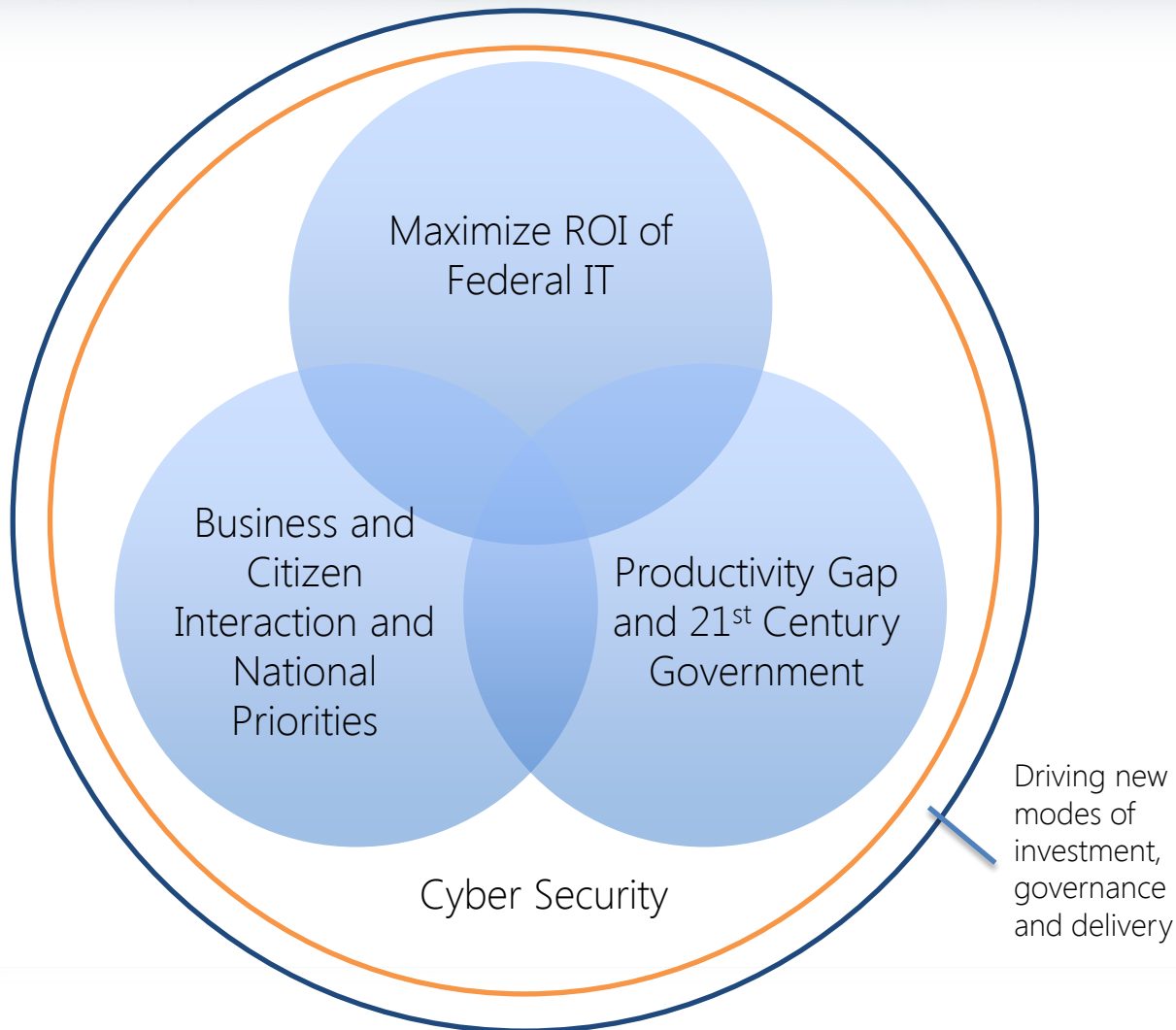# Innovating with Less Across the Federal IT Portfolio: The Role of Shared Services and Enterprise Architecture

Scott Bernard,
Federal Chief Enterprise Architect

Maximize ROI of Federal IT

Business and Citizen Interaction and National Priorities

Productivity Gap and 21st Century Government

Cyber Security

Driving new modes of investment, governance and delivery

Maximizing ROI - PortfolioStat Results

- Total cost savings and avoidance targets: $2.5 Billion
  - Agency reported savings targets for years FY 2013 – FY 2015

- *Multiple consolidation* opportunities identified in agencies' PortfolioStat plans – e.g., Desktops, Email, Collaboration

- Significant management improvements identified

Maximizing ROI – Shared First

PortfolioStat Emphasized the need for a **_Shared-First_** approach – which will:

▸ Eliminate wasteful spending that results from duplicative IT systems
▸ Improve cost efficiencies and streamline through shared commodity IT solutions
▸ Allow more resources to go to the mission
▸ Improve transparency of available services
▸ Support Innovation and Digital Strategy Initatives
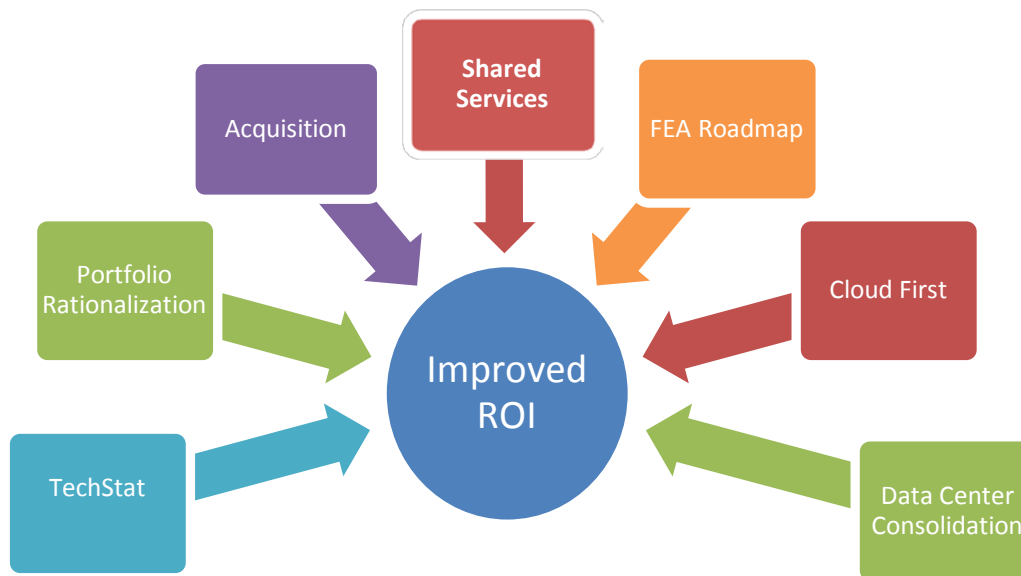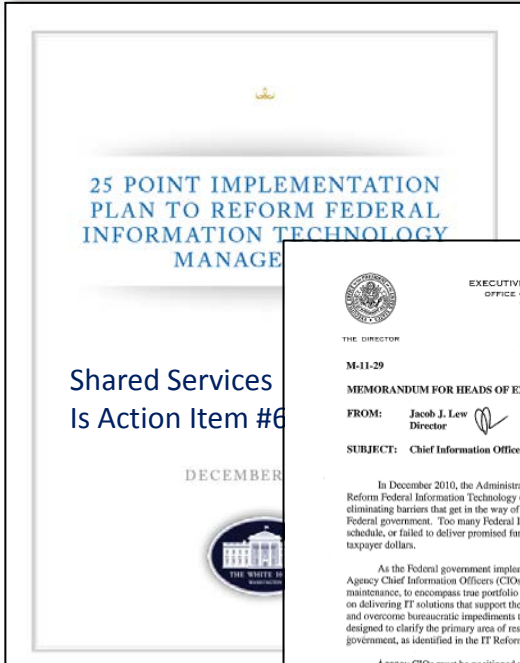
PortfolioStat and Shared Services

