Strategies and successes at DHS in persuading data owners to share data for analysis via the Management Cube

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Information technology tool that integrates the Department’s financial, acquisition, human capital, contracting, asset, and security data to support analysis and decision making.

Will improve data integrity, eliminate duplicative data calls, and allow for greater collaboration.

Allows analysts to go beyond reporting requirements to explore trends and relationships across data sets.
BUSINESS DRIVERS

- Redundant, time consuming data calls to Components and program managers
- No single point for accessing all DHS business data
- No way to integrate across different types of business data

“Public sector analytics professionals spend 47 percent of their time collecting and organizing data”

- IBM Institute for Business Value, “The power of analytics for public sector.”
• Portfolio management of investments
• Comprehensive Workforce Planning
• Enhanced analysis for budget builds and Congressional Justifications
• More informed real estate planning
• Increased collaboration

• Cross-Department benchmarking and lessons learned
• Reduced number of duplicative data calls
• Improved data quality and reliability
• Improved performance reporting
• Standardize business term definitions and use
  ▪ 61 terms added to the DHS Lexicon
  ▪ Term and data harmonization → MGMT CDM → MGMT LDM

• Host all line of business data marts on a common platform
  ▪ DHS Management Dashboard

• Integrate the Department’s business data to create a comprehensive analysis and reporting capability
  ▪ MGMT Cube

Develop the tools and skills necessary to produce comprehensive trusted analysis, which will lead to better decisions, and ultimately a stronger Department.
DHS MGMT CUBE: Integrating the Data
INTEGRATION DIMENSIONS

**Who**
DHS Organizational Components and Offices

**What**
Programs (Mission Activities)

**Where**
Geographic Location

**When**
Date and Time

**Why**
Strategic Missions and Objectives

**How**
Functional Areas, Capabilities and Activities
MGMT CUBE DATA GOVERNANCE AND STEWARDSHIP

• Data Governance
  ▪ Three-tiered data stewardship (Executive Steering Committee, Business Working Group, Tech Team)
  ▪ Approved Share-First Policy, signed Memorandums of Understanding (MOU) and Interface Control Documents (ICD)
  ▪ Standard Operating Procedures ensure that data owners will approve the use of their data before any visualizations are published

• Data Quality
  ▪ MGMT Cube will ensure that the data in the system is the same as the original
  ▪ Source-to-target reconciliation before any new data is released within the Cube
  ▪ Establish measures and metrics for known quality concerns

• Data Confidence
  ▪ Data source owners are responsible for ensuring the data is “right”
  ▪ Confidence metrics and footnotes provide appropriate caveats about the data
  ▪ Entity and attribute level confidence indicators to be established in Metadata

Building Trust in the Data

#GABForum
@REI_Systems | @JHUGovStudies

KEYS TO OUR SUCCESS

• Strong, High-Level Leadership Support

• All lines of business are critical to the success AND will benefit from integrating data and using the tool

• 3-tiered Governance Structure
  ▪ Dedicated participation across lines of business at multiple levels

• Share First Policy and Memoranda of Understanding

• Data Governance, Data Quality Management Plans

• Consistent Communication to Leadership and to working groups
  ▪ Quarterly briefings at Under Secretary Internal Progress Reviews
  ▪ Bi-weekly status emails to working groups
  ▪ SharePoint page for information sharing and collaboration

• Patience
QUESTIONS & COMMENTS