NDIA TID Conference Outbrief "Enterprise Configuration and Data Management"

Workshop Approach

- One workshop for CM, one for DM
- Within the workshop, divide into topic groups
- Each topic group, using the templates, will discuss their recommended approach for implementing their topic
- Last 45 minutes of the morning (from 11:15 t0 12:00) groups will organize their solution outbrief
- Outbriefs will begin at 1:15, and continue through 2:45
 - This allows for each group to present for no more than 10 minutes on their results/recommendations

DM Topic 1: DM Glossary

- Discussion elements
 - Vocabulary of terms and concepts
 - Creates consistency for DM process application and practice
 - Foundational for data strategy, metadata content, and DM business rules
- Points to ponder
 - Terms and concepts
 - "Definitions" versus "metadata"
 - Taxonomy development
 - Data from different families are organized into hierarchies that move from the general to the specific
 - Advantages big picture of objects is defined, communication enhancement, common ground agreement, simple and natural way of organizing data, helps reduce redundancies of data attributes, defines the data attributes and their names
 - Capture of concepts and processes which reflect and communicate business and technical functions

DM Topic 2: DM Concept of Operations

Discussion elements

- Supports integration of processes/functions
- Data applications
- Data origin (author/creator, system of record)
- Life cycle of data

- Describes in language DM customers can understand the plan for day-to-day DM operations
- Organizational structure and actions needed to put DM into action
- Responsibilities
- Identifies organizations who have a stake in the DM operation as customers or partners in delivering DM services
- Executes the DM strategy and links to the enterprise vision

DM Topic 3: Data Governance

Discussion elements

- Requirements (explicit, implicit, derived ...)
 - Implementing standards
 - Creating enterprise-level DM
- "Governance" is contextual
 - Organizational rules, decision rights, how we decide how to decide
 - Accountabilities
 - Enforcement methods for people and IT systems as they perform information-related processes

Definition

 Data governance refers to the overall management of the availability, usability, integrity, and security of the data employed in an enterprise.

- Why data governance projects fail
- Checks and balances
- Estimating the amount of work involved
- Long on structure and policy, and short on action
- Lack of business commitment
- Not understanding that business definitions vary
- Too much, too soon

DM Topic 4: Enterprise DM

Discussion elements

- The bill of information
- Master data management
- Accurate, consistent, and transparent data content
- Challenges of data warehousing
- Establishing business intelligence
- EDM should not be viewed as dependent on a specific technology strategy, or related to an explicit data type definition
- Trust and confidence in data assets

- Data precision, granularity, and meaning
- How content is integrated into business applications and tools, and how it is passed along (data flow) from one business process to another
- Users independently source, model, manage, and store data
 - Segmented outcomes which create conflicts, inconsistencies, and trust issues internally as well as in supply chain management

DM Topic 5: Data Strategy

Discussion elements

- Not having a data strategy is analogous to a company allowing each person and each department to create its own accounts and records
- Chaos is not as obvious, but dirty data and redundant data and users who are becoming increasingly dissatisfied with the performance of "IT"
- People within the organization have no guidelines for making decisions which are essential
- Blank checks to those who want to create their own outcomes and agendas
 - New unproven technologies, new tools which are not needed

- Systems of less risk
- Systems of higher quality
- Rationale for immature technologies and tools which are inconsistent with existing or planned tools
- Value of data is not well-understood
- Data is considered the province of the department that creates it, and is jealously guarded by that organization
- Organizations don't see the big picture, and solutions result which are suboptimized
- Harmful effects on the enterprise, inconsistencies that result in major integration and poor interfacing of systems which cannot be integrated

CM Topic 1: IEEE/EIA 12207: SW Life Cycle Processes

CM Topic 2: ASME Y14 Series:

Engineering Drawing Practices

CM Topic 3: ANSI/EIA-649: National Consensus Standard for CM

Summary

- This event is the start of defining CM and DM at the project and the enterprise levels
- Future events will focus on maturing these concepts and developing processes to make them consistent and implementable across organizations
- The wiki tool will be the center for capturing and evolving this body of work