

# Information Resources Management College National Defense University



***“A global learning community for government’s most promising information leaders.”***



# Mutual Challenges

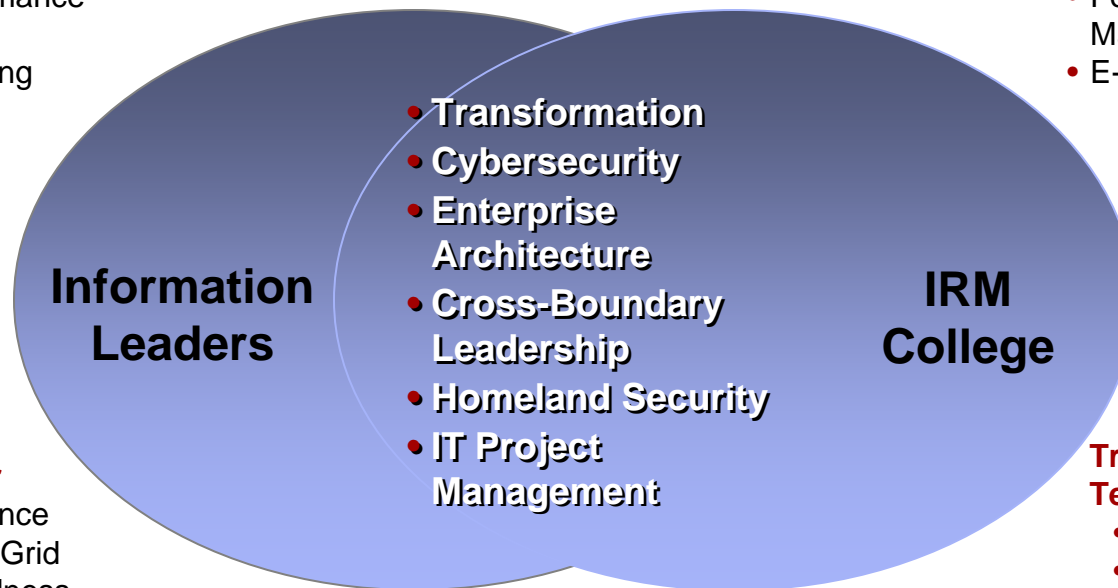
***IRM College understands the current priorities of government executives.***

## **President's Management Agenda**

- Strategic Human Capital Management
- Improved Financial Performance
- Expanded Electronic Government
- Budget and Performance Integration
- Competitive Sourcing

## **Congressional Reform Agenda**

- Chief Financial Officers Act
- Government Performance and Results Act (GPRA)
- Clinger-Cohen Act
- Federal Information Security Management Act (FISMA)
- E-Government Act



## **Global War on Terror**

- Information Assurance
- Global Information Grid
- Domestic Preparedness
- Intelligence and Information Sharing
- The "Information War"

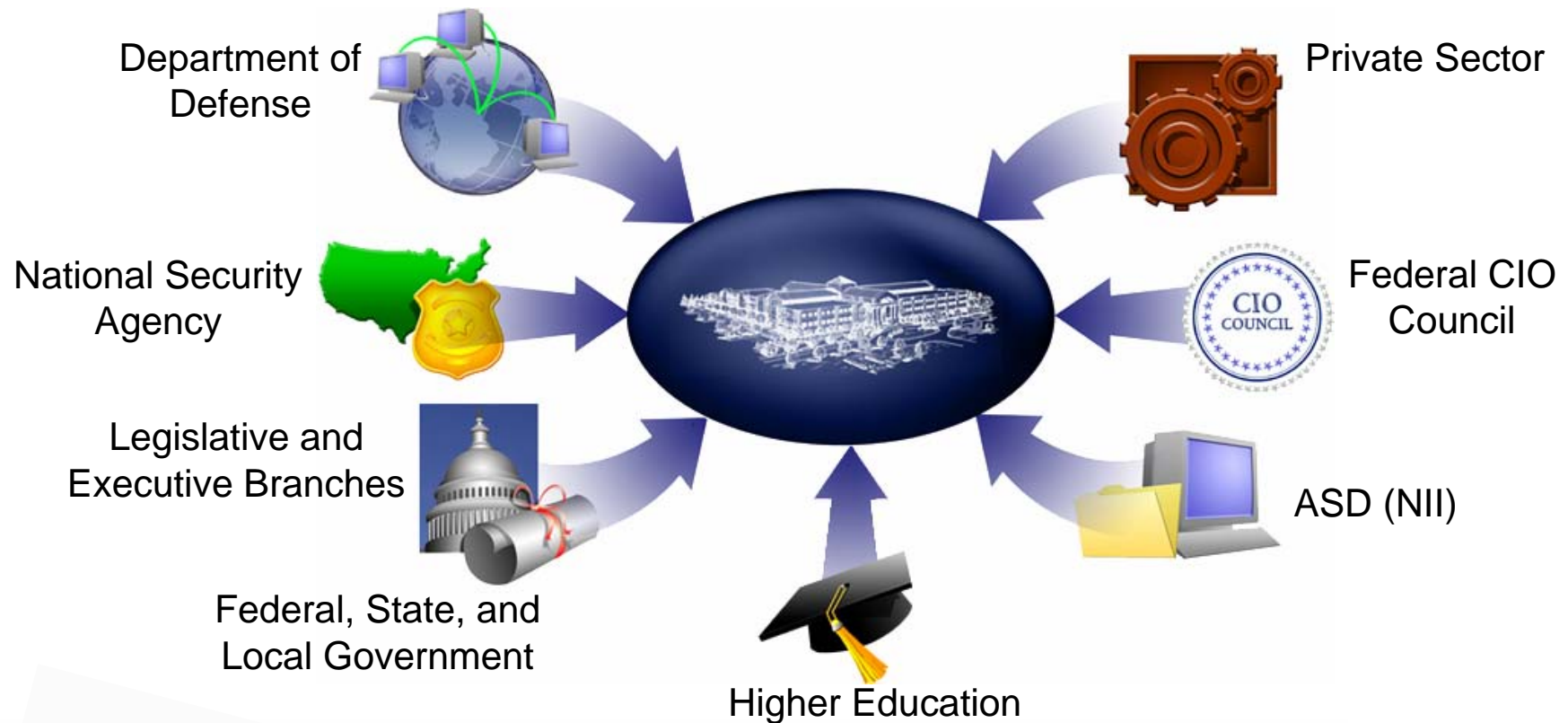
## **Transformation and Enabling Technologies**

- Business Modernization
- Knowledge Management
- Networking and Integration
- Net-centricity
- Data Mining
- Business Intelligence



# Shared Understanding

*IRM College is uniquely positioned to address the most important issues in government.*



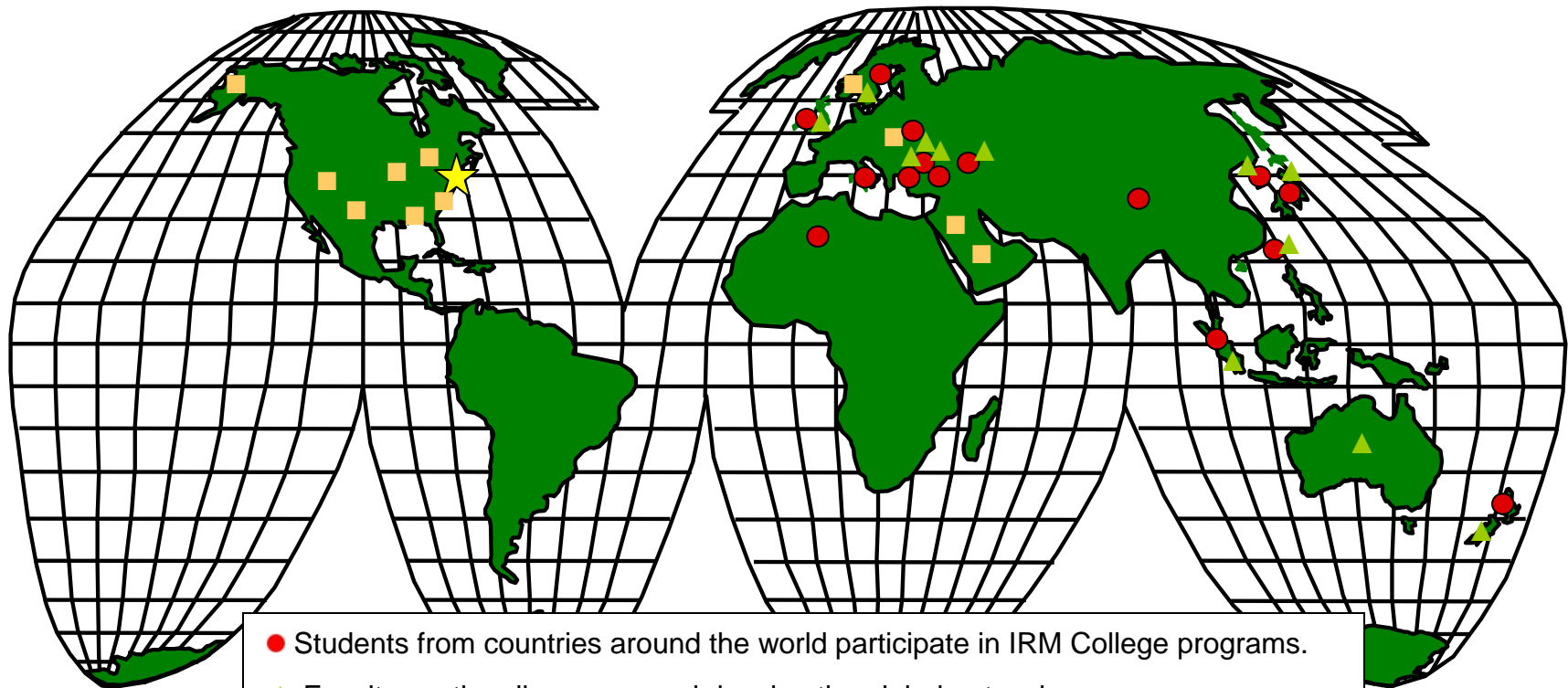
# IRM College Network

*IRM College fosters collaboration, an essential element of success for today's leaders and organizations.*



# Global Learning Community

*IRM College promotes global connectedness through a diverse student body and opportunities to communicate with information leaders from around the world.*



- Students from countries around the world participate in IRM College programs.
- ▲ Faculty continually access and develop the global network.
- U.S. students participate in IRM College courses from wherever they are located.



# Just for You – Learning Communities

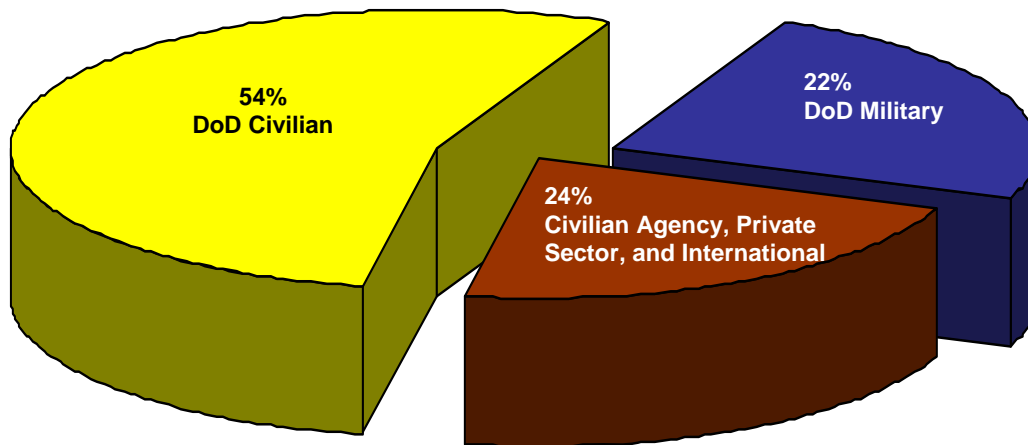
*IRM College engages current and future government leaders in interdisciplinary learning communities that explore ideas, questions, and solutions to mutual challenges.*

## Students

- Mid-career professionals (GS-13+ and O5+)
- Includes DoD, federal agency, private sector, and international students
- Hold bachelor's degrees or higher from regionally accredited institutions of higher education
- Earn graduate credits toward certificates, master's and doctoral degrees, or participate in classes for professional development

## Faculty

- 50 full-time faculty, 75% civilian, 75% with doctorates
- With a broad range of experiences and perspectives from academic, defense, federal, private sector, and international organizations
- Maintain interdisciplinary currency, relevance, and depth



# Wherever You Are

***Flexible learning programs accommodate the educational needs of students and their organizations.***

## **Resident Program (Advanced Management Program)**

- 14 weeks at Fort McNair
- Offered fall and spring
- Government/private sector field studies

## **eResident Courses**

- 1 week of online preparation
- 1 week in residence at Fort McNair
- 3 weeks to complete academic assignments for credit

## **Distributed Learning Courses**

- 1 week of online preparation
- 12 weeks of online coursework
- 3 weeks to complete academic assignments for credit
- Global, 24/7 access

Through the NDU Electives Program, courses are available in elective or DL format for ICAF and NWC students to complete towards IRM College certificates.





