Fully Utilize Your PMO: Implement Key Techniques and Best-In-Class Practices

October 15, 2008

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PMP, SCPM, MBA

THE 2008 Project Management Office Summit

Developing and Implementing a PMO to Maximize Project Efficiency

October 15-17, 2008 | Washington, DC

ASMI — American Strategic Management Institute

Pi — The Performance Institute

Objectives

- **Discover how PMOs can be used to monitor and execute successful project plans**

- **Master innovative techniques for monitoring and controlling all enterprise projects using a successful PMO**

- **Implement best practices for project success using PMO compliance and portfolio management methodologies**

The Boeing Company
Overview

History

- **Founded in 1916 in Puget Sound, Washington**

- **Became a leading producer of military and commercial aircraft**

- **Undertook a series of strategic mergers and acquisitions to become the world's largest, most diversified aerospace company**

  - Aerospace pioneers now part of the Boeing enterprise include:

    - North American Aviation

    - McDonnell Douglas

    - Rockwell International (space and defense business)

    - Hughes Space & Communications

    - Jeppesen

A heritage that mirrors the history of flight

What We Do Today

- **Design, assemble and support commercial jetliners**
  - Boeing 7-series family of airplanes lead the industry
  - Commercial Aviation Services (CAS) offers broad range of services to passenger and freight carriers
- **Design, assemble and support defense systems**
  - World's largest designer and manufacturer of military transports, tankers, fighters and helicopters
  - Support Systems provides services to government customers worldwide
- **Design and assemble satellites and launch vehicles**
  - World's largest provider of commercial and military satellites; largest NASA contractor
- **Integrate large-scale systems; develop networking technology and network-centric solutions**
- **Provide financing solutions focused on customer requirements**
- **Develop advanced systems and technology to meet future customer needs**

Connect and protect people globally

Vision 2016

People working together as a global enterprise for aerospace leadership

| Strategies	Core competencies	Values
Run healthy core businesses	Detailed customer knowledge and focus	Leadership
Leverage strengths into new products and services	Large-scale systems integration	Integrity
Open new frontiers	Lean enterprise	Quality
		Customer satisfaction
		People working together
		A diverse and involved team
		Good corporate citizenship
		Enhancing shareholder value

Global Boeing

- **Customers in more than 90 countries**
  - Total revenue in 2007: $66.4 billion (41 percent from international sales)
  - 70 percent of commercial airplane revenue historically from customers outside the United States

- **Manufacturing, service and technology partnerships with companies around the world**
  - Contracts with 22,000 suppliers and partners globally

- **Research, design and technology-development centers and programs in multiple countries**

- **More than 150,000 Boeing employees in 49 states and 70 countries**

Partnering worldwide for mutual growth and prosperity

How We Are Organized

World-class performance
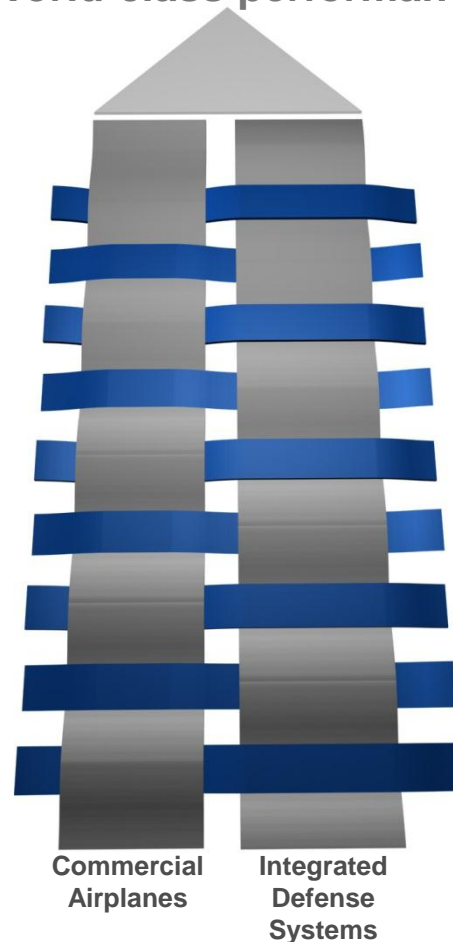
Corporate functions:

Business Development and Strategy

Communications

Engineering, Operations and Technology

Finance/Shared Services Group/Boeing Capital Corp.

Human Resources/Administration

International

Law

Office of Internal Governance

Public Policy

Commercial Airplanes

Integrated Defense Systems

Two businesses supported by nine corporate functions

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Boeing Commercial Airplanes

- **Headquartered in Puget Sound, Wash.**

- **2007 revenues of $33.4 billion**

- **More than 55,000 employees**

- **Offering a family of airplanes and a broad portfolio of aviation services for passenger and cargo carriers worldwide**

  - Boeing airplanes represent three quarters of the world's fleet, with nearly 12,000 jetliners in service

  - Approximately 70 percent of Boeing commercial airplane sales (by value) go to customers outside of the United States



The industry's source for customer-focused solutions

Integrated Defense Systems

- **Headquartered in St. Louis, Mo., with global operations in 4 nations and 21 states**

- **Formed in 2002 integrating Boeing's defense, space, intelligence and communications capabilities**

- **Designing, building and supporting net-enabled platforms and systems for government and commercial customers**

- **Balanced backlog across all markets including a strong mix of development, production and support contracts**