The IT Shared Services Strategy aligns with the key principles of IT Investment Portfolio Rationalization (PortfolioStat), which will:

▸ Maximize an Agency's ROI across the IT portfolio, which is important in a constrained budget environment

▸ Examine IT investments broadly across an Agency's portfolio to identify opportunities to increase efficiencies, improve related acquisitions, and reduce/consolidate the number of duplicated systems or applications

▸ Consolidate Commodity IT spending under Agency CIO

▸ Develop plans, including corrective actions, to identify opportunities to improve efficiencies of IT portfolios

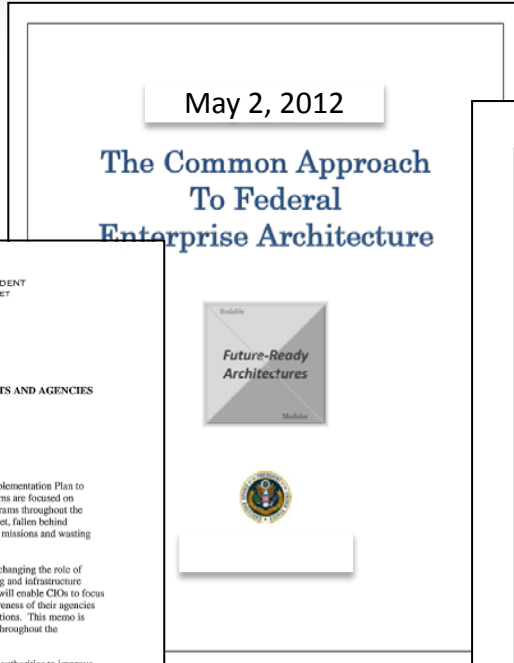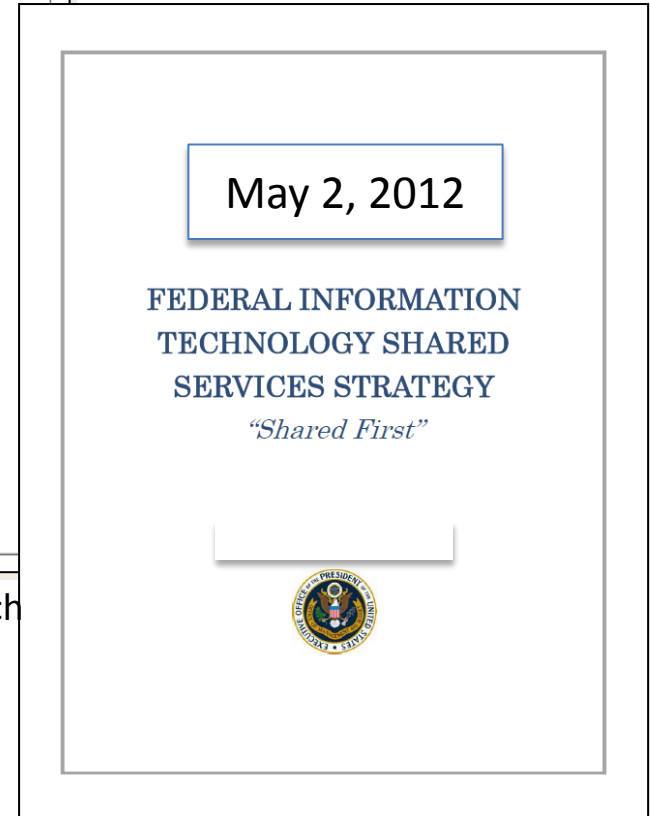▸ Improve governance and program management utilizing best practices and, where possible, benchmarks
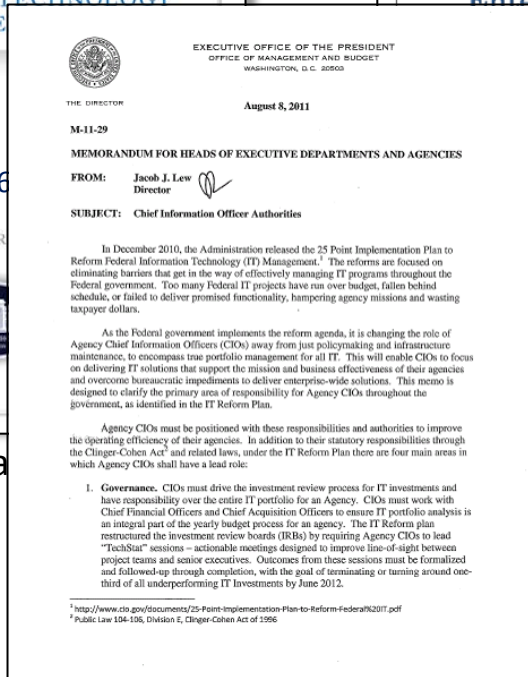
Shared Services Guidance

25 POINT IMPLEMENTATION PLAN TO REFORM FEDERAL INFORMATION TECHNOLOGY MANAGE...

Shared Services Is Action Item #6

DECEMBER

IT Reform Agenda 25-Point Plan (Dec 2010)

May 2, 2012

The Common Approach To Federal Enterprise Architecture

Future-Ready Architectures

Common Approach to Federal EA (May 2012)

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DIRECTOR

August 8, 2011

M-11-29

MEMORANDUM FOR HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Jacob J. Lew
Director

SUBJECT: Chief Information Officer Authorities

M-11-29 CIO Authorities Memo: Commodity IT (Aug 2011)

May 2, 2012

FEDERAL INFORMATION TECHNOLOGY SHARED SERVICES STRATEGY
"Shared First"

Shared Services Strategy (May 2012)

Key Drivers and Opportunities

- Mission Requirements

- Constrained Budgets

- Rising Operating Costs

- Customer Expectations

- Inefficient Legacy Apps

- Security Challenges

- Duplicated Resources

- Standards & Compliance

- Quality of Service

- Commercial Offerings

IT Investment Category (Budget Year 2013) Agency Submissions	# of Planned Investments	Total Planned Spending ($millions)
Information & Technology Management	1,572	$34,661
Supply Chain Management	759	$3,322
Financial Management	563	$2,503
Human Resources Management	662	$2,357
General Government	218	$2,110
Administrative Management	332	$947
Planning and Budgeting	291	$622
Total	4,397	$46,522

Source: BY 2013 OMB Exhibit 53

Chart labels: Commodity IT, GIS, HR, Grants, Financial Mgmt., Health IT, Mission. Y-axis: $ ROI. X-axis: Complexity of Implementation

Levels

Inter-Agency Lines of Business / Business Centers

Intra-Agency Shared Service Centers

Categories

Commodity	Administrative	Mission

Services (Examples)

- Websites & Content Mgmt.
- Infrastructure & Asset Mgmt.
- Email, Help Desk, & Collaboration
- Records Mgmt.
- HR Mgmt.
- Financial Mgmt.
- Performance Mgmt.
- Geospatial
- Federal Health Architecture

Online Service Catalog

Channels

Public, Private, and Hybrid Service Clouds

Internal & External Host Networks / Systems

Standards

"Common Approach" to USG Architecture

Business Models / Strategic Sourcing

IT Shared Service Roles

- **Managing Partner.** The Federal agency that establishes and maintains the shared service with approval by agency leadership for intra-agency services, or by OMB for inter-agency services.

- **Customer.** The Federal agency or bureau that contracts with and pays the managing partner to receive a shared service.

- **Supplier.** A government or commercial organization that actually provides the shared service to consumers. Managing partners contract with suppliers using Federal-wide contract vehicles whenever practicable.

