



Large IT Project Mgt

United States Country Report

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U.S. Federal Government IT

- \$38 billion per year invested
- Great opportunities for service, delivery
- Agent for strategic organization leverage
- Best practices, lessons learned plentiful
- High failure rate



IT Management Policies

■ Goals:

- ◆ Improved service delivery
- ◆ Increased productivity
- ◆ Improved decision making
- ◆ Reduce waste, burden on public
- ◆ More effective IT project management



Emerging IT Management Issues

- Y2K
- E-government
- Cyber security



Y2K – effects, lessons

- Top-level management attention
- Effective risk analysis
- Complete systems inventories
- Independent reviews from outside
- Comprehensive testing methods
- Business continuity / contingency planning



E-government - challenges

- Government Paperwork Elimination Act:
 - ◆ Interact electronically by October, 2003
 - ◆ Electronic signature with legal standing
 - ◆ Operate in global electronic environment
- Lessen the “digital divide”



Cyber security - challenges

- Computer break-ins, denial of service
- Viruses
- Thefts
- Interdependence of IT systems



IT funding/decision/assessment

- Oversight agencies:
 - ◆ Office of Management and Budget
 - ◆ General Accounting Office
 - ◆ General Services Administration



IT project management elements

- Investment management
- Information management
- IT architecture
- System development environment
- Paperless environment
- Information security



Investment management

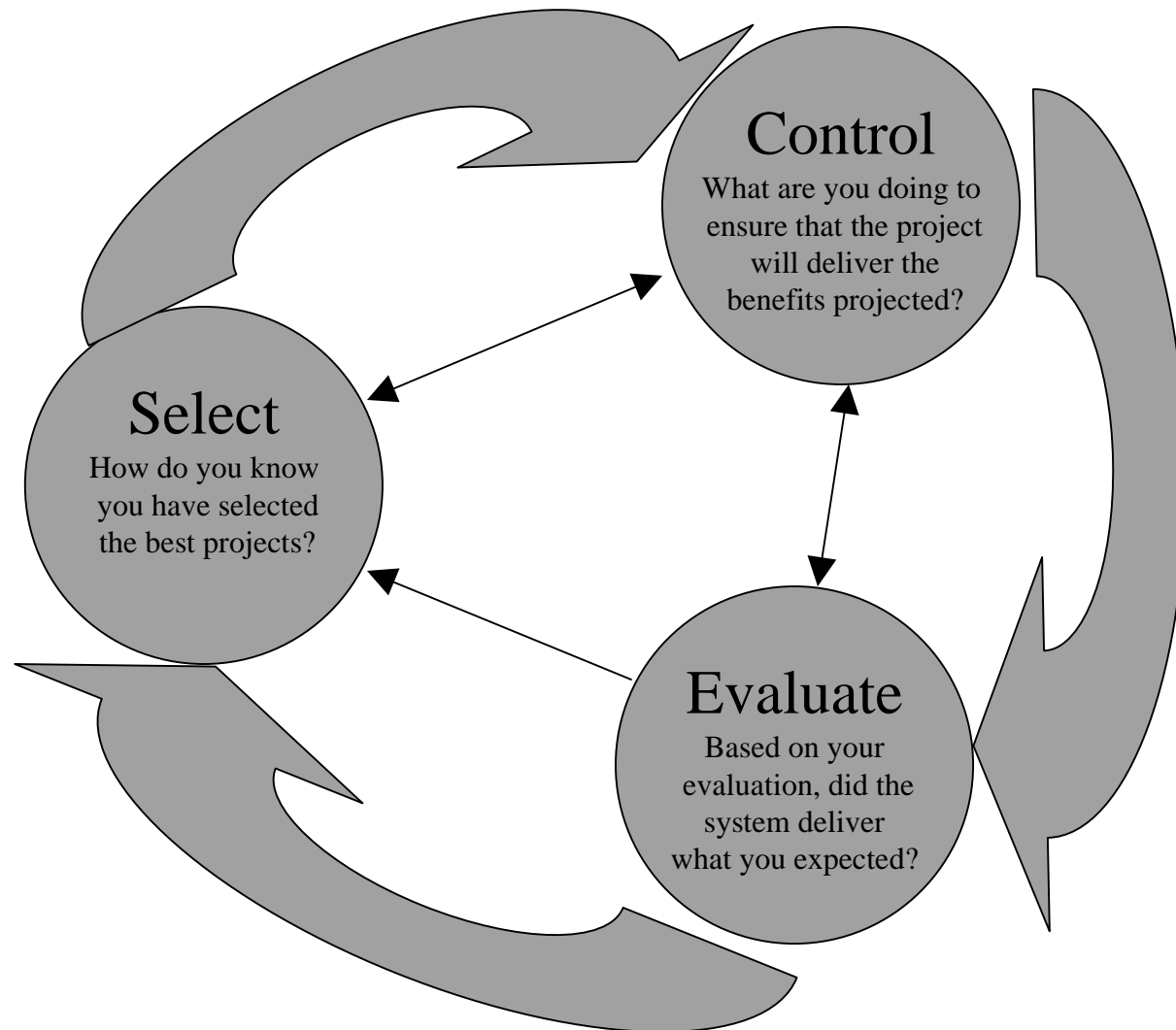
- Life-cycle process:

- ◆ Selection

- ◆ Control

- ◆ Evaluation

Investment process





Information management

- Elements -- collection, use, dissemination
- Provide public access to information
- Collect only needed information with practical utility
- Do not unduly burden the public



IT architecture

- Blueprint to guide development & evolution
- Describes:
 - ◆ Mission
 - ◆ Functions
 - ◆ Information needs and flow
- Provides rules and standards to ensure interoperable and maintainable systems



System development environment

- Provides consistent management & control
- Software development is riskiest IT issue
- Choices:
 - ◆ Inhouse staff
 - ◆ Commercial-Off-The-Shelf
 - ◆ Contractor development
 - ◆ Combination



Paperless environment

- Conduct of business in electronic form
- Interaction with agencies, public, commercial sector
- Authenticity, signature, and audit
- Maintain equal access



Information security

- Integrity
- Confidentiality
- Availability
- Process:
 - ◆ Risk assessment
 - ◆ Awareness
 - ◆ Controls
 - ◆ Evaluation
 - ◆ Central management



Cases and lessons

- U.S. Weather Service – AWIPS
- U.S. Geological Survey – National Atlas
- U.S. Dept Transportation – Docket Mgt
- Federal land/minerals records system
- Large agency modernization
- “ILOVEYOU” virus



Lessons

- “Grand designs” are risky & often fail
- Independent project review is valuable
- Key elements of IT management:
 - ◆ Lifecycle funding
 - ◆ Coherent enterprise architecture
 - ◆ Incremental goals
 - ◆ Tracking deliverables
 - ◆ Accurately measure benefits
- Most systems are interdependent today