# DOD Acquisition

A PMI presentation and discussion with the "809 Panel"

- Introduction and background
- Organizational Agility
- Ideas about Project Management
- Portfolio Management
  - GAO identified challenges
  - Single vis Multiple Tier management structure
- Portfolio Performance Management
  - Lean Systems Management
  - Earned Value beyond contacts
  - System team – beyond DoD staff

AGENDA

PMI Numbers & Statistics
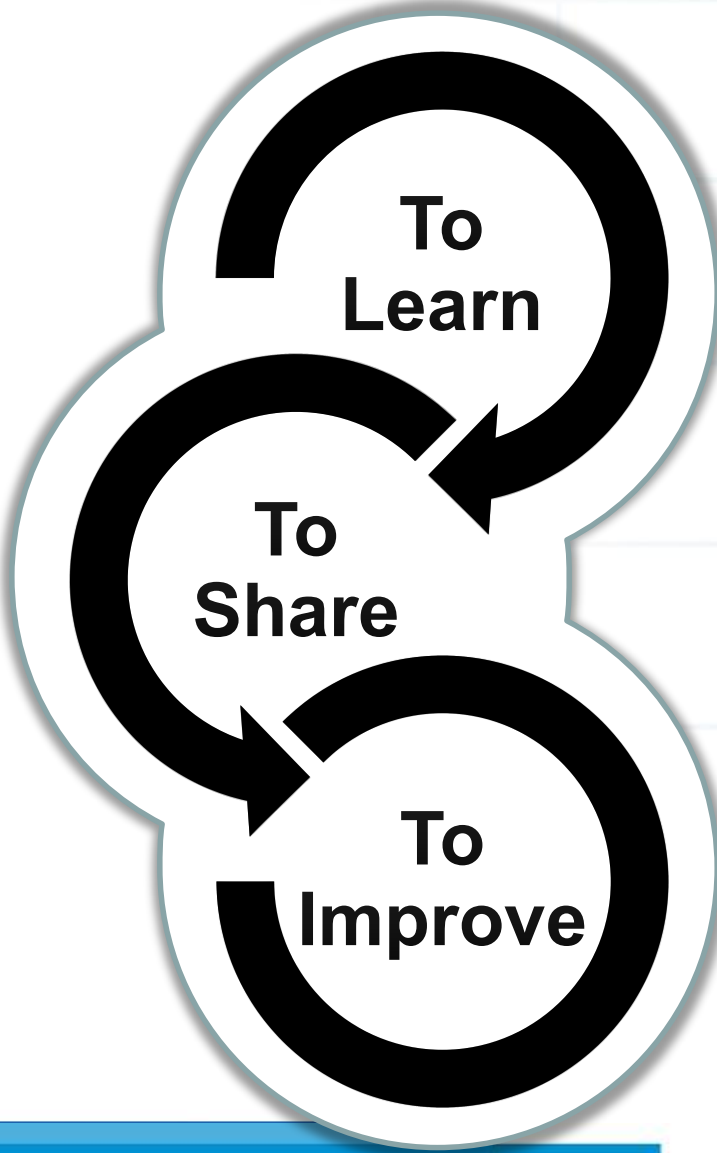
- About <u>477,616 members</u>
- 183 Countries & 27 Territories
- 745,000+ PMPs & <u>800,000+ credential</u>s overall
- 8 Credentials
- 21 Standards & Guides
- 285 chapters
- 183 Countries with members
- 1,000's+ research papers, case studies, articles

To Learn

To Share

To Improve

PMI Promotes PPPM

- Advancing the profession to advance careers of its practitioners via:
  - ✓ Standards and certifications
  - ✓ Global advocacy
  - ✓ Professional development, education, training
  - ✓ Publications
  - ✓ Networking [meetings, symposiums, chapters, more]
  - ✓ Resources and tools
  - ✓ Education and research
  - ✓ Organizational collaboration & partnership

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The Importance

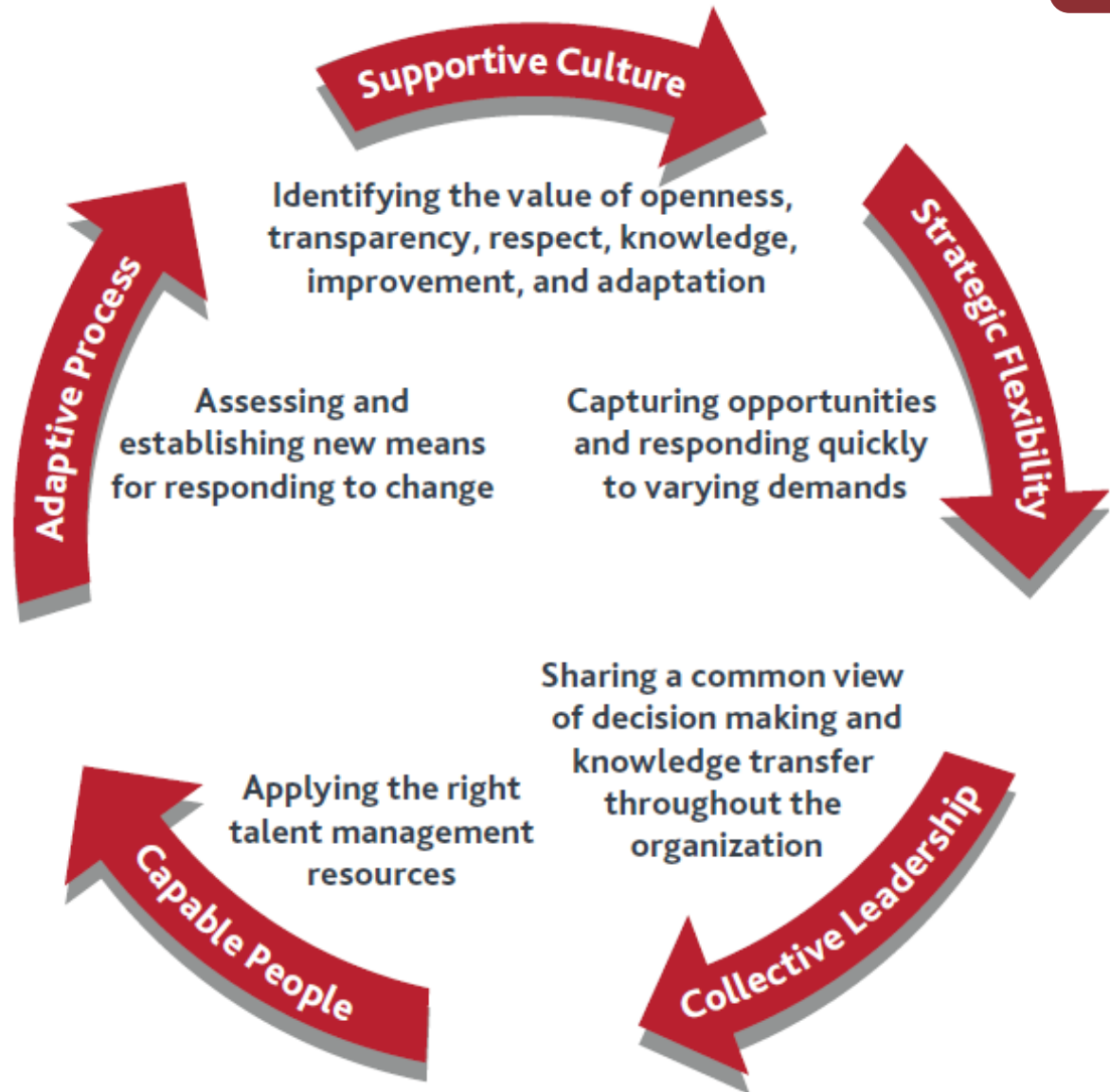**Organizational agility helps companies respond to:**

- **the emergence of new competitors**

- **changing technologies**

- **sudden shifts in overall conditions**

- **customer experience**

Organizational agility includes much more than the widely used project management tools and techniques of "Agile" or "Scrum."

# The Foundational Practices of Organizational Agility.

Shortening production, review, or decision cycles

Focusing on change management

Responding Quickly to strategic opportunities

Integrating the voice of the customer

Eliminating Organizational Silos

Aligning new business capabilities to strategy

The Framework for Organizational Agility

Supportive Culture

Identifying the value of openness, transparency, respect, knowledge, improvement, and adaptation

Strategic Flexibility

Adaptive Process

Assessing and establishing new means for responding to change

Capturing opportunities and responding quickly to varying demands

Sharing a common view of decision making and knowledge transfer throughout the organization

Applying the right talent management resources

Capable People

Collective Leadership

Capable People: Applying the right talent management resources

Project management	41%
Program management	18%
Portfolio management	13%
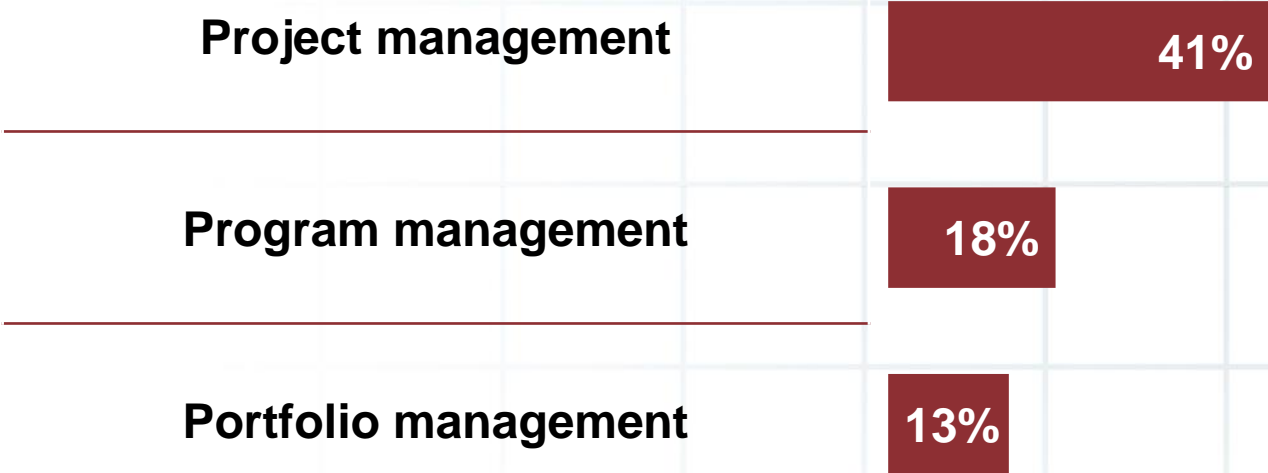
■ % of organizations that are extremely or very focused on the training and development of employees in each area (Top2Box)

Key takeaways

Agility is the result of numerous factors, the keys being the organizations' ability, willingness, and culture to change.