Governance – Federal CIO Council

Strategy and Planning Committee - Shared Services Subcommittee
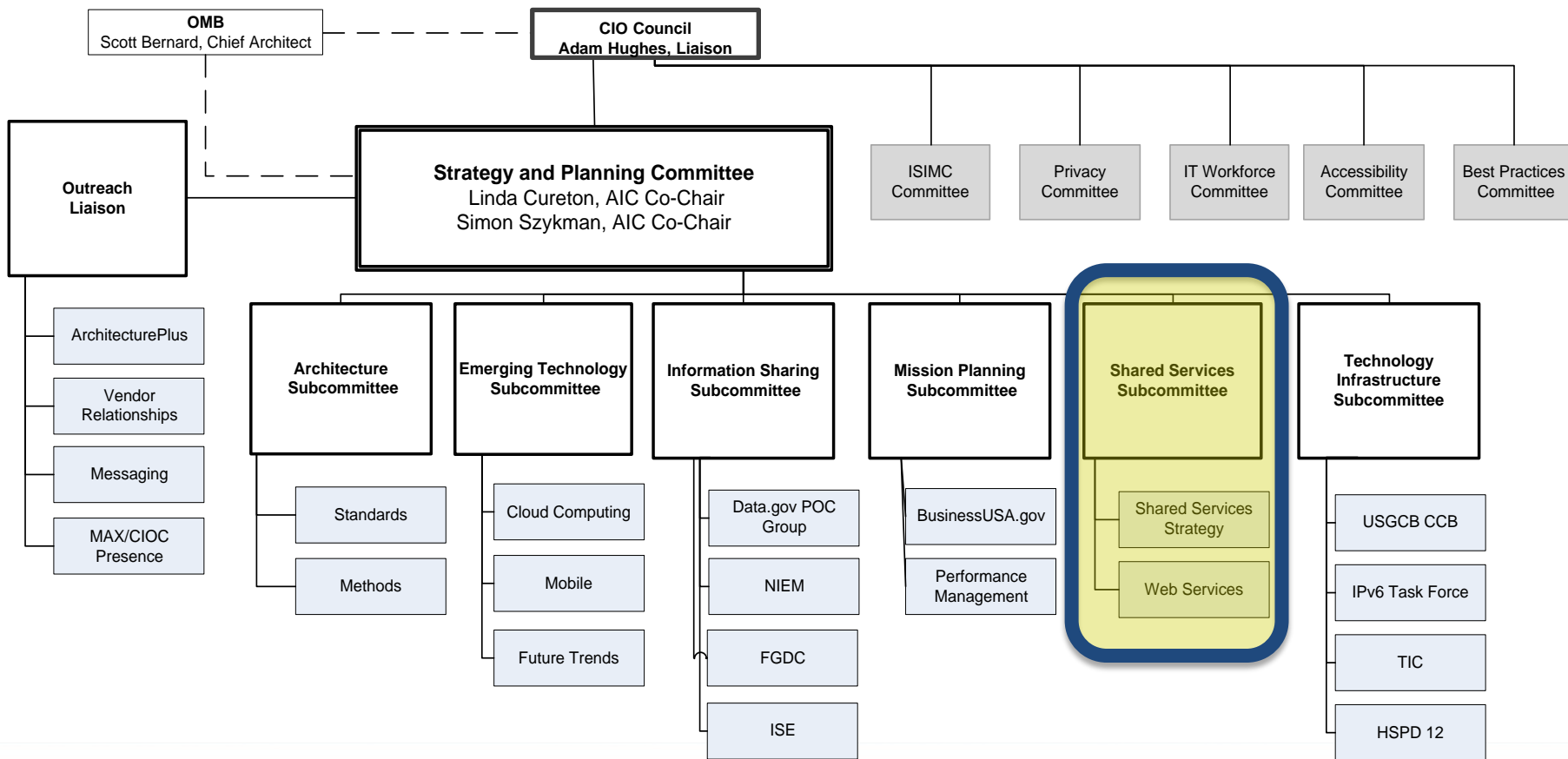
Implementation's Initial Focus

Implementation in Two Work Streams

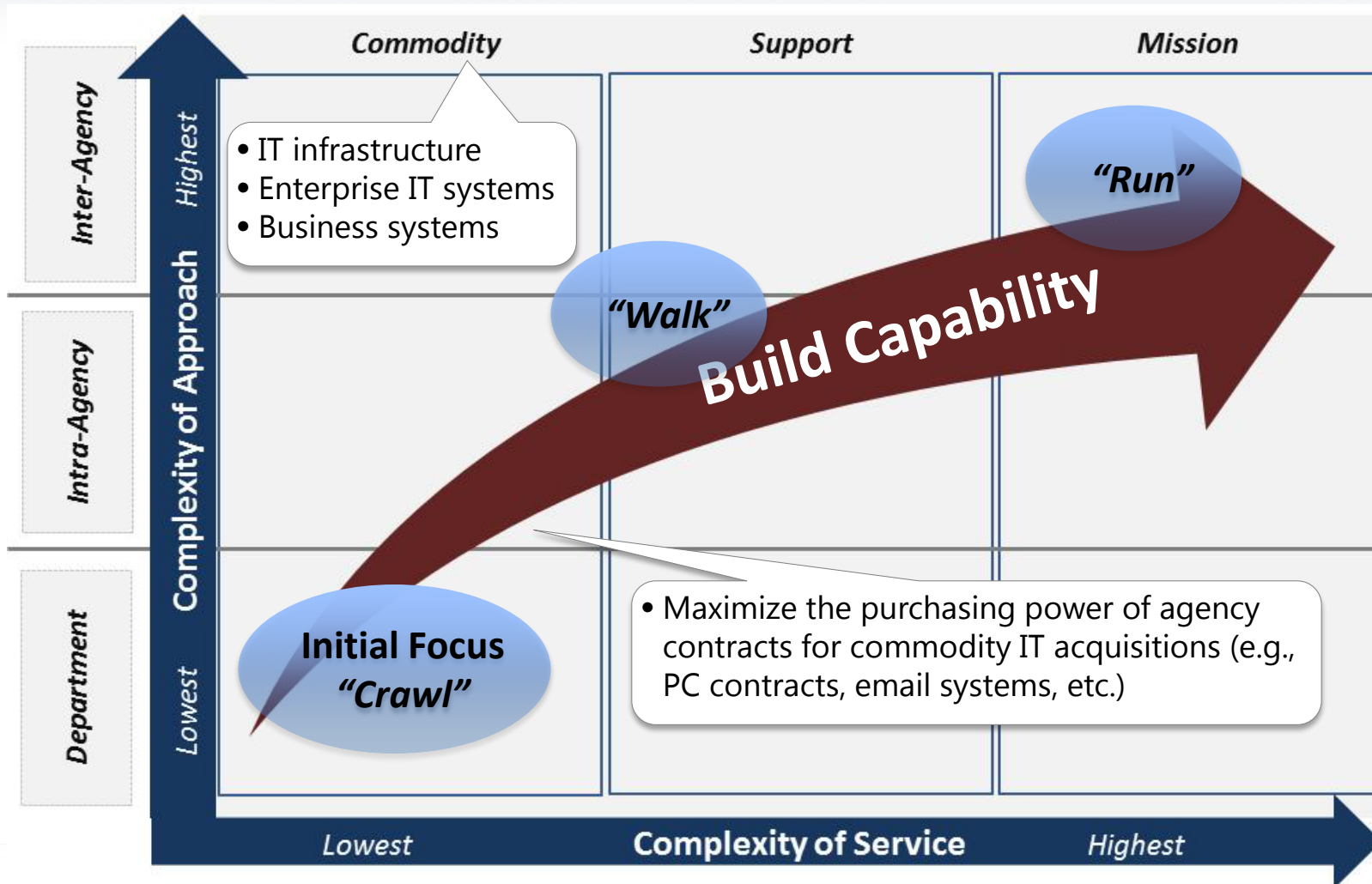|	Intra-Agency Shared Services	Inter-Agency Shared Services
Owner	Agency CIOs	Managing Partners
Scope	Commodity IT	LOBs
2012 Focus	Implementation of Agency Enterprise Architecture/Shared Service Plans	Service Improvement
Key Deliverables	Migrations, EA Plans	Assessment, Benchmarks, Roadmap

Intra-Agency Service Center (Dept. CIOs)	**Commodity IT**	• Websites/CMS • Email/Collaboration • Mobile/Wireless
Inter-Agency LOBs / BCs (Managing Partners)	• Budget • GIS • Performance • Financial • HR • Security	

Support from Strategic Sourcing

▸ Collaboration and adoption of industry best practices to streamline and improve management of commodity IT requirements and procurement processes, while leveraging the Government's buying power through Federal Strategic Sourcing Initiatives (FSSI).

