

Managing in Turbulent Times

Federal Enterprise Transformation Using an Enterprise Architecture

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EXPERIENCE. RESULTS.

Managing in turbulent times

- The definition of the success for a Federal agency has changed with the enforcement of the President's Management Agenda (PMA) and the OMB standards
- Federal agencies are being required to transition to a more performance driven enterprise model focused directly on their customers and their requirements for high-value services
- Agency budgets are required to map directly to mission outputs required from the agency, and to the PMA and OMB standards
- Agencies are being required to transform their organizations to be more customer-centric with clear metrics for success

Elements of enterprise transformation

- An **Enterprise Operations Concept** (vision and strategy) tied to the agency's mission and results, and way of doing business – reengineered with streamlined business processes
- An **Enterprise Architecture (EA)** that implements the operations concept
 - All technology projects are chartered from the EA, held in full compliance to the EA to deliver the results required
- Formal **Program Management** with key people, processes, and tools
- Strict **Program Governance** including a lifecycle methodology and definitive criteria to compete each phase
- An agency **Business Case Analysis (BCA)** (Exhibit 300) based on the EA with formal return on Investment over a 5-year period with compliance required; includes a 5-year budget portfolio plan

To gain budget approval agencies must

- Baseline the current organization issues to be solved
- Set the "to be" target — define the transformed organization, operations concept, and EA for agency mission success
- Lay out the road map to the "to be" target with formal plans, approved baselines, and delivery milestones defined
- Stay on that road using formal management and governance to ensure compliance and correct any variations from the road map

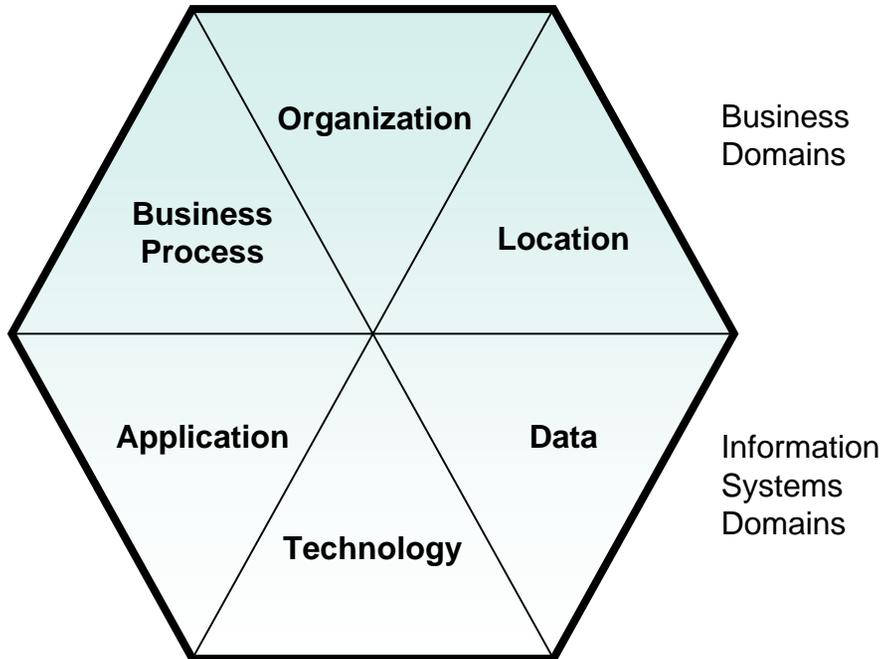


Agencies must achieve business goals

<p>Strategic/ External</p>	<ul style="list-style-type: none"> • Become more customer-facing to more and different customers — know your customers well • Improve agency mission success — define success • Reduce mission risk — set the target and stay on the road
<p>Tactical/ Internal</p>	<ul style="list-style-type: none"> • Improve top management information and service-level metrics about every critical business element • Improve service throughput • Cut delivery time • Cut unit service costs • Increase data sharing • Reduce capital investment • Leverage existing infrastructure investment
<p>Operational Internal or Outsourced</p>	<ul style="list-style-type: none"> • Establish and improve service level agreements • Reduce operational issues and risks • Improve productivity • Optimize staffing

