

Federal Enterprise Architecture Program Management Office

Status of the Federal Enterprise Architecture

Briefing to the Computer System Security and Privacy Advisory Board
Norman Lorentz, Chief Technology Officer,
Office of Management and Budget

December 3, 2002

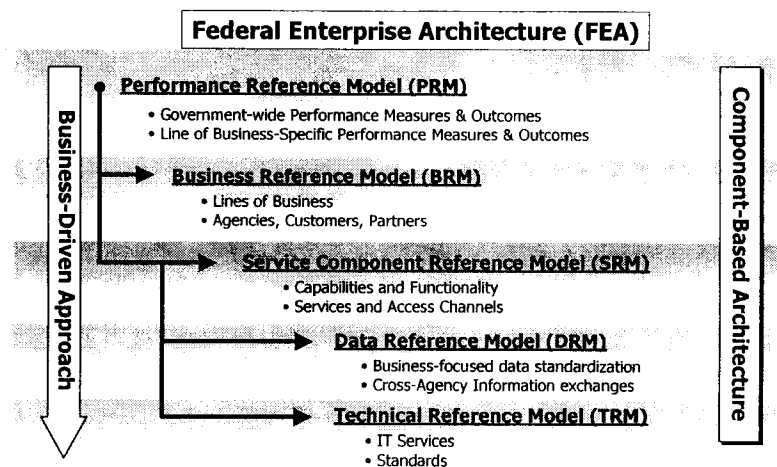
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The Federal Enterprise Architecture is a business-focused framework for cross-agency, Government-wide improvement

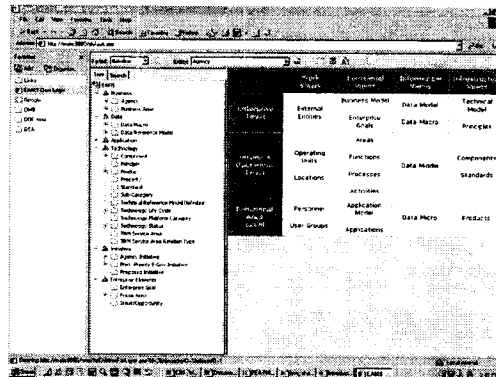
- ◆ The Federal Enterprise Architecture (FEA) is providing OMB and Federal agencies with a **new way of describing, analyzing, and improving the Federal Government** and its ability to serve the citizen
- ◆ The FEA will **eliminate the organizational obstacles** that have historically hindered improvement **without forcing reorganization**
- ◆ The FEA is a **business-focused approach** and is not just for IT
- ◆ The FEA provides a **common framework** for improving a variety of key areas:
 - Budget allocation
 - Horizontal and vertical information sharing
 - Performance measurement and budget/performance integration
 - Cross-agency collaboration
 - Improved service to the citizen
 - e-Government
 - Component Based Architecture
 - and more

The FEA is being constructed through a collection of inter-related "reference models" designed to facilitate cross-agency analysis and opportunities for collaboration



The Federal Enterprise Architecture Management System (FEAMS) is being used to house and maintain the FEA and associated reference data

- ◆ Being constructed using a Component-Based Architecture
- ◆ Will contain all FEA reference models mapped to Federal agencies' major IT initiatives
- ◆ Ready to deploy proof-of-concept
- ◆ Will grant agencies read-only access by mid-November, with full search and reporting capability
- ◆ Will eventually leverage FirstGov hosting capabilities
- ◆ FEA-PMO determining appropriate access and level of security required

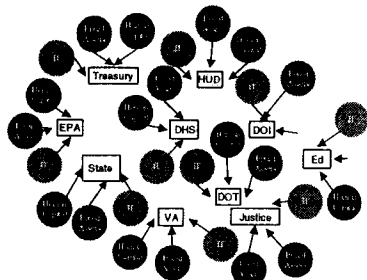


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The foundation of the FEA is an "architected" view of the government's business operations – the Business Reference Model

The Current Approach ...