- **2007 revenues of $32.1 billion**

- **More than 70,000 employees**

Delivering the future

How We Operate: Boeing Management Model
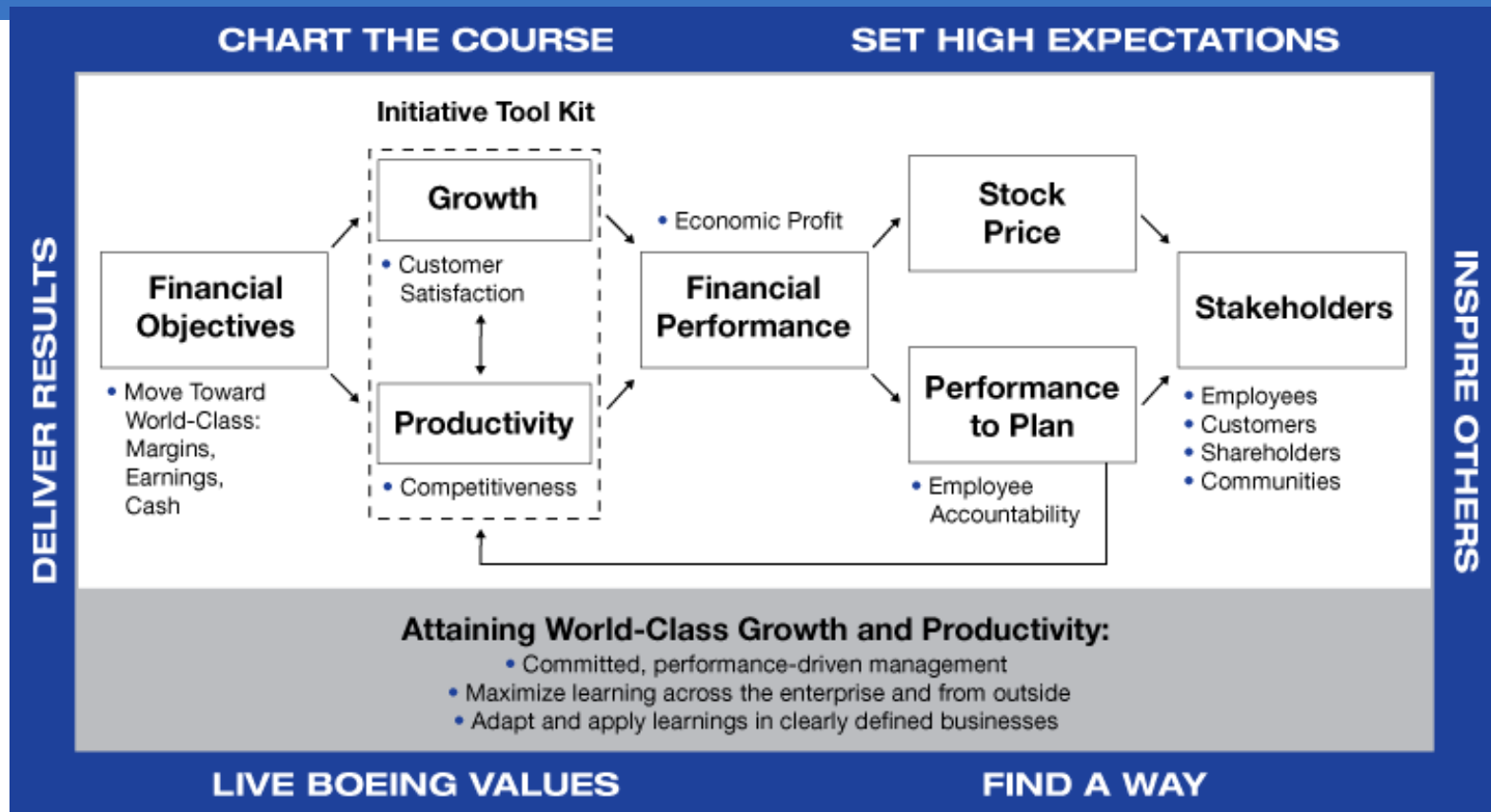
Driving performance through growth and productivity and leadership development

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What's the difference between Project, Program & Portfolio Management?

# Why are we here?

- **Prime purpose**
  - Make money?
  - Produce products and/or services to customers?
  - Chicken & egg scenario?
  - Continued operation as a company?

Why the Emphasis on Projects?