To thrive in an uncertain business world, organizations must create a culture shift to improve and sustain organizational agility.

The most agile organizations establish a framework around **culture, strategy, leadership, people,** and **process**.

Enhance Agility

Increase organizational agility – Apply the right <u>talent management resources</u> to enhance the fundamentals of <u>people</u> to enable adaptability and agility.

DOD's Instructions for Acquisition Programs are robust, they have been derived from decades of experience and are complex.

Embrace PMI Standards as the fundamental end of the project and program spectrum as contrasted to the 5000 series, JCIDS, PPBE & DFAR. "Make everything as simple as possible but no simpler". PMI Standards contain that which is applicable to most projects most of the time.
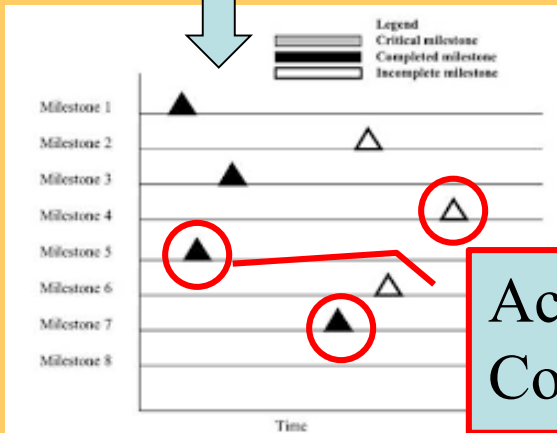
Agility through Project Management

√ Instruct and train PMBOK® guide processes at the beginning of Acquisition Instruction for 2 – 3 days to paint the fundamental and generic image of project management before the training for the tailored DOD Acquisition process.

- Example - Use project management when developing contracts from starting at the acceptance of acquisition strategy through RFPs, proposals, and award.

- Example - Use project management for projects at or below the level of ACAT III/IV category programs. System Command told me that there are thousands of folks working project like things that don't rise to ACAT levels.

- Example - Use project management when developing new services.

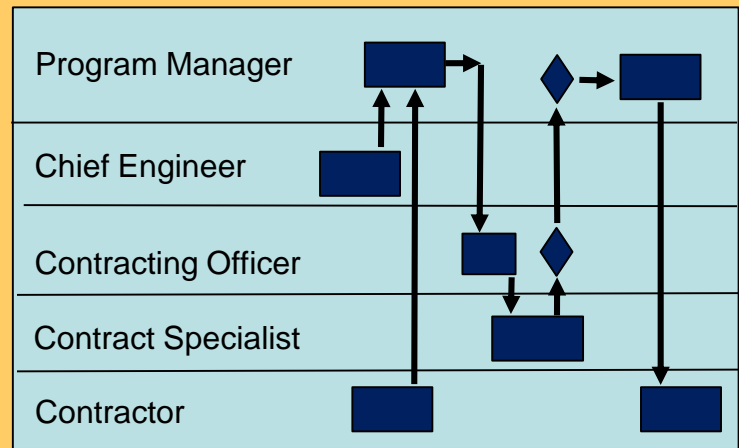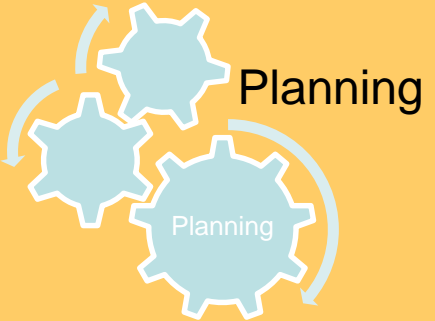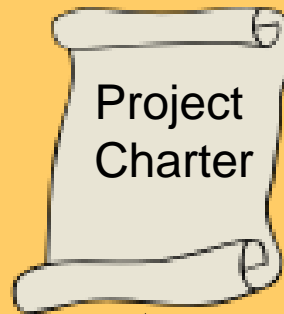- Example – Use project management at each milestone and decision point

Developing and issuing a contract - Make it a project

Requirements Definition
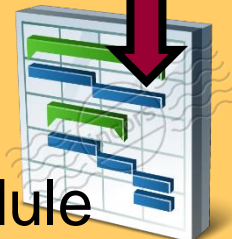Analysis of Alternatives
Program Assignment

Acquisition Strategy
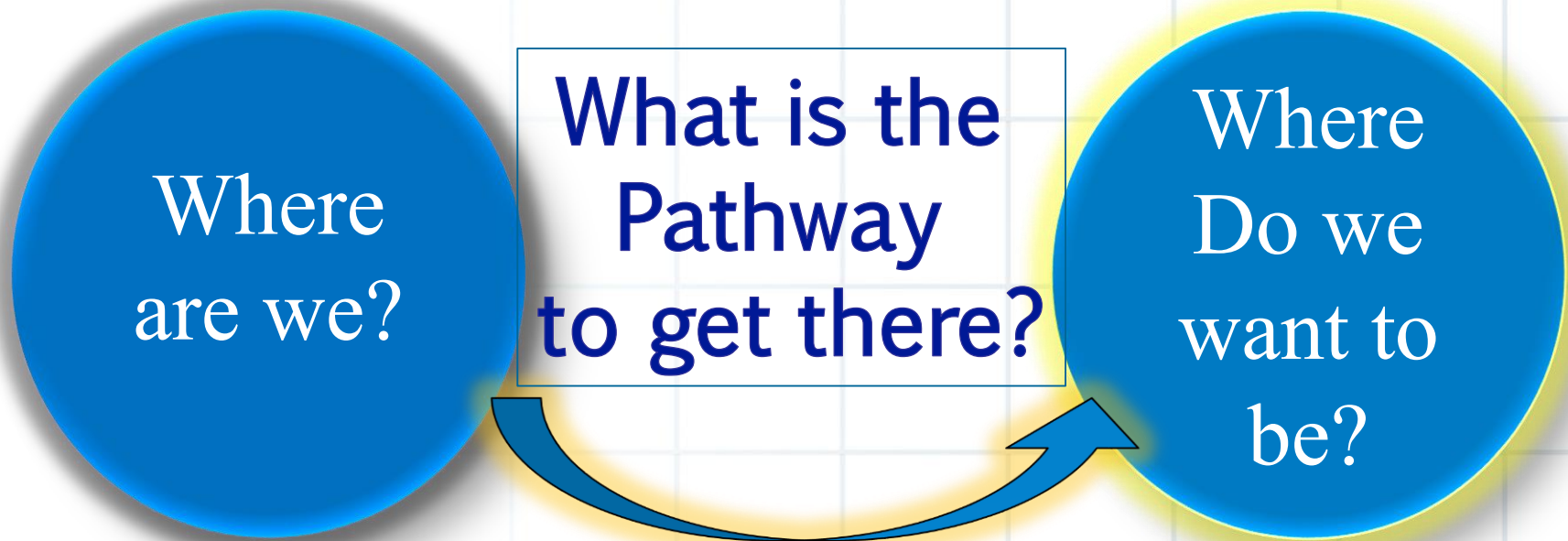

Acquisitions /
Contracts

Project Charter

Planning

Program Manager				
Chief Engineer				
Contracting Officer				
Contract Specialist				
Contractor				

Plan

Schedule

Agility through Portfolio Management

Where are we?

What is the Pathway to get there?

Where Do we want to be?

Leadership needs to formulate the strategy.
- ➤ But how is the strategy implemented or executed?
- ➤ How do the initiatives become reality?
- ➤ Creating the execution plan is difficult, but certainly necessary and productive. Strategy is only as good as the execution behind it.

PORTFOLIO MANAGEMENT
BRIDGES THE GAP

Organizations struggle with strategy implementation

STRATEGY
Doing the Right Work

EXECUTION
Doing the Work Right

88% of organizations say executing strategy is essential to remain competitive[3]

THE IMPACT:

44% of strategic initiatives are unsuccessful[1]

$109 million wasted for every $1 billion invested in projects & programs[1]

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Portfolio Management

All strategic change happens through program and project management.

Portfolios are executed through program and project management
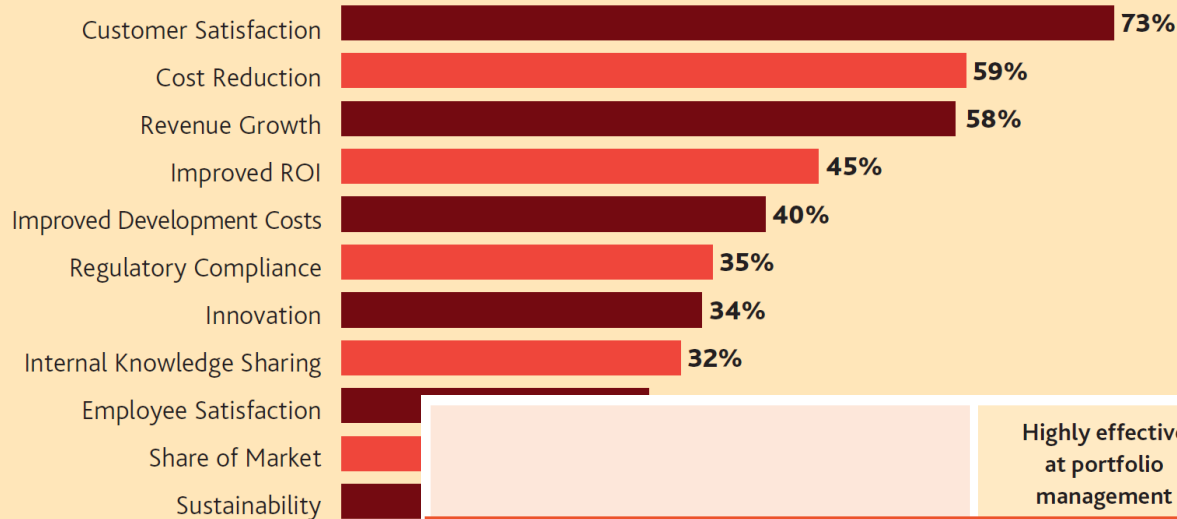
PMI White Papers ... industry views

- *"View from Above: The Power of Portfolio Management,"* April 2013
  - Portfolio Mangement improves Program and Project performance

- *"Using PMI Standards Framework to Improve U.S. Federal Government Capital Investment Outcomes,"* March 2015
  - Move to three tier Portfolio, Program, Project structure
  - Federal Government can use Industry Standards Framework

- "*Improving Program Management in the Federal Government*," July 2015
  - Written in partnership with the National Academy of Public Administration (NAPA)
  - Basis for PMIAA law signed by President Obama, Dec 2016

- "*Time to Update OMB Capital Programming Guidance,*" February 2017 (to be published)
  - A-11 and CPG needs updating to Industry Standards
  - Go beyond PMIAA law (signed Dec 2016)

Many PMI White Papers and Reports capture industry views

View from Above: The Power of Portfolio Management

**WHY DO ORGANIZATIONS PRACTICE PORTFOLIO MANAGEMENT?**

Respondents to PMI's *Pulse of the Profession™ In-Depth Report: Portfolio Management* cited customer satisfaction, cost reduction and revenue growth as the top reasons to practice portfolio management.