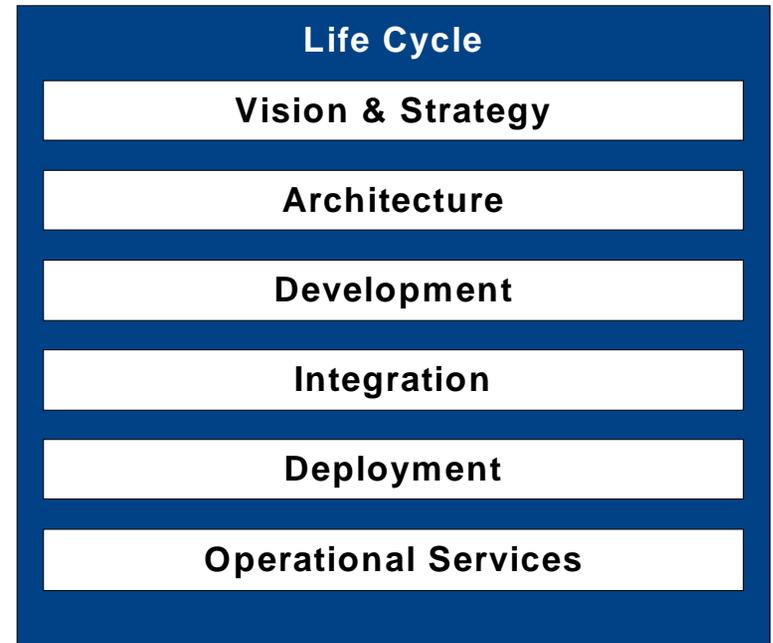
Integrate all domains of change and life-cycle phases

Enterprise Architecture



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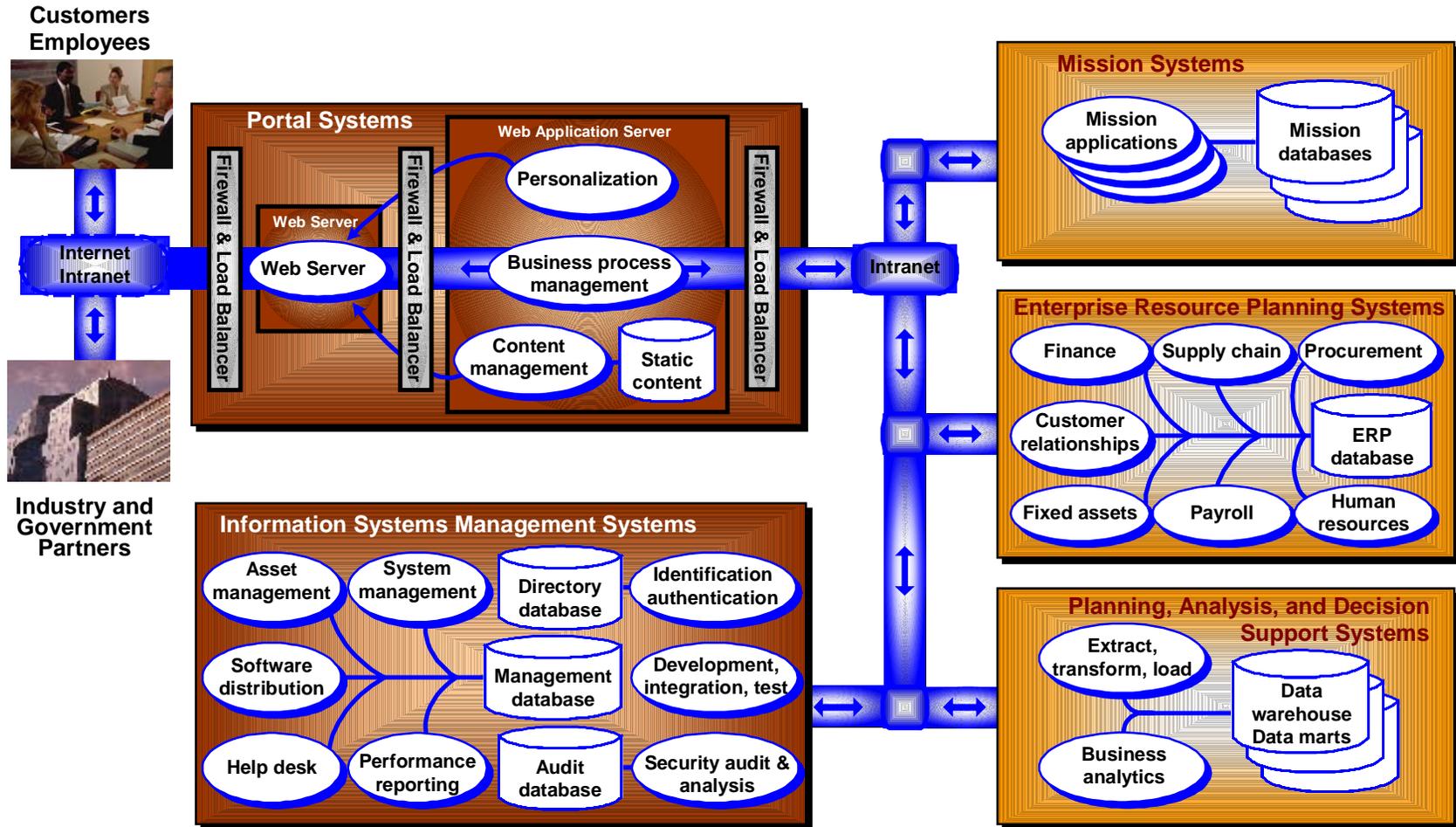
CSC Catalyst looks at a business problem and the impact of change from six perspectives, known as the *domains of change*.