# Learning that is Current, Timely, and Future-Focused

***IRM College concentrates on the relevant questions, challenges, and opportunities facing today's and tomorrow's government leaders.***

- Students demonstrate learning through assignments relevant to their organizations' issues.
- Guest speakers from government and the private sector contribute unique perspectives.
- Innovative curricula prepare students to anticipate and create the future.
- Faculty facilitate participation in the IRM Community of Practice: <http://community.ndu.edu>.
- Graduates may join the IRM College Alumni Association: <http://www.irmcollege.org>.





# Strategic Leader Development

*IRM College prepares government and private sector leaders to direct the information component of national power.*

**Graduate-level courses, certificate programs, and educational services in:**

- Chief Information Officer competencies
- Information assurance
- Organizational transformation
- Domestic preparedness
- eGovernment
- Enterprise architecture
- Information technology project management
- Information operations
- Information technology acquisition



# Academic Partners

***IRM College graduates can apply 9-15 graduate credits toward selected master's and doctoral degree programs at these regionally accredited institutions.***

- Auburn University
- Capitol College
- Central Michigan University
- Clemson University
- Eastern Michigan University
- East Carolina University
- George Mason University
- Georgia Institute of Technology
- James Madison University
- Johns Hopkins University
- Mississippi State University
- New Mexico Tech
- Northeastern University
- Pace University
- Polytechnic University
- Regis University
- Rochester Institute of Technology
- San Diego State University
- Syracuse University
- Texas A&M
- Towson University
- University of Dallas
- University of Detroit Mercy
- University of Illinois at Urbana-Champaign
- University of Maryland Baltimore County
- University of Maryland University College
- University of Nebraska at Omaha
- University of North Carolina at Charlotte
- University of Pittsburgh
- University of Texas at San Antonio
- University of Tulsa
- University of Washington
- Walsh College



# Enrollment MOAs

***U.S. Federal Government agencies have the opportunity to sign a Memorandum of Agreement (MOA) with the IRM College on an annual basis.***

## **Benefits**

- Reduced tuition
- Priority registration
- Seat utilization reports



# Achievements and Recognition

*IRM College has been recognized for outstanding achievements.*

- “Best Practice Award” in Corporate/College Partnerships from Corporate University Xchange (February 2007)
- National Center of Academic Excellence (CAE) in Information Assurance Education (2006-2009)
- Tele-work in the Federal Government Leadership Award (October 2004)
- AFCEA Golden Link Award for partnering with industry (May 2003)
- eGovernment Trailblazer Award (June 2002)
- Federal 100 Award (2002 and 2001)
- “Best Practice Award” for Government Learning Organization from Corporate University Xchange (November 2000)
- “Excellence in Corporate Education” Award from London Financial Times (May 2000)



# IRM College Contacts

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- Dr. Elizabeth McDaniel, Dean of Faculty and Academic Programs; 202-685-3884; [mcdaniele@ndu.edu](mailto:mcdaniele@ndu.edu)
- Mr. Russell Quirici, Dean of Students and Administration; 202-685-3885; [quiricire@ndu.edu](mailto:quiricire@ndu.edu)
- Registrar's Office; 202-685-6300; [IRMCRegistrar@ndu.edu](mailto:IRMCRegistrar@ndu.edu)
- IRM College Website: <http://www.ndu.edu/irmc>
- IRM Community: <http://community.ndu.edu>
- IRM College Alumni Association: <http://www.irmcollege.org>
- **Mailing Address:**  
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Building 62, Marshall Hall  
300 5<sup>th</sup> Avenue  
Fort McNair, DC 20319-5066



Information Resources Management College  
National Defense University



EPA  
JumpStart  
Seminar

November 14, 2007



*"A global learning community for government's most promising information leaders."*



## Introduction





## Description

The EPA JumpStart Seminar is designed to develop the leadership pipeline of the Environmental Protection Agency. This three-day program, for up to 20 participants, offers EPA employees an opportunity to develop a more strategic view of the role of post-9/11 government and the issues and challenges of the 21st Century. The primary focus of this workshop is the effective use of collaboration, information, and human resources to improve organizational performance and mission accomplishment. After an examination of the business of government, participants will explore such topics as strategic thinking and planning, process improvement, information systems development, enterprise architecture, information assurance and privacy, and strategic management of both IT and human capital. Workshop participants will discuss best practices and lessons learned from real-world examples and will engage in seminar discussions and hands-on learning activities to develop their leadership capacity.



## Participants

The workshop is appropriate for all emerging government leaders who seek to improve their organization's performance. While designed for personnel at the GS/GM 9 to 12 (or equivalent) levels, the workshop may also be of benefit to more senior personnel who have joined the government within the past three years. All participants will receive a certificate of completion



## Location

This seminar is held at the National Defense University's campus in Washington, DC or at an EPA Regional Office.



# **FY08 Schedule**

**Feb 26-28, 2008**

**Apr 08-10, 2008**

**May 06-08, 2008**

**Jun 17-19, 2008**

**Aug 12-14, 2008**



# Program Manager

**Ruby Pew**

Office of the CIO, EPA  
1200 Pennsylvania Avenue, NW  
Washington DC 20460

**202-566-0347**



## Seminar Goal

**Students will be able to successfully contribute to the accomplishment of the Environmental Protection Agency's mission.**



## Seminar Objectives

- **Develop a more strategic view of the role of post-9/11 government.**
- **Use collaboration, information, and human resources to improve organizational performance and mission accomplishment.**
- **Explore such topics as strategic thinking and planning, process improvement, information systems development, enterprise architecture, information assurance and privacy, and strategic management of both IT and human capital.**
- **Discuss best practices and lessons learned from real-world examples and will engage in seminar discussions and hands-on learning activities to develop their leadership capacity.**

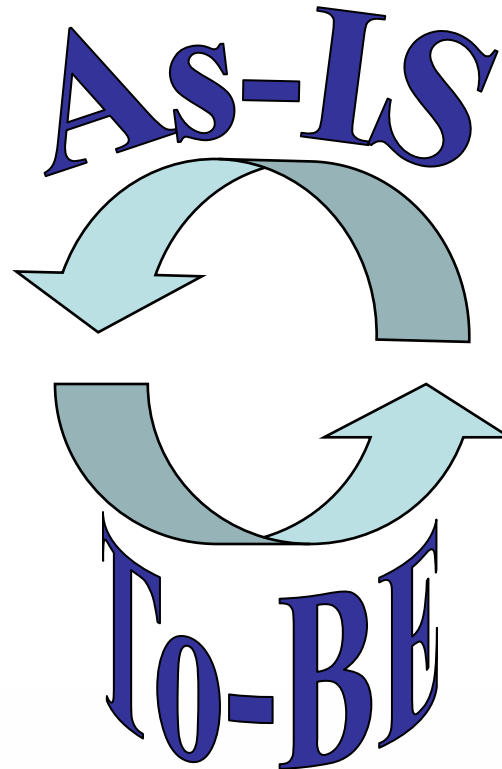




# Seminar Components

**Agency Leadership  
and Management  
Principles**

**Enterprise Architecture  
Planning Principles**



**Agency Specific  
Knowledge  
(Exercises)**

**Applying  
the Principles  
(Agency Case  
Studies)**



## Lessons

- Lesson 1: Introduction to JumpStart Seminar
- Lesson 2: The Business of Government
- Lesson 3: Strategic Thinking and Strategic Planning
- Lesson 4: Emerging Technologies
- Lesson 5: Business Process Improvement
- Lesson 6: Enterprise Architecture
- Lesson 7: Case Study
- Lesson 8: IT Capital Planning and Investment Management
- Lesson 9: Information Assurance and Privacy
- Lesson 10: Human Capital Management



## Current Course Lesson

### Lesson 1: Introduction to JumpStart Seminar

#### Scope

This lesson introduces the students to JumpStart Seminar. Students examine, in detail, the outline for all learning modules. Students are introduced to the several of the frameworks employed during the seminar. This module introduces participants to some of the tools that they will apply during their learning experience.

#### Lesson Outcomes--Students will be able to:

- a. Articulate the learning objectives of the course.
- b. Articulate the major topics of the course.



## Current Course Lessons

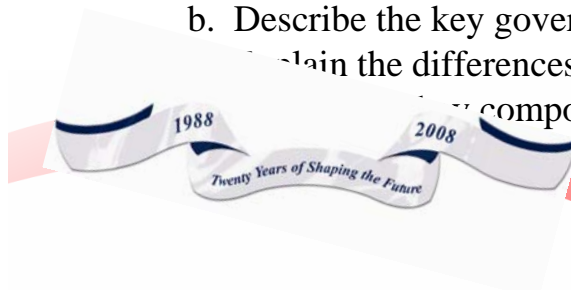
### Lesson 2: The Business of Government

#### Scope

This lesson examines government as a “business” by focusing on the differences in the public and private sectors. It describes trends in government reform with special attention to the reinvention, reform, and legislation of the last fifteen years. The lesson also explores the differences in industrial and information age organizations, and introduces the information age concepts of the knowledge worker and of intellectual and human capital. The lesson concludes with a discussion of the business of EPA and an examination of EPA’s strategic plan.

#### Lesson Outcomes--Students will be able to:

- a. Compare the public and private sectors and identify their differences in leadership, management, operations, and cultures.
- b. Describe the key government reform efforts of the last fifteen years.
- c. Explain the differences in industrial and information age organizations.
- d. Identify the components of EPA’s strategic plan.



## Current Course Lessons

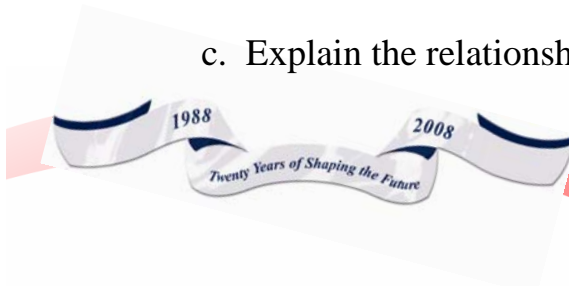
### Lesson 3: Strategic Thinking and Strategic Planning

#### Scope

This lesson examines what it means to think and plan strategically. It compares strategic thinking, strategic planning, and strategic programming, and explores the concept of creativity and its relationship to strategic planning. The lesson also examines strategic planning methodologies. The lesson concludes with a discussion of the relationship between strategic planning and performance management.

#### Lesson Outcomes--Students will be able to:

- a. Distinguish between strategic thinking, strategic planning, and strategic programming.
- b. Use environmental assessment methodologies to enhance strategic thinking and strategic planning.
- c. Explain the relationship between strategic planning and performance management.



## Current Course Lessons

### Lesson 4: Emerging Technologies

#### Scope

This lesson explores the major technology trends that are likely to affect the achievement of EPA's mission in the coming years. It examines technological developments in several key areas and analyzes their associated risks, benefits, and costs. The lesson then explores approaches for responding to technological opportunities and challenges in order to maximize their benefits and minimize their risks.

#### Lesson Outcomes--Students will be able to:

- a. Categorize emerging technologies according to their potential effect on the achievement of EPA's mission.
- b. Develop possible approaches for responding to technological opportunities and challenges.
- c. Recommend different courses of action that EPA can take as a response to technology trends.



## Current Course Lessons

### Lesson 5: Business Process Improvement

#### Scope

This lesson examines the business processes involved in achieving EPA's mission and strategic goals. The lesson considers what EPA's core business processes are and how Information Technology (IT) enables the business processes. The lesson examines performance measurement and its role in assessing the outcomes of business processes and EPA mission achievement. It discusses the causative events for business process improvement. The lesson concludes by considering how EPA might use process improvement strategies as a means of organizational transformation.

