondly, not all Reference Data is static..it can change as business changes, and therefore, requires a master consolidated view



- Reporting and Analytics are Reference Data driven
- Reference data adds to the understanding of enterprise data and transaction data – metadata
- Reference data, by its very nature, is enterprise wide – most fundamental type of enterprise data
- It's entered into systems repeatedly, across many applications, by humans, in inconsistent formats, and typically prone to errors
- Reference data is represented differently in different systems
- Some reference data is stored in databases with only application access, i.e. no one readily knows where it is coming from

Reference Data is Everywhere, and Everyone Uses Reference Data, But No One Wants To Own It!



- Reference data used by applications across enterprise - need to share it - perfect place to start centralized enterprise data management
- Concentration on Analytics and Reporting drives RDM
- Reduce or eliminate synchronization and integration errors between applications – reduce cost of application maintenance
- Reduce/eliminate manual data entry efforts and errors due to same
- Eliminate local management of reference data by centralizing it
- A complex and politically-sensitive requirement for DG is to define what data to govern – MDM will isolate it, RDM will make it easier

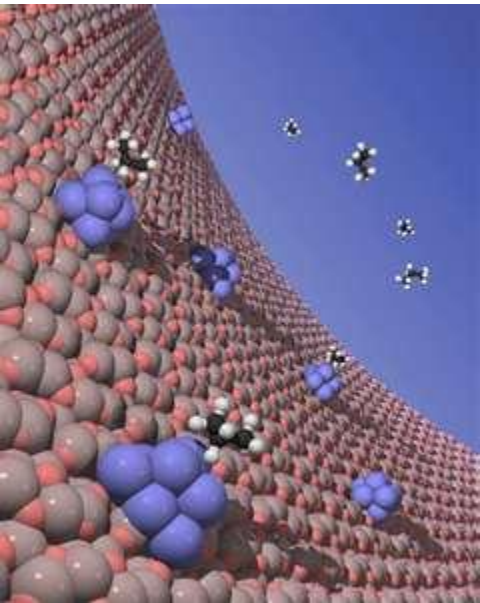
Reference Data Management  
lowers the barriers to Data  
Governance Initiatives

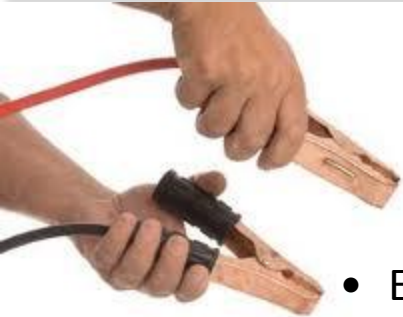


If you don't have an active information governance effort underway, use MDM as your reason for starting it. – Gartner, "Scoping an effective MDM Governance Framework"

## How can RDM catalyze Data Governance?

- RDM reduces risk in DG deployment - how?
  - Laying down the DG accountability framework for governance and stewardship becomes easy and simpler when focusing on MDM, and even simpler when focusing on RDM
- RDM, and subsequently MDM, supports the incremental addition of data-domains to DG
- RDM/MDM supports iterative evolution of the DG program
- RDM is also low on data quality requirements





## What are some areas to examine to jumpstart your RDM/DG program?

- Examine external sources of reference data..are you oversubscribing?
- Examine internal sources of reference data, are they entered manually? Shared? replicated across enterprise? Erroneous? Lack meaning or need interpretation? Governed? Lack lineage information? Lack impact information?
- Is the source format or structure not matching majority of targets?
- Is there a push for SOA?– provide access to golden copy of reference data with SOA
- Is reference data managed as a shared strategic enterprise resource? Do you want to?

- Traditionally, many policies for master data governance exist:
  - Integrity, validation, cleansing, provisioning, access control, privacy, expiration, archive and backup policies
  - All above are minimized for RDM – easier to get started

## What are the elements of Reference Data Governance?

- Small footprint Governance council
- LoB/LoA consumers of reference data – reporting, RD-intensive apps
- Reference Data items for mastering – scope
- Stewardship and Ownership RACI per item
- Source and Target formats
- Data Quality and Business Rules
- Access, Delivery, Security and Usage

Reference Data Management Jump  
Starts your Data Governance Initiatives



# How can Metadata Management Provide a Foundation for Data Governance initiatives?

- What is *Meta*? Greek for “Higher and Beyond”
- Difference between Metadata and Master data
- Can Reference Data be Metadata?
- Metadata needs of Governance:
  - Technical v/s Business metadata
  - Technical metadata: DB Schema
  - Business metadata : Data Concepts, Business Terms
  - **More Business Metadata**: Data policies, Transformation rules, RACI matrix...
  - **Even More Business Metadata**: Quality standards, Access/Usage policies, Delivery SLA...



