

Enabling the Vision of E-Government



Federal Enterprise Architecture

FEA Program Management Office

**Office of Management and Budget
Executive Office of the President**

February 2004



FEA: Business and IT Integration

- **The FEA was commissioned on February 6, 2002 to:**
 - Define and align Federal business functions and supporting IT via a set of common models
 - Identify opportunities to re-use and re-deploy IT assets across the Federal government
 - Improve effectiveness of IT spending to help yield substantial cost savings and improve service delivery for citizens



The Federal Enterprise Architecture

- **Objectives:**

- Identifying opportunities to leverage technology and alleviate redundancy, or highlighting where agency IT overlap reduces the value of investments
- Facilitating horizontal (cross-Federal) and vertical (Federal, state and local) integration of IT resources
- Applying architecture practices to help drive business management improvements across the Federal government
- Supporting a citizen-centered, results-focused government that maximizes IT to better achieve mission outcomes and fulfill legislative mandates

FEA and The PMA

Expanded Electronic Government



- **Vision:** An *order-of-magnitude* improvement in the Federal government's value to the citizen, with decisions in minutes or hours not weeks or months
- **Definition:** The use of digital technologies to transform government operations in order to improve effectiveness, efficiency, and service delivery
- **Principles:**
 - Citizen-centered, results-oriented, market-based
 - Simplify and unify (think "collaboration")
 - Maximize IT investments to ensure interoperability and minimize redundancy

Results of Initiative #4:

"Expanded E-Government will make it simpler for citizens to receive high-quality service from the Federal government, while reducing the cost of delivering those services."

The President's Management Agenda

FEA and The PMA Budget & Performance Integration



- **Vision:** Federal resources should be allocated to programs and managers that deliver results.
- **Definition:** Integrate performance reviews with budget decisions.
- **Principles:**
 - The American people should see how government programs are performing and compare performance and cost
 - Standard and integrated budgeting, performance, and accounting data to provide decision-quality information for management
 - Better control over resources used and accountability for results

Results of Initiative #5:

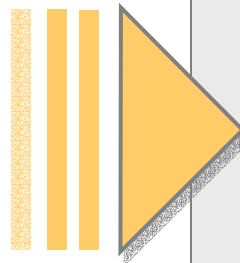
“Budget and performance integration will provide better information on the linkage between objectives and the matching cost ... and accountability for results.”

The President’s Management Agenda

Business Cases Justify Investment Decisions



- Quantifiable, strategic mission value and features/functions for user
- Critical success factors (especially linkage to EA)
- Process, organization, and IT alternatives
- Benefit/cost/risk assessment
- Security plans
- Project management organization and plans (acquisition, EVMS, WBS/milestones, risk management)



FORM 300

Part I: Screening Questions and Summary of Spending for Project Stages

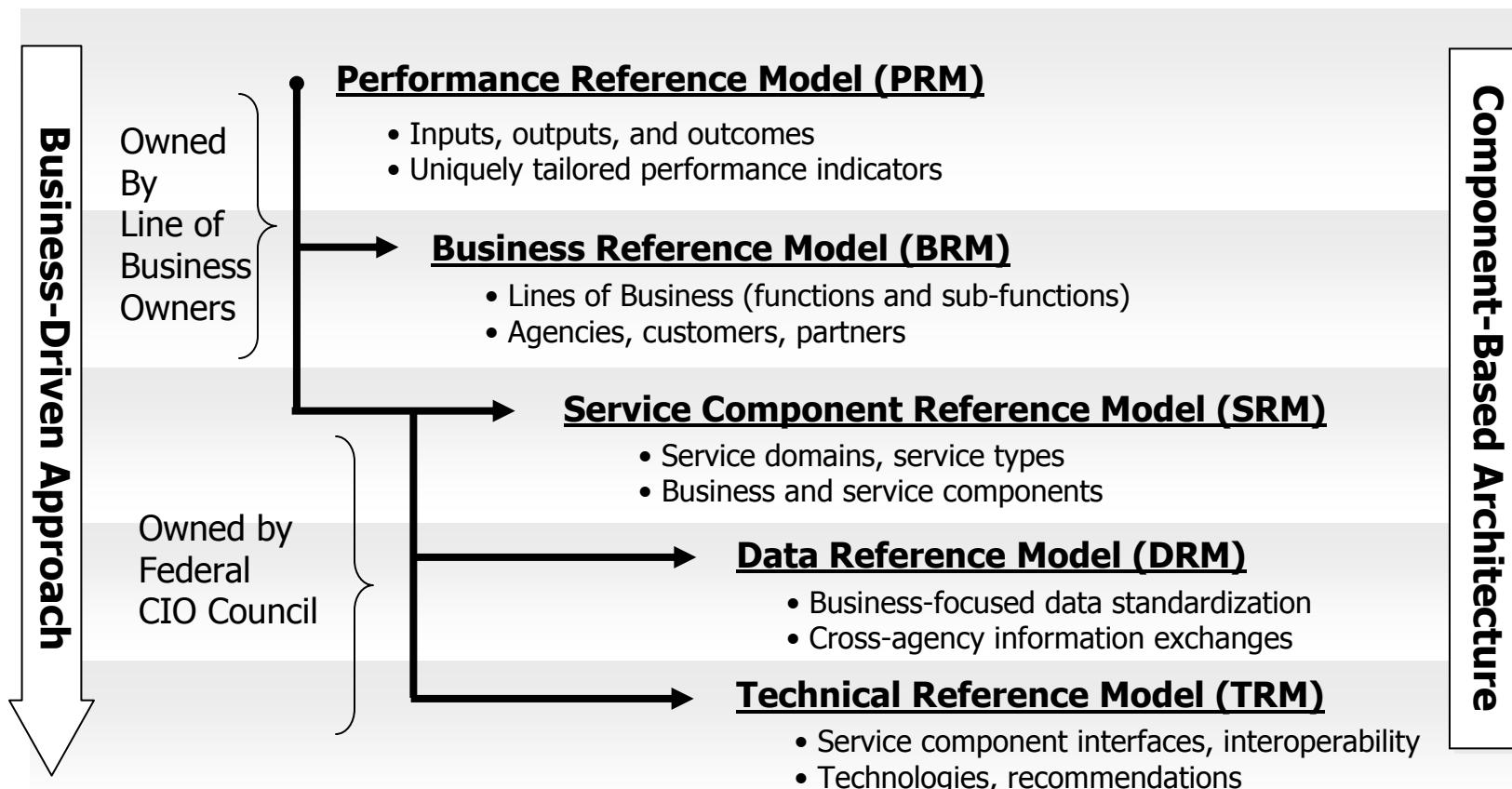
- A. Project Description
- B. Justification
- C. Performance Goals and Measures
- D. Program Management
- E. Alternatives Analysis
- F. Risk Management
- G. Acquisition Strategy
- H. Project and Funding Plan – Cost, Schedule, and Performance Goals