#### Lesson Outcomes--Students will be able to:

- a. Identify EPA's mission-derived core business processes and describe how IT enables the business processes.
- b. Describe the role of performance measures in assessing the outcomes of business processes and in determining the level of mission achievement.
- c. Describe events which drive business process improvement and the types of process improvement strategies that influence organizational transformation.





## Current Course Lessons

### Lesson 6: Enterprise Architecture

#### Scope

This lesson examines what an enterprise architecture (EA) is and how it might enable EPA business processes to accomplish the mission better. It considers OMB's concept of an EA and discusses EA costs and benefits. It contrasts business executives' support for an EA with the CIO's role in developing and implementing an EA and overcoming impediments to EA. The lesson concludes by discussing the implications and the benefits of EA for capital planning.

#### Lesson Outcomes--Students will be able to:

- a. Describe what an EA is and how it enables the business processes.
- b. Describe OMB's perspective of EA including the costs and benefits.
- c. Compare the CIO's role in leading EA implementation to business executive's role in supporting EA deployment.
- d. Discuss benefits and implications of EA for capital planning.

*Twenty Years of Shaping the Future*

## Current Course Lessons

### Lesson 7: Case Study

#### Scope

This lesson applies the concepts of the previous lessons in the IRMC JumpStart Program to a real-world case study that is directly related to EPA's mission. In particular, the case study relates and integrates the following topics: the business of government; strategic thinking; emerging technologies; business process improvement; and enterprise architecture.

#### Lesson Outcomes--Students will be able to:

- a. Apply concepts from the course to a real-world example in order to understand the challenges and opportunities facing EPA in the future.
- b. Compare and contrast how different management tools can be applied to complex problems.



## Current Course Lessons

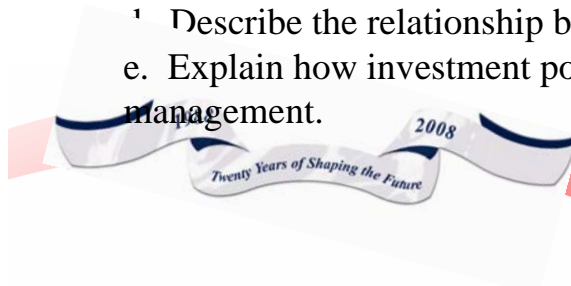
### Lesson 8: IT Capital Planning and Investment Management

#### Scope

This lesson explores the concepts of capital planning and investment control (CPIC) activities. It considers how CPIC governance is performed, how value and risk criteria could serve as evaluation factors for IT projects, and how a collection of IT projects form an IT investment portfolio. The lesson examines investment proposal components and the relationships among the financial case, the business case, and the technical proposal. In the context of a portfolio, it compares acquisition of new investments with management of older legacy IT investments. The lesson concludes by examining how IT investment portfolio performance necessitates effective project management.

#### Lesson Outcomes--Students will be able to:

- a. Describe the concepts and activities in CPIC including governance structures.
- b. Identify value and risk criteria for assessing investments.
- c. Explain how finance, business, and IT components in an investment case address the agency's mission.
- d. Describe the relationship between an investment portfolio and acquisition concepts.
- e. Explain how investment portfolio performance (and mission achievement) depends upon successful project management.



## Current Course Lessons

### Lesson 9: Information Assurance and Privacy

#### Scope

This lesson explores the concepts of information assurance (IA) and privacy within the broader context of risk management. It examines the definition of security and provides a framework for assessing security options within a risk management context. The lesson then explores how IA and privacy can be addressed within that framework. Finally, the lesson touches on Federal mandates in the areas of IA and privacy and discusses how they relate to EPA's mission.

#### Lesson Outcomes--Students will be able to:

- a. Define the concept of security within a risk management context and apply that concept via formal framework.
- b. Integrate information assurance and privacy into a formal security framework.

Assess how federal mandates in the areas of IA and privacy relate to EPA's mission.



## Current Course Lessons

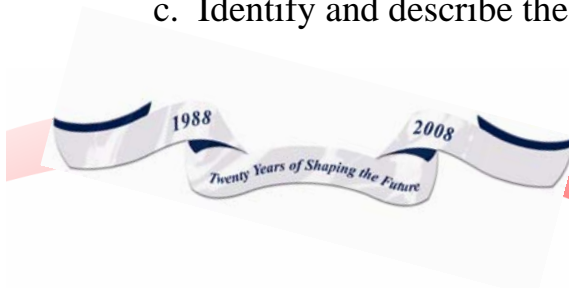
### Lesson 10: Human Capital Management

#### Scope

This lesson focuses on the information age concepts of the knowledge worker and of intellectual capital, examining their importance to 21st century government. It explores strategies for smarter recruiting, motivating, and retaining of the knowledge worker and discusses the criticality of education and training to a high performing, competitive workforce. It concludes with an examination of generational differences in the workplace.

#### Lesson Outcomes--Students will be able to:

- a. Explain the importance of the knowledge worker and of intellectual capital to 21st century government.
- b. Develop strategies for smarter recruiting, motivating, and retaining of the knowledge worker.
- c. Identify and describe the key differences in generations in today's workplace.



## Questions and Comments



Information Resources Management College  
National Defense University



**Pulling it All  
Together for  
the EPA  
JumpStart  
Seminar**



**November 14, 2007**



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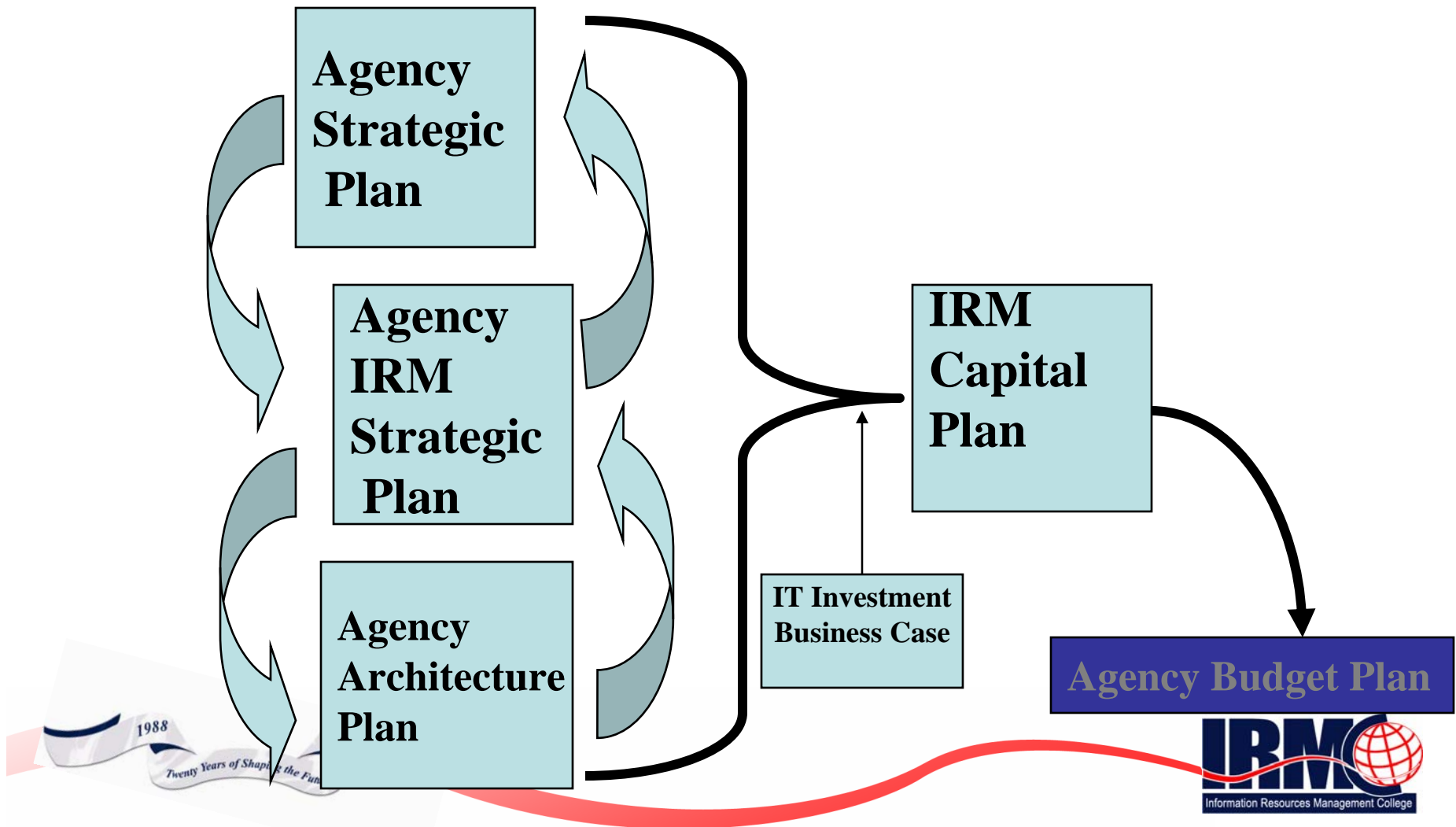




