



8 Steps Successful Enterprise Data Management with the DAMA- DMBOK

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Sponsored by the NASCIO Data Management Working Group

EW Solutions' Background

EW Solutions is a Chicago-headquartered strategic partner and full life-cycle systems integrator providing both award winning strategic consulting and full-service implementation services. This combination affords our clients a full range of services for any size enterprise information management, meta data management, data governance and data warehouse/business intelligence initiative. Our notable client projects have been featured in the Chicago Tribune, Federal Computer Weekly, Journal of the American Medical Informatics Association (JAMIA), Crain's Chicago Business, and won numerous awards, including references in governmental reports.



2007 Excellence in Information Integrity Award
Nomination



20 MOST PROMISING
ENTERPRISE
ARCHITECTURE
TECHNOLOGY PROVIDERS - 2016



World Class Solutions Award
Data Management



Background: Anne Marie Smith

- ❑ Internationally recognized expert and speaker in the fields of enterprise information management, metadata management and data warehousing, one of the top industry experts in data governance, and in data management strategy and planning
- ❑ Over 20 years experience in delivering solutions in enterprise information management for numerous companies / clients across varied industries and governments
- ❑ Published numerous articles that have been featured in some of the industry's most prestigious magazines and newsletters
- ❑ Contributing author and reviewer to the *DAMA Data Management Body of Knowledge* (DAMA-DMBOK®)
- ❑ Has taught at several institutions of higher learning including LaSalle University
- ❑ Holds certifications in enterprise data management (CDMP), data warehousing (CBIP), and data governance, and has earned a Ph.D. in Management Information Systems



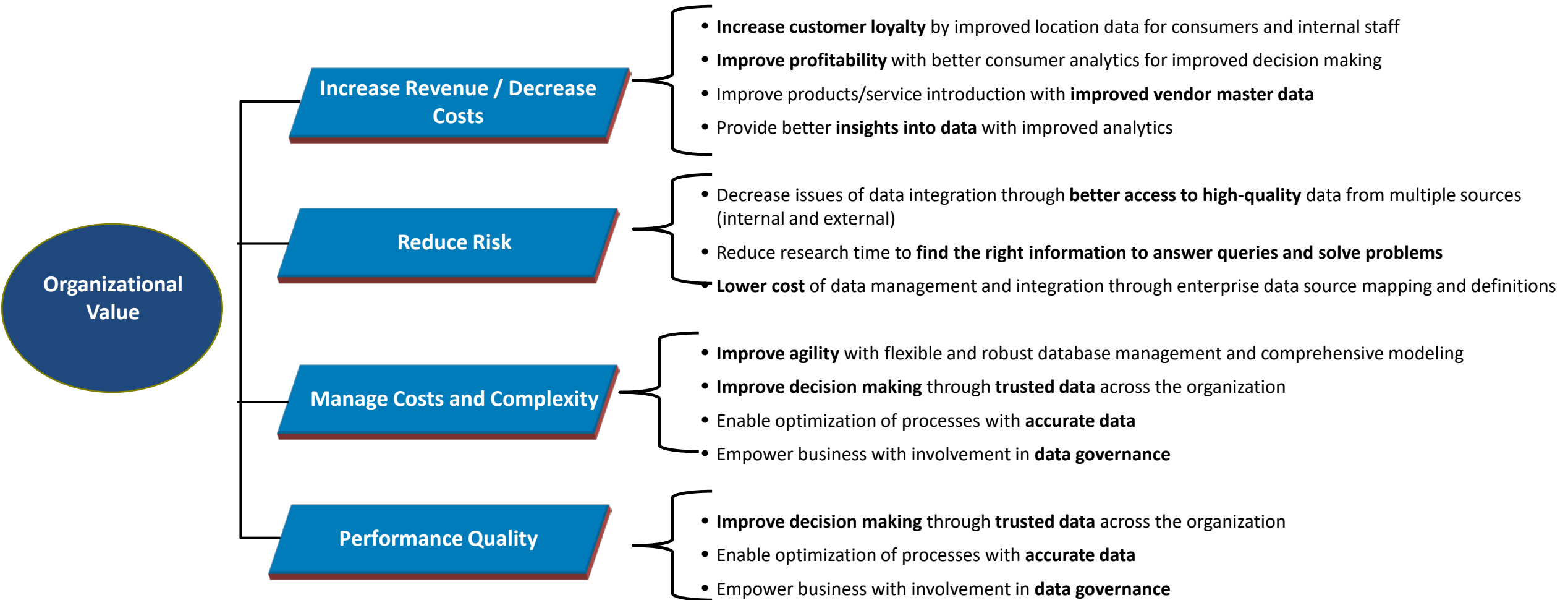
Enterprise Data / Information Management