▸ **FSSI Goals:**
  - ▸ Strategically source across federal agencies
  - ▸ Establish mechanisms to increase total cost savings, value, and participation
  - ▸ Collaborate with agencies and industry to develop optimal solutions
  - ▸ Share best practices
  - ▸ Create a strategic sourcing community of practice

▸ **Examples of FSSI in IT:**
  - ▸ Wireless Devices
  - ▸ Print Management
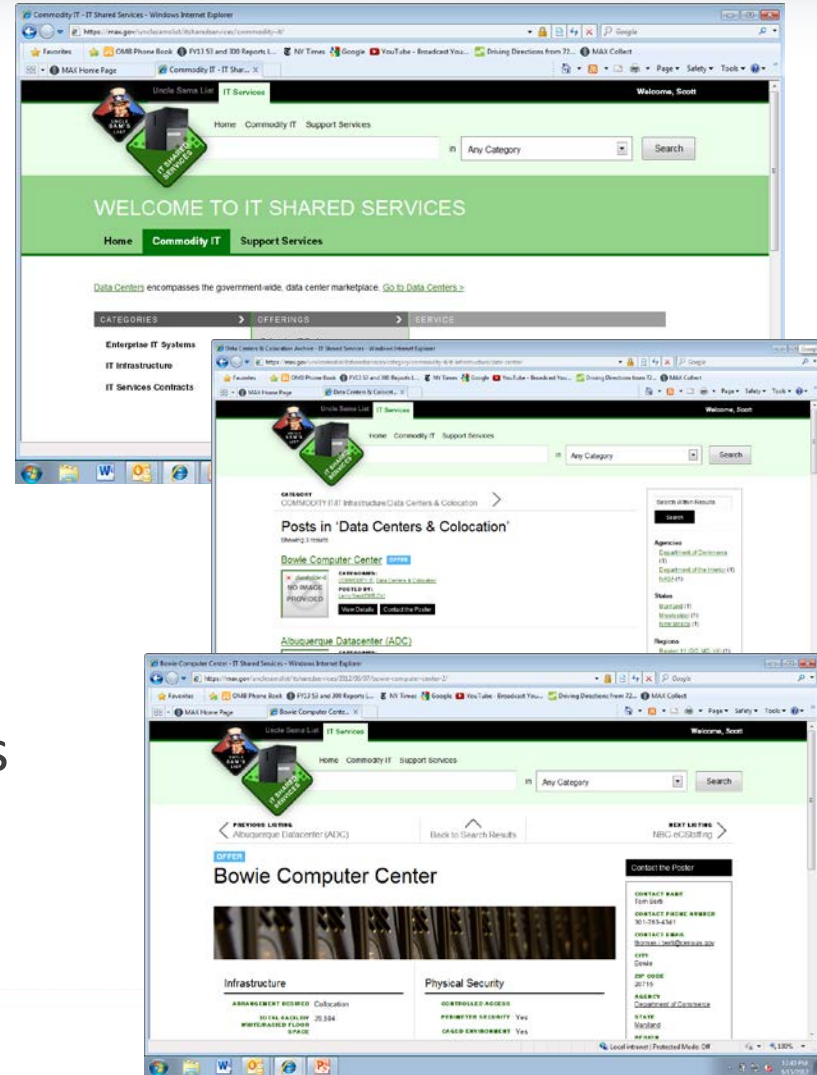 - ▸ Software (SMARTBUY)

Information via an Online Catalog
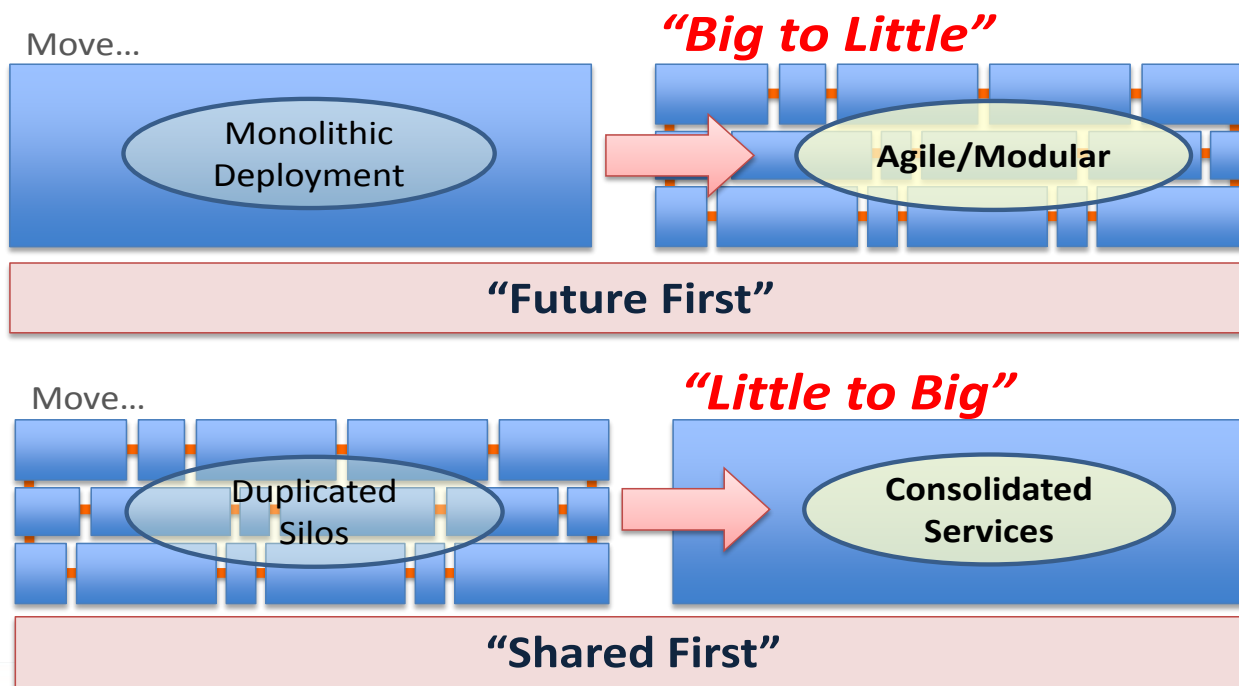
Uncle Sam's List

- Uses Max.gov platform

- Over 100 pages of services

- Initial launch June 9, 2012

- Updated on August 2, 2012

- Next update release Jan 2013

- Tie-in to service providers

- Tie-in to Federal-wide contracts

- Easy navigation/search

- https://max.gov/unclesamslist/#

Making Agencies Future-Ready

"Future-ready" is the concept of using revised federal architecture methods to do the analysis, planning, and design functions that support modular acquisition and enables agencies to successfully execute mission functions in the face of limited resources.