One of the strengths of CSC CatalystSM is that all life-cycle phases are available and already integrated.

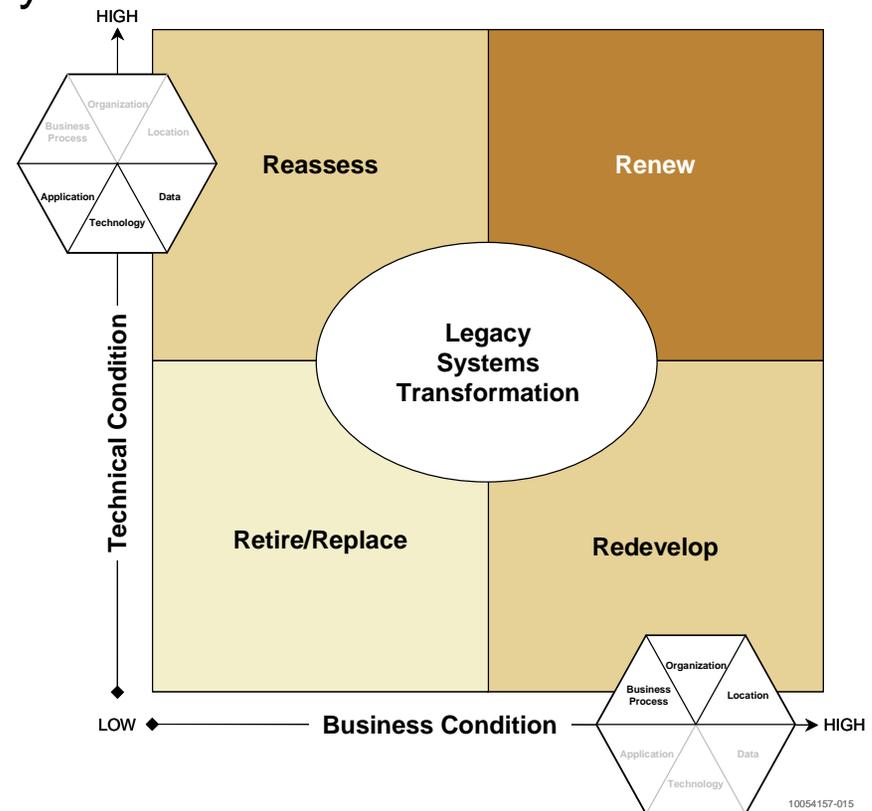
SM CSC Catalyst is a service mark of Computer Sciences Corporation.