## Introduction

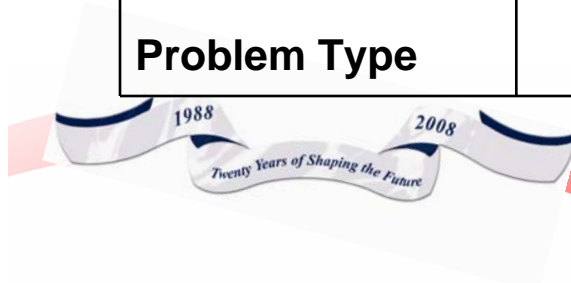


# Strategic Management Process

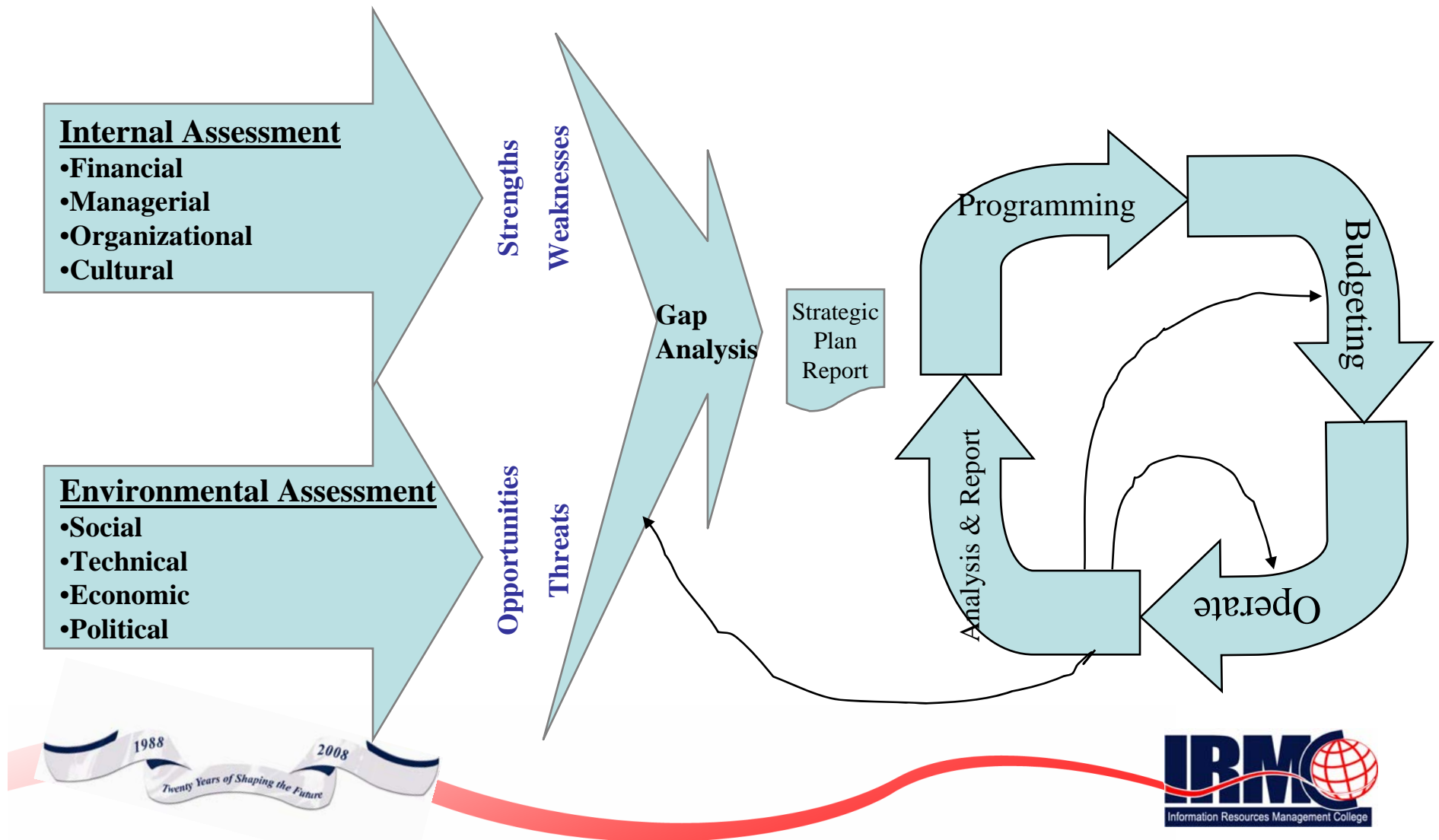


## Strategic Thinking vs. Strategic Programming

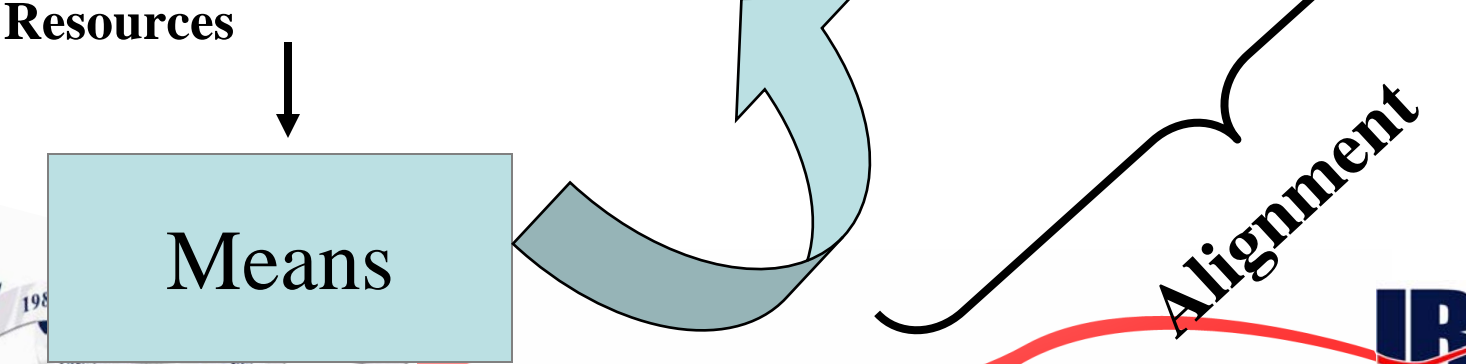
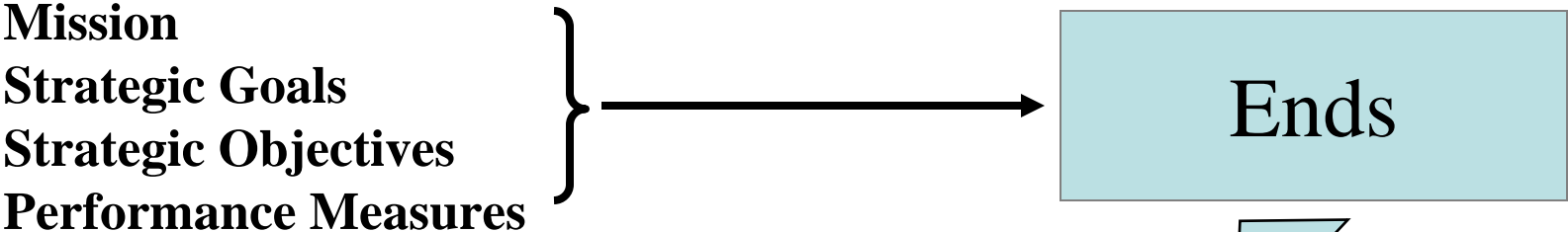
ITEM	Analytic Thinking	Systems Thinking
Metaphor	Well-oiled Machine Swiss Clock	Biological Organism
Slogan	“One best way”	“There is more than one right way”
Unit of Study	Parts/Atoms	Wholes/System
Characterized by	Reductionism and Mechanism	Expansionism Teleology
Nature of the Environment	Closed/Very Stable	Open/Dynamic
Assumption	Whole = Sum of Parts	Whole > Sum of Parts
Cause and Effect	Linear and Static	Nonlinear and dynamic
Problem Type	Tame	Wicked



## Typical Strategic Planning Process



# GPRA-CCA Planning Framework



## GAO/OMB Strategic Plan Components

- Mission Statement
- Vision Statement (optional)
- General (Strategic) Goals and General (Strategic) Objectives
- Strategies to achieve goals and objectives
- Relationship between general and annual performance goals
- Key External Factors over which you have no control
- Program Evaluations
- Treatment/coordination of Cross-Cutting Functions (Optional)
- Data Capacity (Optional)
- Major Management Problems and High-Risk Areas (Optional)
- Congressional and Stakeholder Consultations



## Best Practice Plan Components

- Purpose of Plan Statement
- Introduction to Agency or Program
- Environmental Assessment (STEP Analysis) Summary
- Mission Statement with narrative
- Vision Statement with narrative
- General (Strategic) Goals with narrative description
  - Performance measure with definition
  - General (Strategic) Objectives
  - Strategies to achieve goals and objectives
  - Program Evaluations
  - External Factors
- Congressional and Stakeholder Consultations
- Migration Strategy/Risk Management
- Appendix
  - Relationship between general and annual performance goals
  - External Factors Analysis
  - Treatment/coordination of Cross-Cutting Functions
  - Data Capacity
  - Treatment of Major Management Problems and High-Risk Areas
  - Legislation supporting mission areas



## Today's Agency/IRM Strategic Issues

- Delivering products and services that Citizens and Customers want and need.
- Assuring Citizens and Customers that their information is protected.
- Demonstrating good stewardship of our resources by managing risks and delivering value.
- Leading a skilled workforce that delivers results that citizens and customers care about.
- Improving our business processes to meet Citizen and Customer expectations.





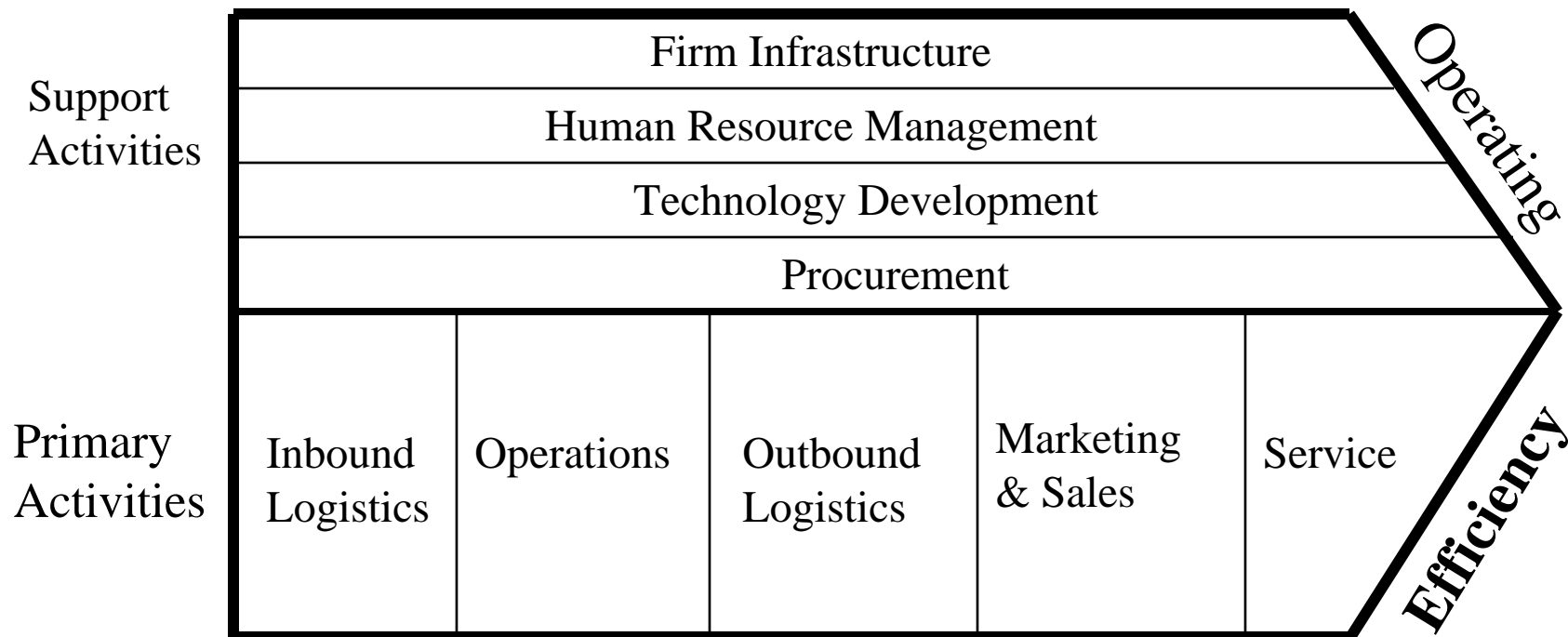
## Common Agency/IRM Strategies

- Strategic Sourcing and eGovernment Initiatives (Lesson 3-Strategic Thinking).
- Leveraging “new” information technology (Lesson 4-Emerging Technologies).
- Business Process Improvement—“radically” changing a current business process (Lesson 5-Business Process Improvement).
- Shared Services and consolidation of assets (Lesson 6-Enterprise Architecture).
- IT Capital Planning and Investment Control (Lesson 8-IT CPIC).
- Information Assurance and Privacy Programs (Lesson 9-IA and Privacy).
- Workforce Shaping (Lesson 10-Human Capital).