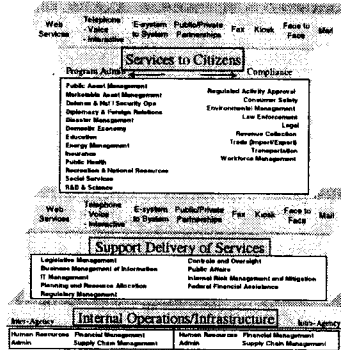


Agency-focused

- X Citizen Service:** Many agencies and offices; not one government
- X Performance:** No common framework for performance measurement across agencies; minimal budget-performance integration
- X IT:** Redundancy within and across agencies
- X Budget Allocation:** Allocation of funds by Agency; minimal cross-Agency analysis

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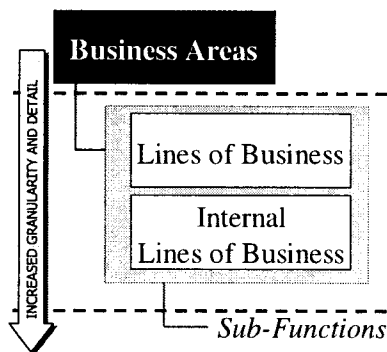
with the FEA ...
The FEA Business Reference Model



Mission-focused

- Citizen Service:** One government
- Performance:** Common performance measurement framework for OMB and all agencies; robust budget-performance integration
- IT:** Minimal redundancy in IT spending; component-based architecture promotes reuse
- Budget Allocation:** Budget analyses take business lines into consideration; funds allocated to support cross-agency collaboration

The FEA Business Reference Model is organized as a functional hierarchy with Business Areas at the highest level followed by Lines of Business and Business Sub-Functions



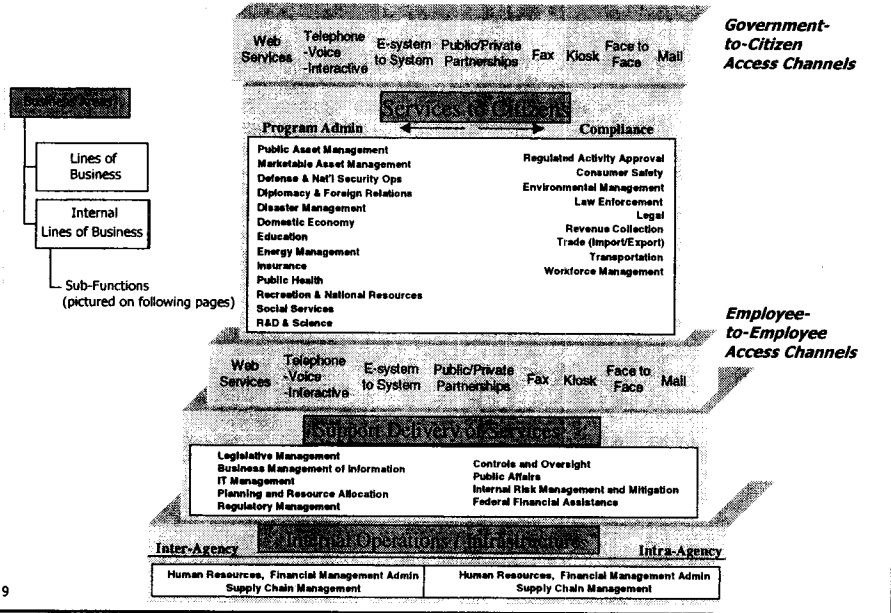
Three Business Areas provide a high-level view of the types of operations the Federal Government performs.

The three Business Areas decompose into two sub-areas and **35 Lines of Business and Internal Lines of Business**. These Lines of Business describe more specifically the services and products the Government provides to its stakeholders, while the Internal Lines of Business describe the inter- and intra-Agency back office and support activities that enable the Government to operate.