- **Work gets done in a company through projects**
  - New ideas/products/services
  - Changes/modifications to existing products/services
  - Fulfill company, business unit and/or organizational business strategies
  - Become more competitive in the marketplace
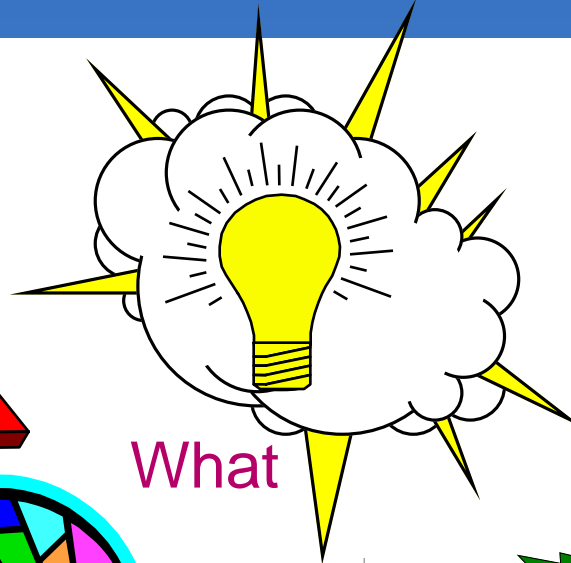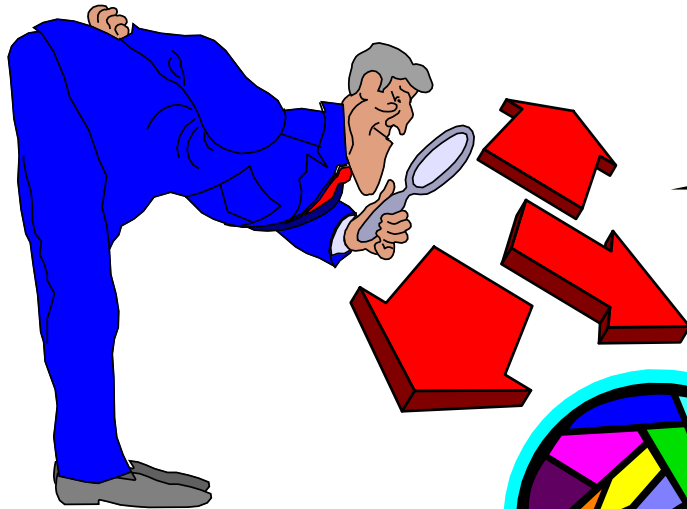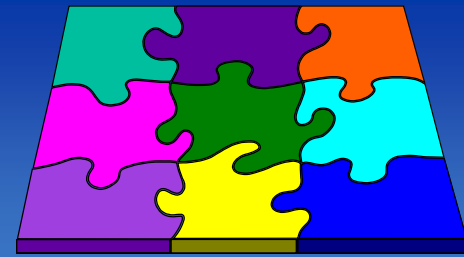
Primary Forces Creating Projects

Customer

Improvements & Non-conformances

Regulatory Agencies

Products, Processes & Services
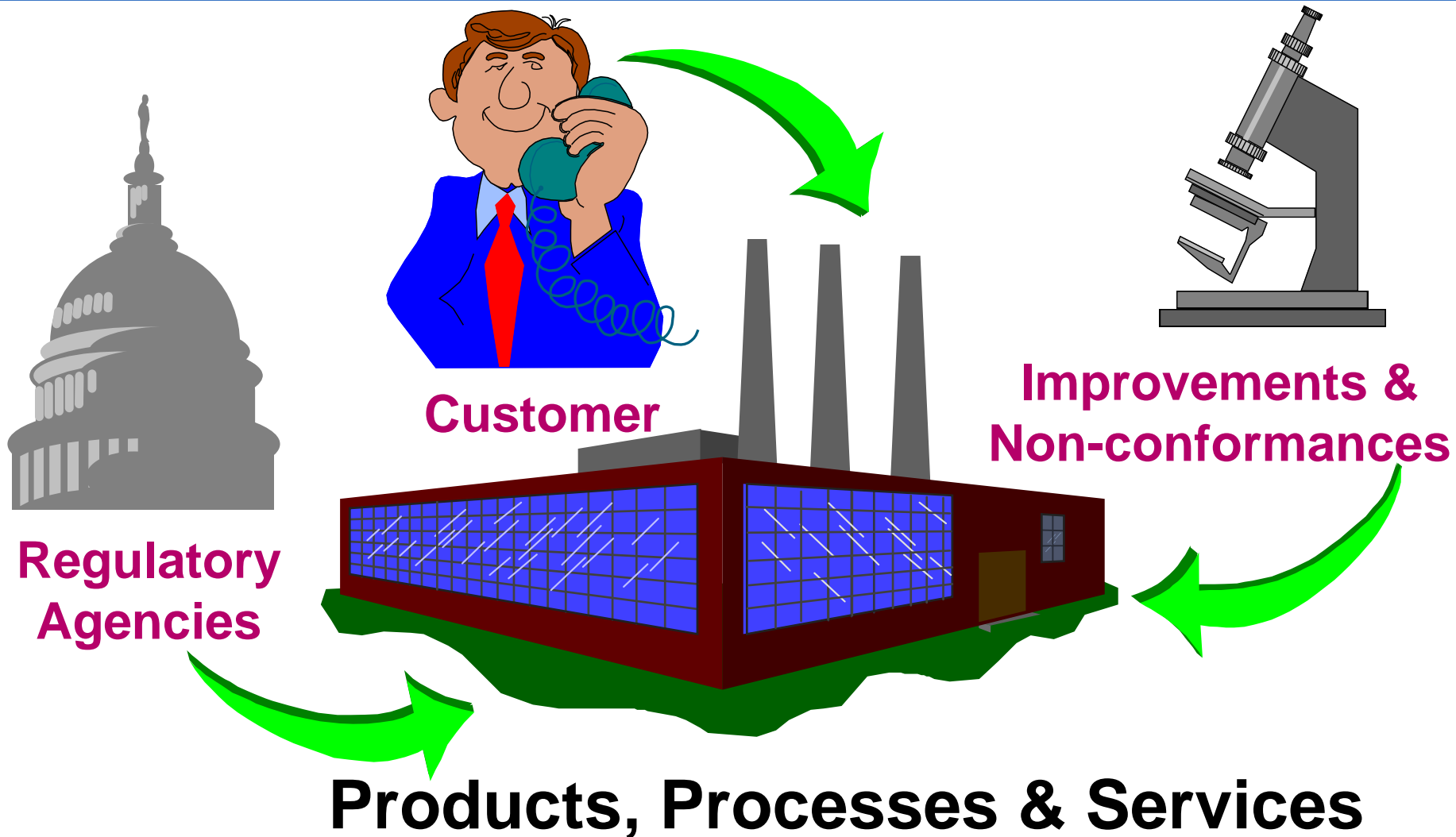
Business & Projects

