Updates on the Federal Enterprise Architecture Program

(ISPAB Quarterly Meeting)

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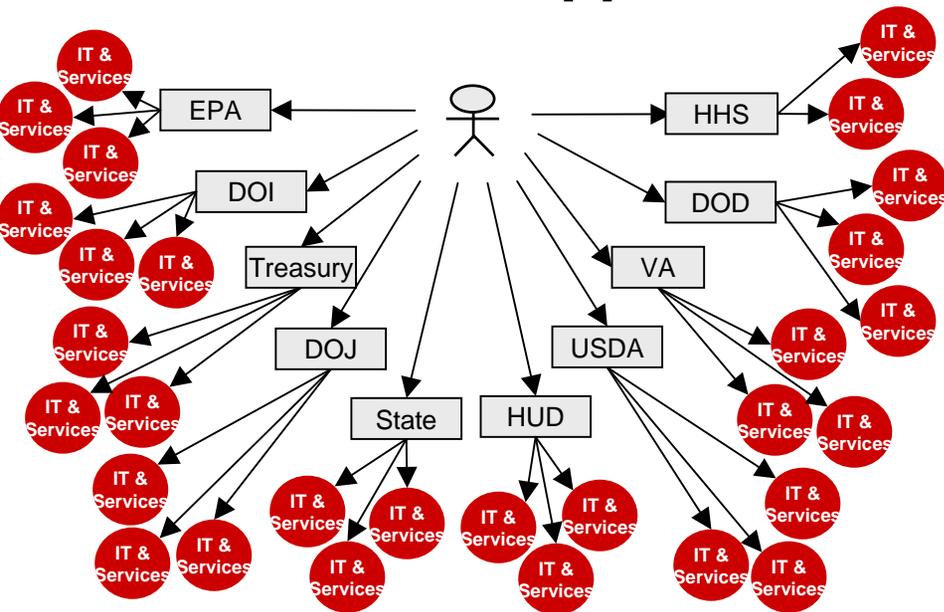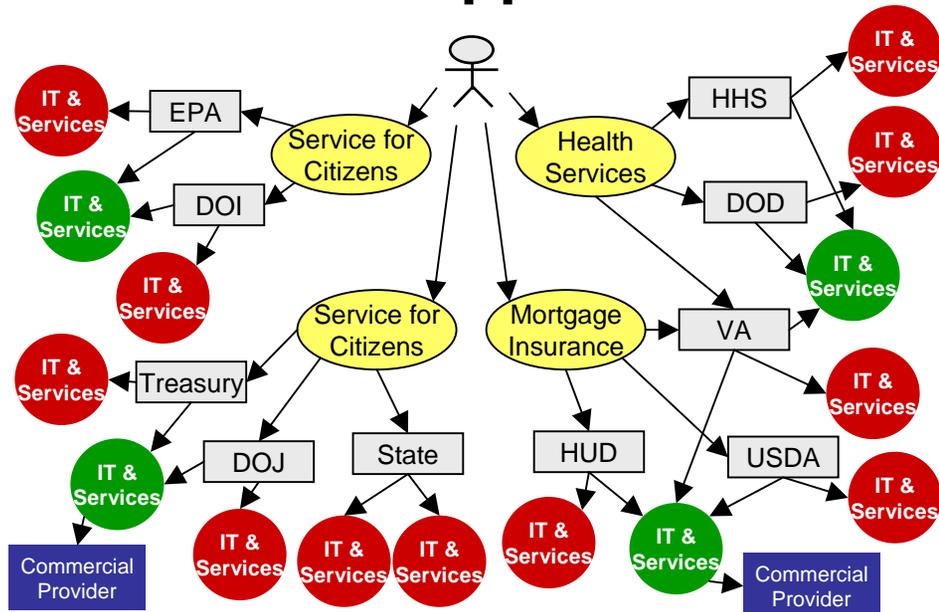
December 7, 2005