Enterprise information systems architecture scope

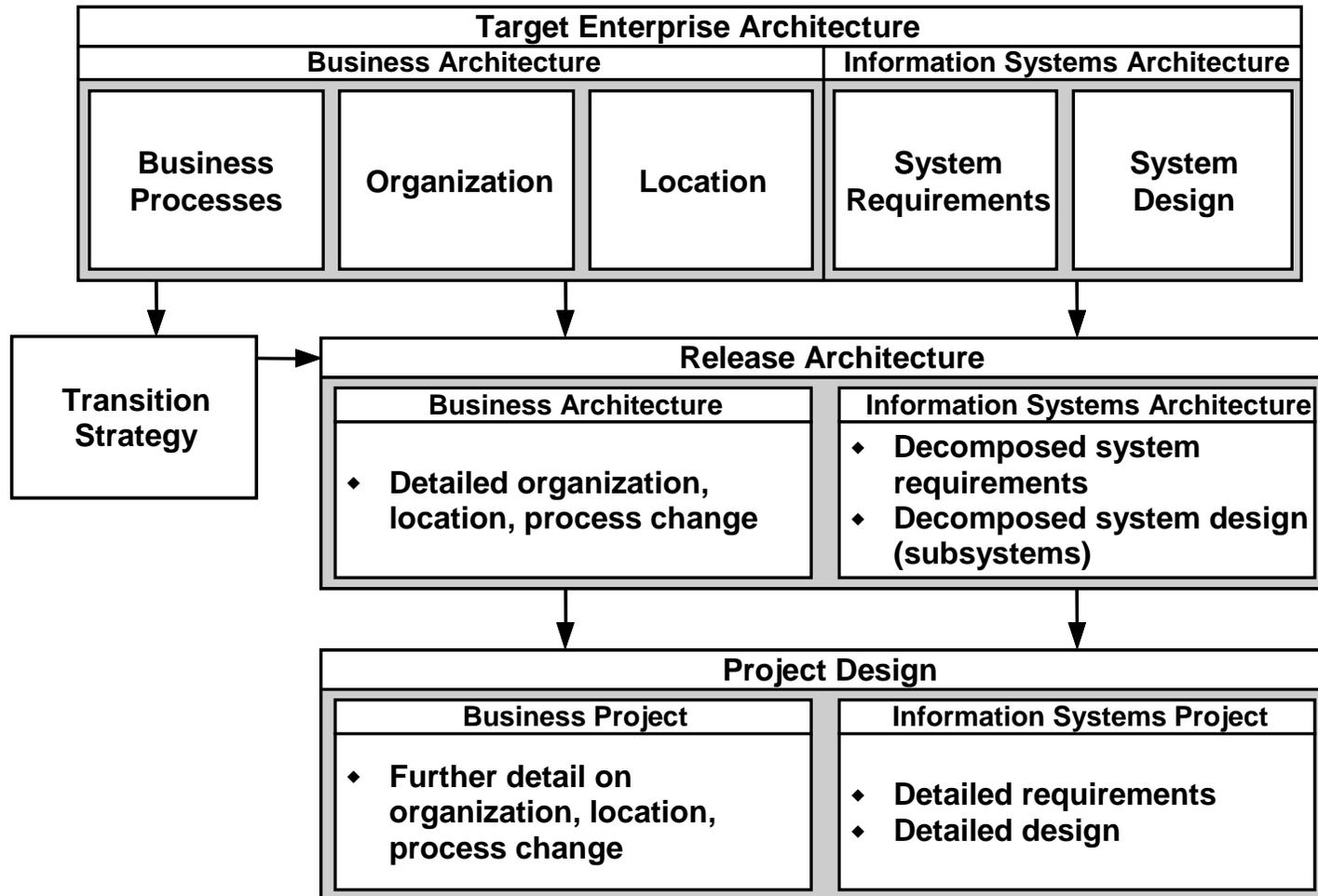


Develop a transition strategy (portfolio management)

- Legacy process integration strategy
- Legacy systems transformation strategy
- Intermediate release states for all six domains of change with sequencing and scheduling driven by business case
 - Business priorities
 - Technical feasibility
 - Organization capacity
 - Return on investment
 - Retirement of legacy systems
 - Risk