Reason	Percentage
Customer Satisfaction	73%
Cost Reduction	59%
Revenue Growth	58%
Improved ROI	45%
Improved Development Costs	40%
Regulatory Compliance	35%
Innovation	34%
Internal Knowledge Sharing	32%
Employee Satisfaction	
Share of Market	
Sustainability	
Supplier Relations	

0%

Source: ©2012 Project Management Institute, Inc. *Pulse o...*

	Highly effective at portfolio management	Minimally effective at portfolio management	% Increase
AVERAGE PERCENTAGE OF PROJECTS:			
Completed on time	68%	50%	36%
Completed on budget	64%	54%	19%
Met original goals and business intent	77%	65%	18%
Met/exceeded forecasted ROI	62%	48%	29%

Source: ©2012 Project Management Institute, Inc. *Pulse of the Profession™ In-Depth Report: Portfolio Management*, November 2012. PMI.org/Pulse
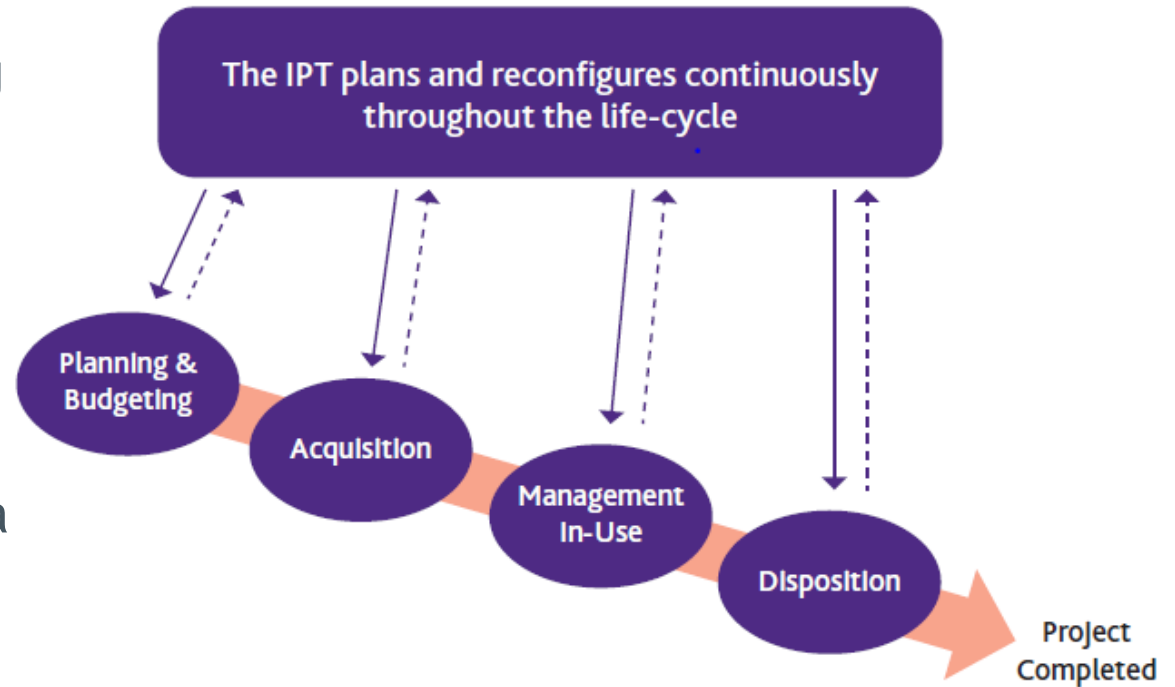
Figure 5: Relationships among portfolios, programs and components.
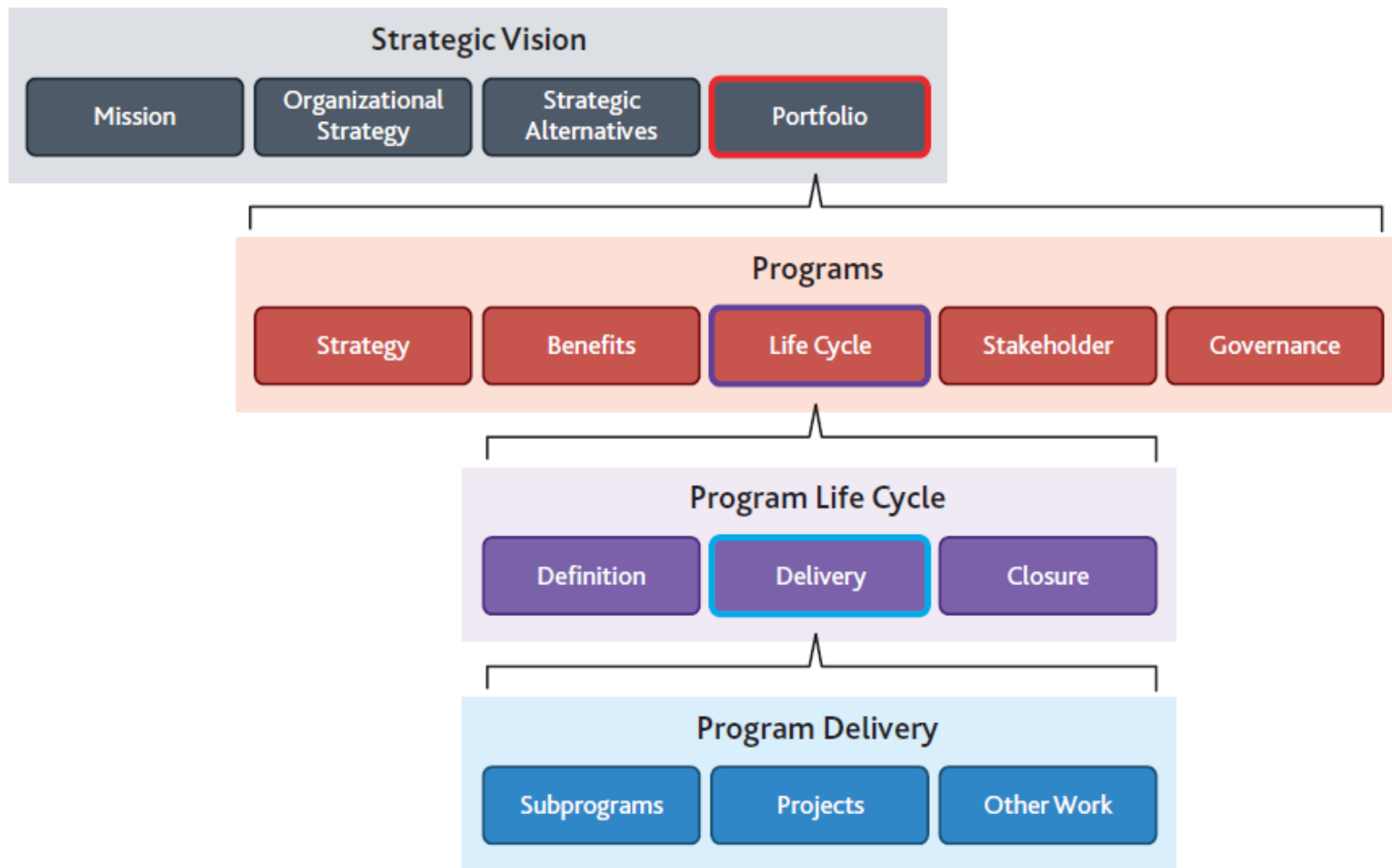
Source: The Standard for Program Management, Figure 1-5, p. 12

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes", PMI White Paper

Capital Asset Lifecycle

- Capital Programming Guide outlines a single tier capital asset lifecycle

- Complexity calls for a multi-tier approach

The IPT plans and reconfigures continuously throughout the life-cycle

Planning & Budgeting

Acquisition

Management In-Use

Disposition

Project Completed

Source: OMB Capital Programming Guide, Figure 1, p. 6

Figure 1: The Capital Programming Guide's capital planning lifecycle.

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes", PMI White Paper

Federal Lifecycle could mirror PMI

Multi-tiered lifecycles would allow for differences in governance (gates)

Portfolio's could align with Strategy as Programs and Projects align with Budget (programming)
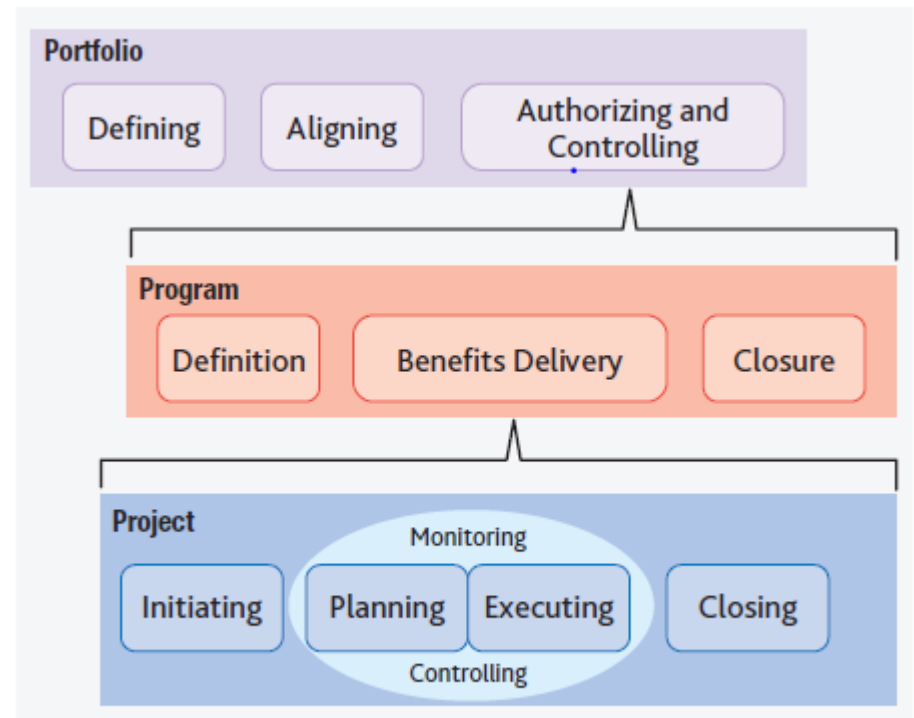

Figure 11: Relationship of PMI standards' lifecycle phases.