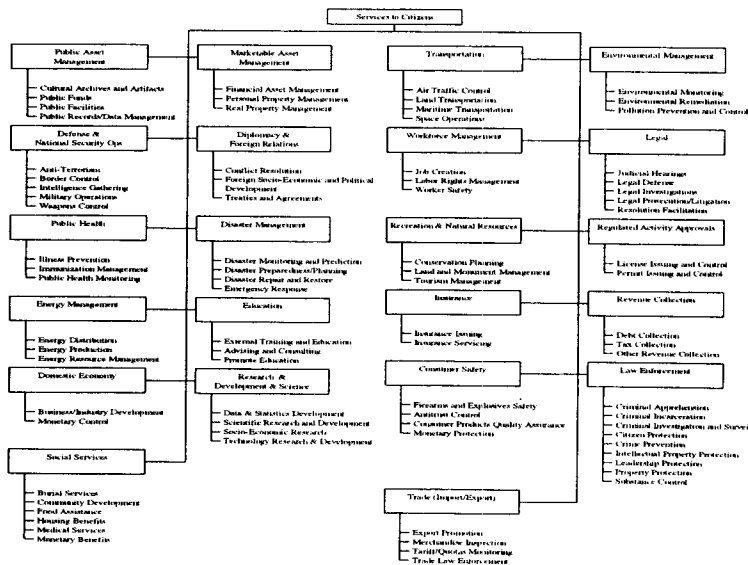
There are **137 Sub-Functions** which form the final level of decomposition within the FEA BRM and communicate the specific activities that Federal Agencies perform within each Line of Business and Internal Function.

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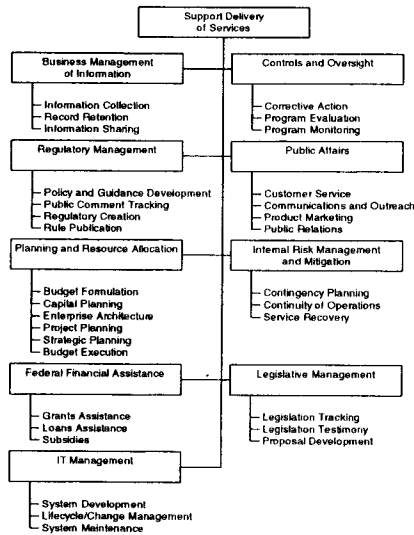
The FEA Business Reference Model (BRM)



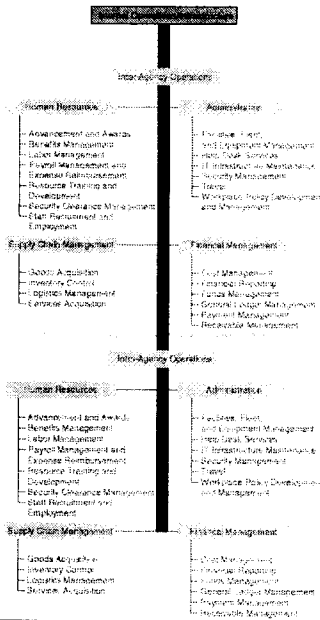
Services to Citizens: Lines of Business and Sub-Functions



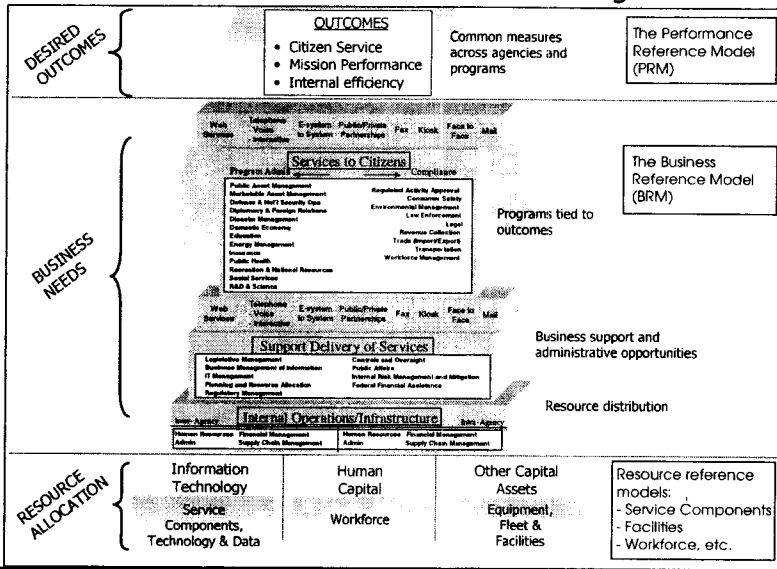
Support Delivery of Services: Lines of Business and Sub-Functions