E·GOV

Future Direction: Citizen-Centered Services

The Historical Approach …

The Future Approach …

Legend

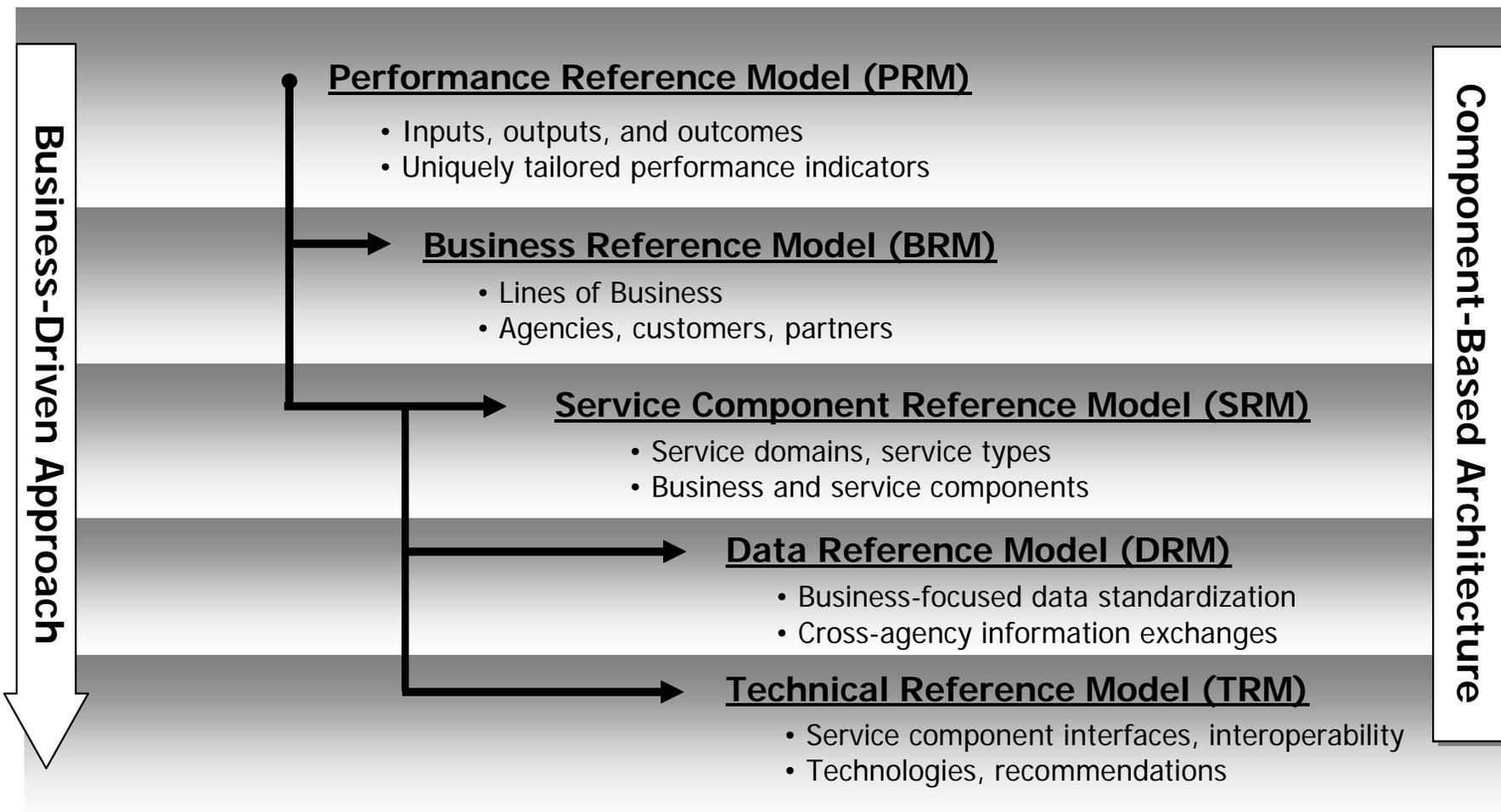| Symbol	Meaning
Service for Citizens (yellow oval)	= Service for Citizens
IT & Services (red circle)	= Agency-specific Service
IT & Services (green circle)	= Common Service
Commercial Provider (blue box)	= Commercial Provider

Transformation to Citizen-Centered Services

- OMB plays role to encourage agencies to become more effective and efficient

  – Public Sector does not have the discipline of profitability

- Agencies need to ask the question, "What functions are core to my mission?"