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes", PMI White Paper

Portfolio	Program	Project
• **Strategic**	• **Integration**	• **Integration**
• Governance		
• **Performance**	• **Scope**	• **Scope**
	• Schedule	• Time
	• Financial	• Cost
	• Qality	• Quality
	• Resource	• Human Resources
• **Communication**	• **Communications**	• **Communications**
• **Risk**	• **Risk**	• **Risk**
	• Procurement	• Procurement
		• Stakeholder

Figure 12: Knowledge/supporting areas across the portfolio, program, and project.

Knowledge areas tasks change with level

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes", PMI White Paper

Portfolio Standard very different than Program/Project

Portfolio Strategic Plan and Roadmap would be derived from Enterprise level similar documents

Portfolio Risk should be directly linked to Enterprise Risks

…etc

Knowledge Areas	Process Groups		
	Defining Process Group	Aligning Process Group	Authorizing and Controlling Process Group
Portfolio Strategic Mangement	4.1 Develop Portfolio Strategic Plan 4.2 Develop Portfolio Charter 4.3 Define Portfolio Roadmap	4.4 Manage Strategic Change	
Portfolio Governance Management	5.1 Develop Portfolio Management Plan 5.2 Define Portfolio	5.3 Optimize Portfolio	5.4 Authorize Portfolio 5.5 Provide Portfolio Oversight
Portfolio Performance Management	6.1 Develop Portfolio Performance Management Plan	6.2 Manage Supply and Demand 6.3 Manage Portfolio Value	
Portfolio Communication Management	7.1 Develop Portfolio Communication Management Plan	7.2 Manage Portfolio Information	
Portfolio Risk Management	8.1 Develop Portfolio Risk Management Plan	8.2 Manage Portfolio Risks	

Source: The Standard for Portfolio Management, Table 3-1, p. 31

Figure 6: Mapping of the Portfolio Management Process Groups and Knowledge Areas.

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes", PMI White Paper
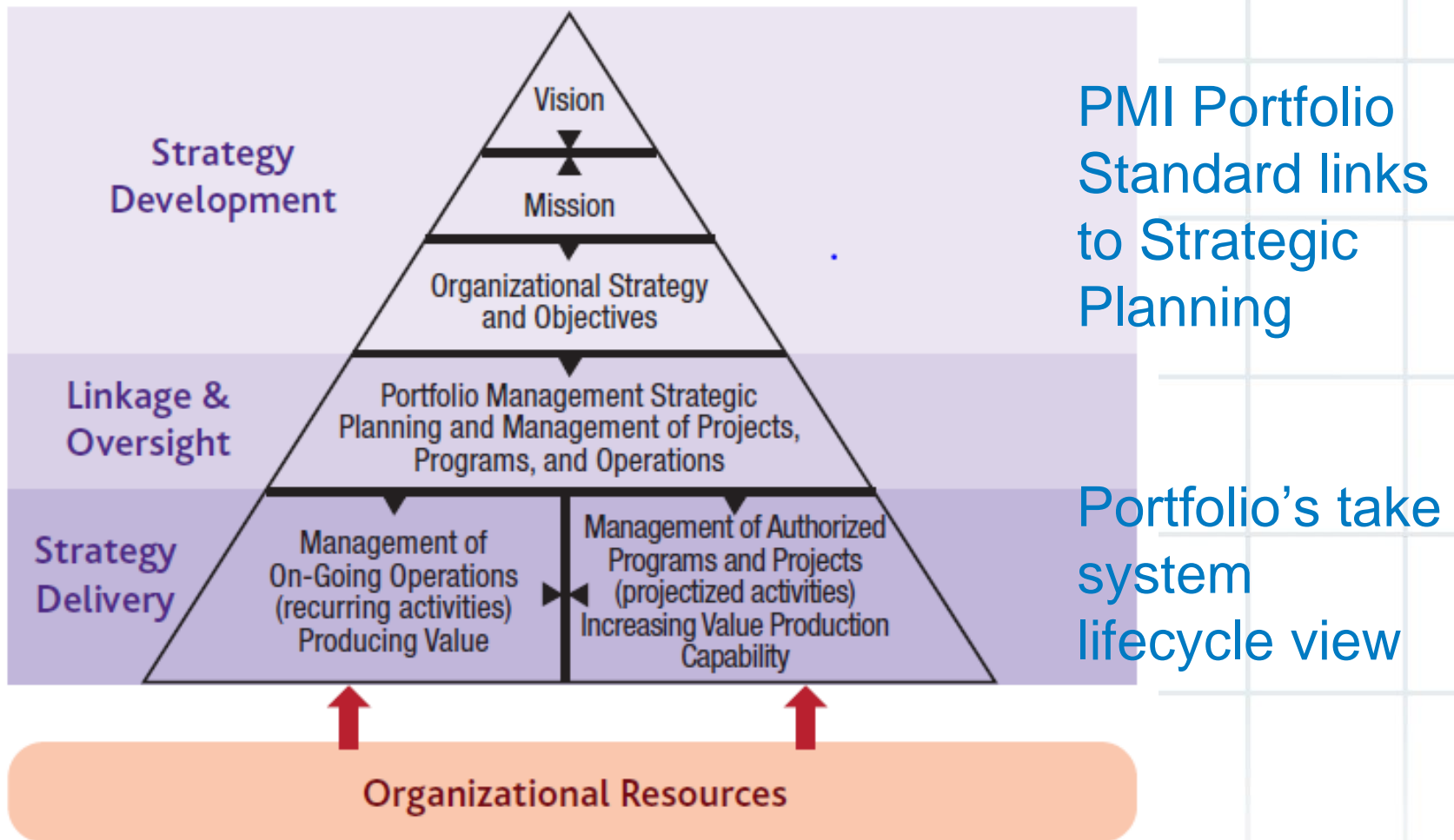
Figure 9: OMB's goal illustration and PMI's OPM framework.
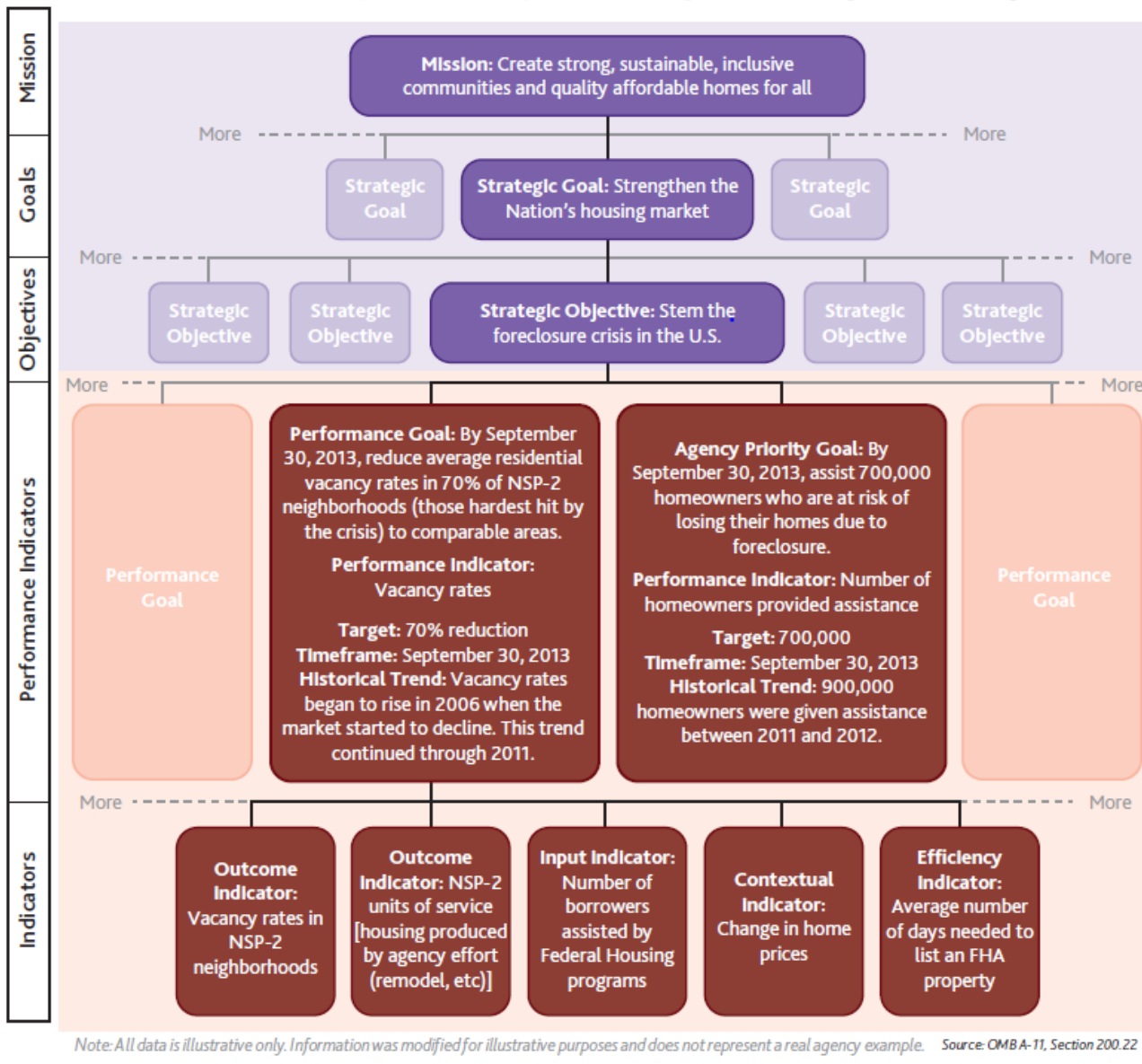
OMB guidance on Strategic Planning

Plans updated every four years align with Presidential terms

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes ", PMI White Paper

Source: Adapted from The Standard for Portfolio Management, Figure 1-3, p. 8

Figure 3: PMI standards organizational framework.