Move…   *"Big to Little"*

Monolithic Deployment → Agile/Modular

"Future First"

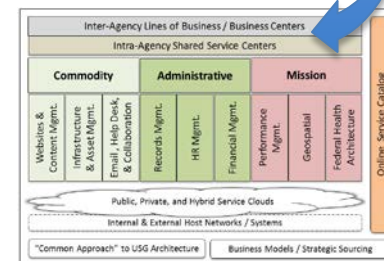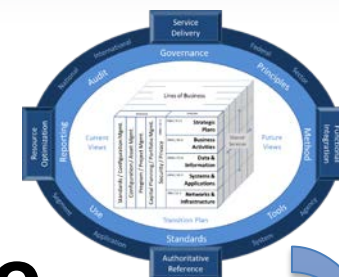Move…   *"Little to Big"*

Duplicated Silos → Consolidated Services

"Shared First"

The Common Approach To Federal Enterprise Architecture

EA helps to keep agencies ready for the future and supports *shared services design/implementation*.

Architectural Components of a Service

| Component	Description
1. Requirements	This includes the strategic and tactical requirements for the type(s) of functionality that the service has to provide to consumers. The type of requirements depends on the type of service area, number and diversity of participating agencies, sensitivity of information/data being exchanged.
2. Workflow	Business processes that function through the shared service. The design of a process must support the functional requirements from #1.
3. Data Exchange	The part of the business process in #2 that involves the creation, exchange, manipulation, storage, or deletion of data and information.
4. Applications	This includes the software and hardware that provide the functionality and data exchange capabilities that are identified in #2 and #3.
5. Hosting	This is the infrastructure that the application(s) are hosted in. This includes cloud-based, client-server hosting solutions.
6. Security and Privacy	The logical, physical, process, and personnel controls that achieve required levels of protection and risk mitigation for the service.

Future First – Architecting Services

Future-First concepts align with the **Common Approach to Federal Enterprise Architecture** and brings together the areas of design, analysis, projects, standards, reporting and governance.
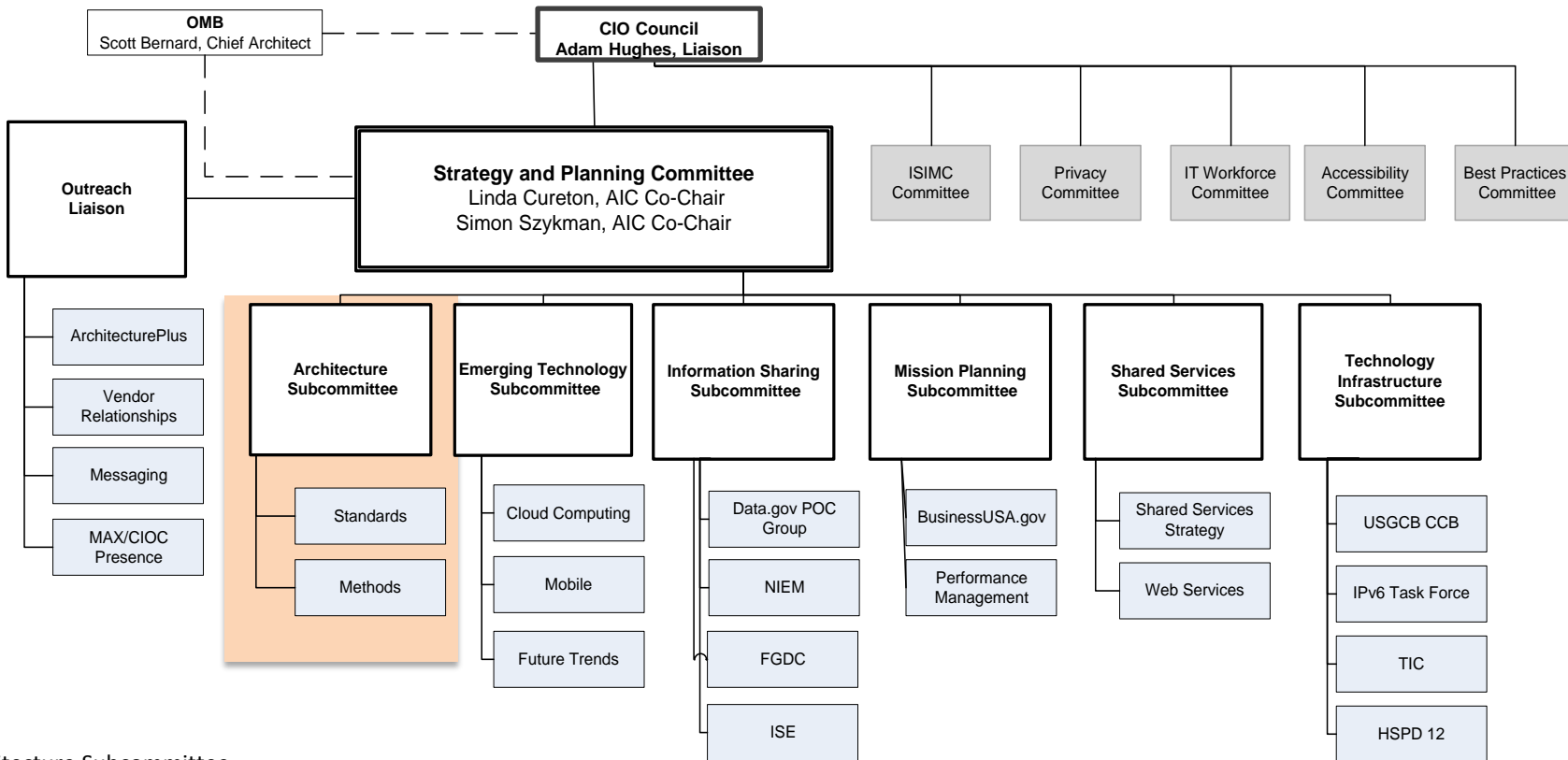
The "Common Approach" provides support to IT Shared Services design and implementation within and between Federal Agencies.

The Common Approach to
Federal Enterprise Architecture

May 2, 2012
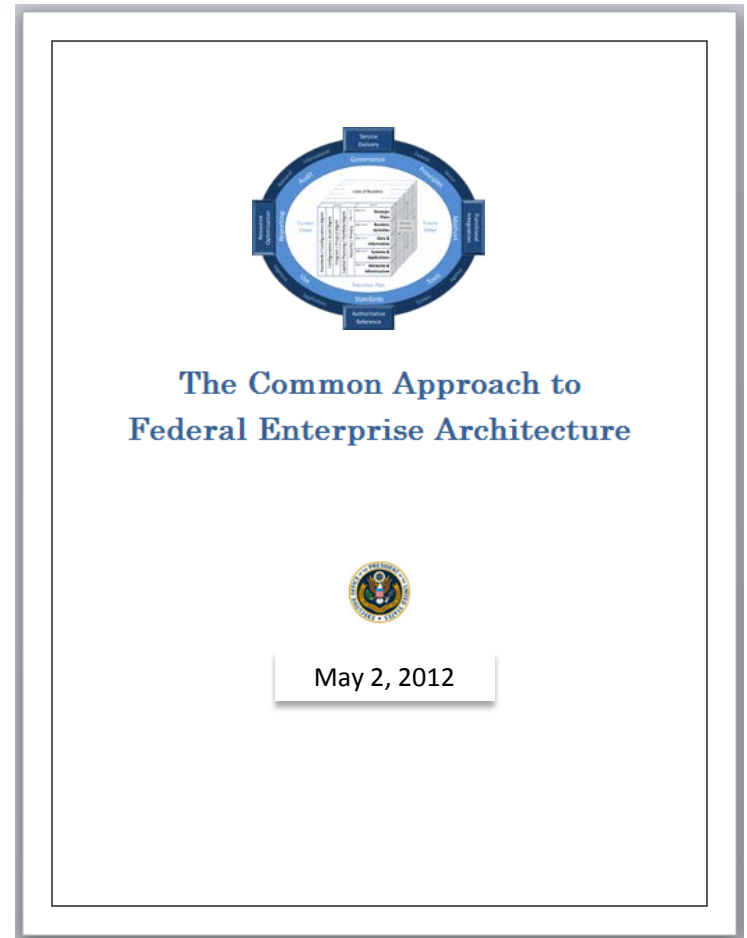
Federal Architecture Governance