  – Defines what is fundamental to the organization

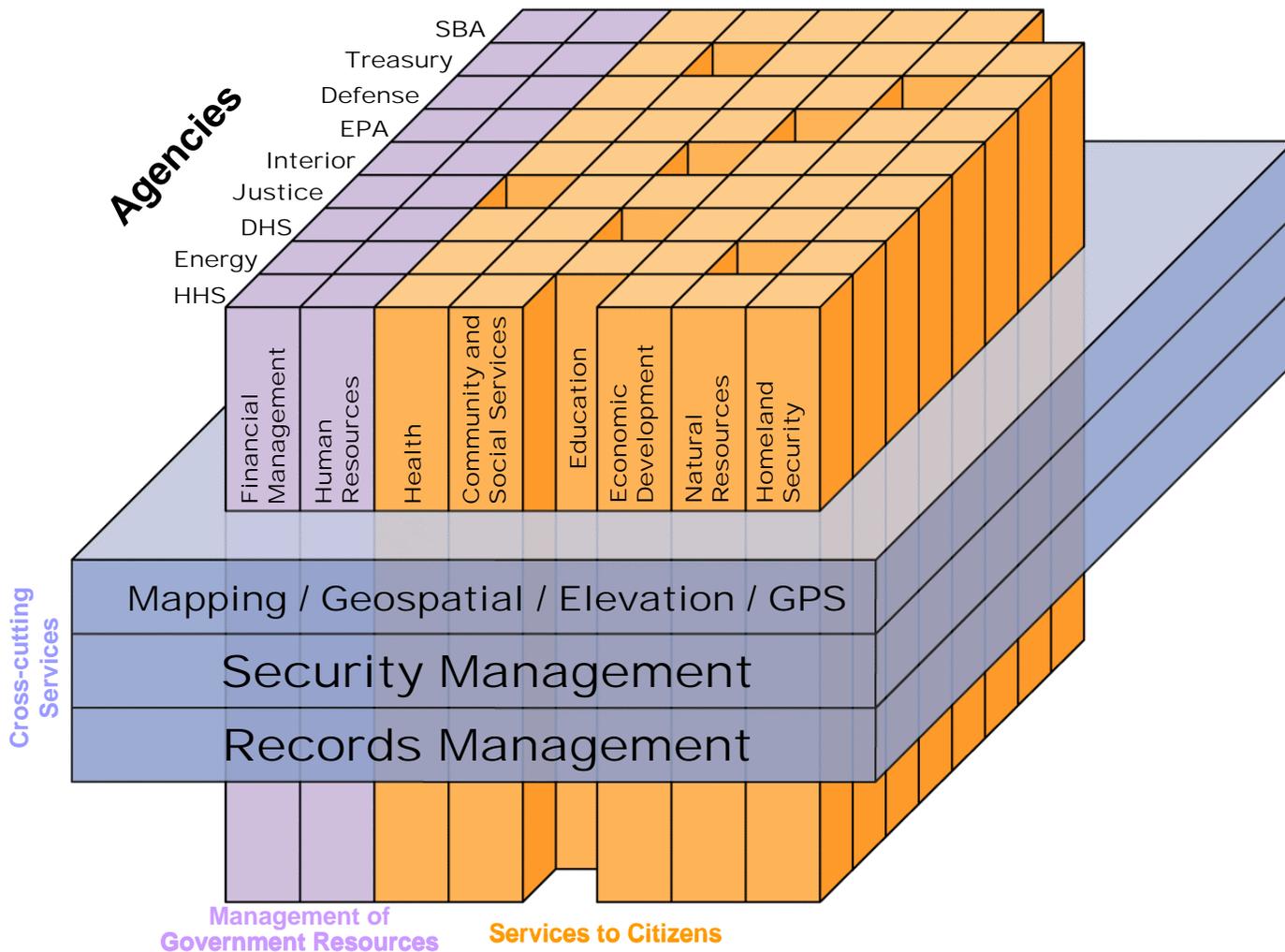 – Build for Excellence, Buy for Competence

Business-Driven Approach

Component-Based Architecture

Performance Reference Model (PRM)

- Inputs, outputs, and outcomes
- Uniquely tailored performance indicators

Business Reference Model (BRM)

- Lines of Business
- Agencies, customers, partners

Service Component Reference Model (SRM)

- Service domains, service types
- Business and service components

Data Reference Model (DRM)

- Business-focused data standardization
- Cross-agency information exchanges

Technical Reference Model (TRM)