Internal Operations/Infrastructure: Lines of Business and Sub-Functions

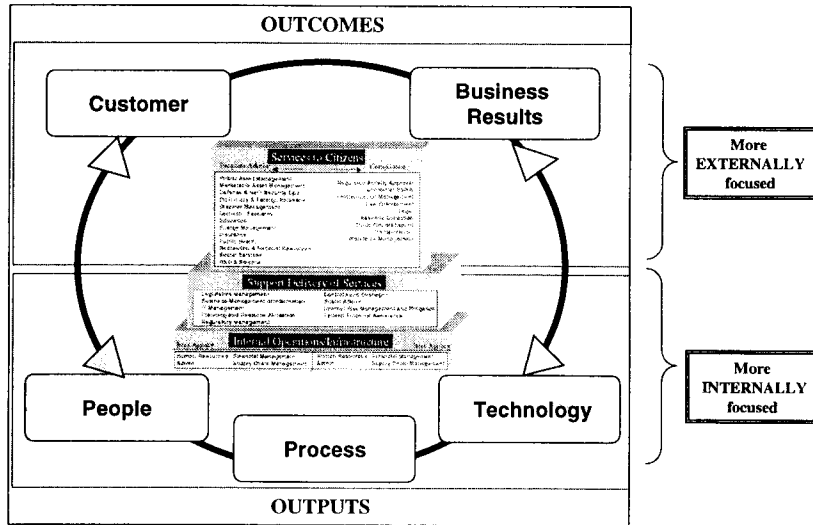


Other models build upon the BRM to define desired goals for the Government's business lines and help agencies determine how to best allocate resources to meet those goals



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The Performance Reference Model consists of five measurement categories that address cross-cutting drivers of performance and span internal/external perspectives and outputs and outcomes



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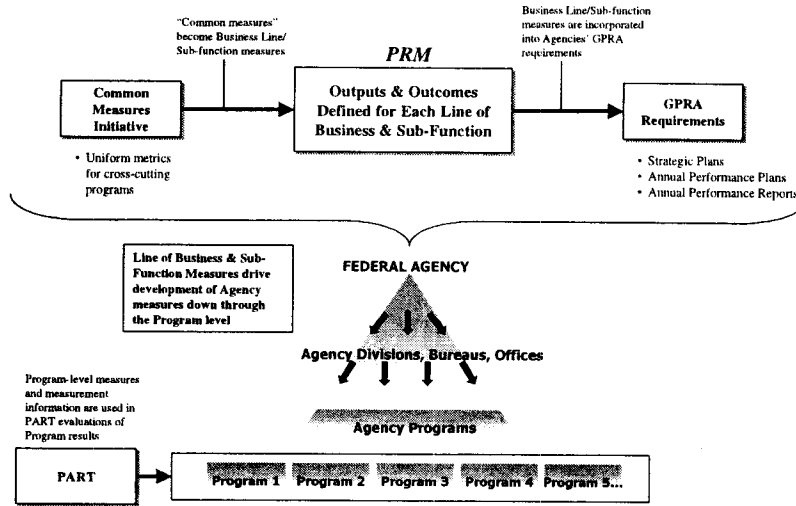
Each performance measurement category includes standard measures that can be operationalized for the Lines of Business and Sub-Functions within the Business Reference Model

PEOPLE	PROCESS	TECHNOLOGY	CUSTOMER	BUSINESS RESULTS
<ul style="list-style-type: none"> ◆ Employee Satisfaction and Quality of Work Life ◆ Recruitment & Retention ◆ Employee Development ◆ Management Ratios 	<ul style="list-style-type: none"> ◆ Productivity & Efficiency ◆ Quality ◆ Financial ◆ Cycle Time & Resource Time ◆ Infrastructure ◆ Innovation & Learning 	<ul style="list-style-type: none"> ◆ Quality & Efficiency ◆ Reliability & Availability ◆ Security ◆ User Satisfaction ◆ Core Management Processes ◆ Technology Infrastructure & Costs 	<ul style="list-style-type: none"> ◆ Customer Satisfaction ◆ Service Coverage ◆ Timeliness & Responsiveness ◆ Quality ◆ Accessibility ◆ Customer Benefit 	<ul style="list-style-type: none"> ◆ Mission Achievement / Outcomes* ◆ Financial Value

* Each Line of Business and Sub-Function will have a set of mission-specific outcomes that must be defined.