PMI Portfolio Standard links to Strategic Planning

Portfolio's take system lifecycle view

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes", PMI White Paper

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DoD Portfolio Management: DoDI 7000.45

- Capability Portfolio Management, issued Sept 2008.
  - Test Case started in 2006 with several memos
- Focus on requirements process
- Created *Capability Portfolios Managers* with:
  - No independent decision-making authority
  - Not to infringe on any existing statutory or regulatory authorities
  - Work within established coordination processes
  - Have access to JROC, DAB, and other forums

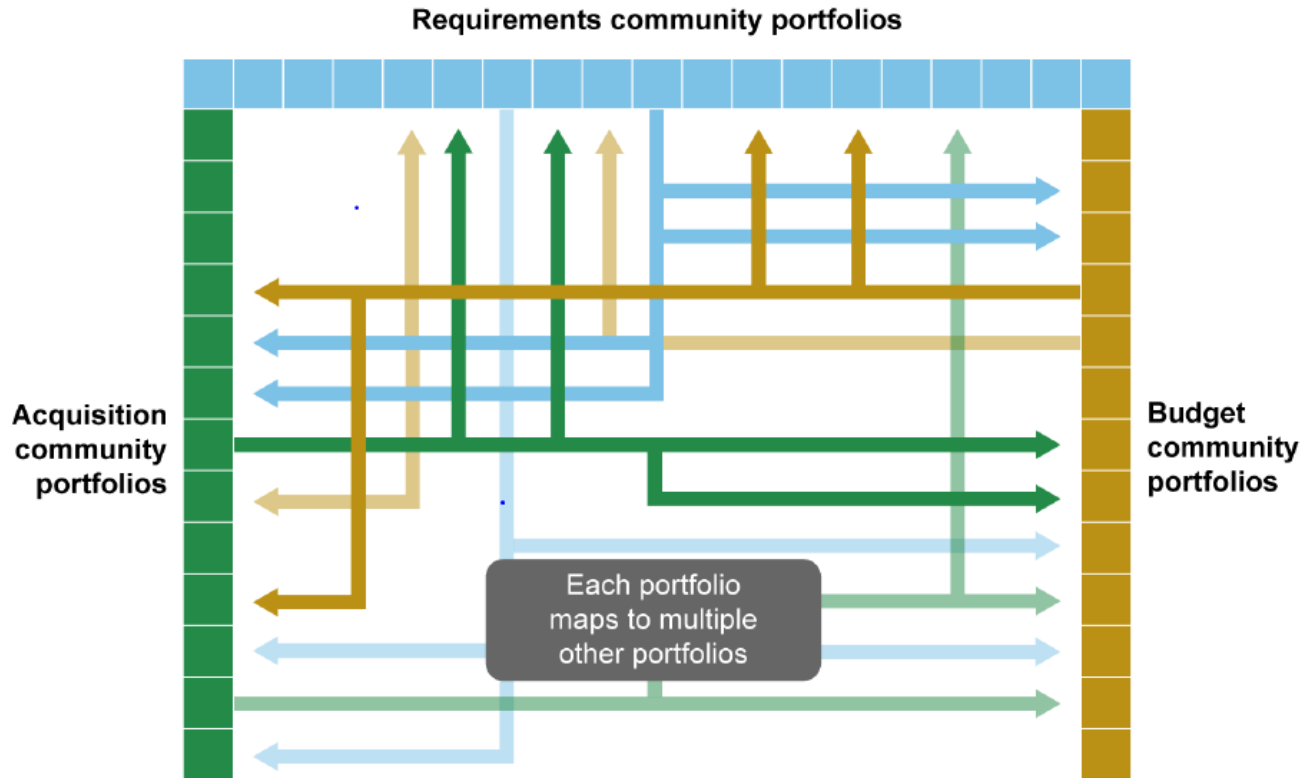**Source: DoDI 7000.45 Capability Portfolio Management, 25 Sept 2008**

GAO Review of Portfolio Management

- GAO-15-446, Weapon System Acquisition: Opportunities Exist to Improve the DoD's Portfolio Management
  - DOD Is Not Using an Integrated Portfolio Management Approach to Optimize Its Weapon System Investments at the Enterprise Level
  - DOD's Stove-Piped Governance Structure Is an Impediment to Portfolio Management
  - DOD Lacks a Portfolio Management Policy That Reflects Best Practices
  - DOD does not conduct integrated enterprise-level portfolio reviews
- GAO-15-49SP, Fragmentation, Overlap, and Duplication: An Evaluation and Management Guide, Apr. 14, 2015)
  - "previously found that one way to better manage fragmented activities is to improve collaboration and coordination."
- Several Federal related GAO reports …

Source: GAO Report to Congressional Committees dated August 2015. "Weapons System Acquisition, Opportunities Exist to Improve the DoD's Portfolio Management"

GAO notes lack of consistency in Portfolios

Figure 2: Notional Mapping of Portfolio Constructs

Source: GAO analysis of DOD policies and documents. | GAO-15-466

Source: GAO Report to Congressional Committees dated August 2015. "Weapons System Acquisition, Opportunities Exist to Improve the DoD's Portfolio Management"

Organizations are Multi-Layered Systems

- **Multiple systems**

    – **Product (Federal PROGRAM) – system of systems**

    – **Processes - Management, Engineering, Logistics, etc**

    – **People – Program Managers, Financial, System Engineers, etc**

- **Multiple phases … yesterday, today, near and far future systems**

- **Multiple organizational layers**

    – **System Program Office (Program) to Air Force (Service) to OSD/AT&L (Department) to OMB (Executive Branch)**

- **Multiple Decision Support Systems**

    – **Financial (OMB A-11, PPBE …)**

    – **Acquisition (OMB A-11, FAR, DoD 5000 series …)**

    – **Requirements (OMB A-11, JCIDS …)**

Compare Federal CPG with PMI Portfolio
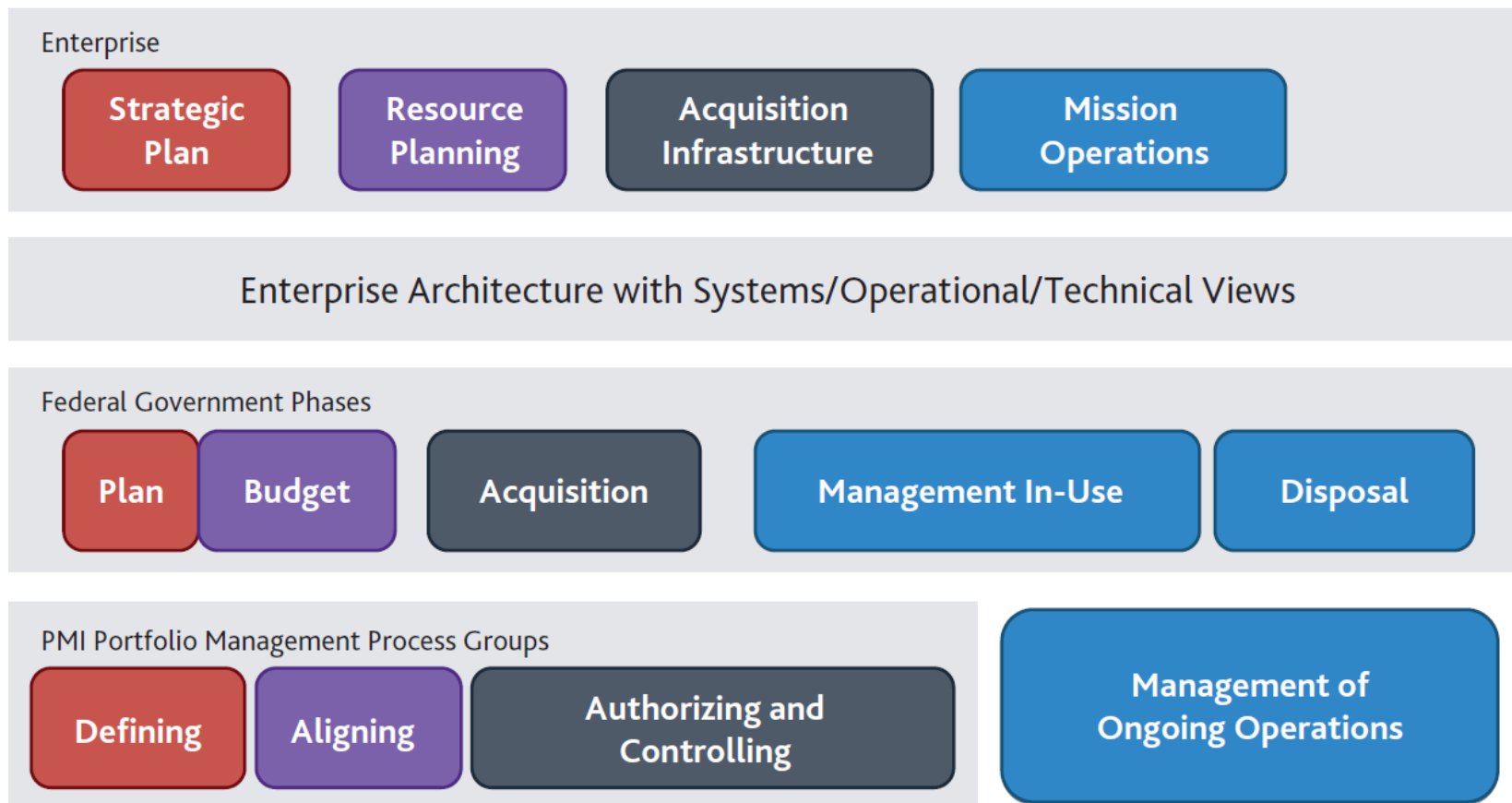
Figure 8: Comparison of CPG's Capital Planning Lifecycle and PMI's portfolio management standard.

Reference " Using PMI standards framework to improve U.S. federal government capital investment outcomes", PMI White Paper

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What would be a DoD Portfolios Structure – AF example
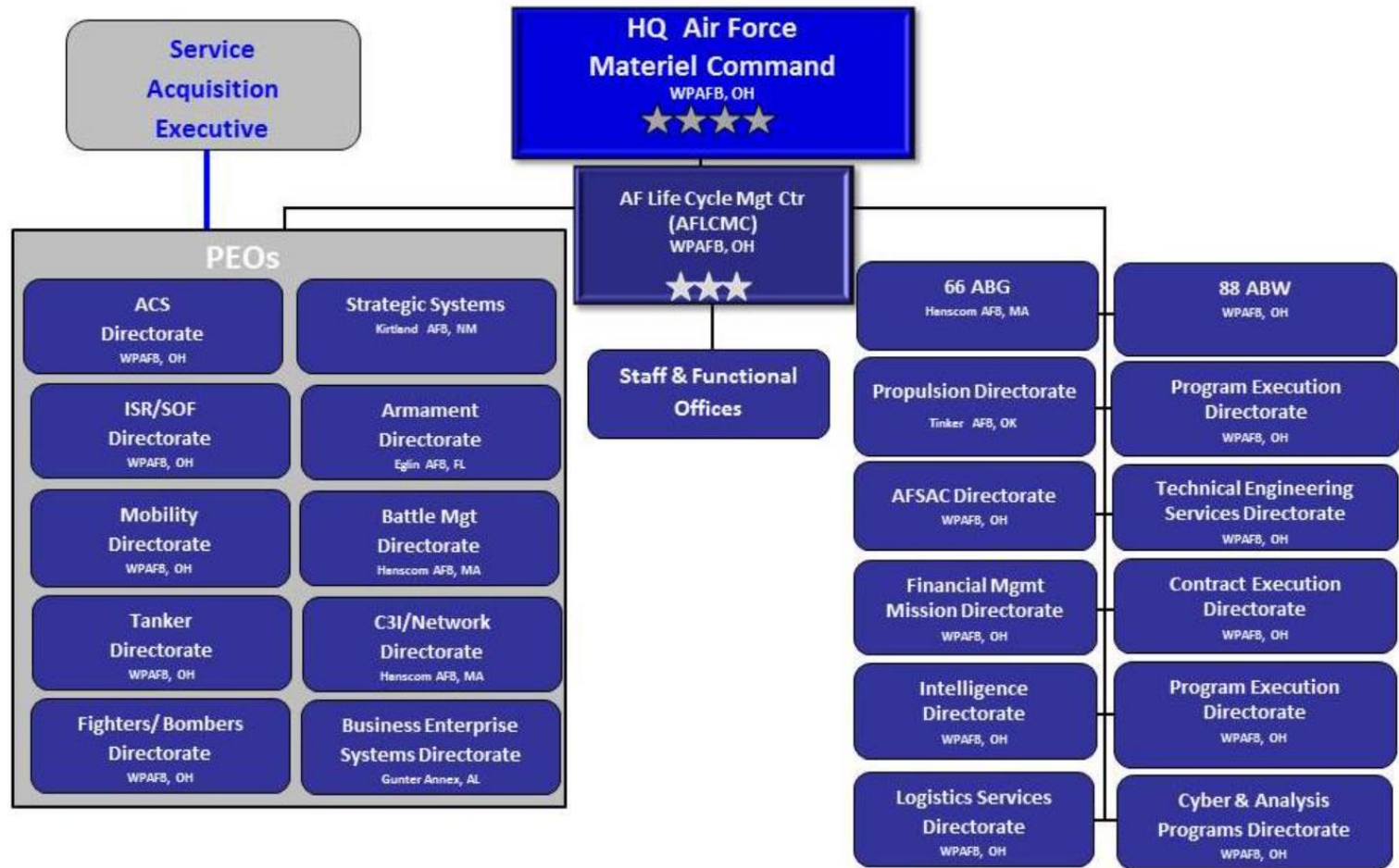
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AGENDA