- Service component interfaces, interoperability
- Technologies, recommendations

CONOPS

ARCHITECT		INVEST		IMPLEMENT	
• Develop and maintain enterprise architecture • Review, reconcile and approve segment architecture for the agency's core lines of business and common IT services	**Architectural Portfolio**	• Select IT initiatives to define the agency's IT investment portfolio • Control IT investments • Evaluate IT investments	**Investment Portfolio**	• Develop and maintain segment architecture • Develop IT program management plan • Execute IT projects	**Transition Strategy**

← END-TO-END GOVERNANCE →
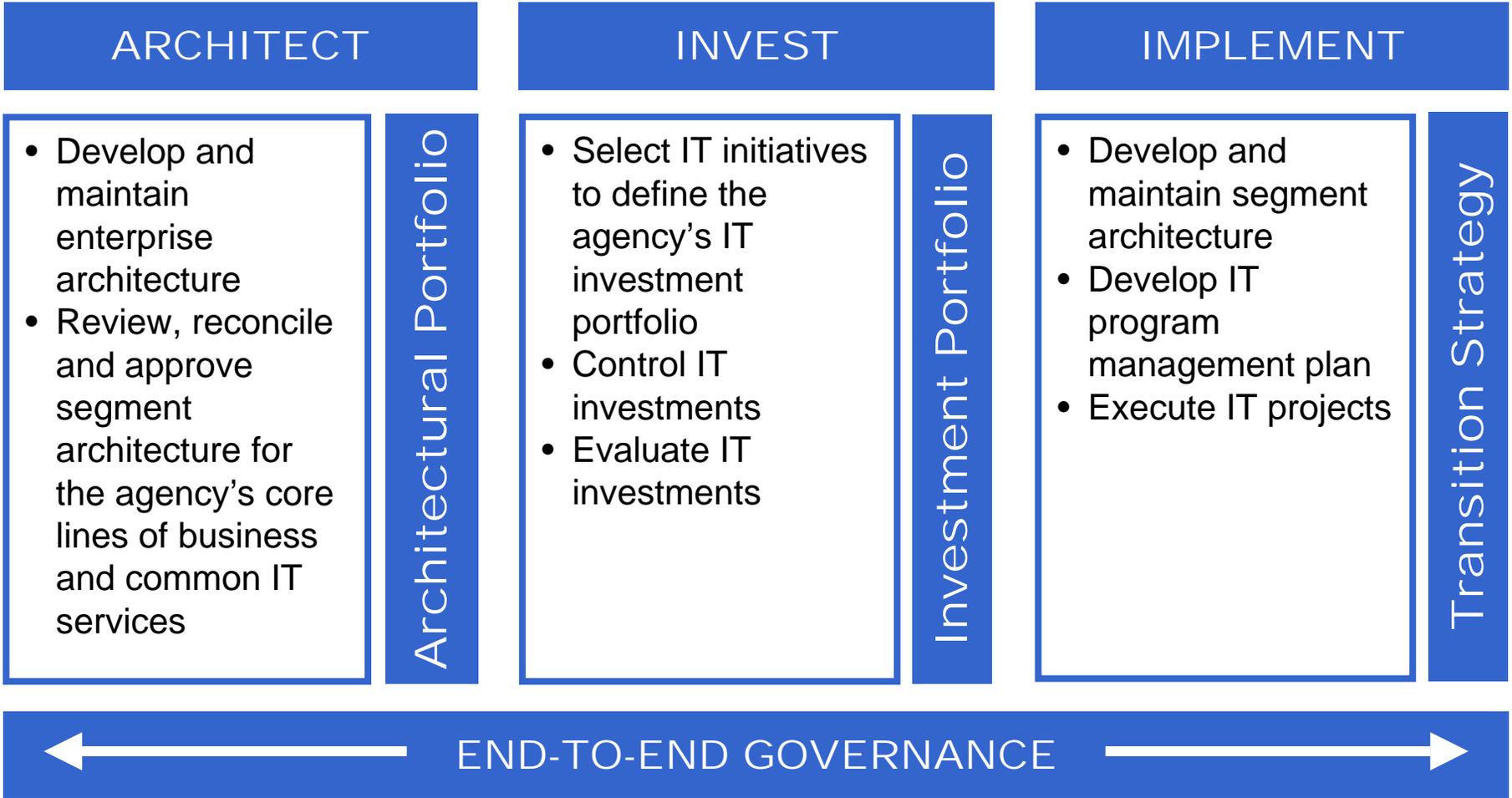
Focus is on three main areas:

1. ## Lines of Business

   ### Operational Phase

   - Human Resources (HR) Management, Financial Management (FM), Grants Management (GM), Case Management (CM), and Federal Health Architecture (FHA)