Projects:

- Elicit business decisions
- Contain options from which to choose
  - e.g., phasing, decision points for "if, then, else" scenarios
  - Commit company resources to:
    - Product changes (e.g., airplane, software, procedures)
    - Process improvements
- Have one or more of three key purposes:
  1. Fix problems, or increase the company's net worth through improvements
  2. Meet customer requirements
  3. Comply with regulatory requirements

Projects – A Puzzle

What

Where

Who

How

Why

How Much

When
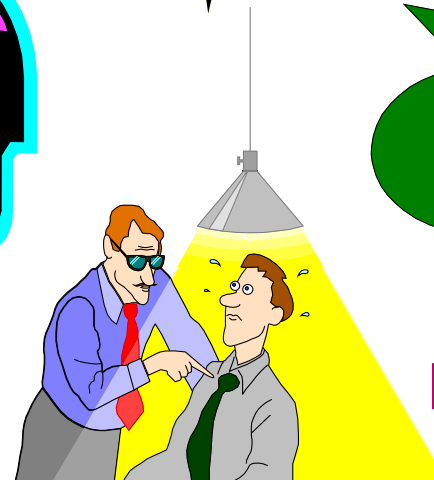
Need to Link & Balance Each of These Items

Schedule (Urgency) (Speed)

Need to understand
- Methods
- Tier Levels
- WBS

Budgets

Need to understand
- Control Accounts
- Earned Value Methods

Need to understand
- Key SMEs needed
- Key System Mgrs

Resources

Risk

Project Objectives

Need to understand
- Options
- Deliverables
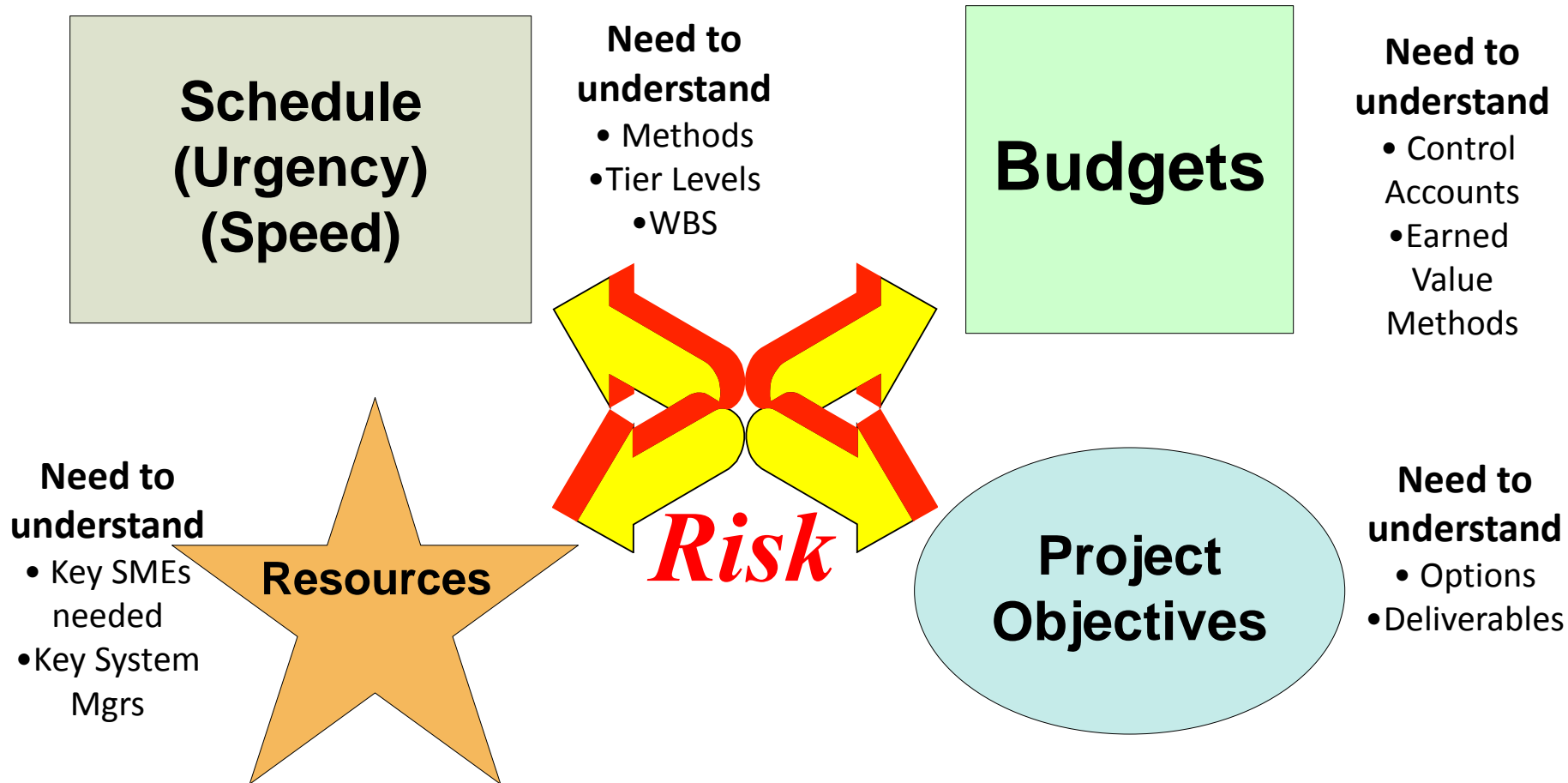
Working Together