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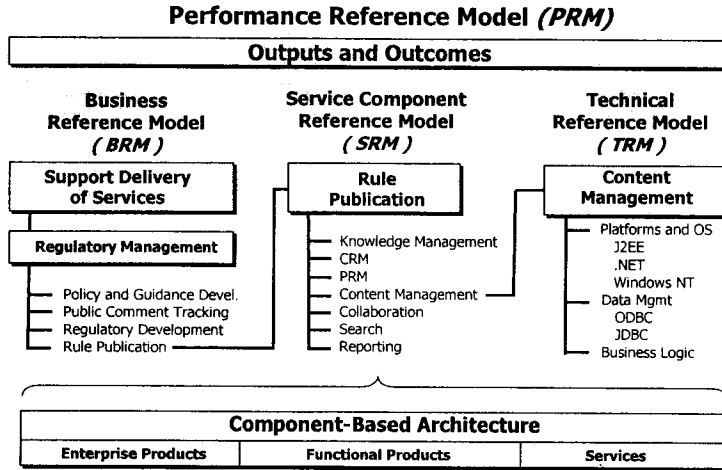
The Performance Reference Model will complement OMB's Program Assessment Rating Tool (PART) and Common Measures Initiative, as well as GPRA requirements, by defining output and outcome measures for each Line of Business and Sub-Function



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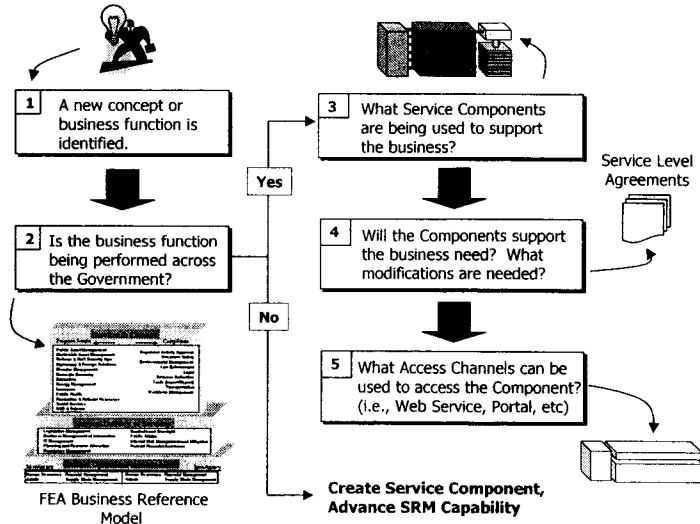
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The FEA reference models can be easily integrated along business lines, providing a foundation for Component-Based Architecture design



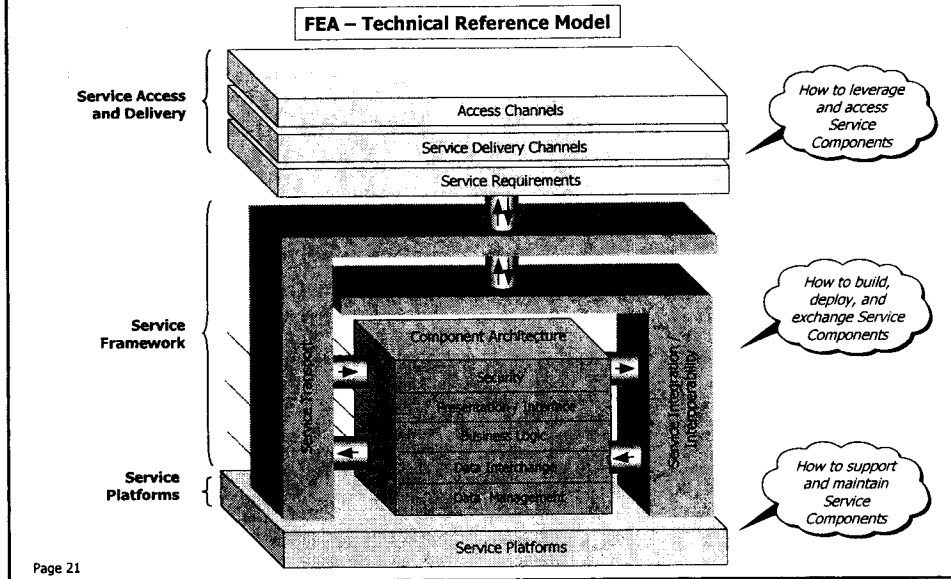
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The FEA Service Component Reference Model will support investment planning by providing a framework by which agencies can leverage existing services and components