Part II: Additional Criteria for IT

- A. Enterprise Architecture
- B. Security and Privacy
- C. Government Paperwork Elimination Act (GPEA)



The Federal Enterprise Architecture





FEA Reference Models

- **Business Reference Model (BRM)**
 - Function-driven framework for describing business operations of the Federal government independent of the agencies that perform them
- **Service Component Reference Model (SRM)**
 - Business and performance-driven functional framework that classifies service components with respect to how they support business and/or performance objectives
- **Performance Reference Model (PRM)**
 - Standardized framework to measure the performance of major IT investments and their contribution to program performance
- **Data Reference Model (DRM)**
 - Model describing, at an aggregate level, the data and information that support program and business line operations
- **Technical Reference Model (TRM)**
 - Component-driven, technical framework used to identify the standards, specifications, and technologies that support and enable the delivery of service components and capabilities



The Federal CIO Council's AIC

Architecture and Infrastructure Committee (AIC)

AIC Objectives:

- Integrate OMB and CIO Council EA efforts
- Facilitate simpler, consistent EA taxonomy and terminology
- Facilitate cross-agency efforts
- Operationalize EA efforts

Governance Subcommittee

Expected Governance Subcommittee Outcomes:

- Effective implementation of the FEA
- Alignment of the FEA reference models with agency EAs
- Identification of opportunities to collaborate on, consolidate, and/or cancel IT initiatives based on FEA analysis
- Expansion of the FEA to include state and local governments for selected Federal lines of business

Components Subcommittee

Expected Components Subcommittee Outcomes:

- Identification of business processes, service components, and technologies for re-use
- Reduction of Federal agency IT costs through the re-use of business processes, service components, and technologies
- Rapid solution development through the re-use of components
- Rapid integration of disparate business services
- Development and implementation of E-Gov solutions based on component-based architectures