CIO Strategy and Planning Committee

Architecture Subcommittee

- Responsible for promoting the use of standardized enterprise architecture practices, as well as supporting related initiatives throughout the federal sector.
- Led by two Co-Chairs who are responsible for participating in SPC Leadership functions and coordinating /executing Subcommittee work plans which are approved by the SPC Co-Chairs.
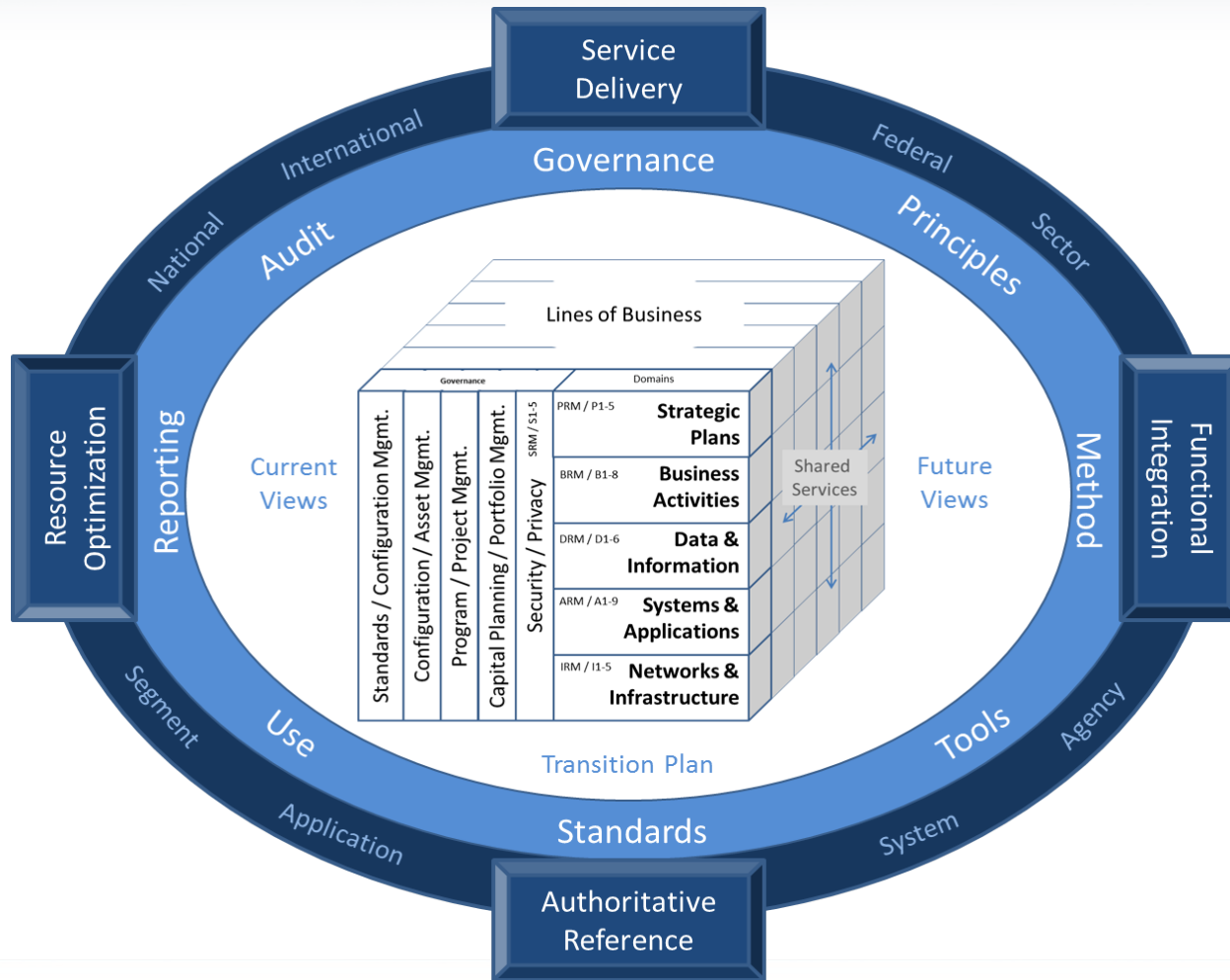
The Common Approach to Federal EA
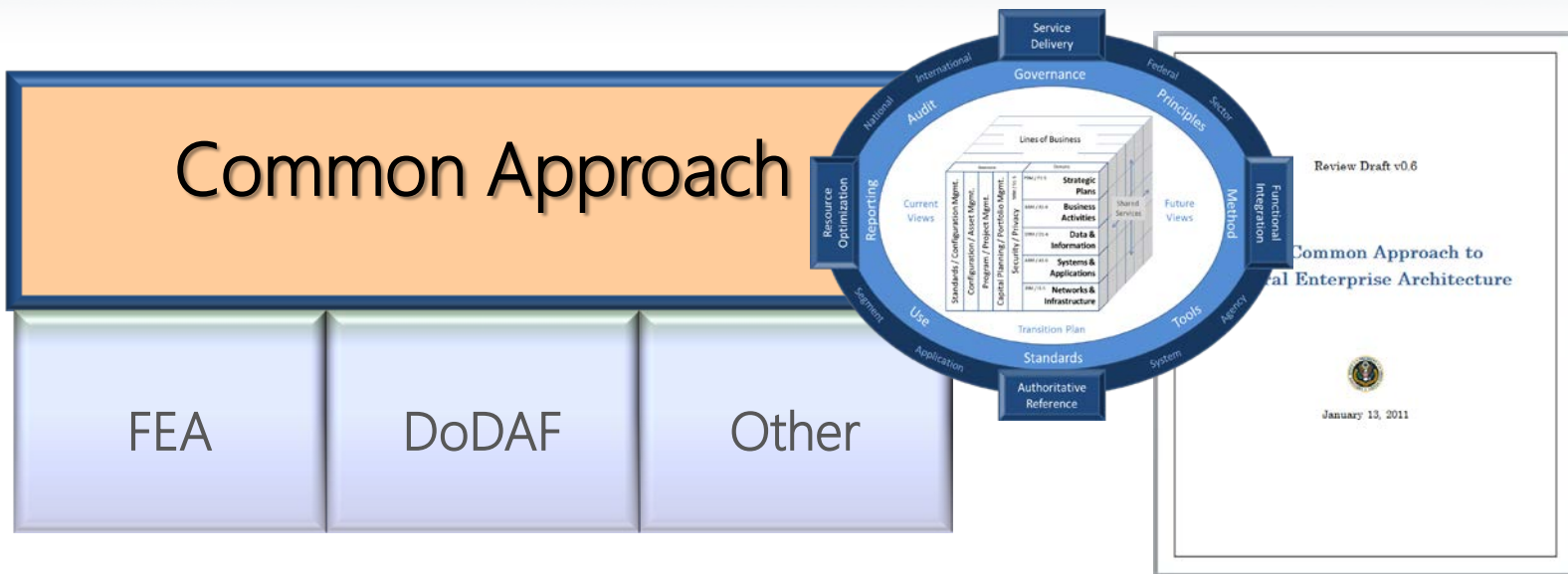
The *Common Approach to Federal Enterprise Architecture* helps to make agencies **"Future-Ready"** by accelerating agency business transformation and new technology enablement by providing standardization, design principles, scalability, an enterprise roadmap, and a repeatable architecture project method that is more agile and useful and will produce more authoritative information for intra- and inter-agency planning, decision-making, and management.
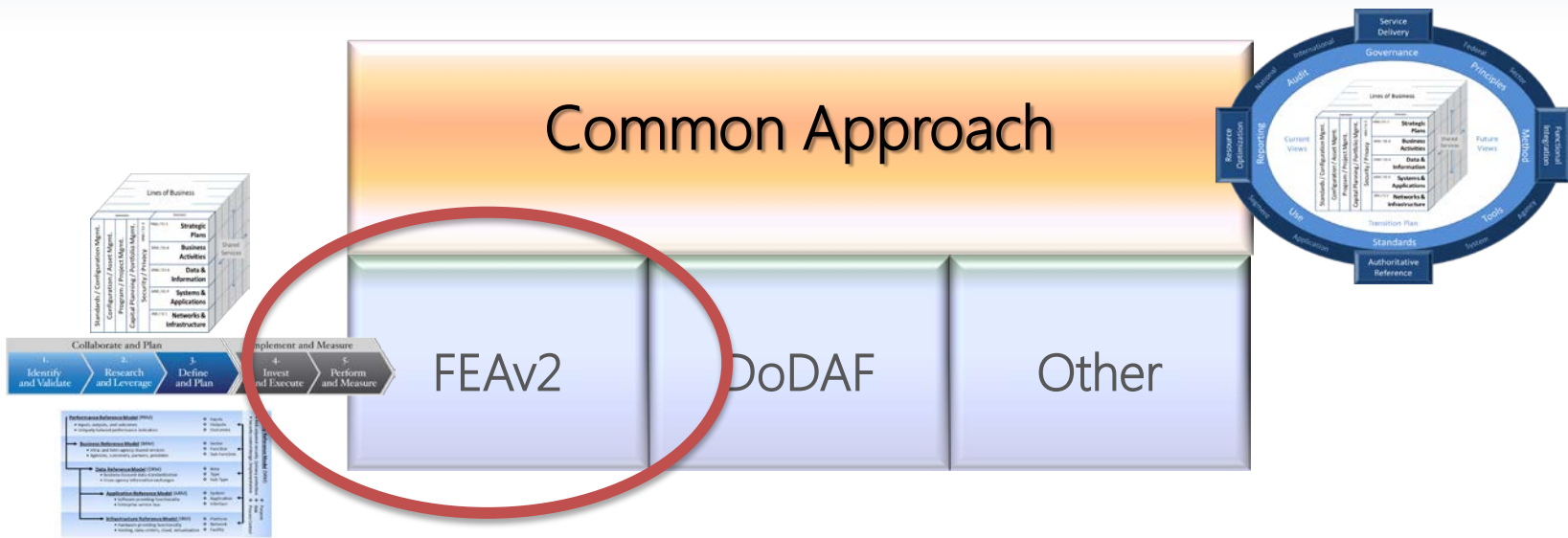
Common Approach - Meta-Model