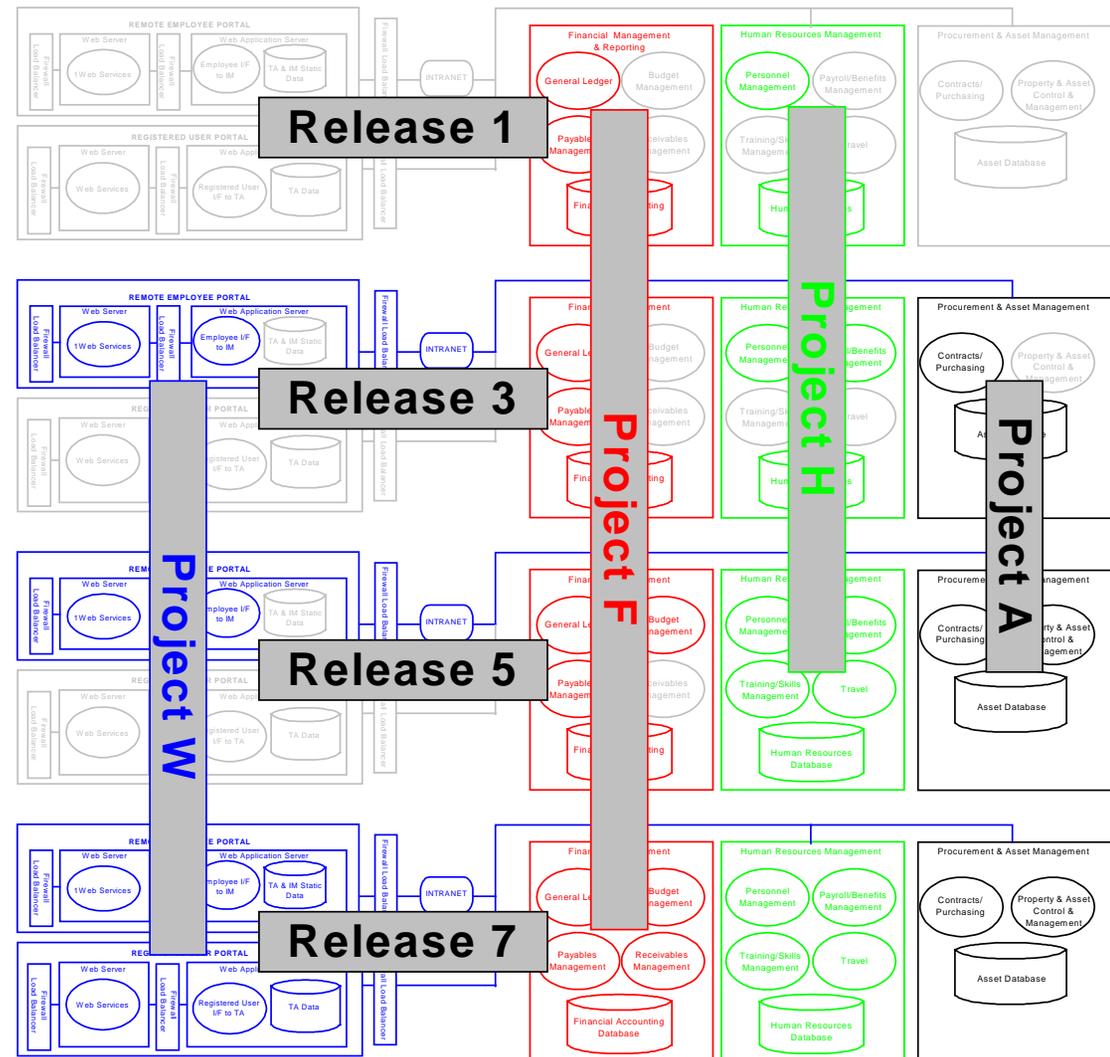


Charter projects from the enterprise architecture



Develop and integrate the release

- Each release builds new capabilities
- All components must integrate to keep the enterprise operating
- Information systems development must keep pace with business domain change
- Each release provides benefits to the enterprise while progressing to the target state
- End-to-end and stress testing demonstrates readiness for operations