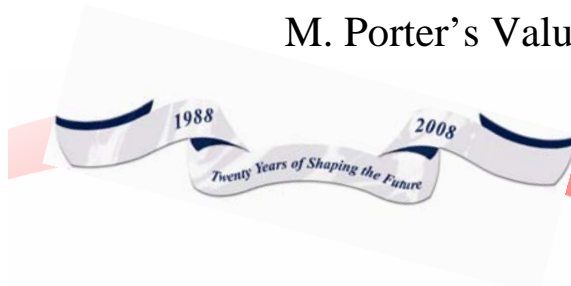


## A Strategic Thinking Framework

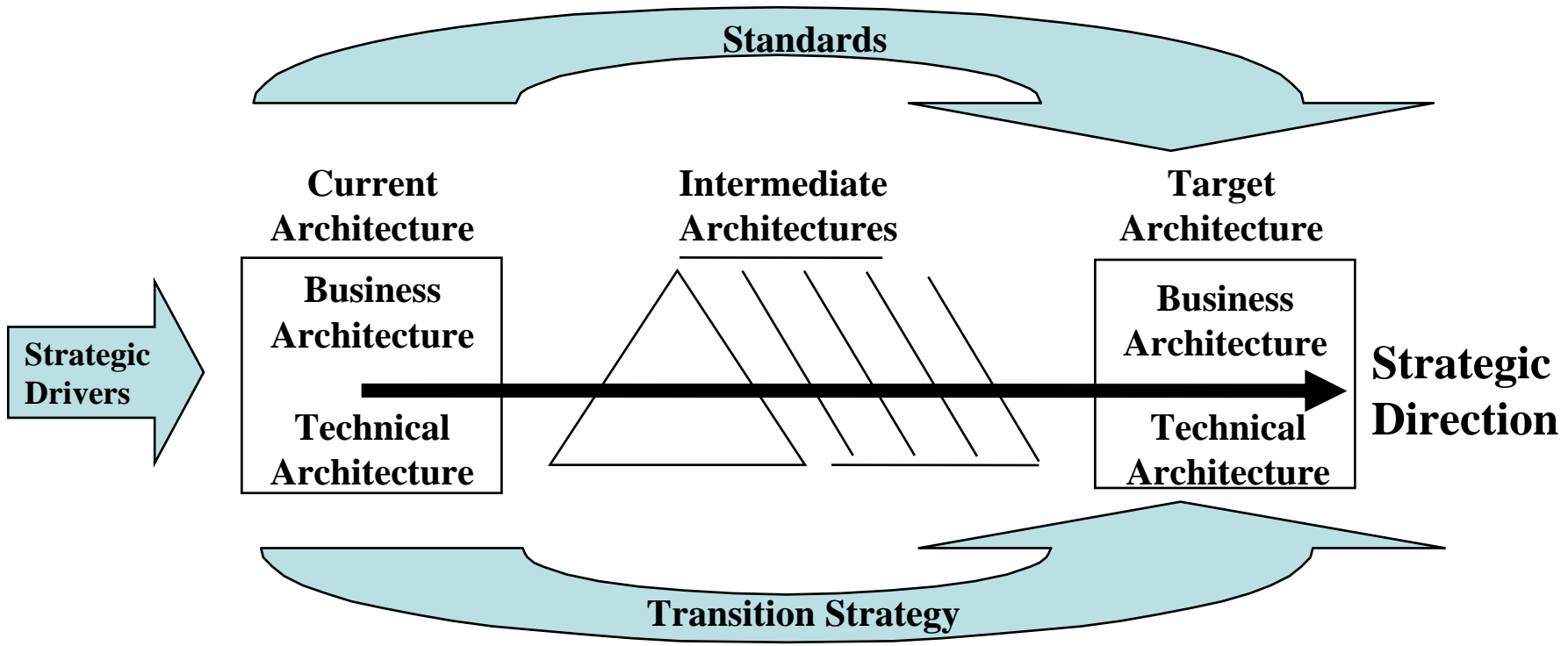
### Porter's Generic Value Chain



M. Porter's Value-Chain Analysis-Strategic Thinking as Operational Efficiency

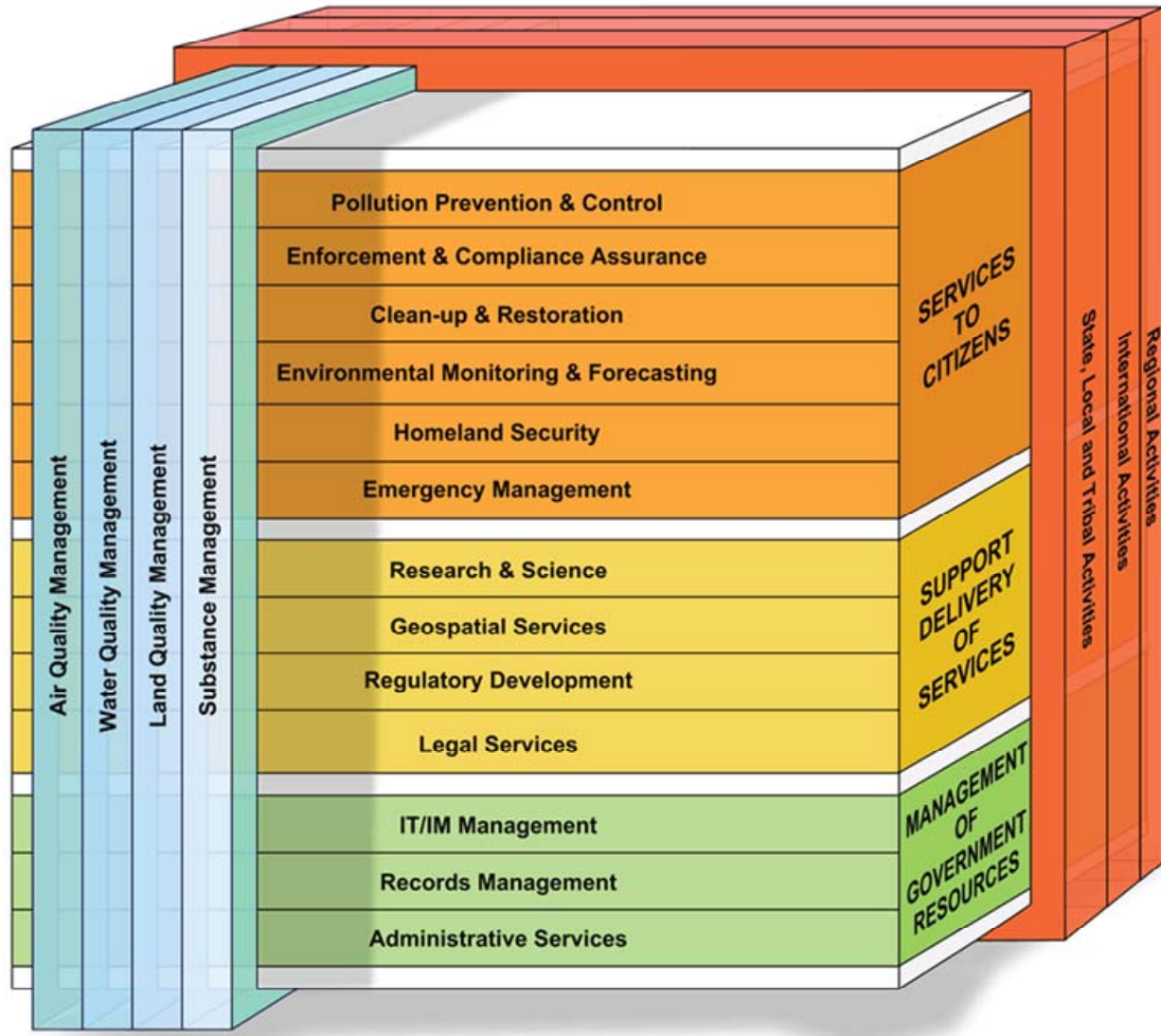


# Federal Enterprise Architecture Framework



# EPA JumpStart Seminar

## EPA Defined Architecture Segments Based Upon Its Primary Business Functions



Business Service Segment Partner Views

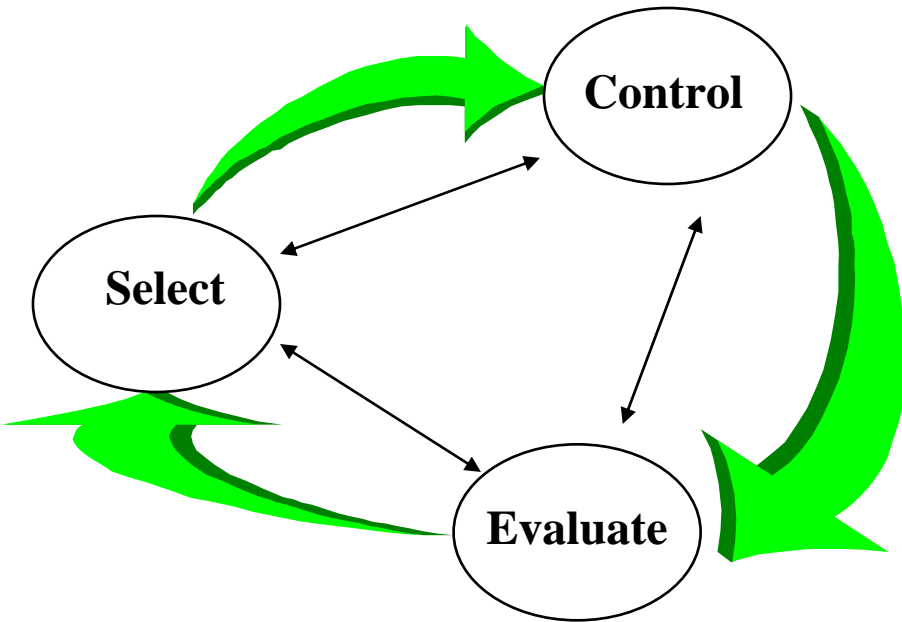


# IT Portfolio Alignment

Agency Strategic Plan

Agency IRM Strategic Plan

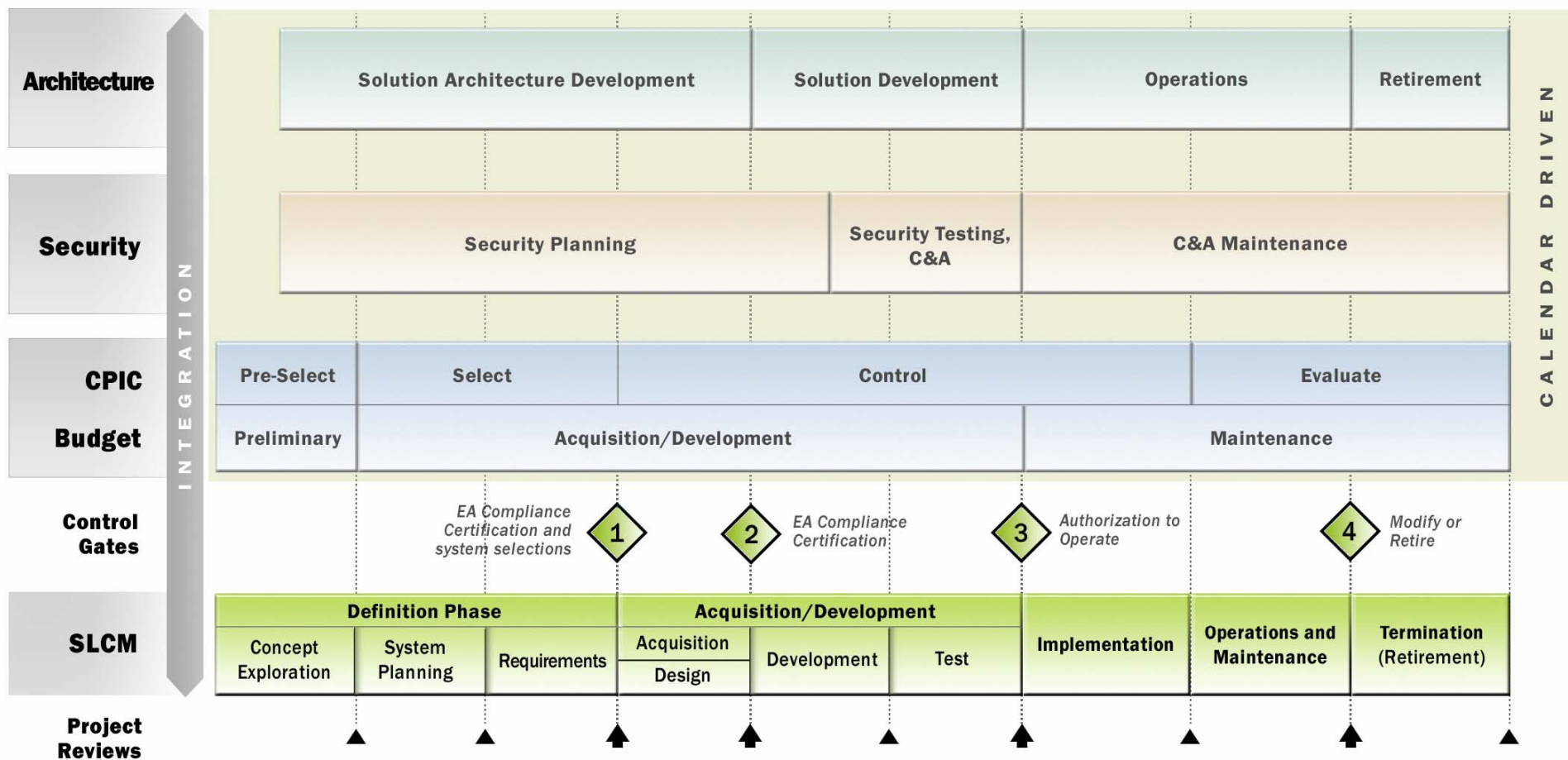
Agency Architecture Plan



R I S K	OOPPSS	Strategic Impact
	Keep The Lights On	Low Hanging Fruit
	Value	



# Life Cycle Management Framework



## Legend

C&A : Certification and Accreditation  
 CPIC : Capital Planning and Investment Control  
 EA : Enterprise Architecture  
 SLCM : System Life Cycle Management

▲ Project Level Review  
 ▲ Project Level and Control Gate Review  
 ◆ Control Gate  
 Go/No Go Decision

### Note:

- ◆ Reporting requirements for Architecture, Security, CPIC, and Budget are calendar driven and occur annually.
- ◆ Specific system reporting requirements depend on the System Life Cycle Management phase.