The Swirling Life of a Project
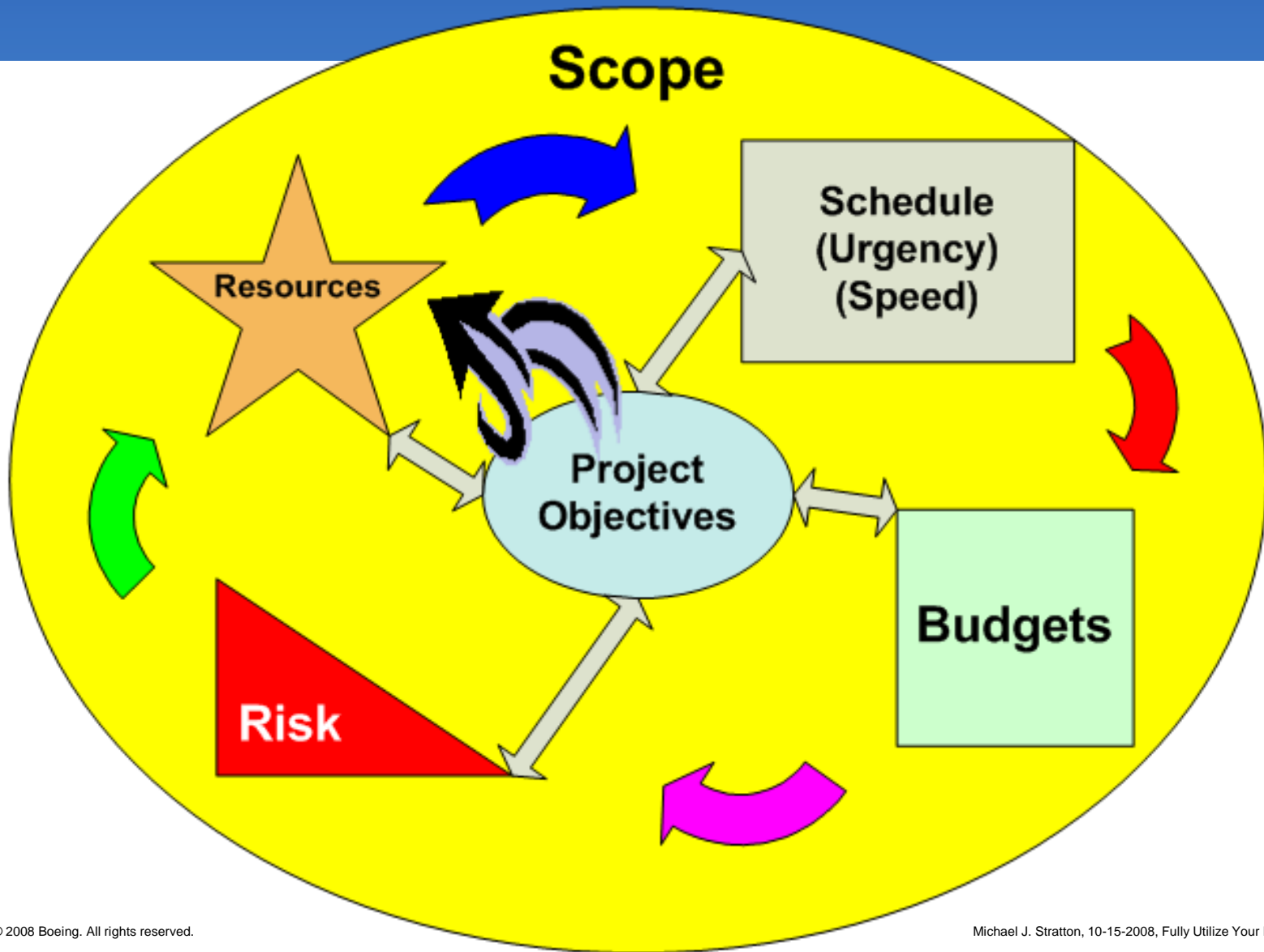
Official Definition -- Project

Project

A temporary endeavor undertaken to create
a unique product, service, or result.
-- *"PMBOK ® Guide"*