Common Approach & FEAv2

The Common Approach to Federal Enterprise Architecture (Common Approach) accelerates supports the identification of opportunities for shared services and design alternatives. The Federal EA version 2 (FEAv2) will be released in January 2013 and aligns with the standards of the Common Approach.
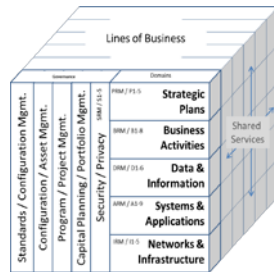
FEAv2: Major Components

FEAv2 aligns with the Common Approach and has three major components:

- **Standards**:
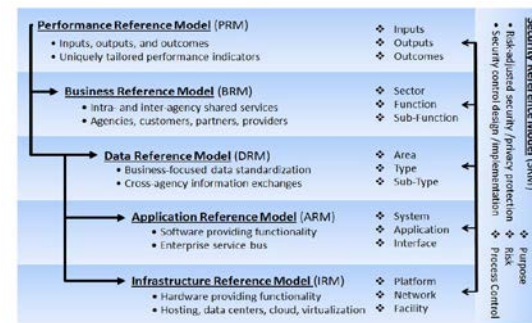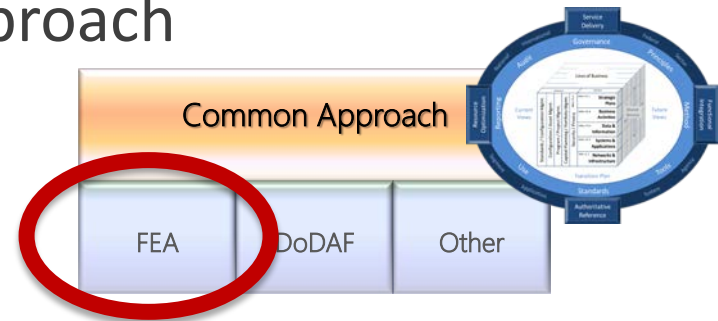 - Framework
  - Artifacts
- **Methods**:
  - Common Approach
  - Collaborative Planning Method (former FSAM)
- **Analytics / Reporting**:
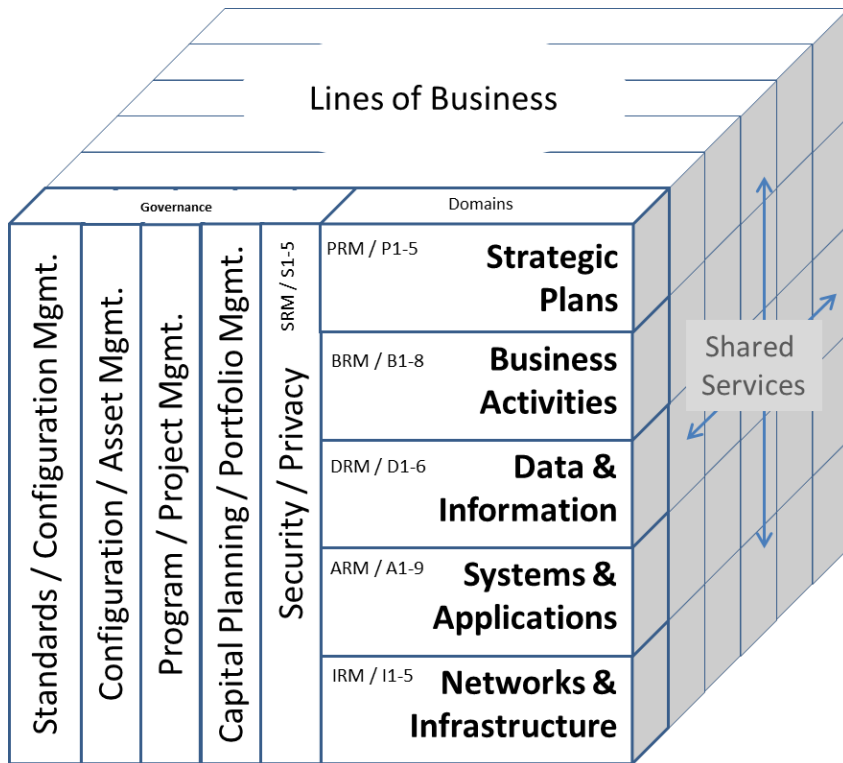 - Consolidated Reference Model
  - Ex 53 & 300
  - Enterprise Roadmap