# Human Capital

- **The information age organization key assests**
  - Knowledge worker
  - Intellectual capital
  
- **Motivating and retaining the knowledge worker**
  
- **Evaluating the knowledge worker**
  
- **Generational differences**



## Generational Differences

- **The Veterans, 1922-1943**
  - Also known as: the traditionalists, the WW II generation, the silent generation, seniors
  
- **The Baby Boomers, 1943-1960**
  - Also known as: the boomers
  
- **The Generation Xers, 1960-1980**
  - Also know as: the Xers, the baby busters, the post-boomers, the twentysomethings
  
- **The Nexters, 1980-2006**
  - Also known as: the Millennials, generation Y, the Nintendo generation, generation net, the internet generation, echo boomers, the boomlet





## Lessons

- Lesson 1: Introduction to JumpStart Seminar
- Lesson 2: The Business of Government
- Lesson 3: Strategic Thinking and Strategic Planning
- Lesson 4: Emerging Technologies
- Lesson 5: Business Process Improvement
- Lesson 6: Enterprise Architecture
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## Questions and Comments





National Defense University

# Lesson 10 - Emerging Technology

# Lesson 11 – Cyber Security



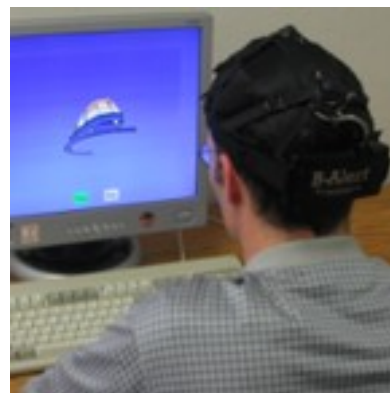
John H. Saunders, Ph.D.

*“a global learning community for government’s most promising  
information leaders”*

# Emerging Technology

## What you will see, do and discuss in the lesson

- **Virtual Reality** - experience and understand how virtual reality and virtual worlds operate
- **Wearable Computing** - Try one on
- **SWOT** - Work in teams to brainstorm and analyze the **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats of emerging technology related to the EPA



# Emerging Technology

## A Little Taste - OQO



# Emerging Technology

## A little taste - SWOT

What can/should EPA do, especially technologically, to promote Your group's goal

- **Focus on both internal and external factors**
  - **Internal: Strengths and Weaknesses**
  - **External: Opportunities and Threats**
  
- **Tips from previous lesson**
  - **Keep it simple; avoid over-analysis**
  - **Be specific; avoid ambiguity**
  - **Be realistic**
  - **Focus on where you are today vs. where you want to be in the future**
  - **Remember that it's subjective & thus it's better to conduct as a team (leverage differing viewpoints)**

<b>Strengths:</b> What do you do well? What unique resources can you draw on? What do others see as your strengths?	<b>Weaknesses:</b> What could you improve? Where do you have fewer resources than others? What are others likely to see as weaknesses?
<b>Opportunities:</b> What good opportunities are open to you? What trends could you take advantage of? How can you turn your strengths into opportunities?	<b>Threats:</b> What trends could harm you? What is your competition doing? What threats do your weaknesses expose you to?



# Cyber Security

What you will see, do and discuss in the lesson

- **Cyber Attacks – What can I find out about you and the EPA? Are you really at Risk?**
- **Defending Yourself – What can I do?**





# Cyber Security

## A Little Taste - Netcraft

Netcraft - Search Web by Domain - Microsoft Internet Explorer

Address: [www.netcraft.com](http://www.netcraft.com)

Search for **epa.gov**

Found 41 sites

**NETCRAFT**

Webserver Search

What's that site running?...

EPA.gov

Wait..

Example: [google.com](http://google.com)

Example: [www.netcraft.com](http://www.netcraft.com)

Rank	Domain	Last checked	OS	Server	Last changed	IP address	Netblock Owner
31.	<a href="http://westernblueskyrains.epa.gov">westernblueskyrains.epa.gov</a>	October 2005	Windows 2000	Microsoft-IIS/6.0	6-Nov-2007	134.67.99.105	U.S. Environmental Protection Agency
32.	<a href="http://www.ahmasepa.gov.cn">www.ahmasepa.gov.cn</a>	August 1999	Windows 2000	Microsoft-IIS/5.0	25-Mar-2005	134.67.99.105	U.S. Environmental Protection Agency
33.	<a href="http://www.epa.gov.com">www.epa.gov.com</a>	January 2006	NT4/Windows 98	Microsoft-IIS/4.0	6-Jun-2004	134.67.99.105	U.S. Environmental Protection Agency
34.	<a href="mailto:mail.kepa.gov.cy">mail.kepa.gov.cy</a>	March 2003	Cyprus Telecommunications Authority	Windows 2000			
35.	<a href="http://earth2.epa.gov">earth2.epa.gov</a>	September 1997	U.S. Environmental Protection Agency	Solaris			
36.	<a href="http://wq.epa.gov.tw">wq.epa.gov.tw</a>	March 2006	unknown	unknown			
37.	<a href="http://google.epa.gov">google.epa.gov</a>	June 2005	U.S. Environmental Protection Agency	Windows Server 2003			
38.	<a href="http://salmon.epa.gov">salmon.epa.gov</a>	September 2004	U.S. Environmental Protection Agency	Windows 2000			

**OS, Web Server and Hosting History for salmon.epa.gov**

<http://salmon.epa.gov> was running Microsoft-IIS on Windows Server 2003 when last queried at 7-Nov-2007 21:50:13 GMT - [refresh now Site Report](#) [FAQ](#)

Try out the Netcraft Toolbar!

OS	Server	Last changed	IP address	Netblock Owner
Windows Server 2003	Microsoft-IIS/6.0	6-Nov-2007	134.67.99.105	U.S. Environmental Protection Agency
Windows 2000	Microsoft-IIS/5.0	25-Mar-2005	134.67.99.105	U.S. Environmental Protection Agency
NT4/Windows 98	Microsoft-IIS/4.0	6-Jun-2004	134.67.99.105	U.S. Environmental Protection Agency

**[CVE-2003-0223](#) [oval:org.mitre.oval:def:66](#) [OVAL66](#)**

**Summary:** Cross-site scripting vulnerability (XSS) in the ASP function responsible for redirection in Microsoft Internet Information Server (IIS) 4.0, 5.0, and 5.1 allows remote attackers to embed a URL containing script in a redirection message.

**Published:** 6/9/2003

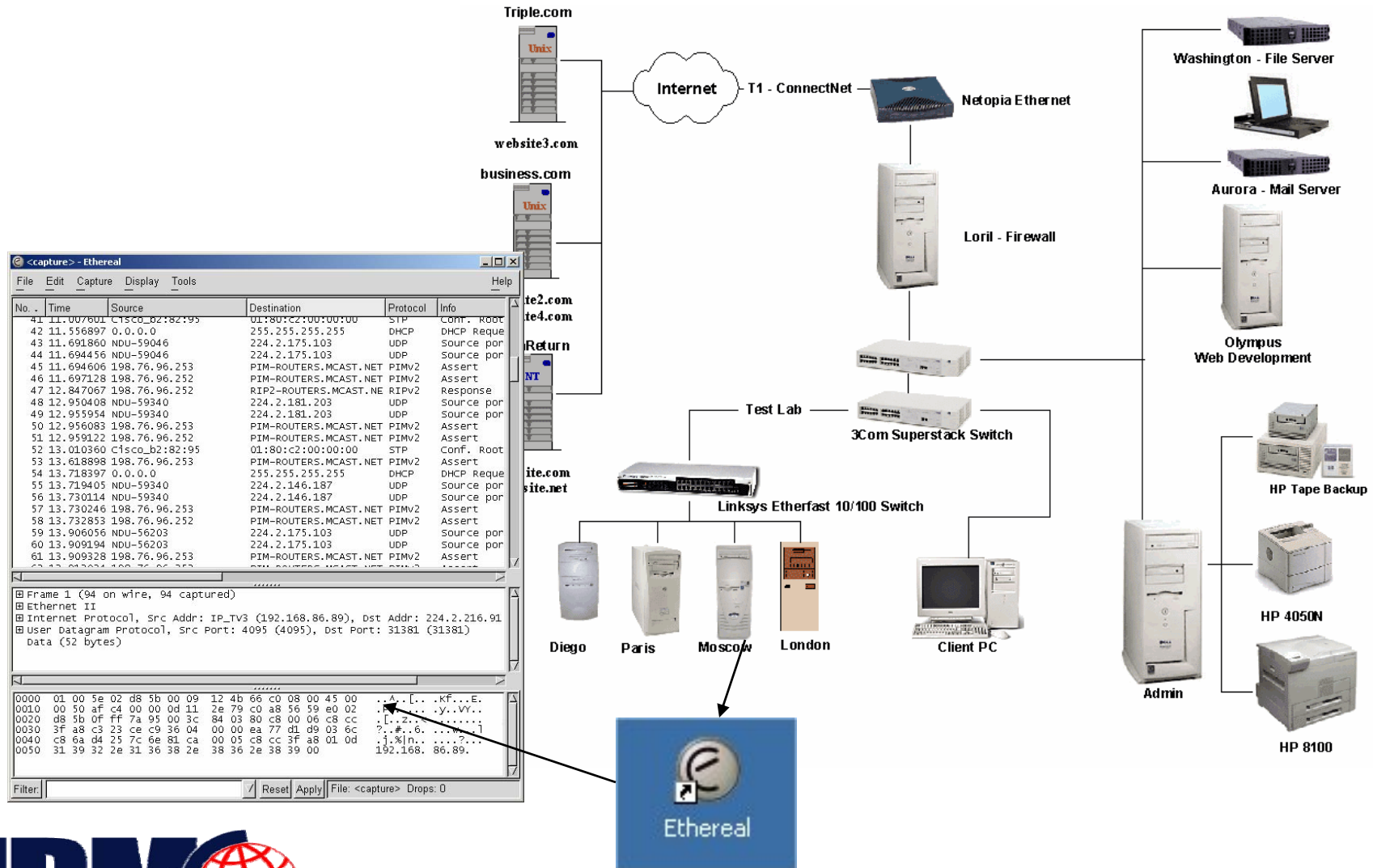
**CVSS Severity:** 6.8 (Medium)





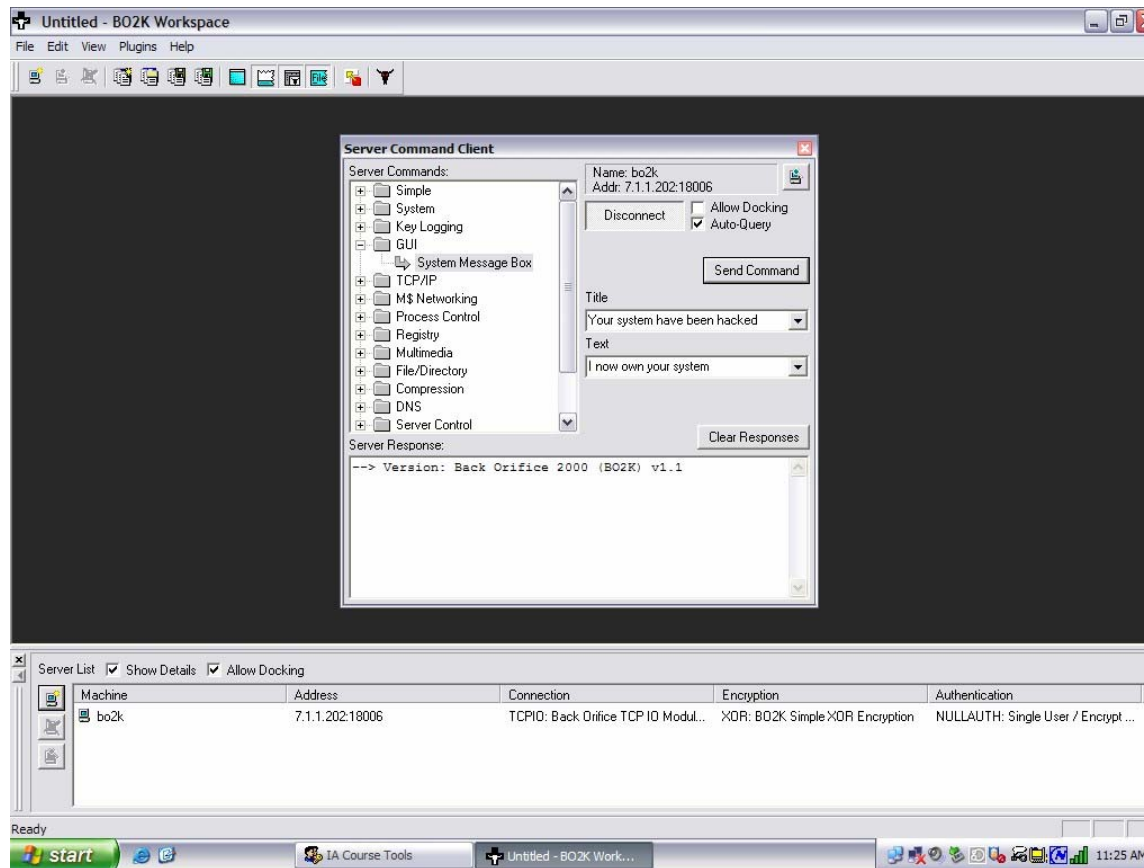
# Threats

# What - Sniffing



# Cyber Security

## A Little Taste – Back Orifice 2K



# Cyber Security

## For (almost) Every Technology Offense, A Defense

- Sniffing → ■ difficult
- Trojan Horses → ■ Antivirus
- Scanning → ■ Intrusion Detection System
- Shares → ■ Share Identification
- DDOS → ■ Firewall, Router Disconnect
- Worms → ■ Firewall, Antivirus, email guards