Who are we?

The **Consortium for Engineering Program Excellence (CEPE)** at the *Massachusetts Institute of Technology* (MIT) seeks to improve program outcomes through research at the intersections of:

- Program management
- Systems engineering
- Product development
- Lean management
- Organizational change

More info:
http://cepe.mit.edu

## Strategic Partners:

Key Results and Ongoing Research

The **Guide** to **Lean Enablers**

The **Encyclopedia** for Lean Enablers

- ➢ Improving Integration of Program Management and Systems Engineering
- ➢ Project Management Agility Global Survey
- ➢ Lean Program Metrics
- ➢ Supplier integration in early-stage program development

System Boundaries
Engineering, Management, Implementation
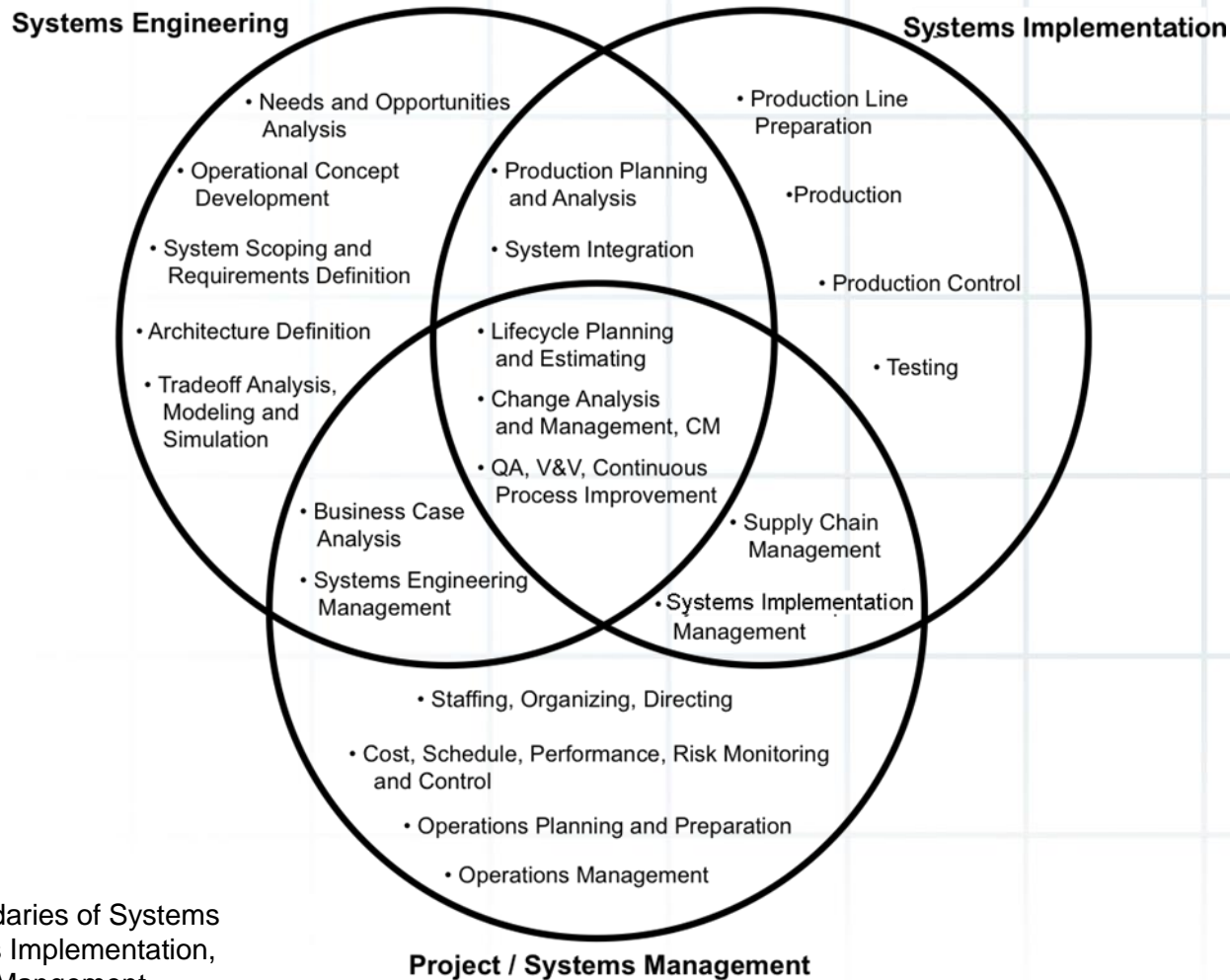
Figure, System Boundaries of Systems Engineering, Systems Implementation, and Project/Systems Mangement,

Graphic from http://sebokwiki.org/wiki/File:Scope_BoundariesSE_PM_SM.png

Lean Enablers (LE) Structured Along Six Lean Principles (LP)	No. of Lean Enablers
LE 1.x: Respect the people in your program (LP6)	6
LE 2.x: Capture the value defined by the key customer stakeholders (LP1)	6
LE 3.x: Map the value stream and eliminate waste (LP2)	11
LE 4.x: Flow the work through planned and streamlined processes (LP3)	10
LE 5.x: Let customer stakeholders pull value (LP4)	2
LE 6.x: Pursue perfection in all processes (LP5)	8
Total	43

Oehmen, Josef, (Ed.). 2012. The Guide to Lean Enablers for Managing Engineering Programs, Version 1.0. Cambridge, MA: Joint MIT-PMI-INCOSE Community of Practice on Lean in Program Management. URI: http://hdl.handle.net/1721.1/70495.

Major Challenge Themes in Engineering Programs that Lean Enablers Help to Address

1. Firefighting—Reactive program execution
2. Unstable, unclear, and incomplete requirements
3. Insufficient alignment and coordination of the extended enterprise
4. Processes are locally optimized and not integrated for the entire enterprise
5. Unclear roles, responsibilities, and accountability
6. Mismanagement of program culture, team competency, and knowledge
7. Insufficient program planning
8. Improper metrics, metric systems, and KPIs
9. Lack of proactive program risk management
10. Poor program acquisition and contracting practices

Looking for the **causal links** between, organizational, processes and people factors and **effective integration** to improve **program performance**
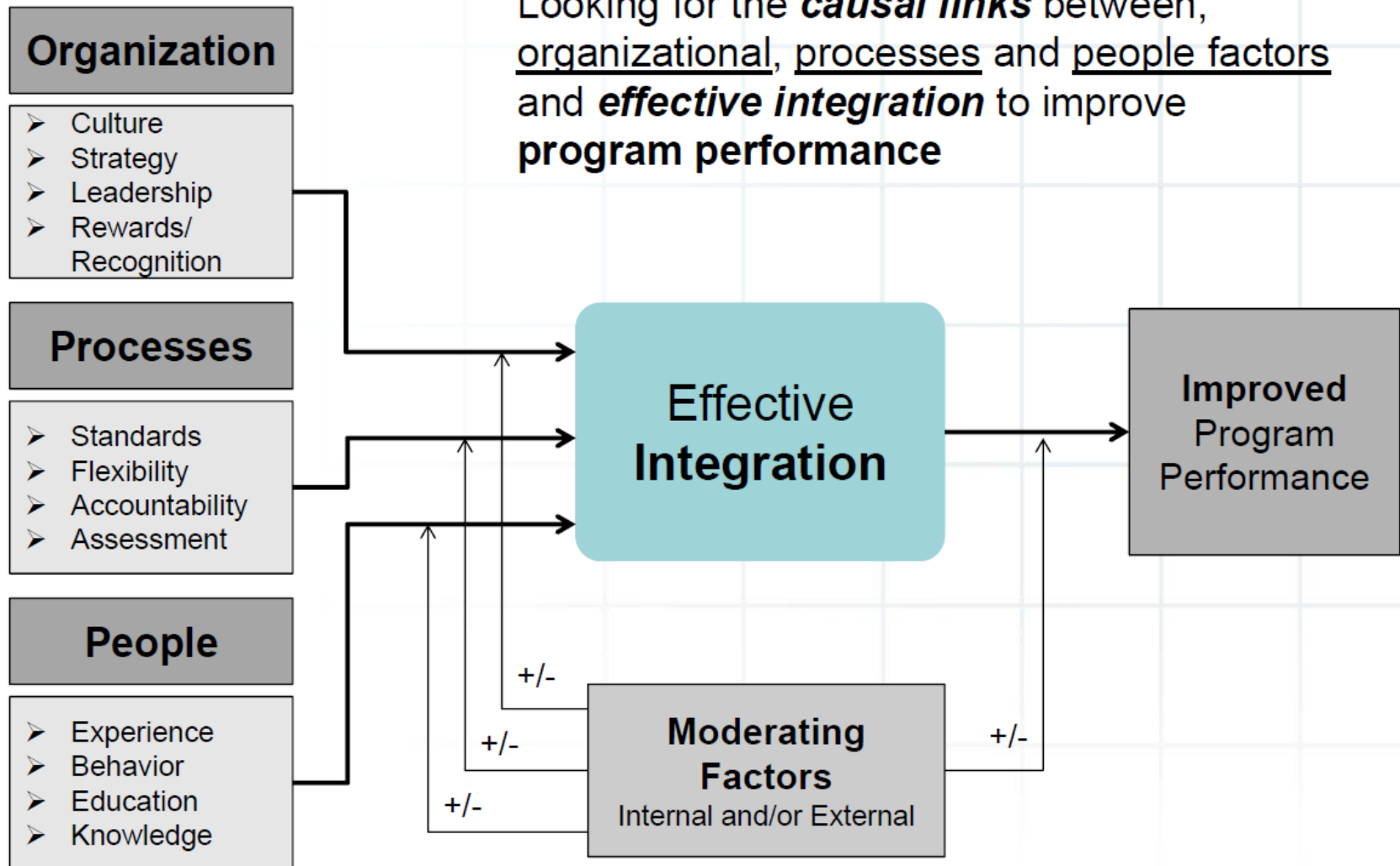
Organization
- Culture
- Strategy
- Leadership
- Rewards/ Recognition