- Most organizations never planned their IT enterprise; rather, it “just grew” over time
- Tremendous levels of redundancy in:
 - Data
 - Process
 - Technology (software/hardware/middleware)
- Large data quality problem results from lack of management of data at an enterprise level
- Without EIM / EDM, attempts to fix or refine a process can cause several other processes to break
- EIM / EDM can:
 - Reduce IT development life-cycles
 - Lower project failure rates
 - Enable enterprise applications (data warehousing, ERP, CRM, SCM, etc.)
 - Provide analytics and cross-unit data / information for decision making

What's the Value?

Improving the quality and consistency of data brings revenue opportunities, reduced risk, decreased cost and overall better decision making to all state governments

Examples



8 STEPS TO ENTERPRISE DATA MANAGEMENT SUCCESS

8 Steps to EDM / EIM Success

Base EDM program on DAMA-DMBOK framework

Develop and implement an enterprise data strategy

Assess current state of EDM / EIM across organization, for each DAMA-DMBOK component

Develop future state plans for EDM based on DAMA-DMBOK

Form an EDM / EIM program team

Created phased high-level implementation roadmap for each DAMA-DMBOK component (current to future state)

Develop and implement sustained communication and socialization plans for data management across organization

Begin first implementation efforts

What is a Framework?

Frameworks offer a common structure to organize processes and roles

- Frameworks provide a context for structuring a program
- Frameworks allow the organization to adopt and incorporate best practices from the various disciplines into a coherent and organized approach that suit the organization
 - Retaining core principles and practices, amending certain aspects to conform to organizational differences