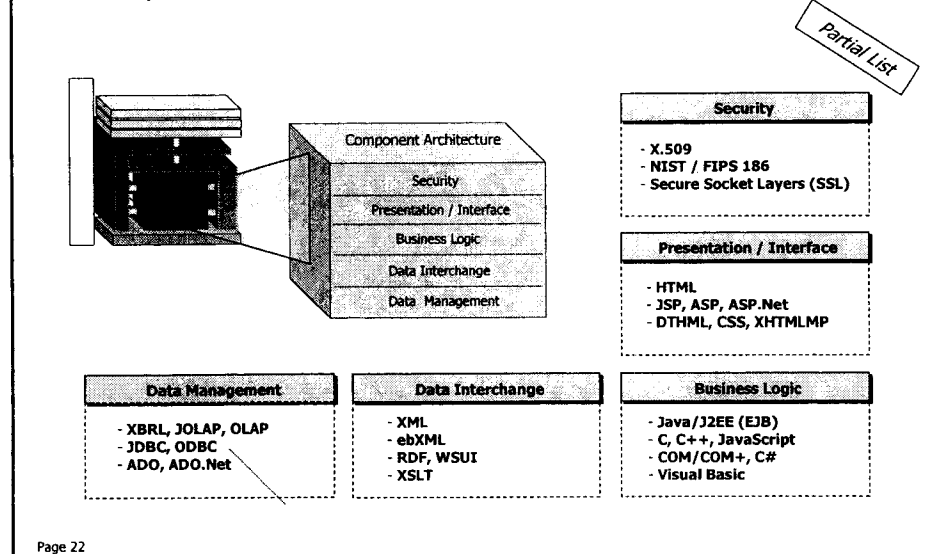


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The FEA Technical Reference Model provides an effective means by which Service Components can be leveraged, built, and deployed across the Federal Government



The FEA Technical Reference Model also provides guidance and technology recommendations supporting the development and implementation of Service Components that embrace a Component-Based Architecture



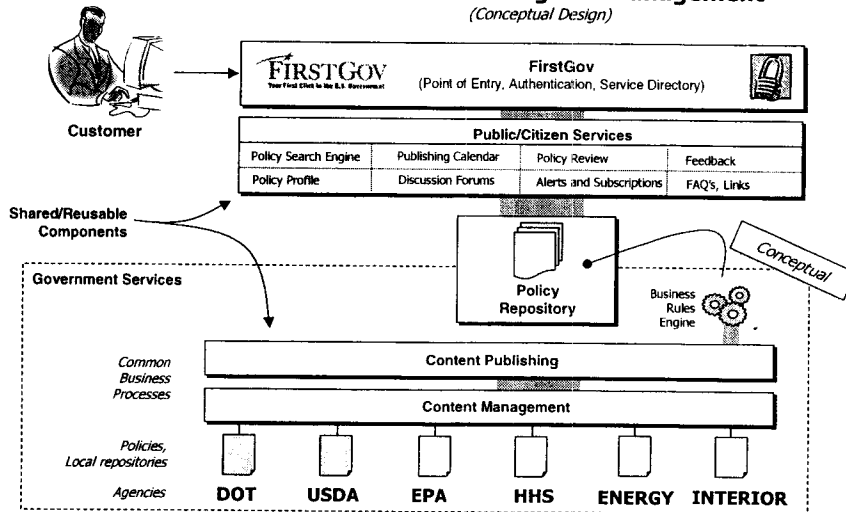
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Component-Based Architectures, and our ability to embrace them, can support the rapid assembly of E-Gov solutions

- ◆ The E-Gov Initiatives are positioned to transform existing thinking in how the Federal Government leverages technology to satisfy complex business objectives
- ◆ Priority funding consideration will be provided to IT investments that *leverage technology purchases across multiple entities**
- ◆ Component-Based Architectures (CBA) will:
 - Support reusability, portability, and interoperability
 - Leverage existing cross-agency investments
 - Leverage emerging and industry-proven technologies
 - J2EE, .NET, XML, SOAP, Web Services, UDDI
 - Reduce costs and risks associated with legacy integration, technology selection, maintenance and support
 - Improve:
 - Quality and consistency of services
 - Customer support (citizen and intra-governmental)
 - Delivery and speed to market