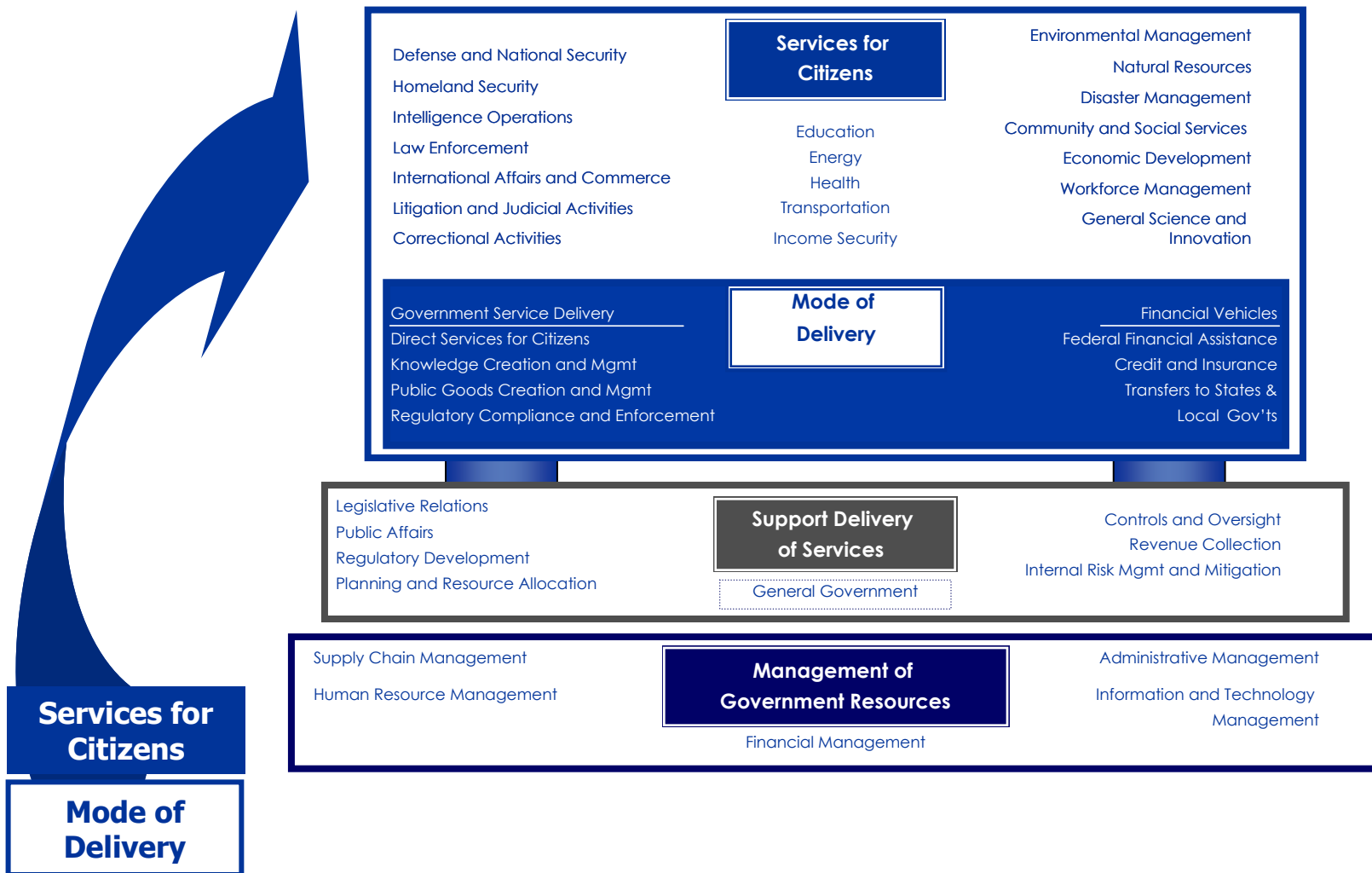
Emerging Technology Subcommittee

Expected Emerging Technology Subcommittee Outcomes:

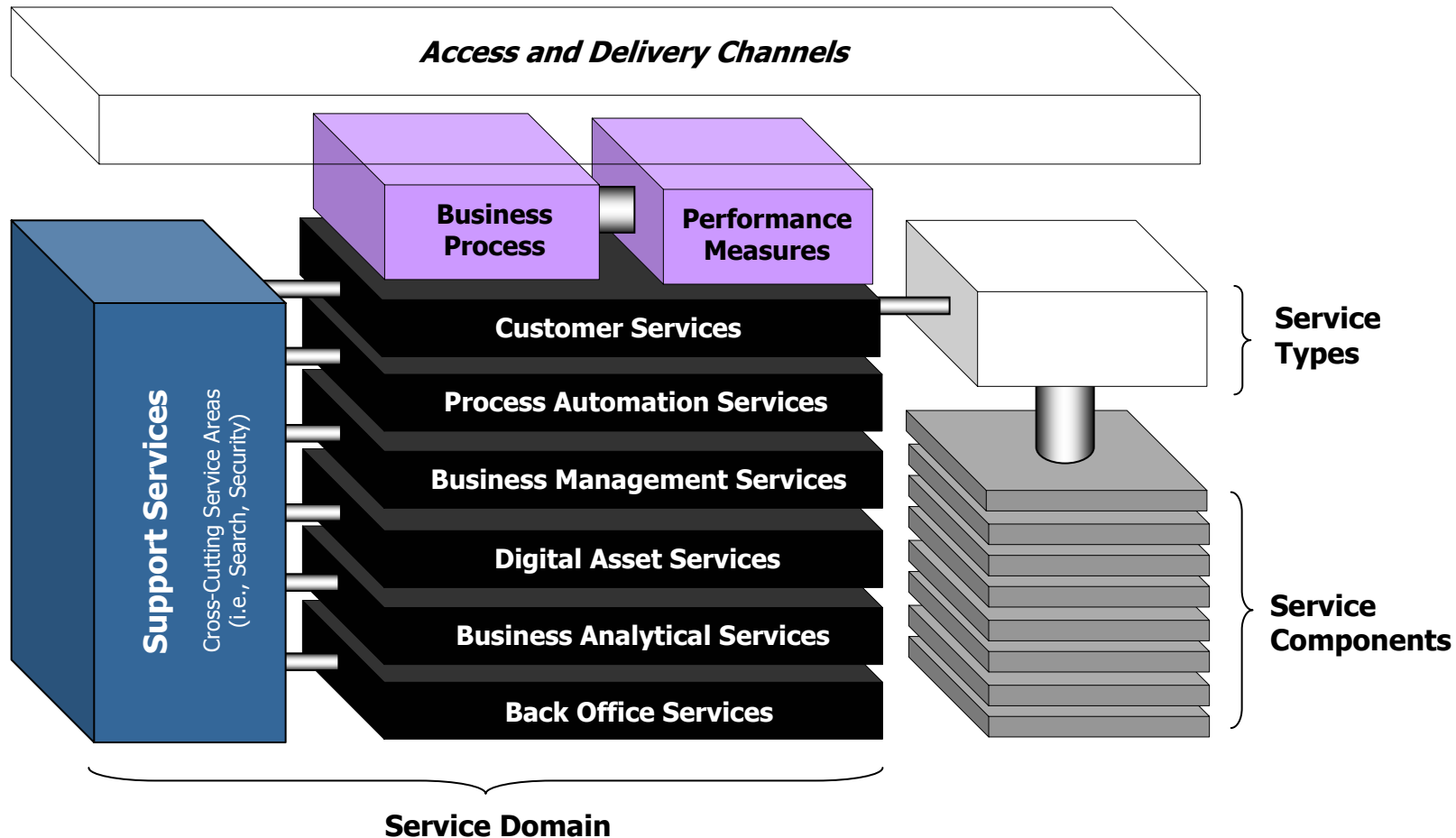
- Improved value and common understanding of the FEA
- Development of performance models of business scenarios to anticipate performance outcomes and mitigate risks
- Faster adoption of validated capabilities for integration into the FEA
- Better understanding of FEA tradeoffs as established/emerging technologies compete and converge
- Greater FEA valuation and longer component life-cycles through market-based, open standards technologies and decreased use of proprietary technologies