DAMA -DMBOK Framework

Standard terms and definitions

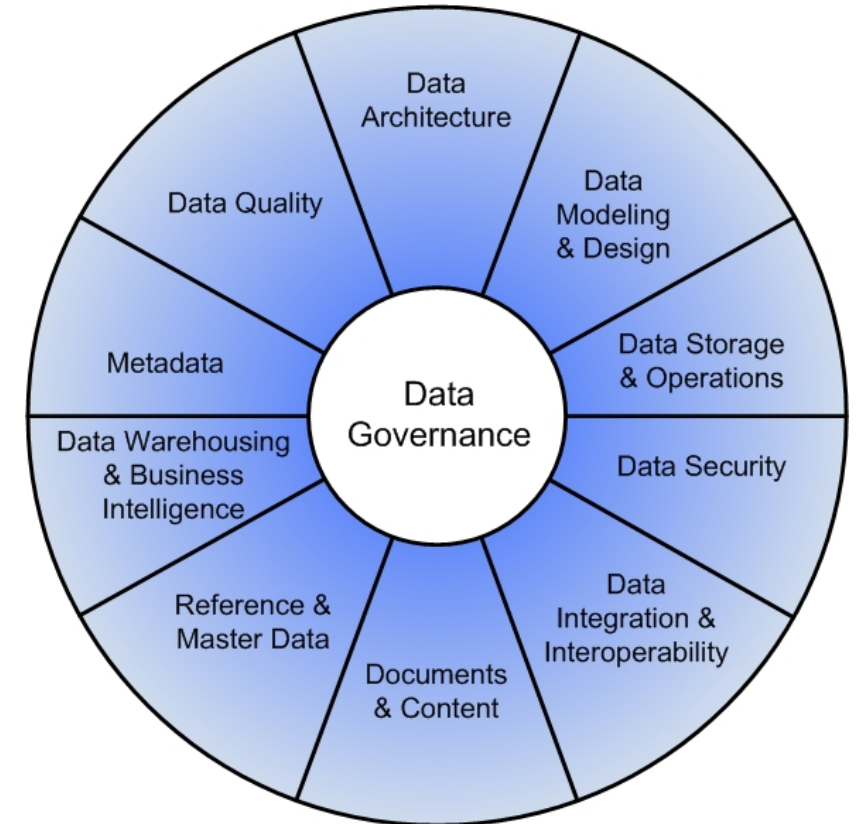
Standard functions and activities

Standard roles and responsibilities

Standard deliverables and metrics

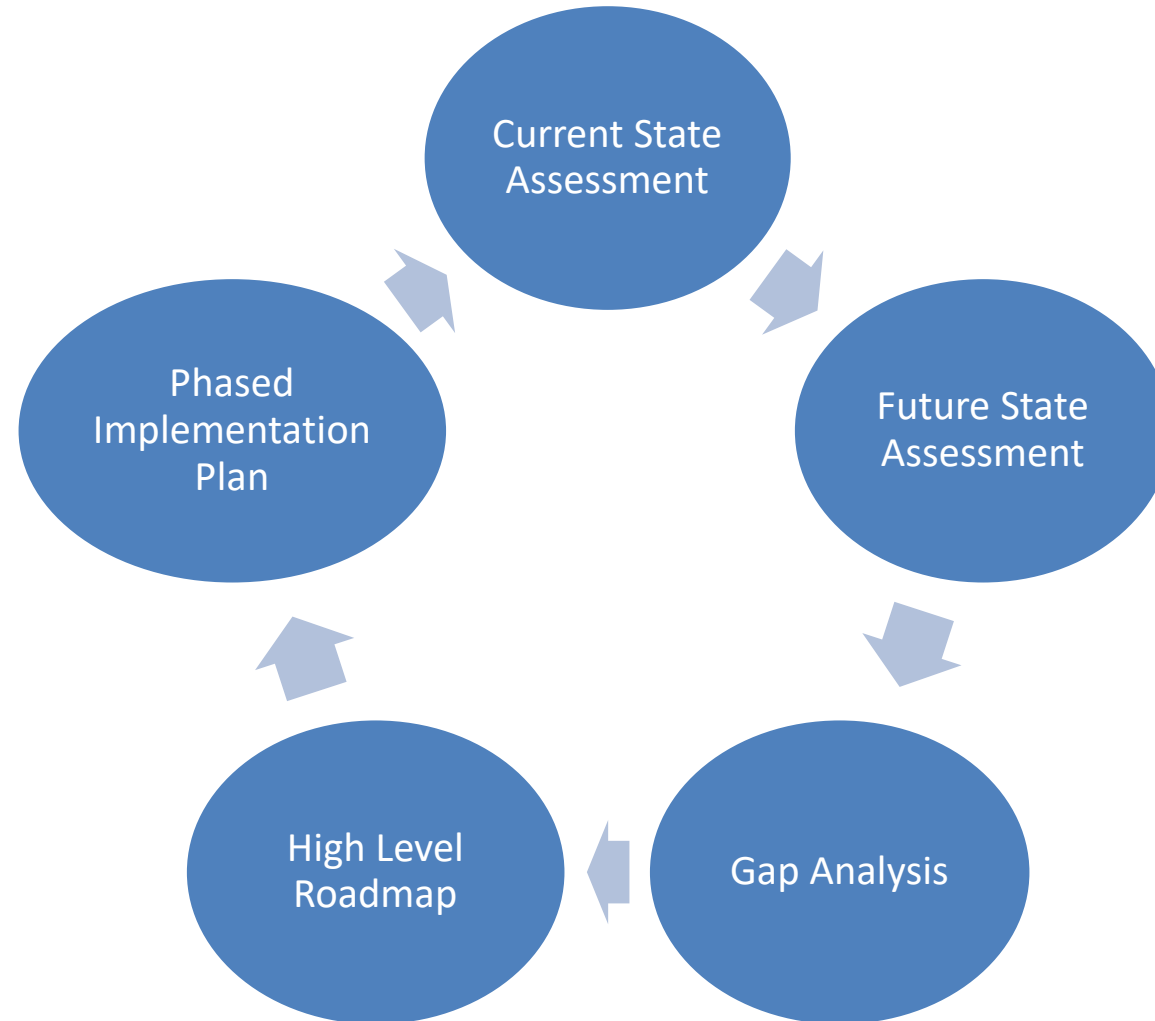
Generally accepted principles within and across domains

Generally recognized best practices within and across domains



Source: DAMA International 2012, www.dama.org

EIM / EDM Data Strategy Fundamentals



EIM / EDM Assessment

- Can't manage what has not been measured
- Must understand current state before designing future state
- Current state assessment of each EIM / EDM function (component) from DAMA-DMBOK, in existence or not:
 - Business perception
 - Technology support
 - Successful or failed attempts
 - Cultural climate
- Future State for EIM / EDM overall and for each component
- Gap Analysis, including resources and skills assessment
- Recommendations for improvement (current state to future state)
- Phased implementation roadmap - high level

EIM / EDM Assessment Process

Assess current state and describe future state:

- Diagnostic assessment of:
 - Key business goals and drivers (“what is the purpose?”)
 - Current state and key challenges to enterprise information management (EIM) and each component function of the DAMA-DMBOK
 - Current data management efforts and milestones (successful and unsuccessful)
- Assess each DAMA-DMBOK function and strategic view of EDM / EIM
 - EIM / EDM evaluation based on industry standards and a maturity model
- Develop high-level business case for EIM / EDM program and components
- Define solution approach and prioritize component implementations according to business case / needs
- Develop roadmap and EDM / EIM plan - iterative

Future State Recommendations

- Future State - where does the organization want to be in 2, 3, 4 years with EDM and within each component?
- Gap Analysis
 - Against industry standards and informed by culture
- Recommendations for Improvement
 - Enterprise - strategic view
 - Each functional area - tactical views

EIM Mission and Vision

Enterprise Information Management will provide value by ensuring that information content is meaningful and consistent across systems and applications that affect the business environment.

EIM Vision

*To enable the **generation of business value from the information assets** the organization owns and has access to so that the company and its customers, partners and shareholders can achieve their business objectives.*

EIM Mission

This organization will **manage information in a disciplined and coordinated manner** across the company so that its Information assets can be used to generate business value and competitive advantage, support effective business activities and decisions, and improve the delivery of services to its customers, partners and shareholders.