NIST 800-53 Recommended Security Controls for Federal Information Systems:  
179 categories of controls/countermeasures e.g. Training, Firewalls, etc



Information Resources Management College  
National Defense University



**Pulling it All Together  
for the EPA  
JumpStart Seminar**

**November 14, 2007**

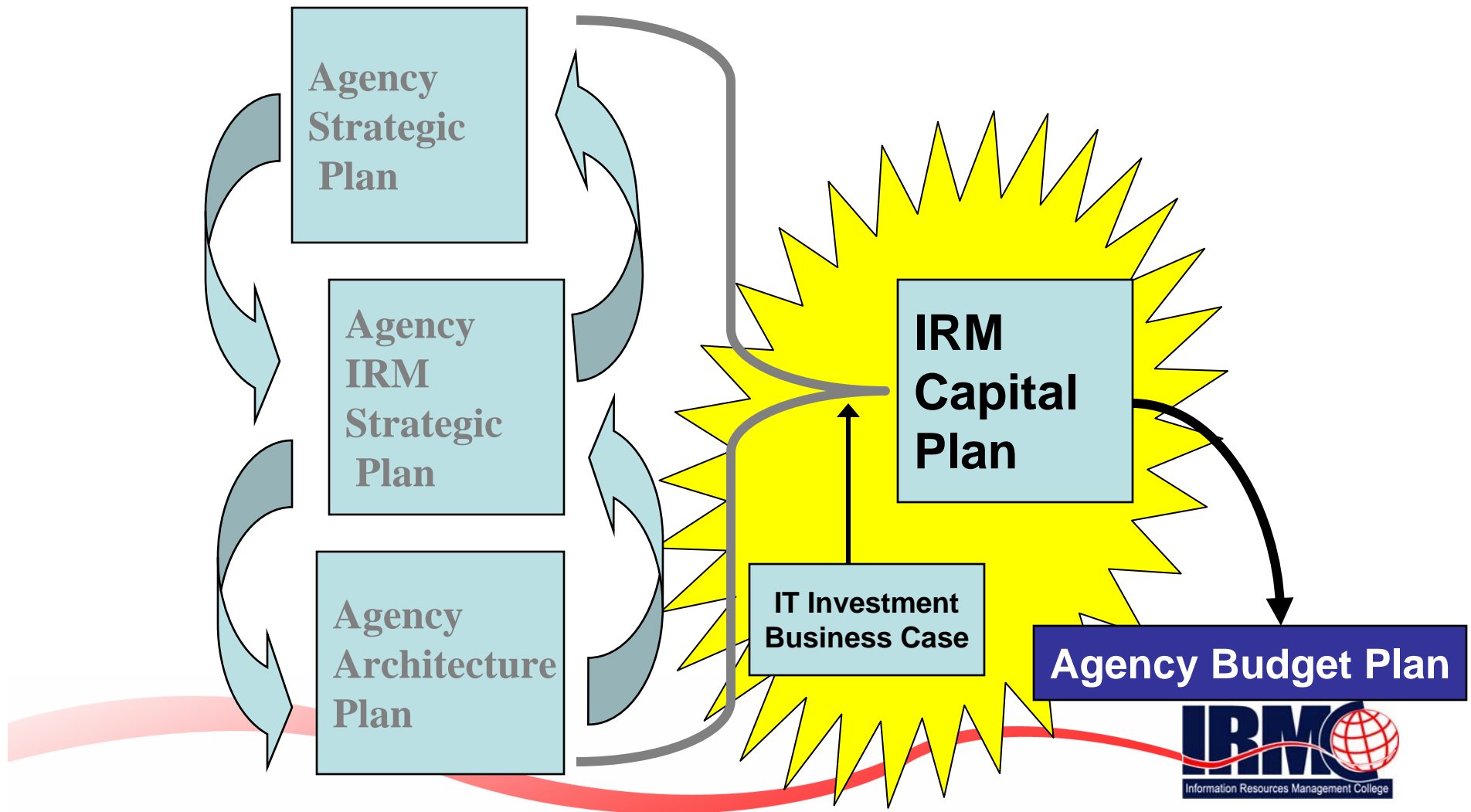


*“A global learning community for government’s most promising information leaders.”*



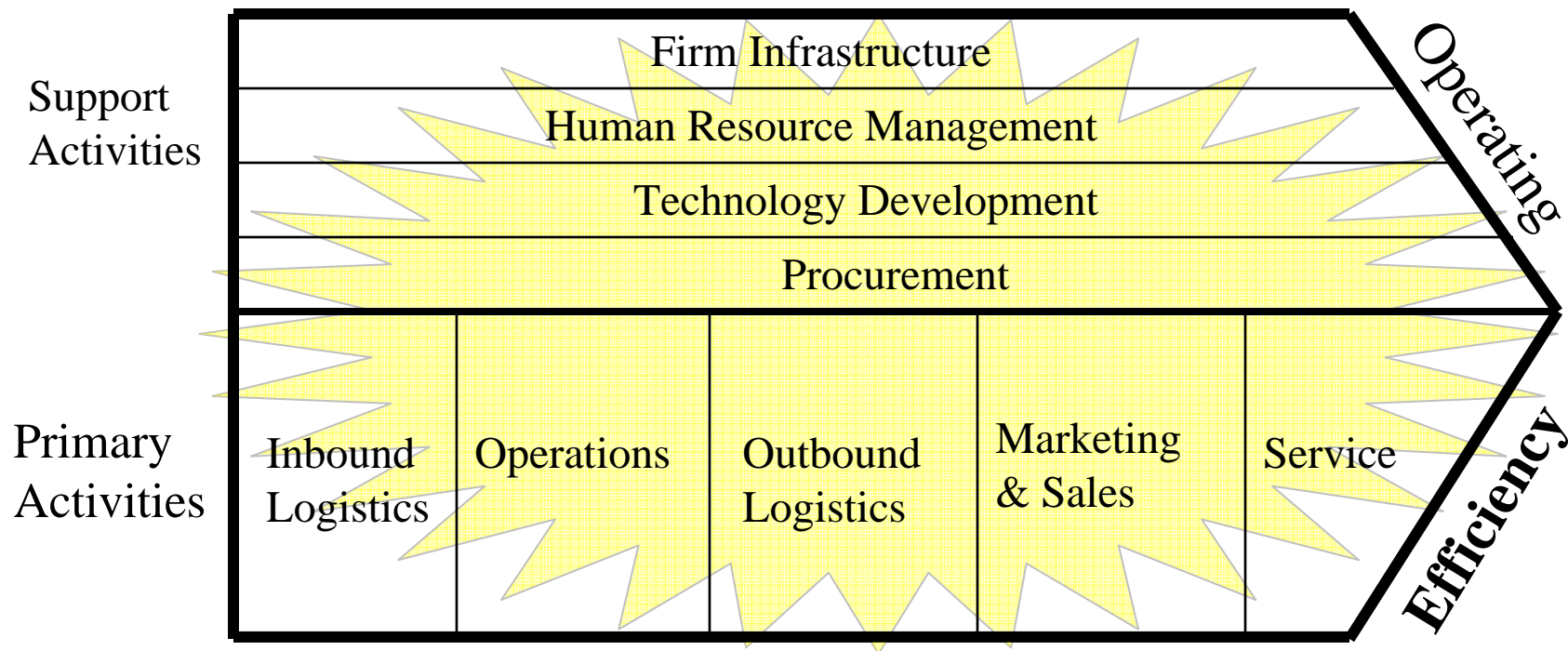
Capital Planning  
and  
Investment Control