The Swirling World of Projects

Official Definition – Project Management

Project Management

The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.
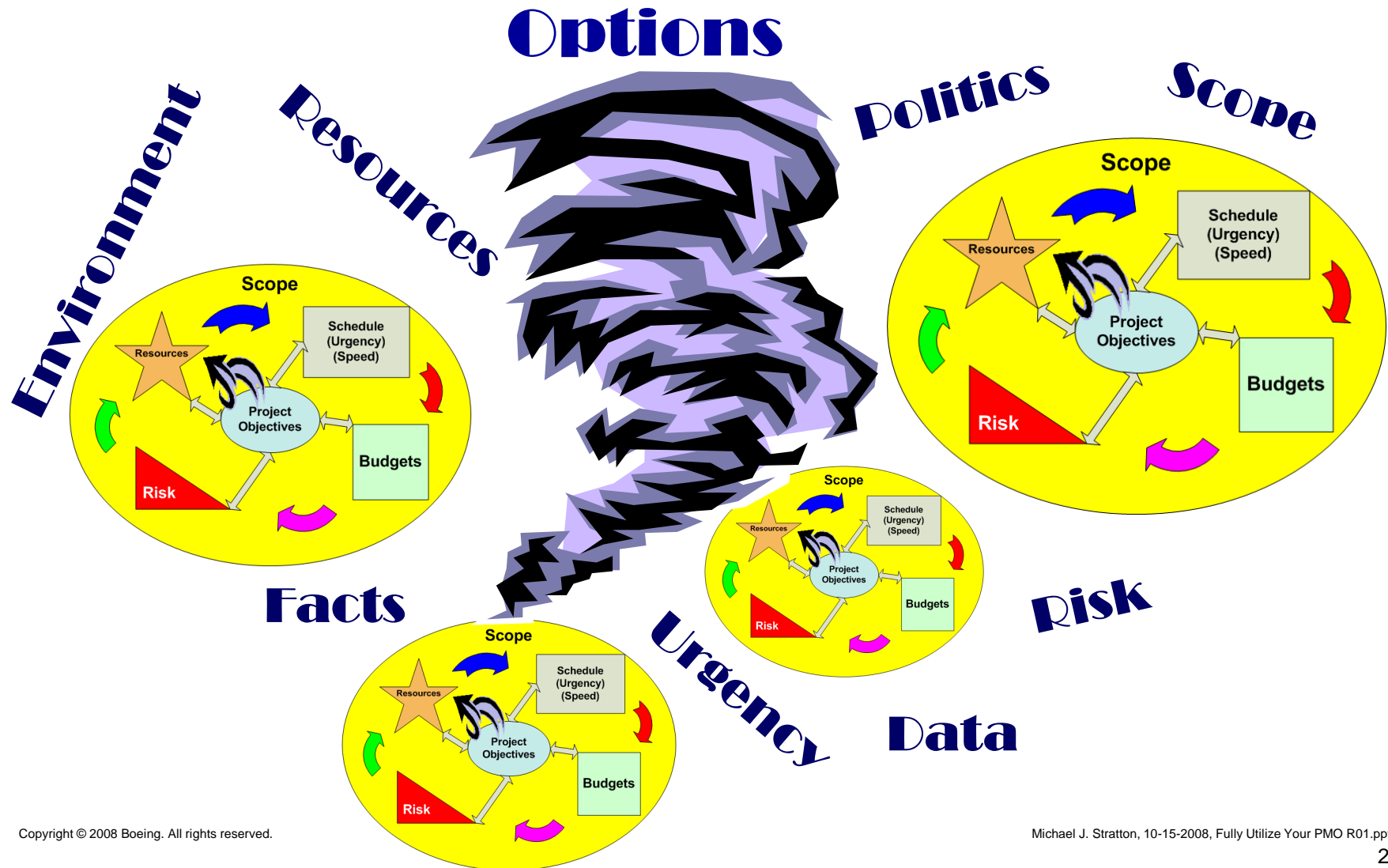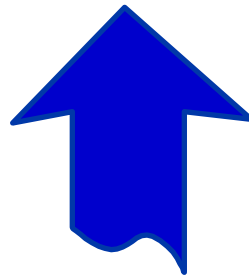-- IEEE-1490-PMBOK and ***"PMBOK ® Guide"***

Project

A temporary endeavor undertaken to create a unique product, service, or result.
-- ***"PMBOK ® Guide"***

The Swirling World of Programs
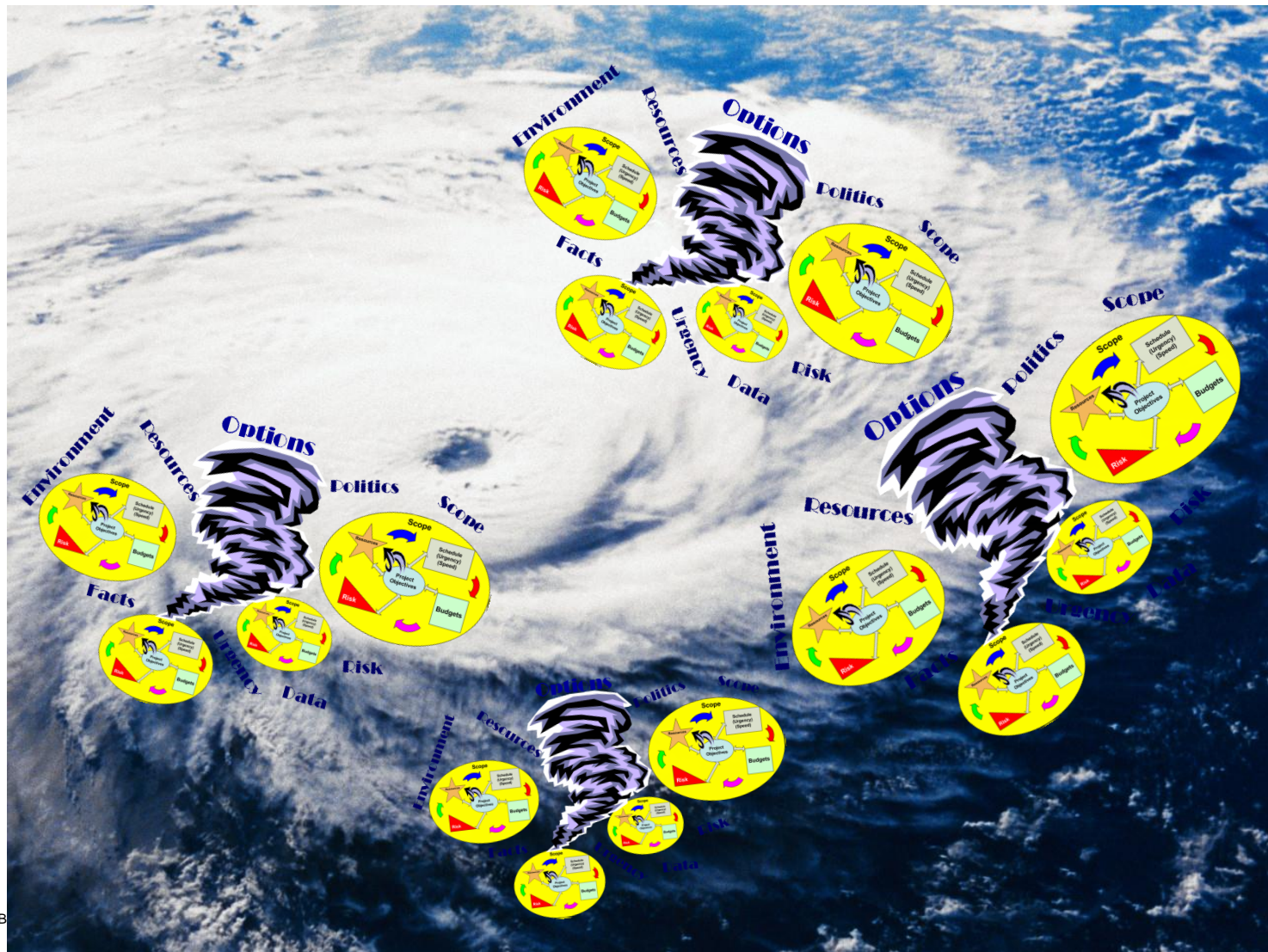
Official Definitions – Programs/Mgt