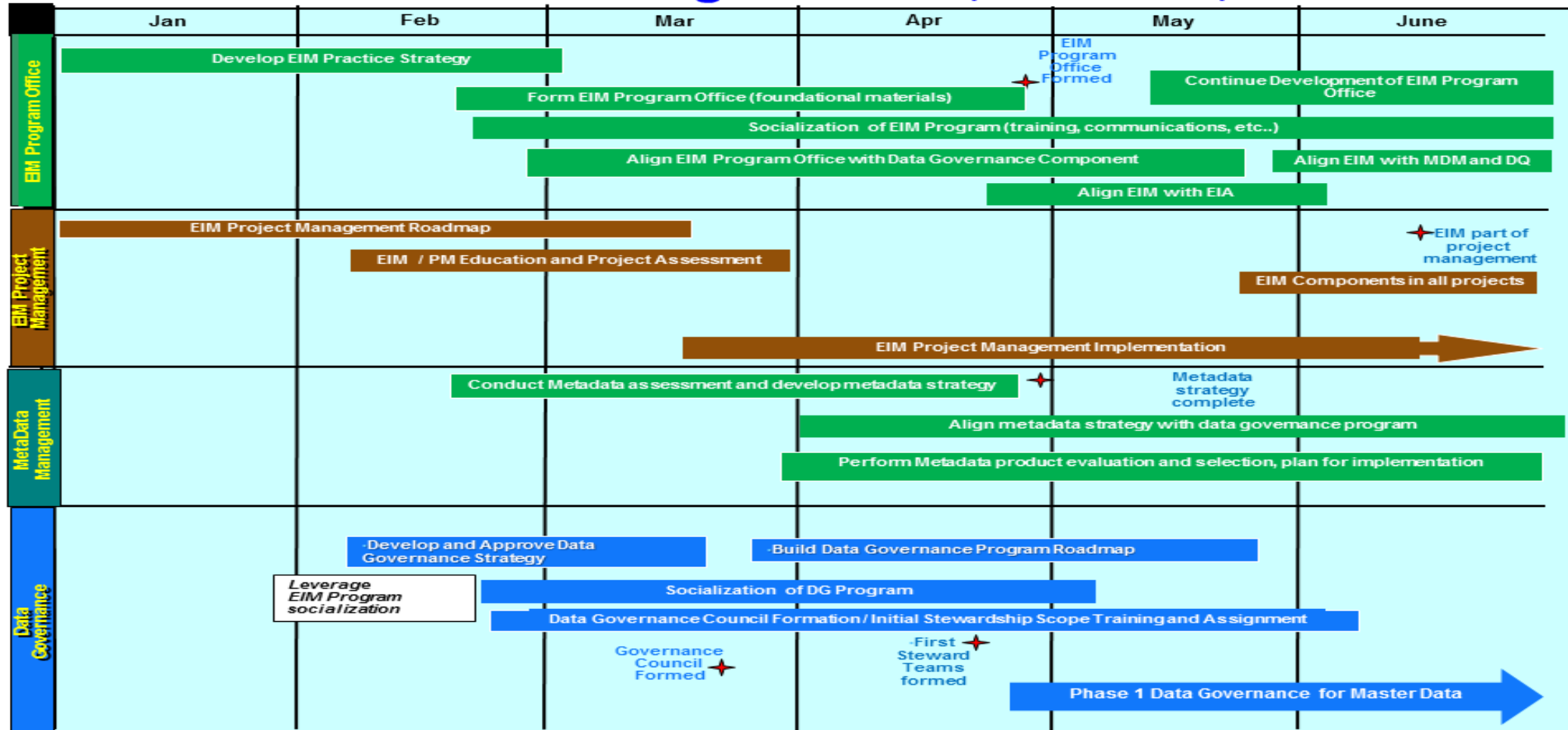
EDM / EIM Program Team

- Vital to success in any program - starts small but needs experienced staff



Phased Implementation Roadmap

EIM Core Program Plan (Months 1 – 6)



EIM / EDM Communication Plan

- Using a plan to guide your organization's communications efforts to target its diverse audiences will result in more clear, coordinated, memorable, and effective messaging
 - Determine goal(s)
 - Identify target audiences
 - Determine strategies
 - Finalize key messages
 - Determine activities
 - Determine evaluation mechanisms

Keys to Communicate EDM Successfully

Start with a consistent message to communicate the EIM program

Develop business cases to demonstrate organizational need for EIM and how ROI is realized

Educate organization in EIM concepts and approach

Measure and report results

Provide support using varied methods (web, central documents, EIM experts, etc.)

EIM / EDM Program Planning

- EIM is a program - continuing, with projects dependent upon the main program
- EIM project plans vary greatly depending on what you wish to accomplish
 - Data Governance
 - Metadata Management
 - Master / Reference Data Management
 - Data Quality Management
- All organizations can use this format as a guide - size or industry does not matter

EIM / EDM Program Planning Example

EIM Program Planning

	Month #1	Month #2	Month #3	Month #4	Month #5	Month #6
Data Governance	Data Governance Strategy, Plan and Implement		Form Data Governance Executive Committee	Form First EIM Focus Area	Form Additional EIM Focus Areas	
	Data Gov. Education				Form Necessary Subject Area User Groups	
Metadata Management	Metadata Management Roadmap & Strategy		Phase One – MME Construction/Population			
	Metadata Education	MME Tool Evaluation/Selection				
Data Management	<input checked="" type="checkbox"/> requirements are captured in above efforts EIM Education		Phase One – Data Management			
	<input checked="" type="checkbox"/> requirements are captured in above efforts					
Master Data Management	<input checked="" type="checkbox"/> requirements are captured in above efforts					

★ Represents a significant milestone

EIM Metrics

Defined “hard” and “soft” dollar savings and earnings

Testimonials from participating areas (lines-of-business, divisions, etc.)

Improvements in process and data performance (limiting redundancy, increasing reuse, improving performance, etc.)

Documented improvements in data quality, reducing need for re-work or reducing penalties from fines, etc..

Number of times metadata is read/updated/added/deleted from the metadata management system or related sources, providing faster access to correct data

Number of participating Data Stewards, for improved data governance capabilities

Number of defined Subject Areas, for improved management of data across organization

Build Projects Iteratively

- Avoid the “Boiling the Ocean” approach
 - EIM / EDM is a program, it is continuing, and will never be completed
 - Each effort within enterprise data management can be planned as a project
 - Choose project focus based on DAMA-DMBOK components and assessment results
- Use 3 - 6 month project cycles
 - Three (3) months to complete a well-defined portion of an EDM / EIM project is a reasonable goal - after program formation
- Examples:
 - Developing initial set of data governance policies - Data Governance Council approval
 - Identifying, selecting and training first set of business data stewards
 - Defining first set of mission-critical data by the business data stewards for one business unit and recording it in the repository
 - Identifying, collecting and performing profiling on first set of data for data quality benchmarking

Foundational EDM / EIM Components

- Every successful EIM / EDM program has the following foundational components:
 - Data Governance
 - Metadata Management
 - Data Quality
- Additionally, all successful programs are supported by the EDM / EIM Program team
- Data Architecture, Master / Reference Data Management, Data Warehousing / BI / Analytics follow these foundational components

Recommendations

Enterprise data management is an essential discipline for all state government success

Emphasize DAMA-DMBOK framework and its vendor-neutral nature

Every state government needs an enterprise data strategy

Data strategy starts with a thorough assessment and a vision for sustained future state – through administration changes

Communication and change management must be sustained for data management success

Each component of the DAMA-DMBOK has value for all state governments

Questions



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