Business Reference Model (BRM V2.0)



Service Component Reference Model (SRM)





SRM Domains and Service Types

Service Component Reference Model

Customer Services

- Customer relationship management
- Customer preferences
- Customer initiated assistance

Process Automation Services

- Tracking & workflow
- Routing & scheduling

Business Management Services

- Management of process
- Organizational management
- Investment management
- Supply chain management

Digital Asset Services

- Content management
- Document management
- Knowledge management
- Records management

Business Analytical Services

- Analysis & statistics
- Visualization
- Business Intelligence
- Reporting

Back Office Services

- Data management
- Human resources
- Financial management
- Assets / materials management
- Integration
- Human capital & workforce management

Support Services

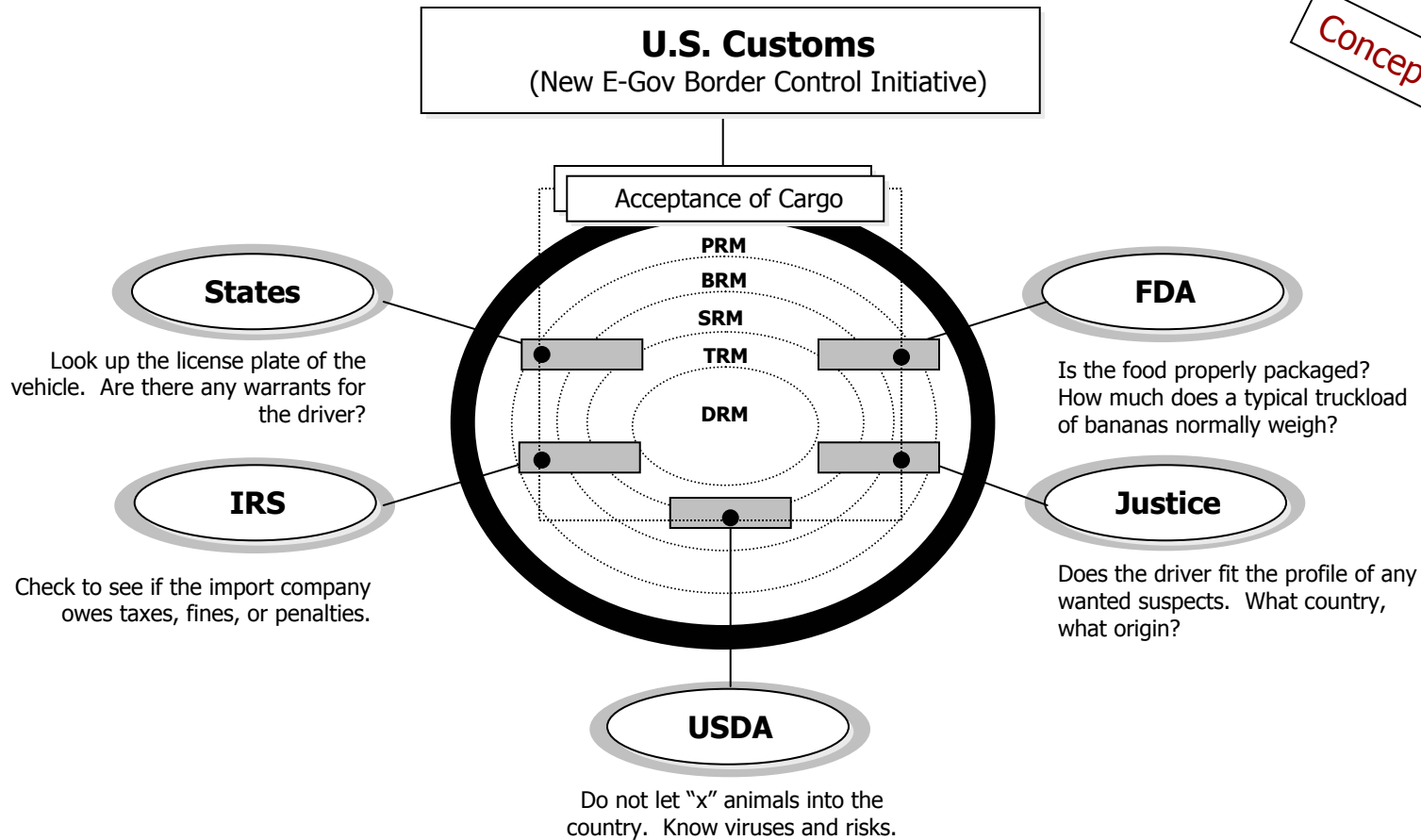
- Security management
- Collaboration
- Search
- Communication
- Systems management

