TOPIC

Maturity in Data Management – Why do I need it?

PRESENTED TO:
Webinar

July 21, 2016
Today’s Agenda

Why you Need Maturity in Data Management

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Data Management Maturity: Defined

Data Management

• The business functions that develop data, and/or execute plans, policies, practices and projects that control, protect, deliver and enhance the value of data.

Data Management Maturity

• The ability of an organization to precisely define, easily integrate, protect, effectively retrieve, and deliver data that is fit for purpose for both internal applications and external purposes.
Subjective Data Management Maturity

As critical as data management practices are to every industry, there is very little objective data that measures how mature data management activities are.

- Benchmark report from the Enterprise Data Management (EDM) Council, 2015
  - Only measured financial industry
  - 234 respondents from 128 institutions
  - Measured degree of implementation of a data governance program
  - Indicated a low percentage of firms actively engaged in deploying a formal program
- A 2016 report from FIMA\(^1\) states that 31% of respondents have a governance program in place

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1. Financial Information Management Report; Modernizing Data Quality & Governance, 2016
Anecdotal Evidence Data Management Maturity

Without empirical information to measure the state of data management activities we defer to anecdotal data via data quality

• Experian report from 2015 states 26% of global companies, and 32% of U.S companies believe their data is inaccurate

• A 2016 Paper from Blazent reports that across multiple industries nearly 23% of measured data quality is less than satisfactory, with data integrity, accuracy and consistency being the largest quality problems

• A 2014 report from the Office of National Coordinator (ONC) for Health and Human Services (HHS) on patient data matching declined to provide quantitative measures of quality, but concluded that accuracy and consistency problems needed to be improved

Data Management Maturity is relatively new, and without it, quality is generally poor
Data Management Trends

Data management practices are generally not very mature and our resulting data is often of questionable quality. Regardless, we see strong demand for trusted data

• Strong trends and **demand for master data management**, especially as it relates to financial securities and customer data

• **Increasing regulatory requirements** specifically targeted to data governance, risk management and accountability for data

• **Demand for more accurate data** to support decisions and reporting

• Statistical analysis of **large, complex and disparate sets of data** (i.e. data science and big data analytics)

• **Calls for predictive analytics** for a variety of purposes

• The sciences industry has **multiple initiatives to improve metadata** collection and quality to aid in data discovery and integrated research
Measuring Data Management Maturity

DMM<sup>SM</sup>

- Released by CMMI Institute in 2014
- Designed to encompass all facets of data management

- Released by the Enterprise Data Management (EDM) Council in 2015
- Designed to guide organizations to a mature data management program

Kingland is the only firm currently certified to consult on both models
Business Case for the Need for Mature Data Management Practices

2015 Forrester report*: “65% of top 10% performing firms had appointed a CDO, and they are more likely to…”

Components of a Mature Data Management Program
Data Management Cycle

Mature data management requires that all of these are in place and performed in accordance with the business need of the organization. **Data management is a business function, not an IT function.**

Things that drive work efforts, **guiding common understanding** of the objectives, rules, expectations and definitions.

Performing activities to **ensure that the data is fit for purpose and consistent** with the objectives, rules, expectations and definitions.

Things that **ensure execution is accomplished consistently** according to the objectives, rules, expectations and definitions.

Performing the day-to-day operational activities **according to stewardship and governance guidance**.
Data Management Maturity Continuum

Where are you in this sequence?

- No Governance
- Scoping and Strategy defined
- Governance Defined
- Lifecycle Controls Defined
- Funded Program implemented
- Program is Stable
- On-going Enhancements

Data Governance

Data Management
Scope of a Data Management Program

**Critical Data**
- Data critical to the nature of business
- Data critical to support of business objectives
- Data necessary for internal and regulatory reporting

**Organizational Standardization**
- Parts of the organization that originates or integrates critical data
- Parts of the organization that uses critical data
- Parts of the business that impacts critical data
Components of a Mature Data Management Program

**Data Management Strategy**
- Scope, vision, clear data management objectives tied to business objectives, priorities and sequence, stakeholder buy-in, expectations related structure, oversight methods, funding expectations

**Governance Structure**
- Organizational structure, Stakeholder involvement, responsibilities, authorities and accountabilities, policies and standards, standardization and tailoring rules, business glossary/taxonomies, data lifecycle management guidance, resources

**Data Quality Strategy**
- Data quality attributes and criteria, data profiling rules and criteria, quality strategy program defined, data cleansing rules

**Organizational Control Environment**
- Processes and process management (inclusive of process quality oversight), funding models, provider management program, data lifecycle management, process performance management, stakeholder involvement, reporting oversight

**Funded Implementation**
- Data management functions, platform management program, authorized platforms in operation, implemented integration rules, metadata management, quality controls and assurance activities implemented

* Components listed are not intended to be exhaustive, but rather indicative
Operational Implementation Considerations

• Implementation of a data domain should encompass everything, from business glossary all the way through integration of quality checks along the data flows, as well as reaching into authorized uses, and from origination through obsolescence or curation/archive
  • Lifecycle management rules for a data domain must be standardized across all lines of business - Different data domain rules do not have to be exactly the same, but should only be different based on data governance decision
  • Should be based on documented data lifecycle flows with mapping to supported business processes

• Performed with authority of organizational policy under single executive responsibility with authority to require organizational compliance

• Must be sustainable and resourced through on-going funding models
High-level Self Assessment for Data Management Maturity
Data Management Strategy

Scope, vision, clear objectives, priorities and sequence, stakeholder buy-in, expectations, oversight methods
Governance Structure

Organizational structure, stakeholder involvement, responsibilities, authorities and accountabilities, policies and standards, business glossary/taxonomies, data lifecycle management guidance, resources
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**Implementation State**

- **Target** → On-going/Enhanced
- Implemented
- Defined
- In development
- Not Initiated

**Operational State**

- **Target** → Optimizing Processes
- Quantifiably Measured
- Performed consistently
- Inconsistent
- Ad Hoc
## Mature Data Management Program Success Matrix

### With these you will achieve...

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### ...this

- Data Fit for Purpose
- Confusion
- Dissatisfaction
- Exasperation
- Frustration
- Inconsistency
Attendee Self-Assessment Survey Results

Over 50% of responses indicated they are on some level of path towards a formal data management program, but majority are in very early stages

- 88% recognize current operational activities are ad hoc or inconsistent, yet still have 31% - 57% of responses indicting no initiation of any form of formal program to manage data – begs the question of why not

- 7% reported a control ecosystem as being implemented with on-going enhancements, and zero reporting a formal program implementation, yet the operational state of activities are reported to be consistently performed (according to a defined method) in 12% of responses. – Inconsistency of responses indicate confusion of questions or expectations

General results of respondents indicate a lag behind the more regulated larger banks for implementation of any components of a formal program, by about half.
Next Webinar – Introduction to the DCAM and DMM Models

- Understanding the breadth and depth of the models
- Insight into model content
- Understanding scope of data management improvement efforts
- Examples of how others have used the models
Thank you.
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