# Strategic Management Process



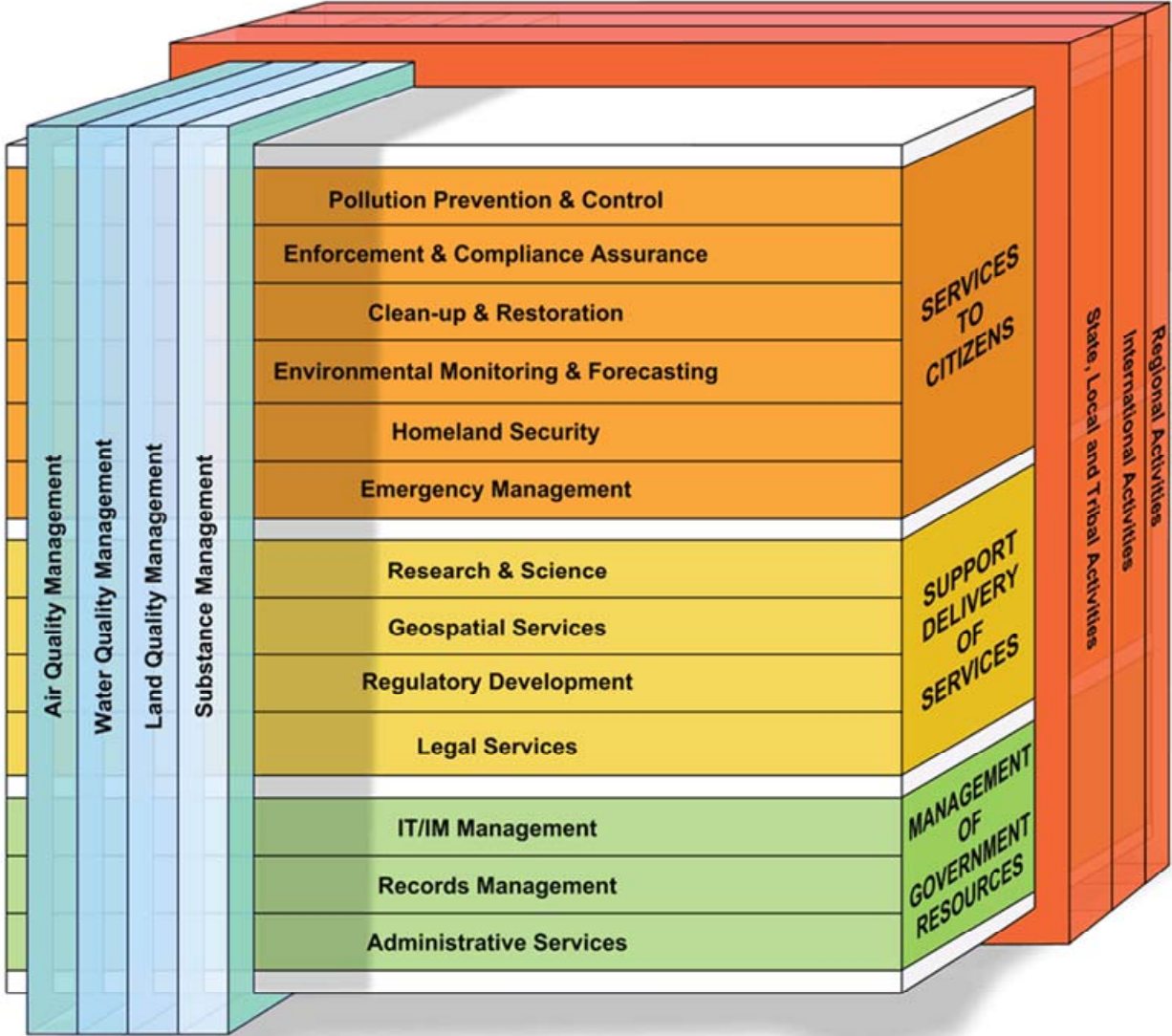
# A Strategic Thinking Framework

## Porter's Generic Value Chain



M. Porter's Value-Chain Analysis-Strategic Thinking as Operational Efficiency

## EPA Defined Architecture Segments Based Upon Its Primary Business Functions

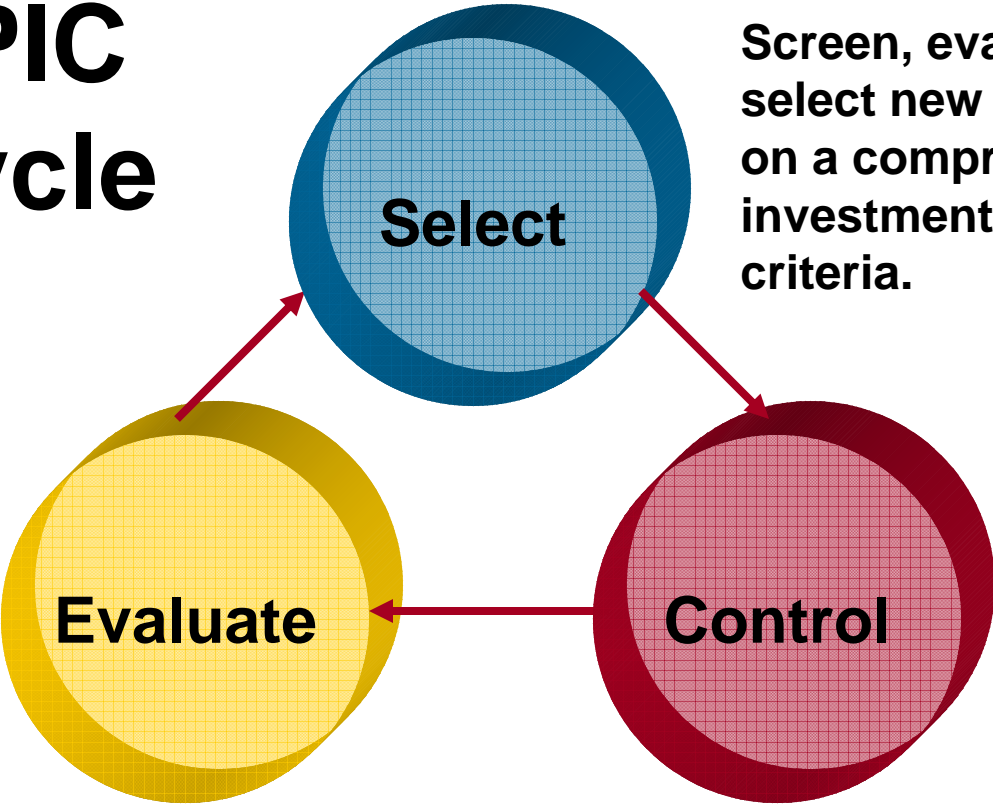


Business Service Segment Partner Views



# CPIC Cycle

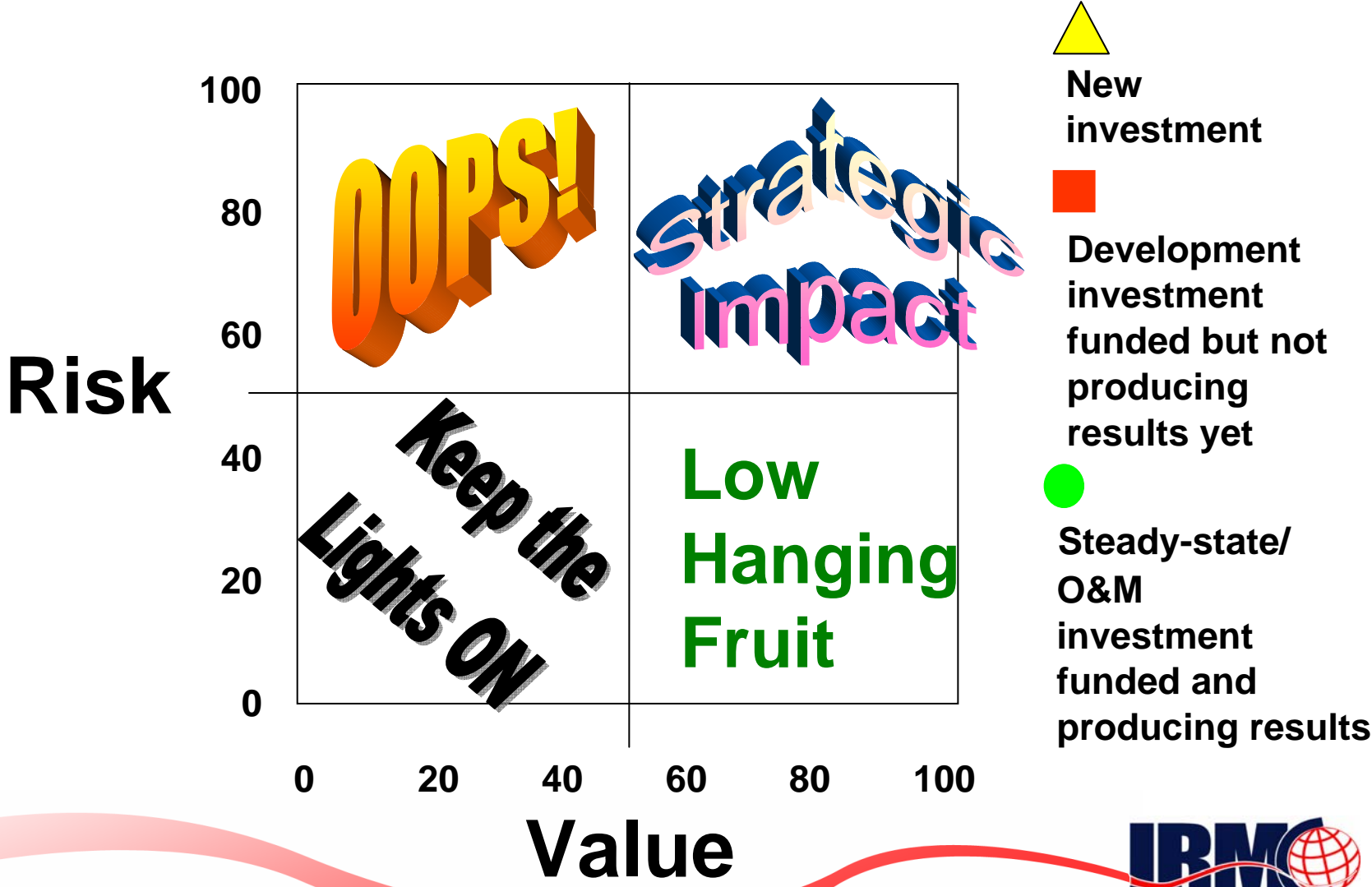
Evaluate completed projects using comprehensive criteria and decide to cancel, modify, replace, or continue. Feed lessons learned back to Select and Control phases.



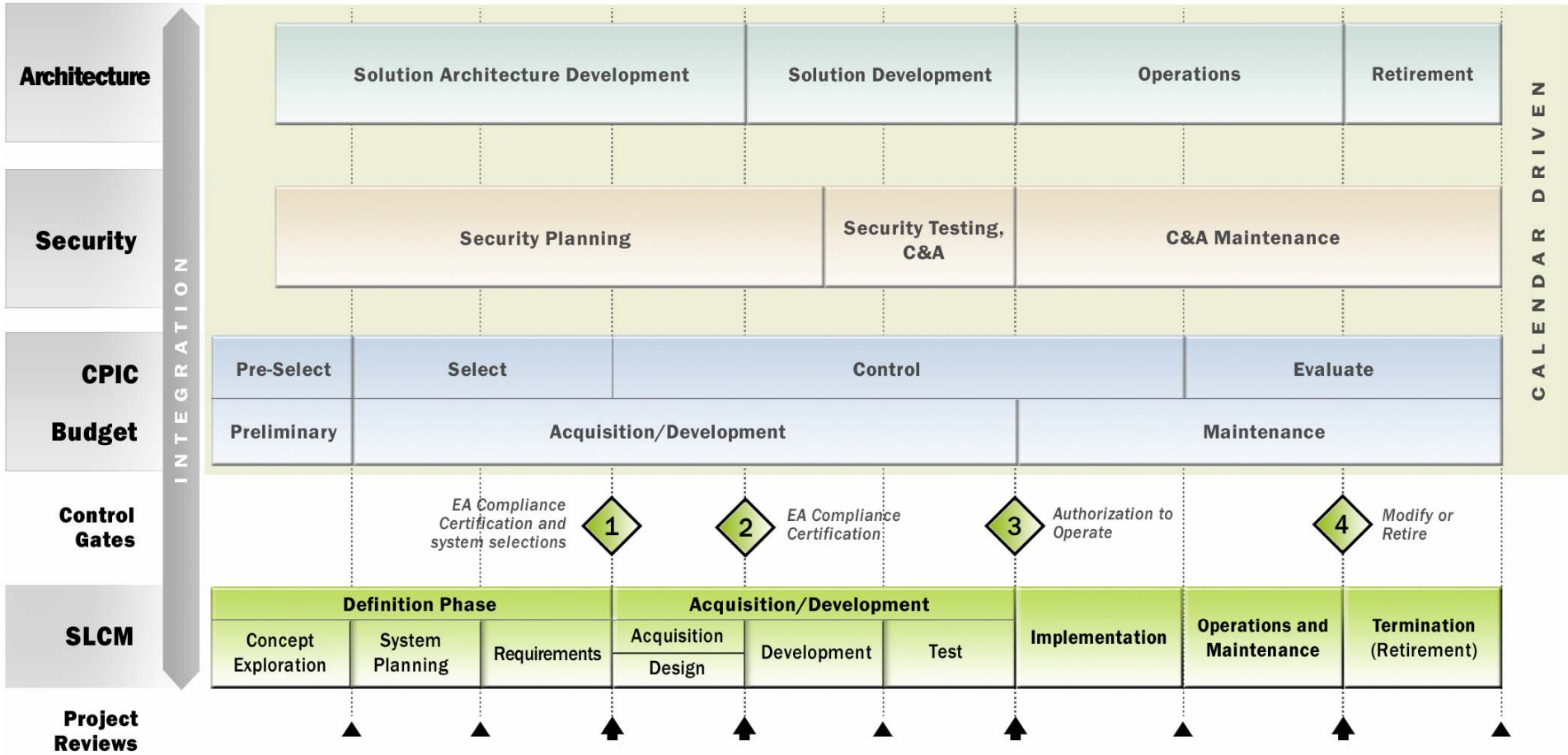
Screen, evaluate, and select new projects based on a comprehensive set of investment assessment criteria.

Control on-going projects using comprehensive criteria and decide to cancel, modify, continue, or accelerate.

- **Financial, business, and IT case for investment**
  - **How do we recognize a useful idea?**
  - **How do we decide an idea does not fit?**
  
  - **How much money could/should be invested over what time period?**
  - **Who wants/needs/benefits from an investment?**
  - **What risks might/would we face?**
  - **When could/should an investment be in operation?**
  - **What else do we need to support the investment?**
  - **How do we decide to stop an investment?**
  - **How does an investment fit into our current and projected investment portfolio?**
  
- **Trading expected value, cost, and risk**  
**Harvesting actual value, cost, and risk**



## Life Cycle Management Framework



Source: EPA

**Legend**

- C&A : Certification and Accreditation
- CPIC : Capital Planning and Investment Control
- EA : Enterprise Architecture
- SLCM : System Life Cycle Management
- ▲ Project Level Review
- ▲ Project Level and Control Gate Review
- ◆ Control Gate Go/No Go Decision

**Note:**

- ◆ Reporting requirements for Architecture, Security, CPIC, and Budget are calendar driven and occur annually.
- ◆ Specific system reporting requirements depend on the System Life Cycle Management phase.

**Questions?  
Comments?**