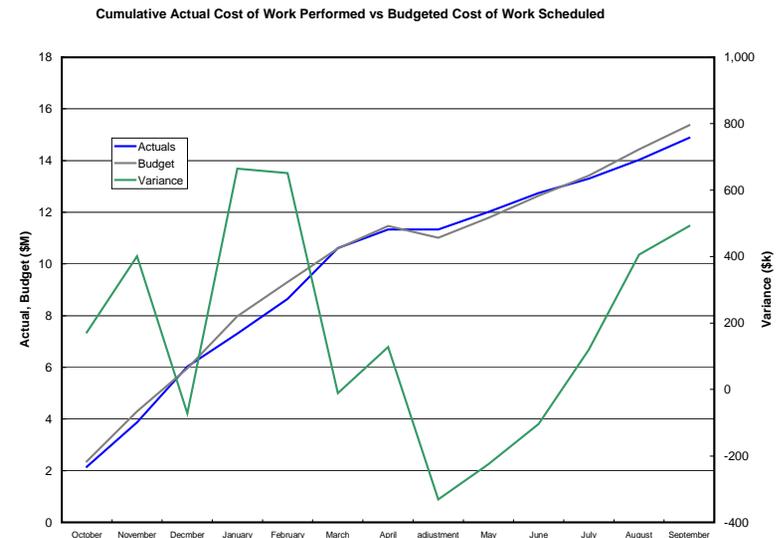
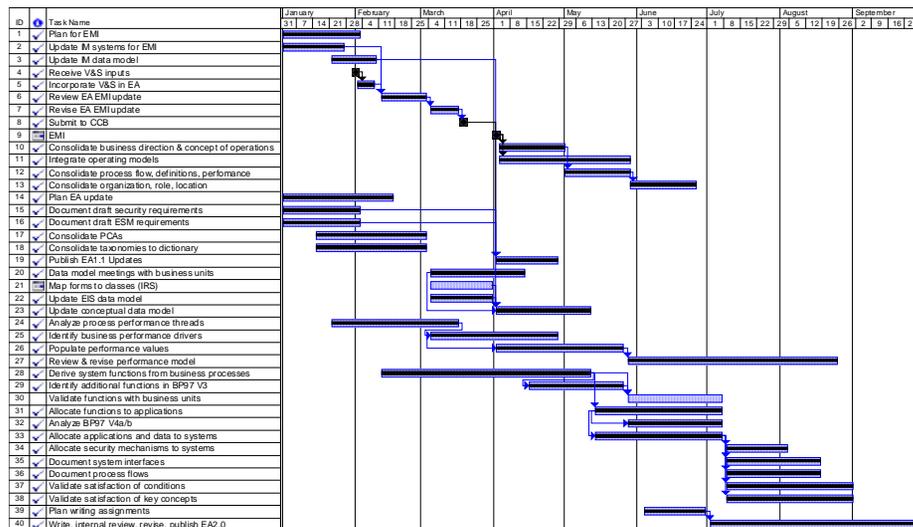
Deploy the release

- Assess organizational capacity
- Align business domains and information systems domains
- Train on new processes and information systems
- Survey deployment sites
- Plan each step
- Plan for rollback in the event of unforeseen obstacles
- Test in the operational environment
- Deploy into pilot parallel operations
- Transition business units incrementally