Processes
- Standards
- Flexibility
- Accountability
- Assessment

People
- Experience
- Behavior
- Education
- Knowledge

Effective Integration

Improved Program Performance

Moderating Factors Internal and/or External

+/- +/- +/- +/-

Chart 41, Rebentisch & Conforto, MIT/EPE; PMI & INCOSE Integration Study; PMI Global Congress EMEA, ,May 2014

Performance Measurement – beyond contracts

PMI multi-tiered structure

- **Portfolio – value tied to strategy**

- **Program – budget tied to benefits**

- **Project – cost tied to baseline**

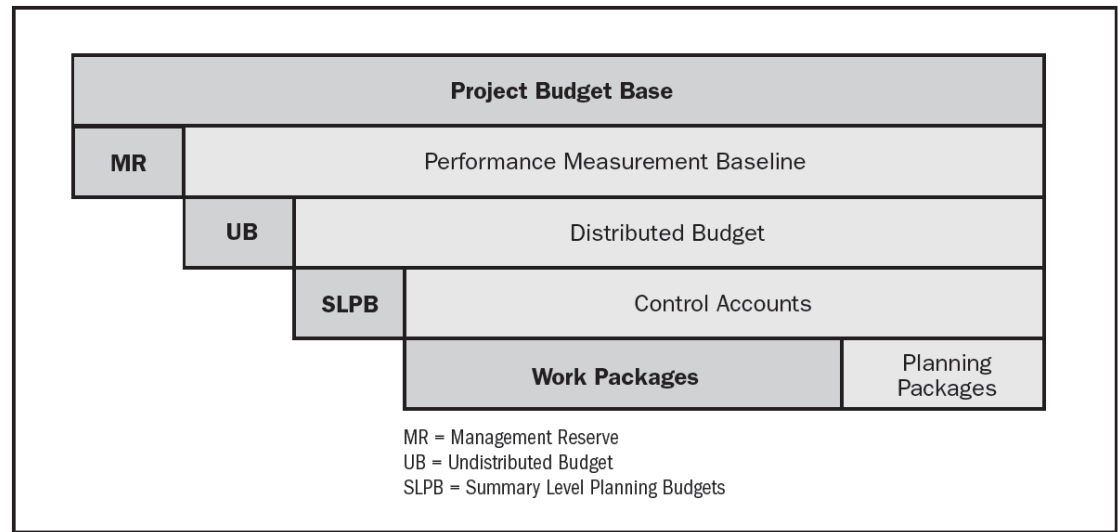**PMI EVM Standard**

- **Focus on Projects**

Figure 2-4. EVM Budget Elements

Framework for Assessing the Acquisition Function, GAO 05 218G.

Also issue in OMB letter, May 2008, as requirement as part of internal reviews

Limited Portfolio, Program, or Project knowledge areas!

Not focus on performance!

TEMPLATE ROADMAP

CORNERSTONES	ELEMENTS	CRITICAL SUCCESS FACTORS
I. Organizational Alignment and Leadership (pg. 7)	A. Aligning Acquisition with Agency Mission and Needs (pg. 7)	1. Assuring Appropriate Placement of the Acquisition Function (pg. 7) 2. Organizing the Acquisition Function to Operate Strategically (pg. 8) 3. Clearly Defining and Integrating Roles and Responsibilities (pg. 9)
	B. Commitment from Leadership (pg. 10)	1. Clear, Strong and Ethical Executive Leadership (pg. 10) 2. Effective Communications and Continuous Improvement (pg. 12)
II. Policies and Processes (pg. 14)	A. Planning Strategically (pg. 14)	1. Partnering with Internal Organizations (pg. 14) 2. Assessing Internal Requirements and the Impact of External Events (pg. 15)
	B. Effectively Managing the Acquisition Process (pg. 17)	1. Empowering of Cross-Functional Teams (pg. 17) 2. Managing and Engaging Suppliers (pg. 18) 3. Monitoring and Providing Oversight to Achieve Desired Outcomes (pg. 20) 4. Enabling Financial Accountability (pg. 21)
	C. Promoting Successful Outcomes of Major Projects (pg. 23)	1. Using Sound Capital Investment Strategies (pg. 23) a. Integrating Organizational Goals into the Capital Decision-making Process (pg 23) b. Evaluating and Selecting Capital Assets Using an Investment Approach (pg 25) c. Balancing Budgetary Control and Managerial Flexibility (pg. 26) 2. Employing Knowledge-Based Acquisition Approaches (pg. 26)
III. Human Capital (pg. 28)	A. Valuing and Investing in the Acquisition Workforce (pg. 28)	1. Commitment to Human Capital Management (pg. 28) 2. Role of the Human Capital Function (pg. 29)
	B. Strategic Human Capital Planning (pg. 29)	1. Integration and Alignment (pg. 29) 2. Data-Driven Human Capital Decisions (pg. 30)
	C. Acquiring, Developing, and Retaining Talent (pg. 32)	1. Targeted Investments in People (pg. 32) 2. Human Capital Approaches Tailored to Meet Organizational Needs (pg. 33)
	D. Creating Results-Oriented Organizational Cultures (pg. 33)	1. Empowerment and Inclusiveness (pg. 33) 2. Unit and Individual Performance Linked to Organizational Goals (pg. 34)
IV. Information Management & Stewardship (pg. 35)	A. Identifying Data and Technology that Support Acquisition Management Decisions (pg. 35)	1. Tracking Acquisition Data (pg. 35) 2. Translating Financial Data into Meaningful Formats (pg. 36) 3. Analyzing Goods and Services Spending (pg. 37)
	B. Safeguarding the Integrity of Operations and Data (pg. 38)	1. Ensuring Effective General and Application Controls (pg. 38) 2. Data Stewardship (pg. 38)

Organizational Project Management Maturity Model (OPM3), 3rd Edition

ANSI/PMI Standard

08-0004-2013

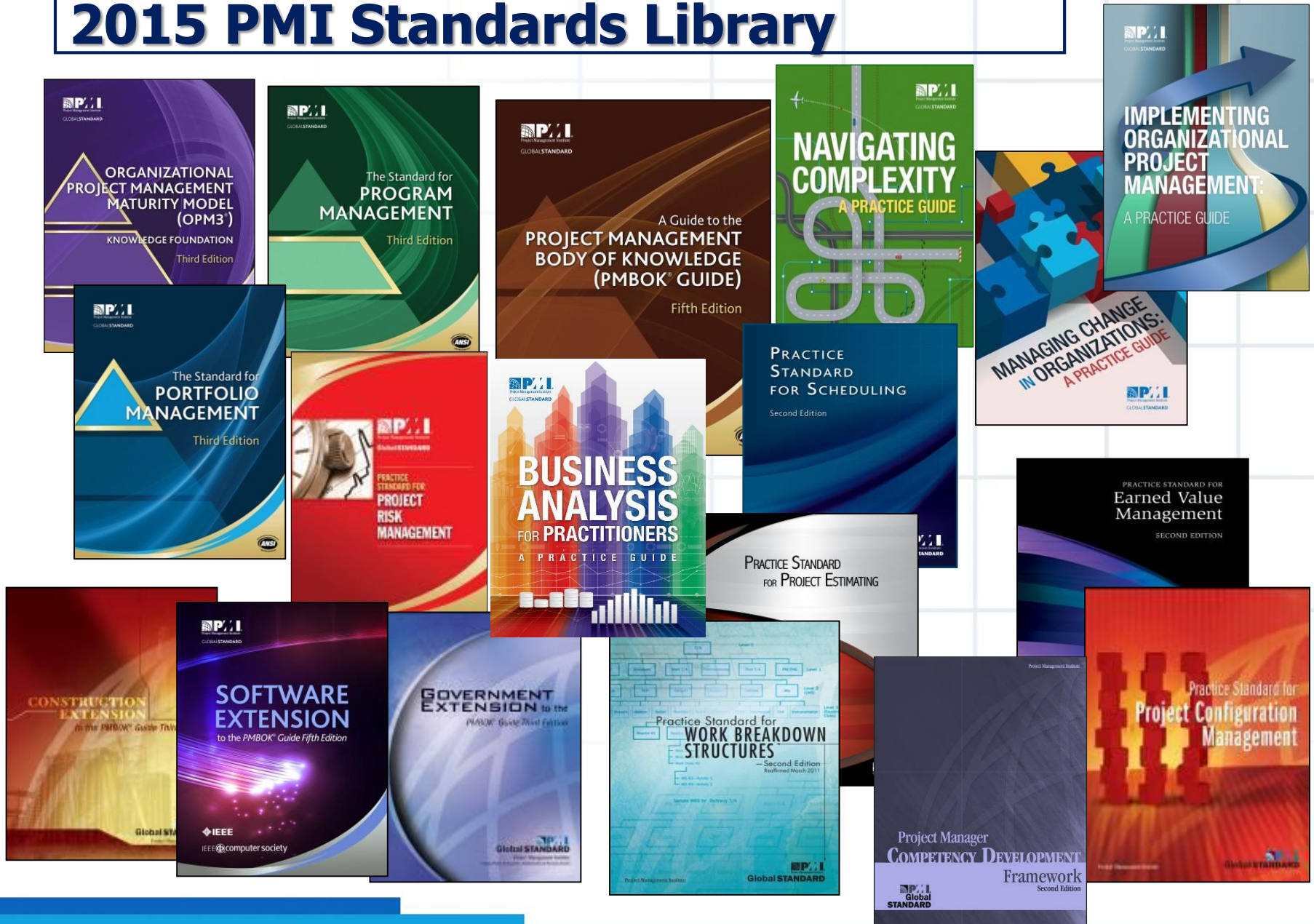- **Across Portfolio, Program, and Project**