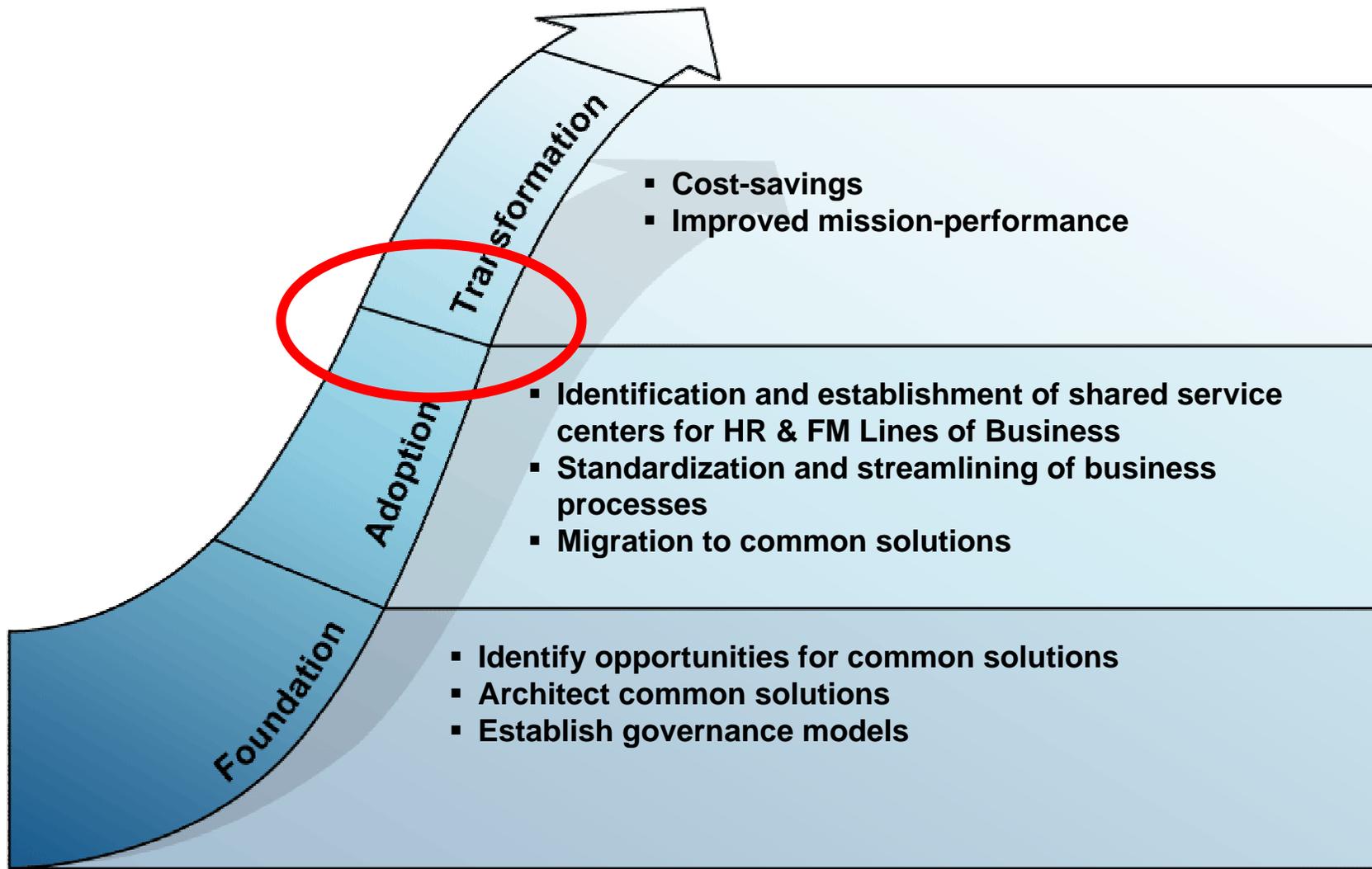   ### Planning Phase

   - Information Systems Security (ISS)