**MDM is not sustainable without Metadata Management** – Gartner “*Metadata Management is Critical to MDM’s long-term success*”

## Why is Metadata essential to a Data Governance and MDM program?

- Master data must be formally defined – metadata
  - Data name, definition, description,
  - Integrity constraints
  - Approved synonyms – business glossary
  - Sensitivity/security classifications
  - Quality and accuracy policies
  - Access policies
  - History, Versioning – where has the master data been?
  - Lineage – where is the master data coming from?
  - Impact – where is master data going?
- A foundation in Metadata accelerates DG and MDM
- MDM/MEM yield faster time-to-value for DG initiatives

The Value of a MDM Program is the Metadata that contains the Governance Policies of Master Data.



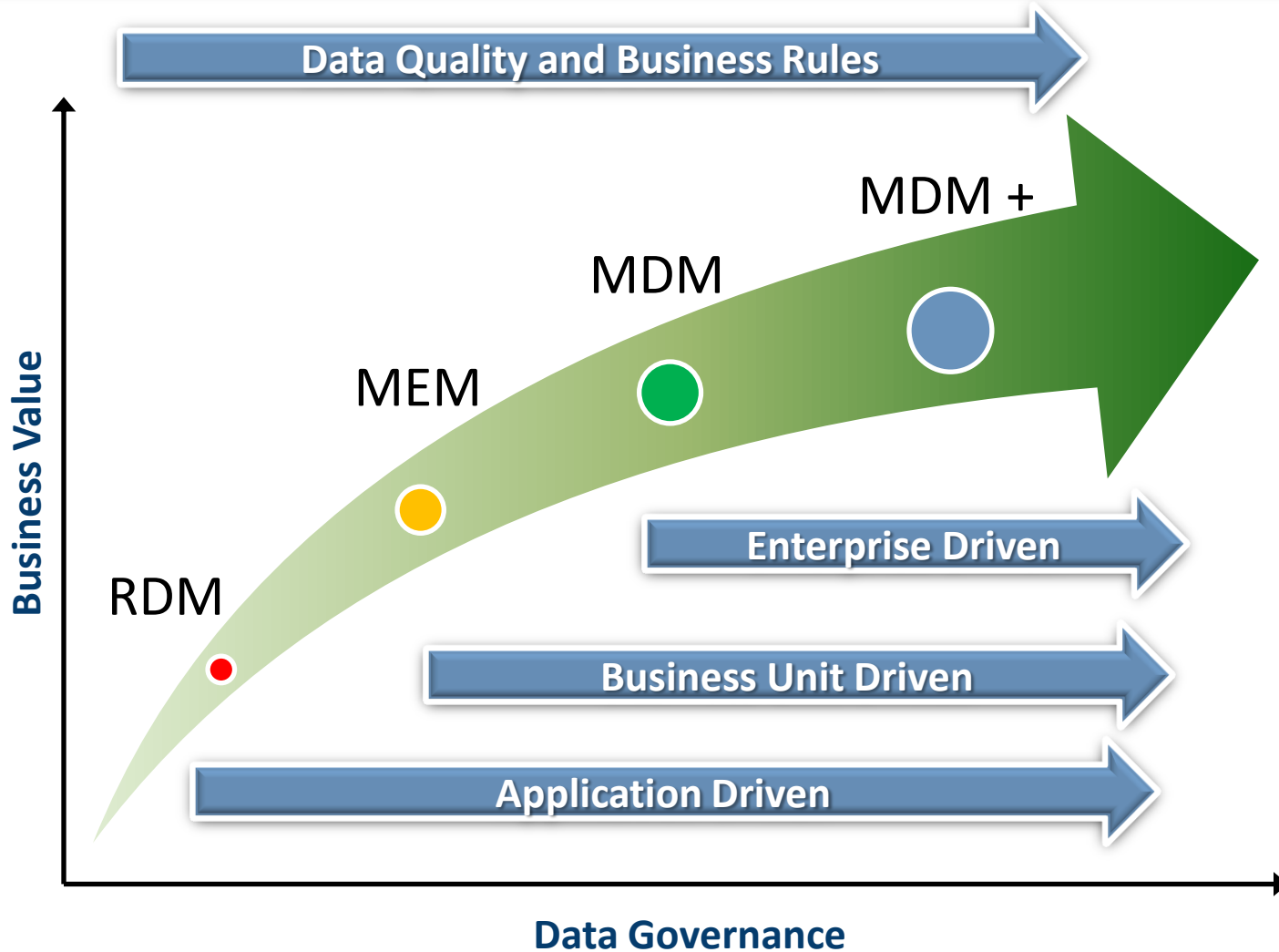
To sustain MDM, a deeper level of Metadata Management is required than is provided by most MDM tools out there – Gartner “Metadata Management is Critical to MDM’s long-term success”

- Where MEM is required for a solid foundation in enterprise data management, MDM provides a way to get started on a lower-risk scope by allowing focus on metadata for master data
- MEM allows information assets to be used more effectively – allows MDM lifecycle activities to be completed more efficiently and effectively
- A tool that integrates MEM with MDM enables effective management and enforcement of Governance policies



Work with vendors from both MDM and MEM sides to bring these technologies together sooner, rather than later – Gartner, “Metadata Management is critical to MDM’s long-term success.”

# Putting it all together



## Thank You For Attending!!

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