The SRM is structured across horizontal service areas that can provide a leverageable foundation for reuse of applications, application capabilities, components, and business services.

FEA: Supporting Cross-Agency Service Components

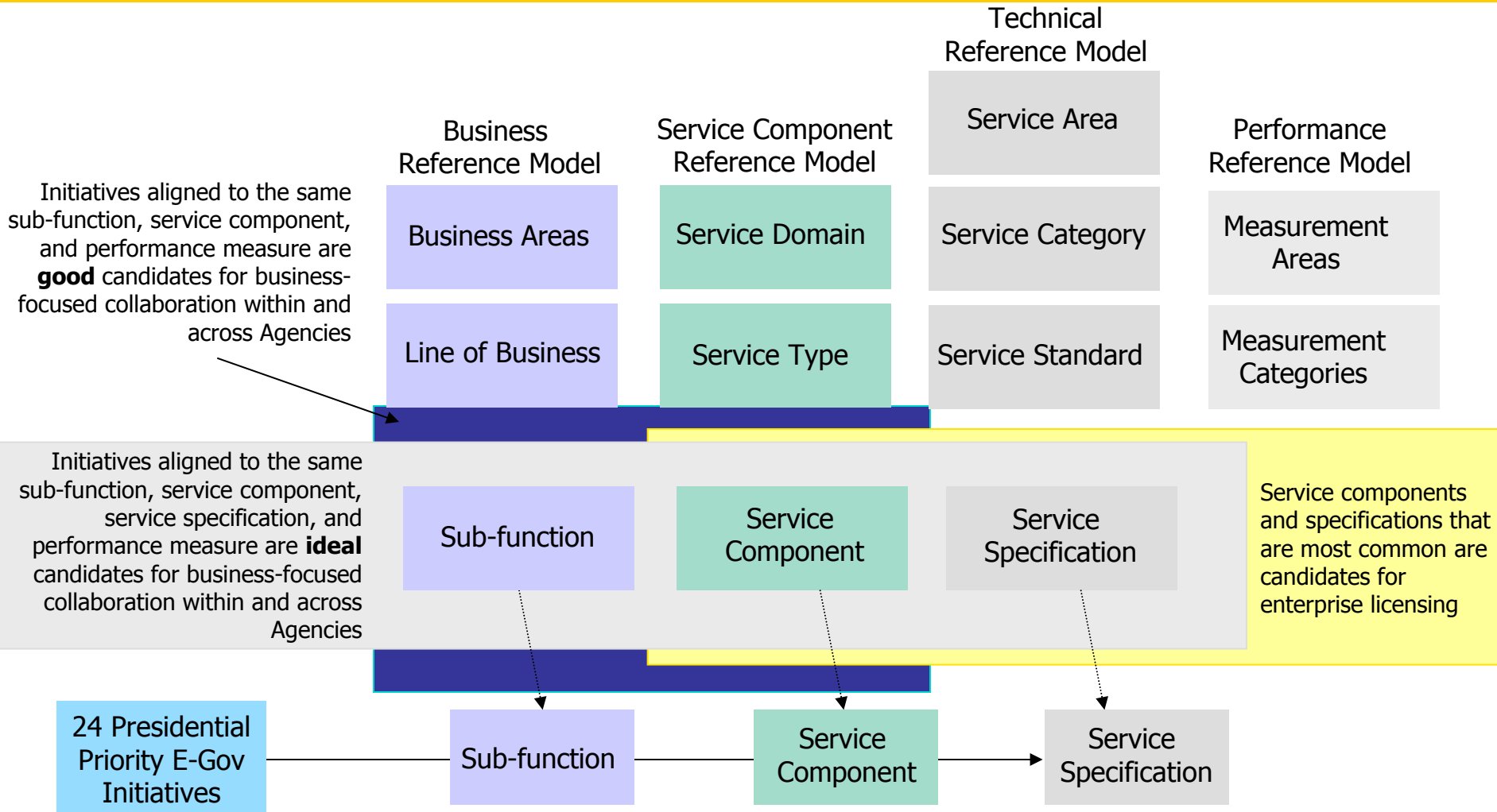


Conceptual



Agency EA
 Service Component
 E-Gov Architecture Guidance
 Federal Enterprise Architecture

Identify Opportunities for Collaboration, Consolidation, Enterprise Licensing



Initiatives aligned to the sub-functions, service components, and service specifications of the 24 Presidential Priority E-Gov Initiatives are candidates for consolidation / cancellation