2. ## E-Gov Initiatives

   - Driving toward usage and adoption by agencies
   - Self-sustaining fee-for-service model
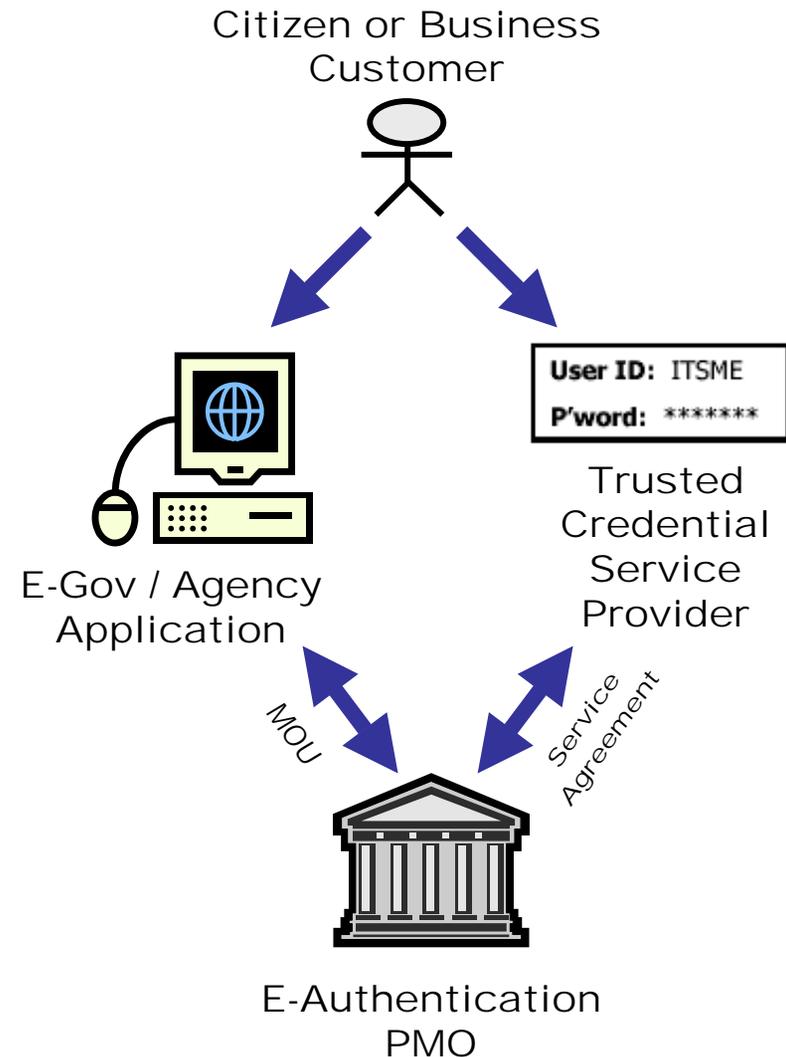
3. ## SmartBUY Agreements

E-Gov Future Direction

Transformation
- Cost-savings
- Improved mission-performance

Adoption
- Identification and establishment of shared service centers for HR & FM Lines of Business
- Standardization and streamlining of business processes
- Migration to common solutions

Foundation
- Identify opportunities for common solutions
- Architect common solutions
- Establish governance models

CORE.gov

- ## CORE.gov
  - Repository for service components
  - Contains a collaboration tool

CORE.gov Example: E-Authentication

- **Provide standards-based authentication for Federal E-Gov applications**

- **Provide a uniform process for establishing electronic identity**

- **Eliminate the need for each initiative to develop a redundant solution for identity verification and electronic signatures**

- **Enable citizens and businesses to use credentials issued by commercial entities to conduct transactions with the government**

- **First component to be submitted to CORE.gov**

- **More info at www.cio.gov/eauthentication**

Citizen or Business Customer

E-Gov / Agency Application

User ID: ITSME
P'word: *******

Trusted Credential Service Provider

MOU

Service Agreement

E-Authentication PMO

IPv6 Implementation

OMB Memorandum 05-22 directs agencies to successfully transition their <u>network backbone</u> to Internet Protocol version 6 (IPv6) by June 2008, and….