Manage programs to controlled baselines

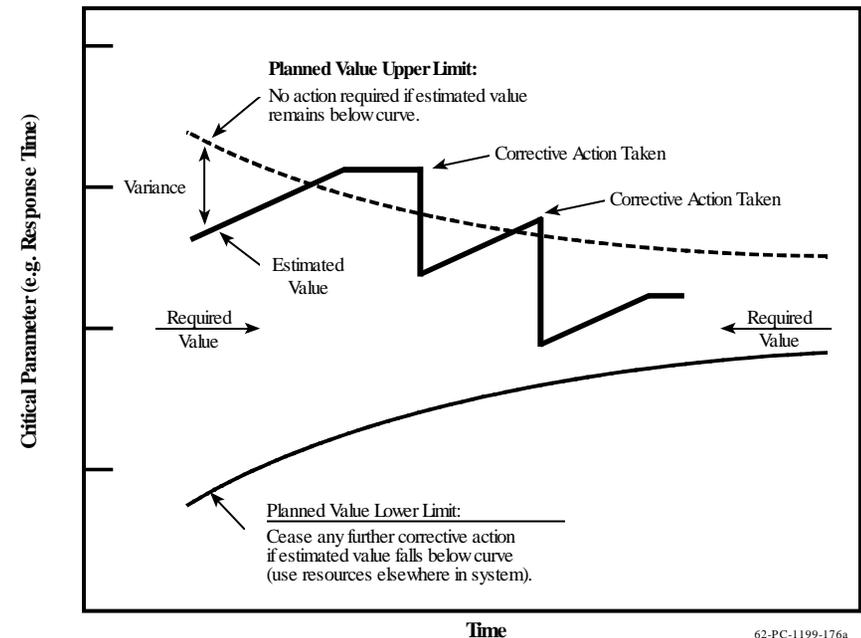
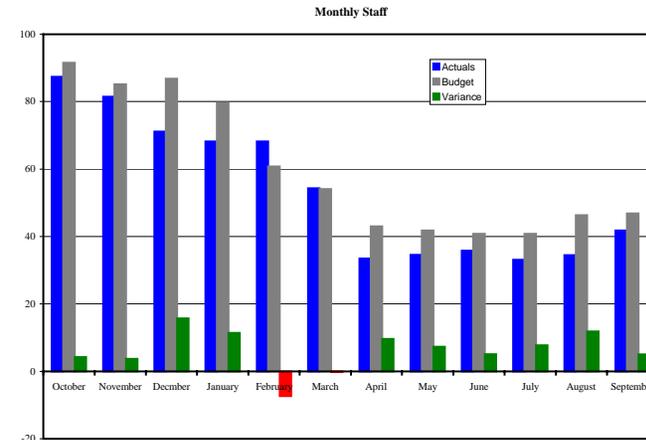
- Integrated master schedule
 - WBS element completion
 - Deliverables and milestones
 - Dependencies

- Earned value
 - Budgeted cost of work scheduled
 - Budgeted cost of work performed
 - Actual cost of work performed



Manage programs to controlled baselines (cont'd)

- Resources
 - Staffing
 - Budget
 - Materials and facilities
- Technical performance measurements
- Variance analysis
- Risk assessment
- Issue status
- Corrective action plans
- Program control baselines replanning



Governance: Configuration management

- Identify program baselines (management and technical)
- Identify configuration items
- Document change requests
- Approve and schedule change requests
 - Configuration control board
- Maintain version control and track changes
- Report configuration status at program management reviews

Governance: Quality management

- Set quality goals
- Plan quality program
- Collect and analyze data
 - Process quality
 - Product quality
- Report quality metrics at program management reviews
- Plan quality improvements

Governance: Formal life-cycle reviews

- Enterprise architecture
- Project reviews
 - System requirements
 - System design
 - Preliminary design review
 - Critical design review
- Release reviews
 - Test readiness review
 - Operational readiness review

Establish executive steering board

- Provide guidance on transformation strategy and priorities
- Validate that projects remain aligned
- Assess achievement of milestone exit criteria, based on the enterprise lifecycle methodology, and approve continuation to the next milestone
- Assess each project's compliance with enterprise architecture and its positive business case
- Regularly review project status and issues
 - Schedule and perform regular external program status reviews for executive management and oversight authorities
 - Schedule and perform regular internal program management reviews with all projects participating

Develop an oversight scorecard – goal is to get to BLUE

Process Areas	1	2	3	4	5	6	7	8	9	0	1
Software Acquisition Management	R	R	R	Y	Y	Y	G	G	G	G	B
Configuration Management	R	R	R	Y	Y	G	G	G	B	B	B
Quality Assurance	R	R	R	Y	Y	G	G	G	B	B	B
Risk Management	R	R	R	Y	Y	G	B	B	B	B	B
Enterprise Architecture Compliance	R	Y	G	G	G	G	G	B	B	B	B
Human Capital Management	R	Y	Y	Y	Y	Y	G	G	B	B	B
Release Management Scheduling	R	Y	Y	Y	G	G	G	B	B	B	B
Cost and Schedule Estimating	R	R	Y	Y	G	G	G	G	B	B	B
Program Performance Management	R	R	Y	G	B	B	B	B	B	B	B
Enterprise Lifecycle Deployment	R	Y	Y	G	G	G	G	B	B	B	B
Management Reporting	R	Y	G	G	G	G	G	B	B	B	B

Enterprise integrator as a transformation partner

To achieve these ambitious performance and high-value goals, some agencies have turned to enterprise integration contractors as their long-term partners.