Program Management

The business and administrative planning, organizing, directing, coordinating, controlling, and approval actions designated to accomplish overall program objectives which are not associated with specific hardware elements and are not included in systems engineering. -- *MIL-HDBK-881A 7/30/2006*

The centralized coordinated management of a program to achieve the program's strategic objectives and benefits. -- *"PMBOK ® Guide"*
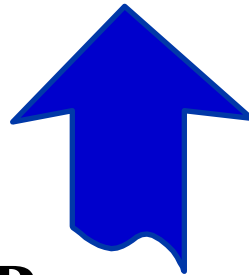
Program

A group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programs may include elements of related work outside of the scope of the discrete projects in the program.
-- *"PMBOK ® Guide"*

The Swirling Universe of Portfolios
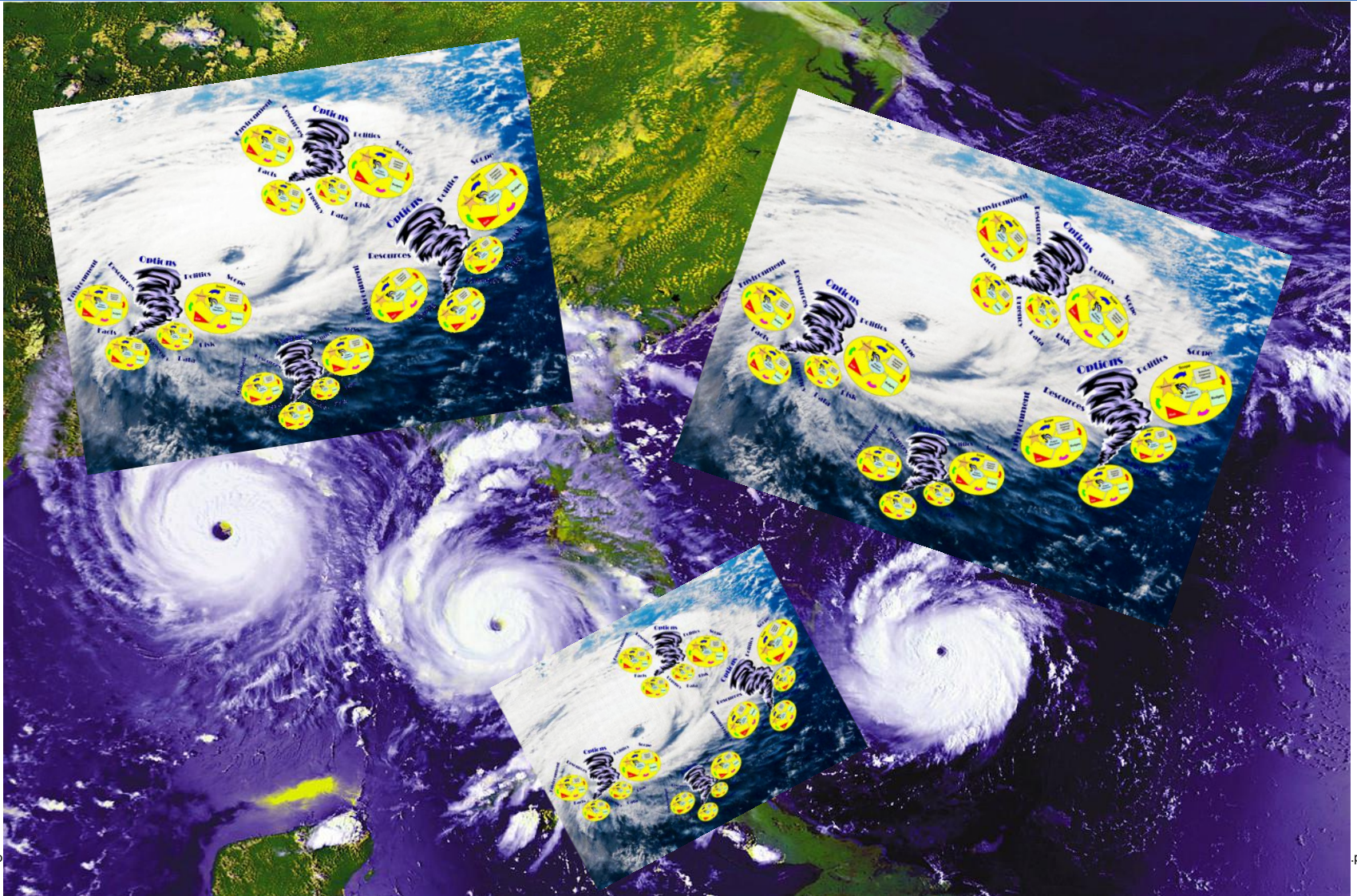
A Rose by Any Other Name

- **Portfolio Management (PfM) can take on many different names throughout industry:**
  - Product Portfolio Management
  - Project Portfolio Management
  - Application Portfolio Management
  - Investment/Project Management Process
  - Etc.