Developing a Common Process View

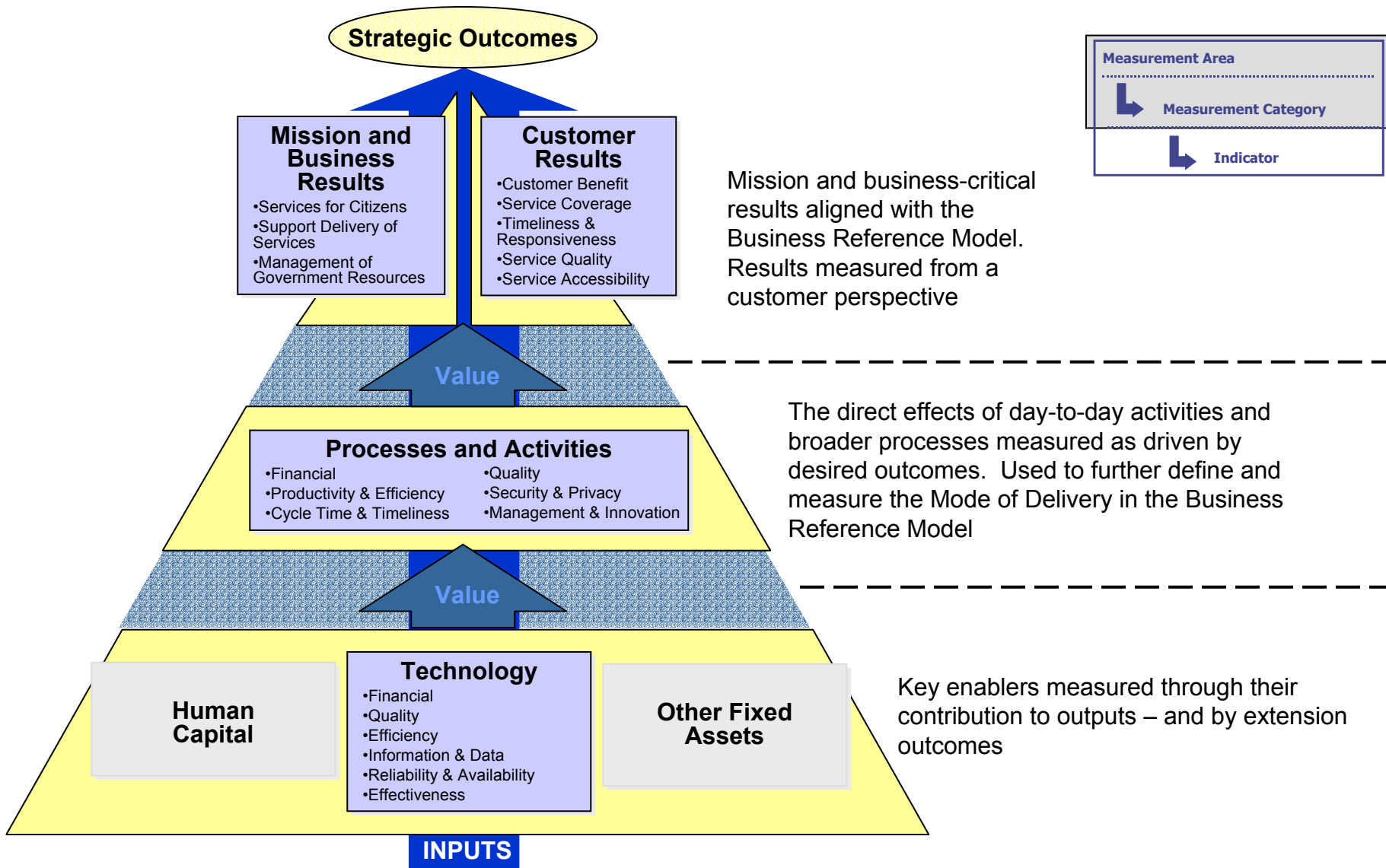
Purpose: Help agencies discover where they have similar processes

Iterative Process: Three rounds of structured discovery:

- **Round 1** – Discover if processes share stakeholders or major information sources
- **Round 2** – Ascertain which processes share key capabilities and measures of success
- **Round 3** – Ascertain whether any of the processes have similar inputs, outputs, activities, and/or skill requirements