1. Identify an IPv6 agency lead

2. Develop a network backbone transition plan for IPv6

3. Complete two (2) inventories of IP-aware devices and technologies

   - First is due in November 2005

   - Second is due in June 2006

4. Complete an IPv6 transition impact analysis

5. Complete an IPv6 progress report

6. Submit to OMB all of these items (with the exception of the second inventory) with their <u>February 28, 2006</u> Enterprise Architecture assessment

EA Assessment Framework 2.0

- ## Three Capability Areas
  - Completion
  - Use
  - Results

- ## EA Assessment Timeline
  - Annual Assessment Process
  - Quarterly Review Process

Transition Strategy

Segment Current EA "Baseline"

Segment Architecture

Segment Architecture

Segment Architecture

Program A — Projects with Milestones and Dependencies

Project 1
Project 2
Project 3
Project 4
Project 5

Program B

Project 6
Project 7
Project 8
Project 9

Program C

Project 10
Project 11
Project 12
Project 13

Performance Improvement Plan

Period 1   Period 2   Period 3

Segment Target EA

Segment Architecture

Segment Architecture

Segment Architecture

Transition Architectures ("Interim Targets")

FEA Principle: Security and Privacy

- ## *Security and Privacy are Design Standards*
  - Security and privacy are integral parts of government operations, and are designed into the architecture.

- ## Rationale:
  - Government must protect confidential information to increase public trust and improve the security of its resources.

- ## Implications:
  - Security and privacy requirements must be defined in the context of the business, and integrated into the entire architecture.
  - Security and privacy must be implemented consistently government-wide.
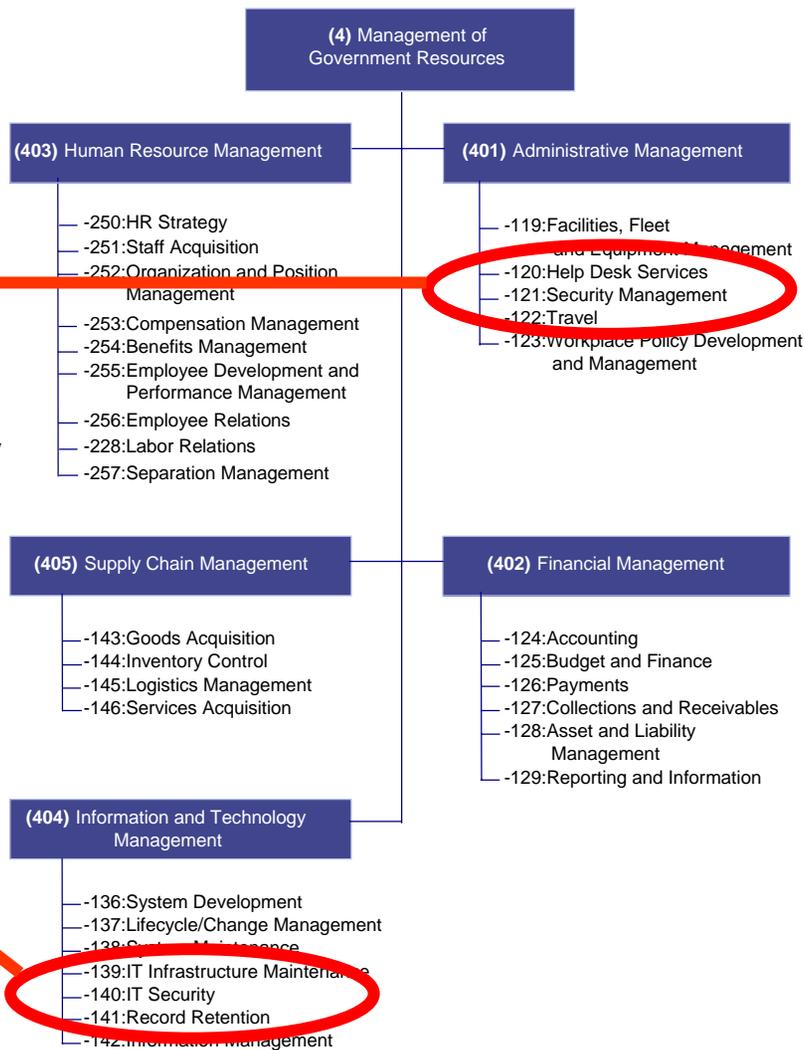
Business Reference Model (BRM)

The Business Reference Model (BRM)

Services for Citizens

Defense and National Security
Homeland Security
Intelligence Operations
Law Enforcement
International Affairs & Commerce
Litigation & Judicial Activities
Correctional Activities

Education
Energy
Health
Transportation
Income Security

Environmental Management
Natural Resources
Disaster Management
Community & Social Services
Economic Development
Workforce Management
General Science & Innovation