Component-Based Architectures can provide the basis for cross-Agency collaboration and E-Gov transformation

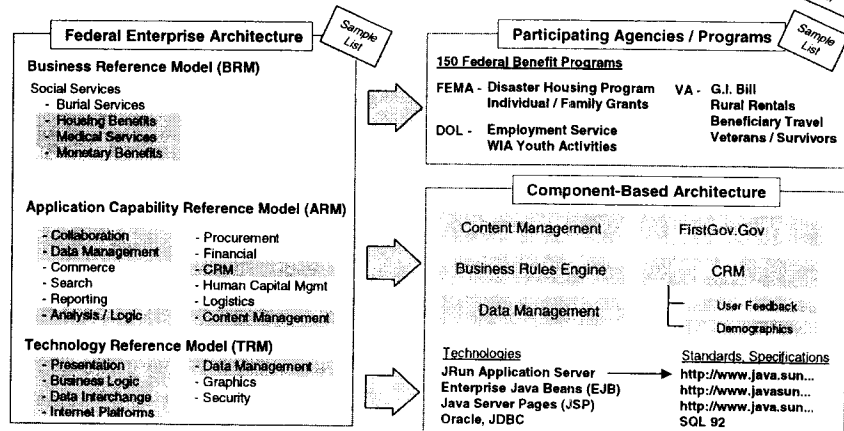
- Online Rulemaking and Management - (Conceptual Design)



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Components - and their supporting architectures - provide a "building block" approach to effectively leverage disparate business services and technologies

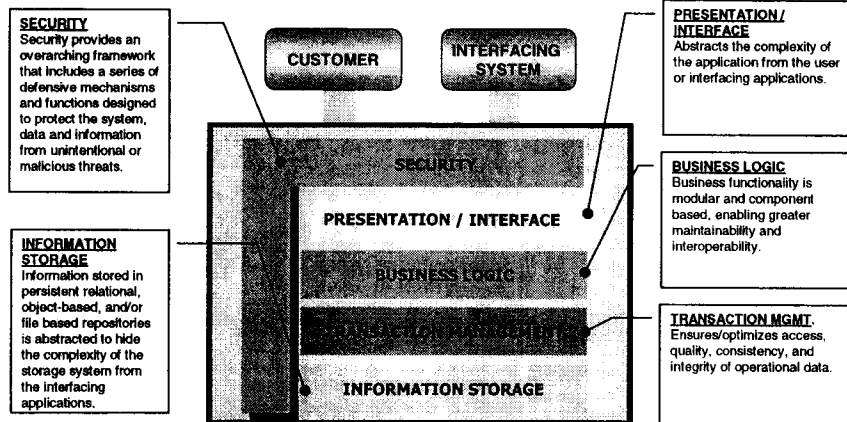
GovBenefits (Eligibility Assistance Online)



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To support development and reuse of components, best practices outline the use of a tiered solution architecture

- Solution Design and Development -
(Conceptual Framework)



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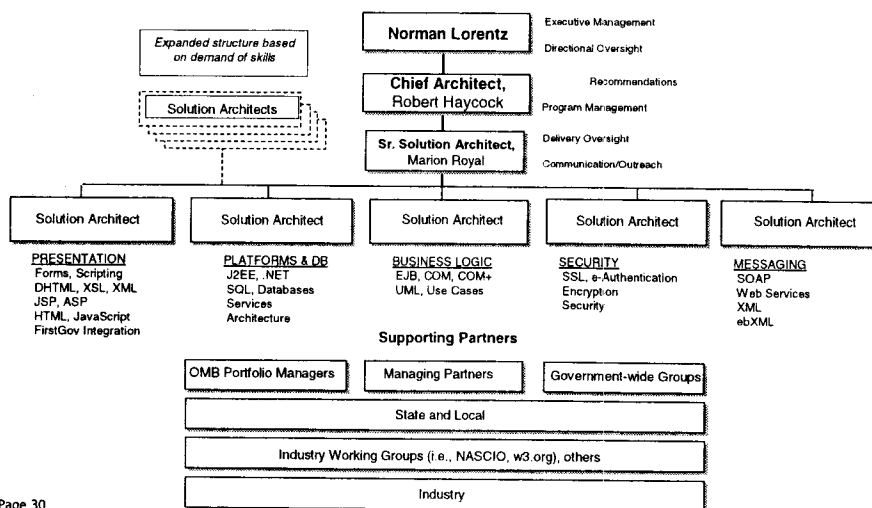
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The Solution Architects Working Group (SAWG) is focused on assisting the 24 Presidential Priority E-Gov Initiatives in areas related to:

- ◆ **Solution Architecture Planning**
 - Review and / or creation of supporting documentation
 - Forward-thinking approaches – aimed at risk mitigation
 - Conveyance of best practices and lessons learned based on years of knowledge and expertise
- ◆ **Architecture Design**
 - Identification of components, buy vs. build methodologies
 - Component-Based implementations – leveraging existing capabilities across the Federal Government (i.e., Pay.Gov, FirstGov.gov, etc)
 - Rapid Development and Enterprise Architecture methodologies – what are the critical successes, minimize stranded investments
- ◆ **Expertise and Knowledge**
 - XML, Web Services (what's the right approach)
 - Security, Authentication (what you need to plan for now)
 - Hosting and Platforms (leveraging what's available now)
- ◆ **Relationships with other Federal, State and Industry Working Groups**
 - XML Working Group, Federal Architecture Working Group (FAWG)
 - NASCIO
 - Industry Advisory Council (IAC), OASIS (Interoperability)

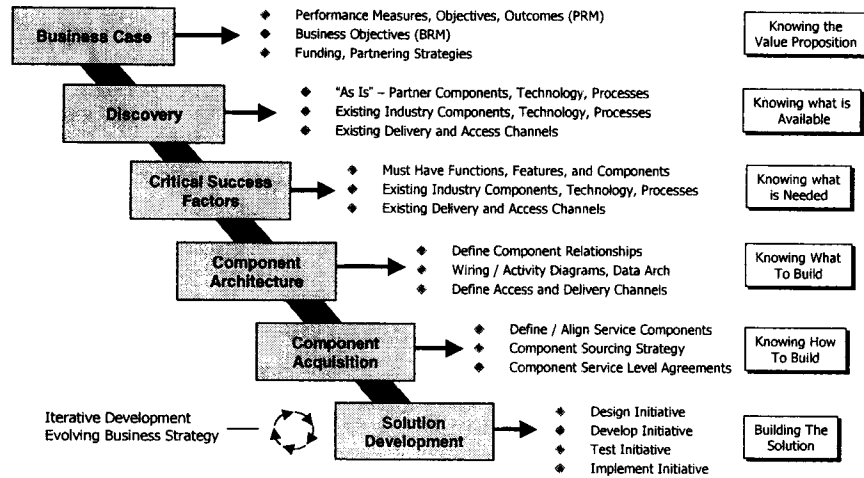
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The SAWG Leadership Team consists of solution architects who are focused across vertical areas of expertise



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While still in development, the SAWG has defined the following high-level SDLC areas to support the e-Gov Initiatives



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Near-Term Next Steps for the SAWG and FEA

Solution Architects Working Group

- ◆ Continue to engage with E-Gov Initiatives
- ◆ Continue creation of the E-Gov Solution Development Life Cycle (SDLC)
 - Intended to supplement existing SDLC's
 - Focused on cross-agency collaboration and development
 - Will identify and provide examples of supporting Artifacts
- ◆ Continue to create and deliver Intellectual Capital
 - Best Practices
 - Lessons Learned
 - Case Studies, White Papers
 - Delivered through <http://www.feapmo.gov>

Federal Enterprise Architecture

- ◆ Issue *FEA Management and Maintenance Plan* to describe continued upkeep and agency use of the FEA reference models
- ◆ Continue to define and validate the draft Service Component, Technical and Data Reference Models
- ◆ Work with OMB and Federal Agencies to define government-wide and Line of Business-specific performance measures and outcomes (Performance Reference Model)
- ◆ Continue consultations with defense and intelligence agencies to obtain their input on the Business Reference Model
- ◆ Continue to collect agency comments on the Business Reference Model, Version 1, issue draft revision in December 2002 for agency review, and issue updated model in February 2003
- ◆ Launch FEAMS on www.feapmo.gov