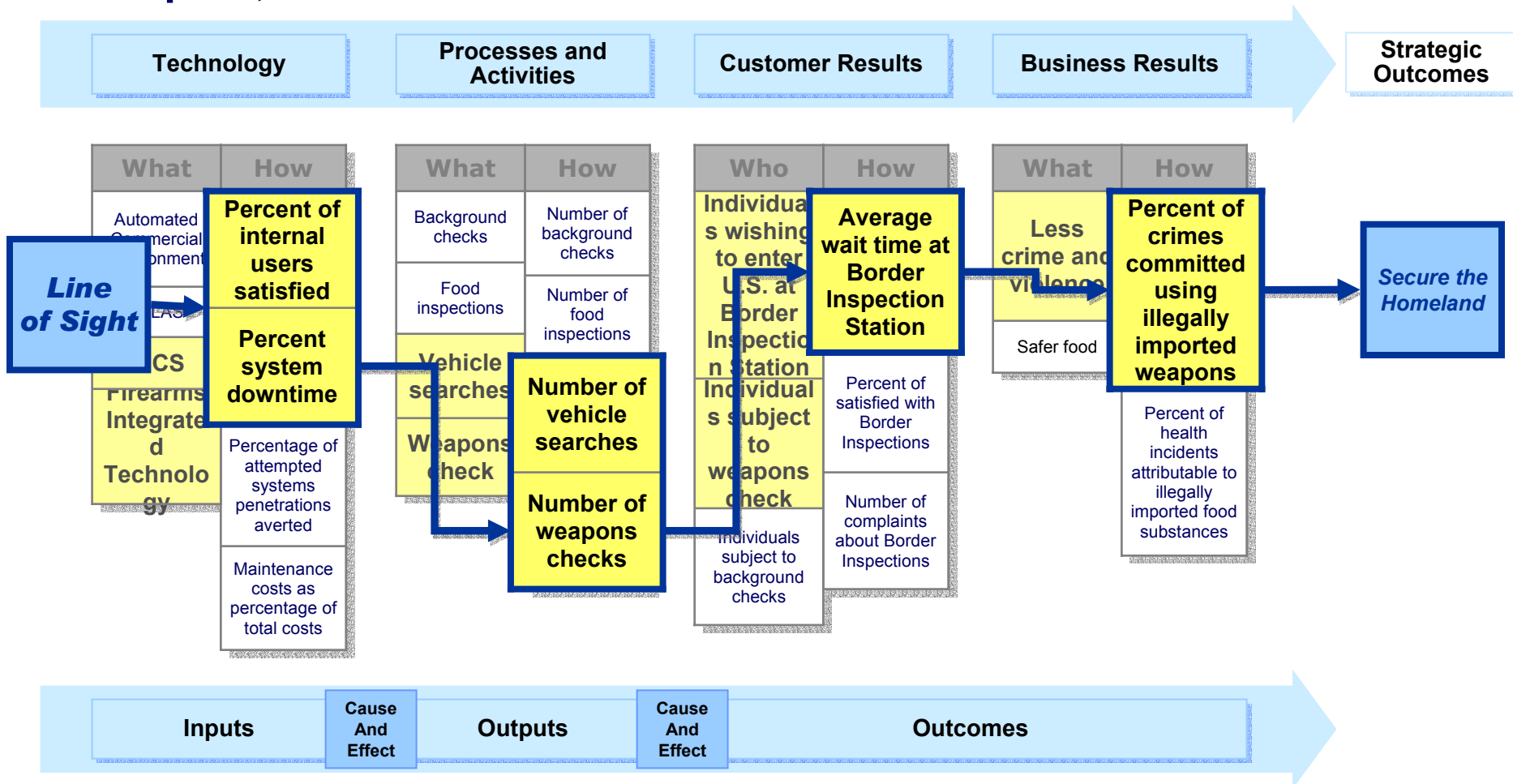
Performance Reference Model (PRM)





PRM Articulates **Line of Sight**

Line of Sight is the cause-and-effect relationship between inputs, outputs, and outcomes.

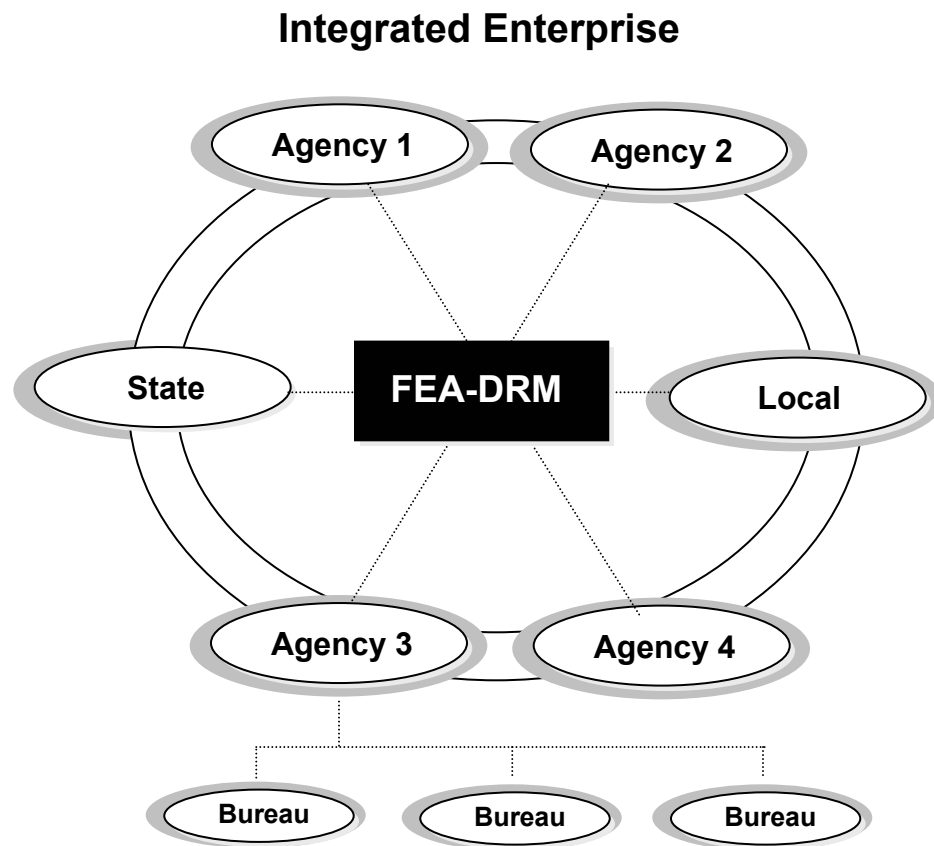




Data Reference Model (DRM)