Mode of Delivery

Direct Services for Citizens
Knowledge Creation & Mgmt
Public Goods Creation & Mgmt
Regulatory Compliance & Enforcement

Federal Financial Assistance
Credit & Insurance
Transfers to States & Local Governments

Support Delivery of Services

Legislative Relations
Public Affairs
Regulatory Development
Planning & Resource Allocation

Controls & Oversight
Revenue Collection
Internal Risk Mgmt & Mitigation
General Government

Management of Government Resources

Supply Chain Management
Human Resource Management
Financial Management

Administrative Management
Information & Technology Management

Purpose of Government

Mechanisms Used to Achieve Purpose

Government Operations Support Functions

Resource Management Functions

Business Area's (4)

Lines of Business (39)

Management of Government Resources

- # Administrative Management
  - ## Security Management

- # Information and Technology Management
  - ## IT Security

(4) Management of Government Resources

(403) Human Resource Management
- -250:HR Strategy
- -251:Staff Acquisition
- -252:Organization and Position Management
- -253:Compensation Management
- -254:Benefits Management
- -255:Employee Development and Performance Management
- -256:Employee Relations
- -228:Labor Relations
- -257:Separation Management

(401) Administrative Management
- -119:Facilities, Fleet and Equipment Management
- -120:Help Desk Services
- -121:Security Management
- -122:Travel
- -123:Workplace Policy Development and Management

(405) Supply Chain Management
- -143:Goods Acquisition
- -144:Inventory Control
- -145:Logistics Management
- -146:Services Acquisition

(402) Financial Management
- -124:Accounting
- -125:Budget and Finance
- -126:Payments
- -127:Collections and Receivables
- -128:Asset and Liability Management
- -129:Reporting and Information

(404) Information and Technology Management
- -136:System Development
- -137:Lifecycle/Change Management
- -138:System Maintenance
- -139:IT Infrastructure Maintenance
- -140:IT Security
- -141:Record Retention
- -142:Information Management

Service Component Reference Model

SRM: Security Management Service Type

Service Component	Definition
Identification and Authentication	Support obtaining information about those parties attempting to log on to a system or application for security purposes and the validation of those users
Access Control	Support the management of permissions for logging onto a computer or network
Encryption	Support the encoding of data for security purposes
Intrusion Detection	Support the detection of illegal entrance into a computer system
Verification	Support the confirmation of authority to enter a computer system, application or network
Digital Signature	Guarantee the unaltered state of a file
User Management	Support the administration of computer, application and network accounts within an organization
Role / Privilege Management	Support the granting of abilities to users or groups of users of a computer, application or network
Audit Trail Capture and Analysis	Support the identification and monitoring of activities within an application or system

- Phase I completed in July 2004

- Phase II currently in progress

  – Being "piloted" at two federal agencies

  – Addresses other guidance released since Phase I

  – To be refined by Spring 2006

- Provides a methodology for agencies to define security and privacy requirements and investments within the context of EA

Security and Privacy Profile

In more detail, Phase II will include and reflect:

- An enterprise approach linking architectures and reference models to system-level security activities.

- Buy-in from CIOs and other agency stakeholders across the Federal Government.

- Useful implementation tools to assist agencies.

- Lessons learned from real-world implementation of the FEA SPP.

- Integration with FEA and other Federal guidance.

Information Systems Security (ISS) LOB

- Provide government-wide ISS services to be used across agencies

- Four common solution areas have been defined:
  - Training
  - FISMA Reporting
  - Situational Awareness and Incident Response (SAIR)
  - Security Solutions

- Plan is to establish 3 Centers of Excellence (COEs) for each of the 4 common solutions

- Required and optional common solutions will be phased in over 2 to 3 years

For Further Information:
www.egov.gov

E-Gov Results

Government to Citizen	Government to Government
▪ 5.1 million taxpayers filed using Free-File ▪ Recreation One-Stop provided easy access to 3,200 federal parks & other recreation sites	▪ 51,000 users registered with DisasterHelp.gov ▪ Disaster Management services used in 111 actual emergencies
Government to Business	**Internal Efficiency & Effectiveness**
▪ 4.4 million electronic applications received for Employer Identification Numbers (EIN) ▪ 6.5 million business tax forms filed electronically	▪ Job-seekers use USAJOBS to create between 90,000 and 100,000 resumes per month ▪ E-Payroll consolidating payroll providers from 26 to 4

LoBs projected to save over $5 billion dollars in the next 10 years.