FEA Framework
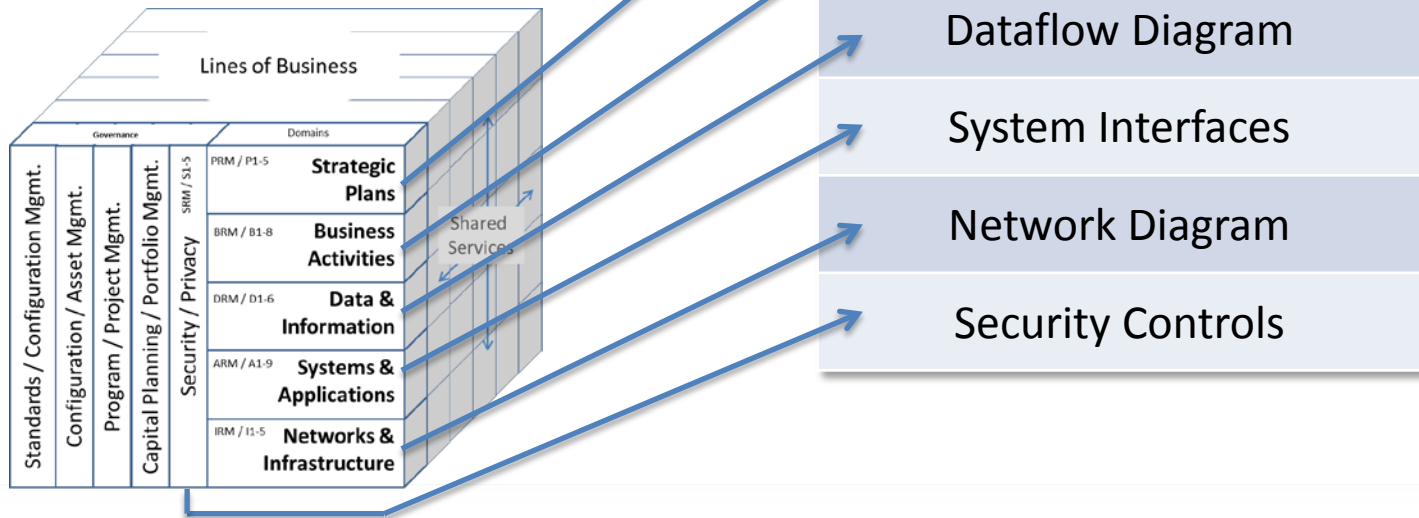

▸ The Framework provides the area of Design

▸ The FEA framework shows the relationship of sub-architecture domains, how the architecture can be decomposed into segments (that follow structural or functional lines in the organization) and how shared services would be positioned
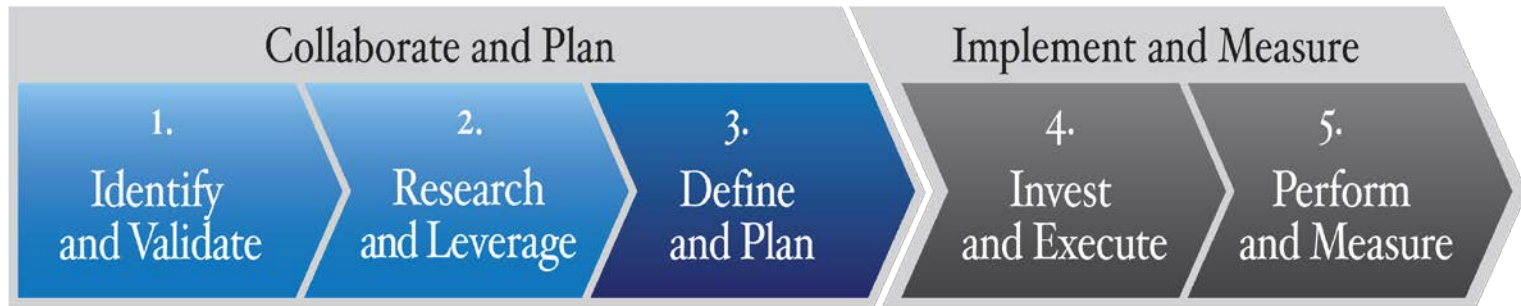
FEAv2 Standards: Artifacts

▸ The standard artifact list consists of the "core" artifacts that need to be considered and/or tailored to support a robust set of EA artifacts for the organization

Core Artifact List

Strategic Plan/Priority Goals

Workflow Diagram

Dataflow Diagram

System Interfaces

Network Diagram

Security Controls

FEAv2: Collaborative Planning Method

The Collaborative Planning Methodology is a repeatable process that consists of steps that require integrated multi-disciplinary activities to affect change with the collaboration of leaders, stakeholders, planners, and implementers.

It is inclusive of the full planning and implementation lifecycle and is intended for use at all levels of scope.
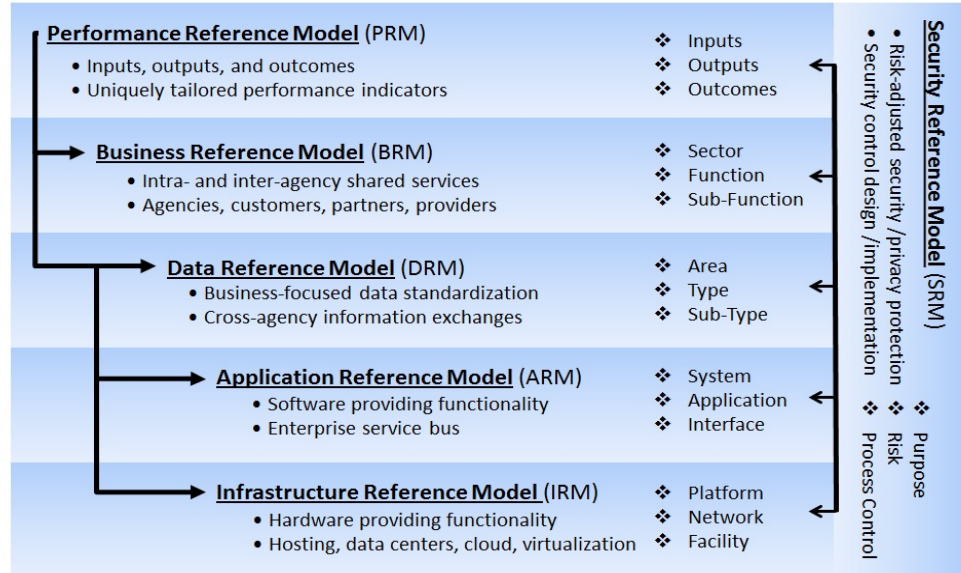
FEAv2: Consolidated Reference Model

Consolidated Reference Model (CRM)

2003-05 FEA RMs
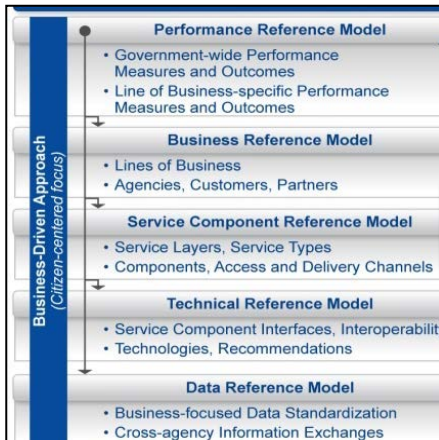
The CRM consists of a set of interrelated "reference models" designed to facilitate cross-agency _analysis_ and the identification of duplicative investments, gaps and opportunities for collaboration within and across agencies. Through the use of the CRM and vocabulary, IT portfolios can be better managed and leveraged across the federal government.

FEAv2: The CRM's Reference Models

PRM – BRM – DRM – ARM – IRM – SRM

The Reference Models from have evolved from five in FEAv1 to six in FEAv2. Each Reference Model consists of the following areas:

▸ Taxonomy – Provides for categorization and inventories.

▸ Methods – Incorporates associated best practices.

▸ Use Cases – Describes how the reference model will be applied and used in the federal government. This area will apply the reference models to the Collaborative Planning Method (CPM). Each reference model will have at least three use cases.

▸ Touch Points – The relationship between all of the reference models.

Implementation Milestones and Status

Date	Agency Actions and Deliverables	Status
March 1 , 2012	Identify two IT areas for migration to a shared service approach by December 31, 2012.	Complete
May 2, 2012	Issue OMB IT Shared Service Strategy and updated guidance on federal enterprise architecture methods.	Complete
August 31, 2012	Submit an agency Enterprise Roadmap to OMB that includes shared services status and a commodity IT consolidation plan.	Complete
December 31, 2012	Agencies complete two OMB -approved IT shared service initiatives in 2012 and report status to OMB.	In-progress
April 1, 2013 and Annually Going Forward	Agencies submit an updated Enterprise Roadmap to OMB with an IT asset inventory and shared services plan.	In-progress

Questions

Scott Bernard
Scott_Bernard@omb.eop.gov
Office of Management and Budget
Office of E-Government and IT