Goals and Objectives:

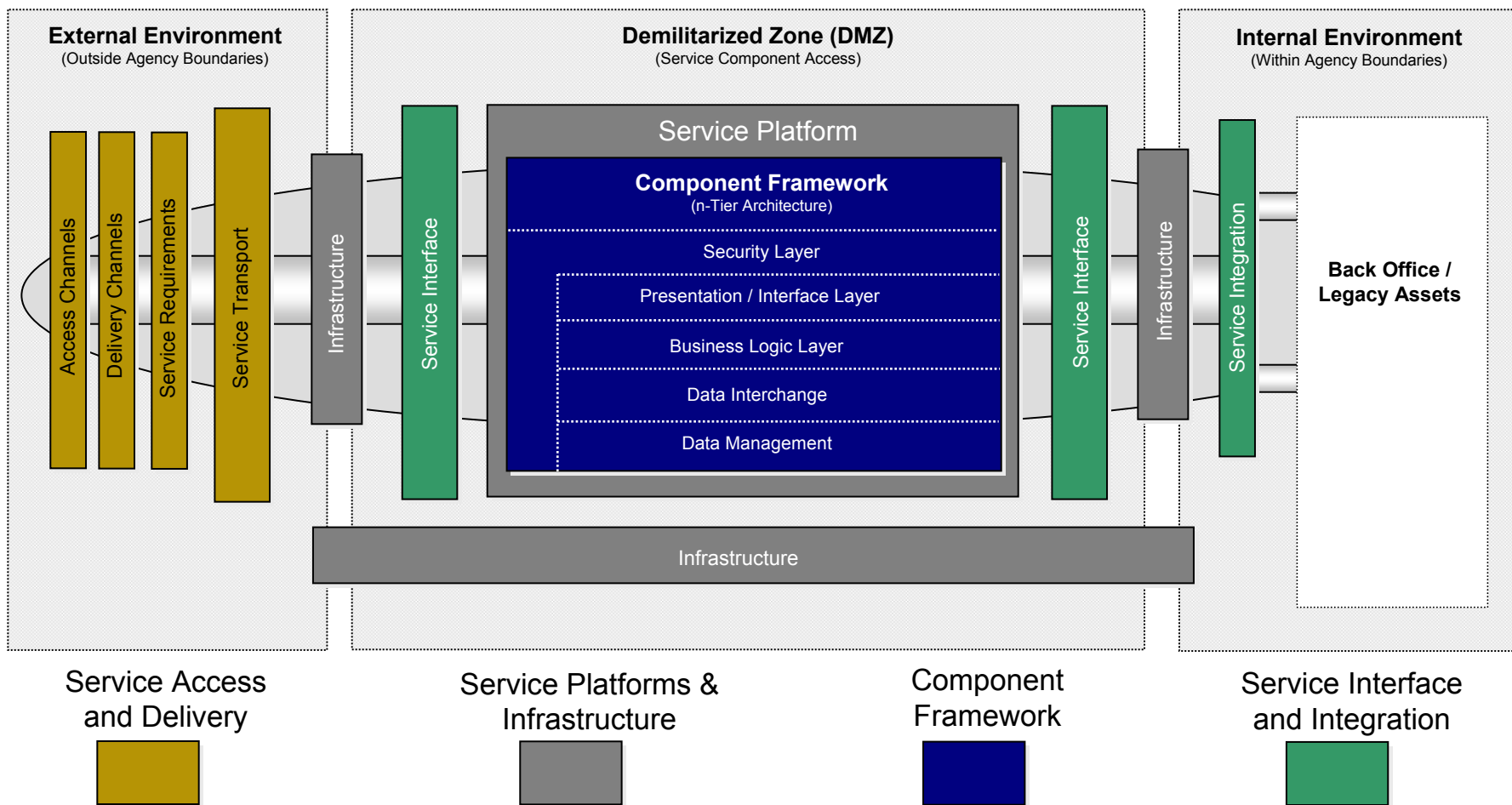
- Promote horizontal and vertical information sharing between business lines
- Business-focused data standardization that can be categorized for re-use
- Re-use and integration of data as opposed to duplication
- Enabler to support cross-agency collaboration
- Facilitate cross-agency information exchanges
- Consistent means to categorize and classify data



DRM provides framework for agencies to leverage existing data components across the Government



Technical Reference Model (TRM)





FEA Going Forward

- **Facilitate EA management and practice maturity through agency EA evaluations and expanded FEA guidance**
- **Advance operationalization of agency EA through of the Line of Business (LoB) Common Solutions Initiative**
- **Expand application of the FEA to work with agencies to identify opportunities for improved, shared business processes and IT investments**
- **Release the Data and Information Reference Model and continue progressive evolution of the other FEA Reference Models**
- **Develop security profile and process model for government-wide architecture**
- **Accelerate building partnerships with industry, academia, and state and local governments**