- **Assessment and Improvement**
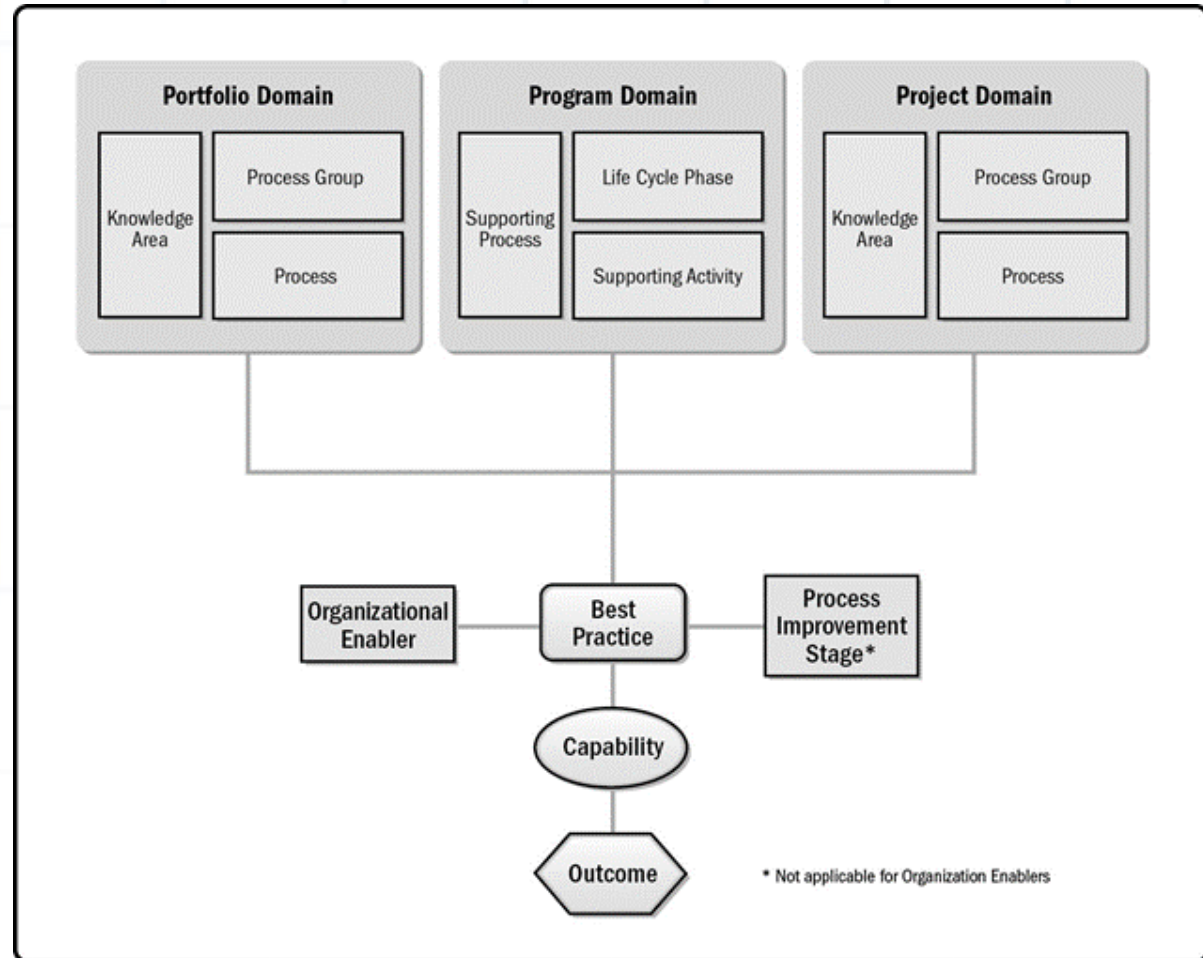
"Time to Update OMB Capital Programming Guidance," February 2017

- Recommendations
  - Deploy new policy in A-11/Capital Programming Guide
  - Address Portfolio Management with Lean Enablers
  - Move to Multi-tier life cycle framework
  - Agencies should define/report portfolio stuctures linked to strategic planning
  - Update/Expand Federal Acquisition Certification (FAC)
    - Align with multi-tier lifecycle
    - Address Federal and Industry staff
- DoD has always led the evolution in Federal space

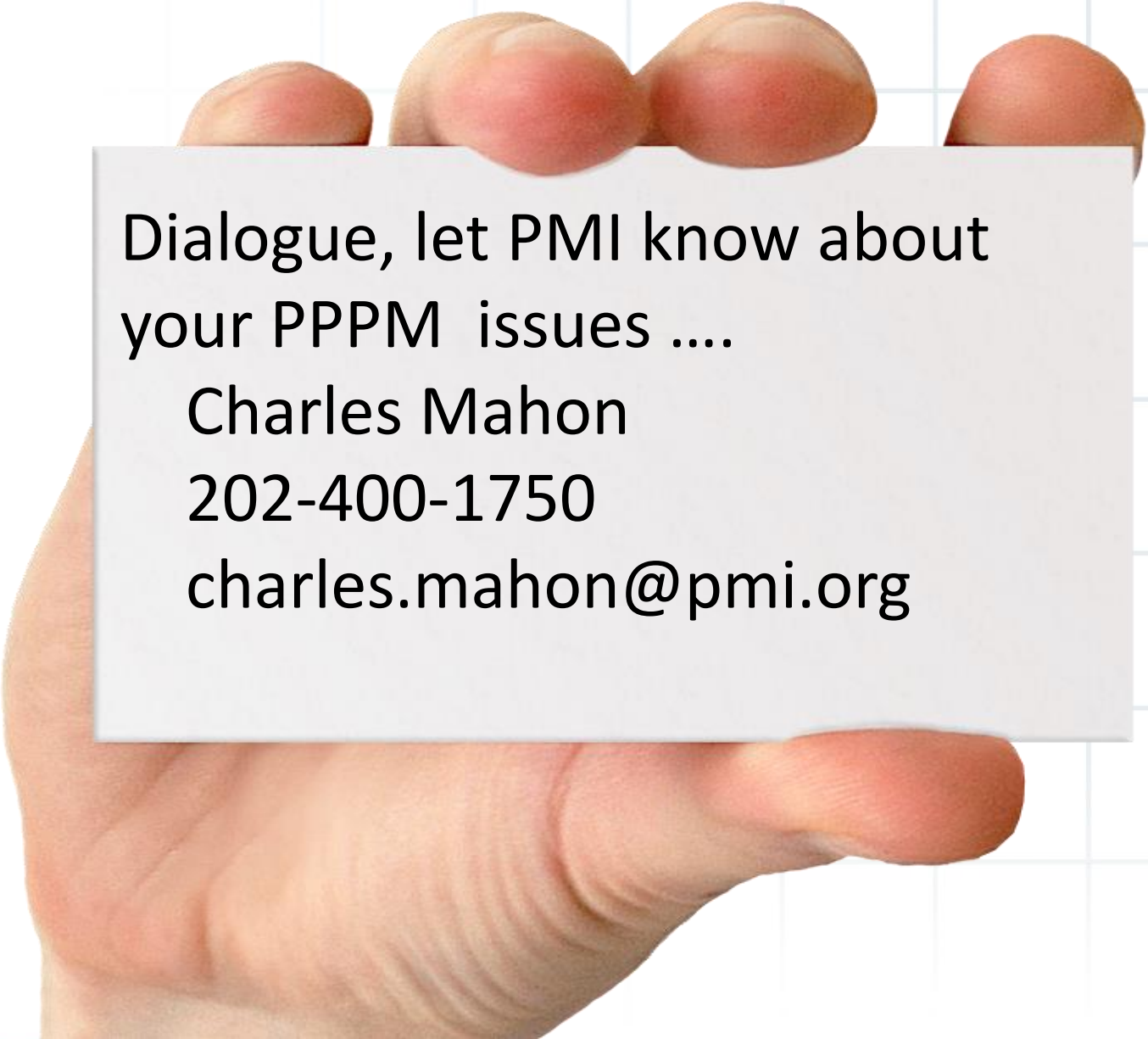# BACKUP AND REFERENCE SLIDES FOLLOW:

2015 PMI Standards Library

PMI Standards Library List

Category	Title
PMI Global Foundational Standards / PMI American National Standards	- A Guide to the Project Management Body of Knowledge (PMBOK® Guide - The Standard for Program Management - The Standard for Portfolio Management - Organizational Project Management Maturity Model (OPM3)
PMI Global Practice Standards	- Practice Standard for Earned Value Management - Practice Standard for Scheduling - Practice Standard for Project Configuration Management - Practice Standard for Project Risk Management - Practice Standard for Work Breakdown Structures - Practice Standard for Project Estimating
PMI Global Standard Application Area Extensions	- Construction Extension to the PMBOK Guide® - Government Extension to the PMBOK Guide® - Software Development Extension to the PMBOK Guide®
PMI Standards Adjunct Products	- Project Manager Competency Development Framework - PMI Lexicon of Project Management Terms (online resource) - Managing Change in Organizations: a Practice Guide - Navigating Complexity: A Practice Guide - Implementing Organizational Project Management: A Practice Guide - Business Analysis for Practitioners: A Practice Guide

Certifications: Certifications provide Credibility, Transferability, Commitment, and Relevance

Certification	Description
PMP	**The PMP (Project Management Professional)** certification recognizes competence of an individual to perform in the role of project manager, specifically experience in leading and directing projects.
CAPM	**The CAPM (Certified Associate in Project Management)** certification recognizes a demonstrated understanding of the fundamental knowledge, processes, and terminology as defined in the PMBOK Guide that are needed for effective project management performance.
PgMP	**The PgPM (Program Management Professional)** certification recognizes demonstrated experience, skill, and performance in the oversight of multiple, related projects that are aligned with organizational objectives.
PfPM	**The PfPM (Portfolio Management Professional)** certification recognizes the advanced skill needed for the coordinated management of one or more portfolios of projects, programs, or operations to achieve organizational objectives.
PMI-ACP	**The PMI-ACP (Agile Certified Practitioner)** certification recognizes knowledge of agile principles, practices, and tools and techniques across agile methodologies, not simply limiting a practitioner to one agile approach.
PMI-PBA	**The PMI-PBA (Professional in Business Analysis)** certification recognizes highlights expertise in business analysis. It spotlights ability to work effectively with stakeholders to define their business requirements, shape the output of projects and drive successful business outcomes.
PMI-RMP	**The PMI-RMP (Risk Management Professional)** certification recognizes demonstrated knowledge and competency in the specialized area of assessing and identifying project risks along with plans to mitigate threats and capitalize on opportunities.
PMI-SP	**PMI-SP (Scheduling Professional)** certification recognizes demonstrated knowledge and competency in the specialized area of developing and maintaining the project schedule.

Dialogue, let PMI know about your PPPM issues ....
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