<p>Enterprise leadership talent Take us to the future</p>	<ul style="list-style-type: none"> • Mega program managers • Enterprise modernization architects • Thought leaders
<p>Enterprise mission consulting Deep agency knowledge</p>	<ul style="list-style-type: none"> • Organization: Mission specialists/organization transformation experts • Investment: Business case analysts/portfolio management analysts • Technical: Systems integration engineers/mission technology experts (SME)
<p>Solution construction Design/build/field our enabling systems</p>	<ul style="list-style-type: none"> • Program management/program wide governance/release management • Solution development methodology including rapid system development • Security engineering capabilities
<p>Solutions operations Run our systems/manage our infrastructure</p>	<ul style="list-style-type: none"> • Infrastructure design and technology experts, including total enterprise system management, security, and mission continuity • Operations and facilities experts

Integration contractors share accountability for success

- Proactive thought leadership — concepts and solutions offered
- Subject matter experts who know the agency's core business
- Experience in designing and building enterprise architectures
- Formal program management and governance processes, tools, and proven key personnel
 - Formal baselines — technical, cost, schedule, and budget
 - Baseline line variance management and tools with corrective actions
 - Risk management and issue escalation with alarm thresholds
 - Process for requirements specification, prioritization, approval
 - Release partitioning and allocation of resources
 - Formal change control governance process

Enterprise integrator roles and responsibilities

Enterprise Management	<ul style="list-style-type: none"> • Strategic planning • Technology trends • Change agent 	<ul style="list-style-type: none"> • Thought leadership • External interface • Oversight liaison
Operations Management	<ul style="list-style-type: none"> • Performance metrics for success • Customer interface • Issue escalation resolution 	<ul style="list-style-type: none"> • Anticipate customer needs • Business plan and results • Growth plan and results
Systems Integration	<ul style="list-style-type: none"> • Systems engineering • Enterprise architecture • Infrastructure engineering • Chief technologist • Modeling/simulation 	<ul style="list-style-type: none"> • Performance engineering • Security engineering • Integration/test • Deployment • Tradeoff analyses
Release Management	<ul style="list-style-type: none"> • Manage all deliveries • Manage critical path actions • Escalate issues 	<ul style="list-style-type: none"> • Expedite all delivery issues • Monthly Program Integration Review • Manage all performance issues
Transformation Management	<ul style="list-style-type: none"> • Plan 3-year road map • Develop target organization • Lead org change initiatives 	<ul style="list-style-type: none"> • Define business architecture • Transition management • Business case analyses • Customer calls/satisfaction data

Enterprise integrator roles and responsibilities

(Cont'd)

Governance	<ul style="list-style-type: none"> • Earned value management • Configuration management/CCB • MIS/management reports • Baseline definition/control • Technical reviews • Quality management 	<ul style="list-style-type: none"> • Process improvement/SEI • Delivery assurance/QA • Risk management/issue escalation • Work oversight/performance-based metrics
Program Management	<ul style="list-style-type: none"> • HR, F&A • Facilities • Development labs • 3-year budget • Acquisition management 	<ul style="list-style-type: none"> • Contracts • Communications • Prototype labs • Security • Program directives/policies
Customer Delivery	<ul style="list-style-type: none"> • Project management • R&D task management • Project development/SEI • Prototypes 	<ul style="list-style-type: none"> • Project governance • SME • Project engineering/SEI • Operational design

Managing in turbulent times

- Enterprise-wide transformation offers the opportunity to dramatically improve performance
- Leverage skills of an enterprise integration contractor to minimize risk and maximize success
- Focus internal staff on continuing operations and alignment with the contractor
- Establish the key elements for successful transformation
 - Enterprise architecture
 - Program management and governance