Official Definitions – Portfolios/Mgt

Portfolio Management

The centralized management one or more portfolios, which includes identifying, prioritizing, authorizing, managing, and controlling projects, programs, and other related work to achieve specific strategic business objectives. -- *"PMBOK ® Guide"*

Portfolio

A collection of projects or programs and other work that are grouped together to facilitate the effective management of that work to meet strategic business objectives. The projects or programs of the portfolio may not necessarily be interdependent or directly related.
-- *"PMBOK ® Guide"*

Another View

Portfolio

7 *Programs* 9

A Z *Projects* C V

Jo Sam Ben Cher Anna Aria Will Lilje Ann

Shared Resources

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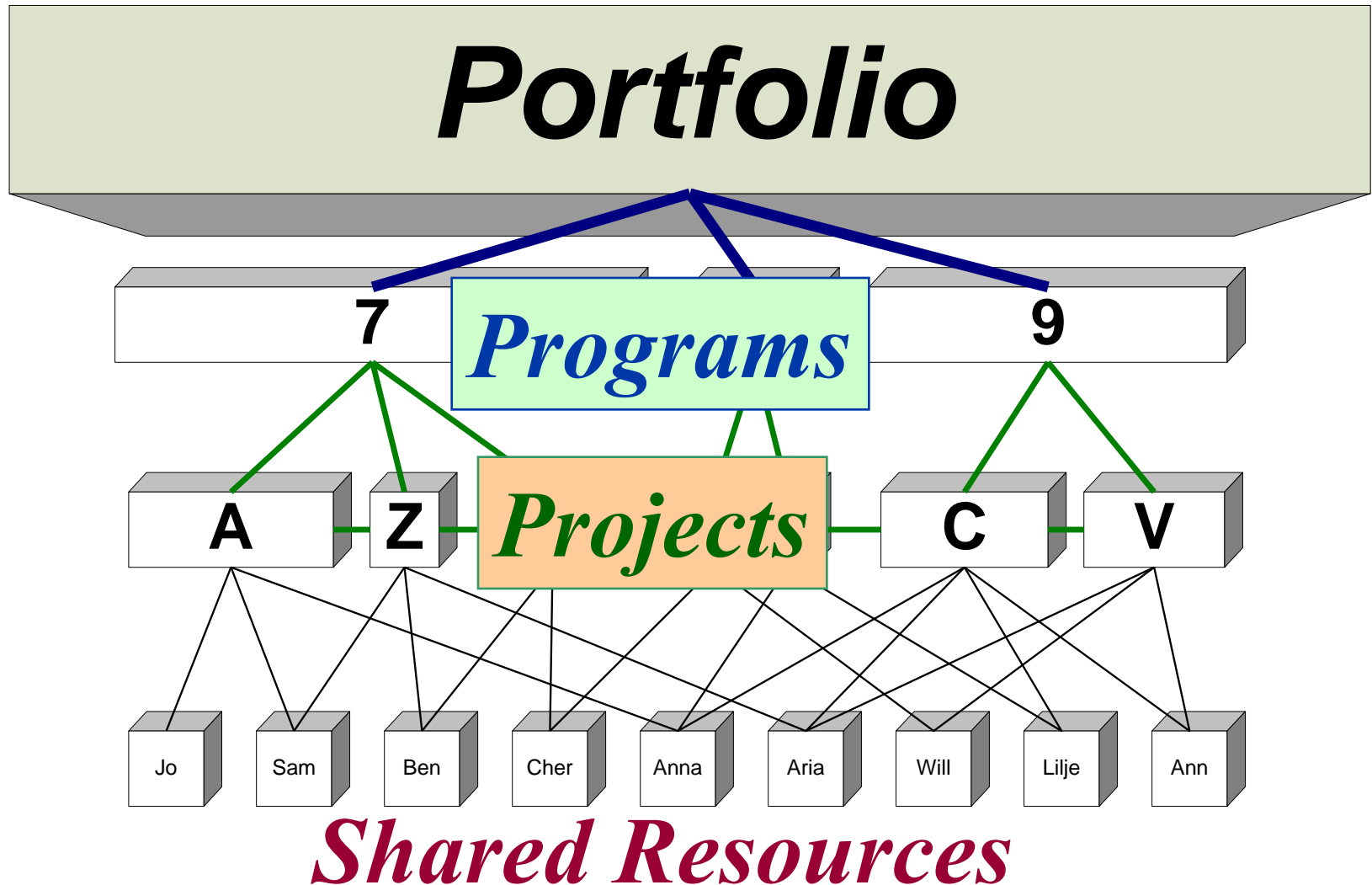
Fulfillment of Business Purpose

Goals, Objectives, & Strategies

Initiatives, Programs & Projects

CEO Goals,

Portfolio

Funding

Value

Ideas

Plans

Translate

Translate

Translate

Measure

Measure

Initiatives, Programs & Projects

Stakeholders
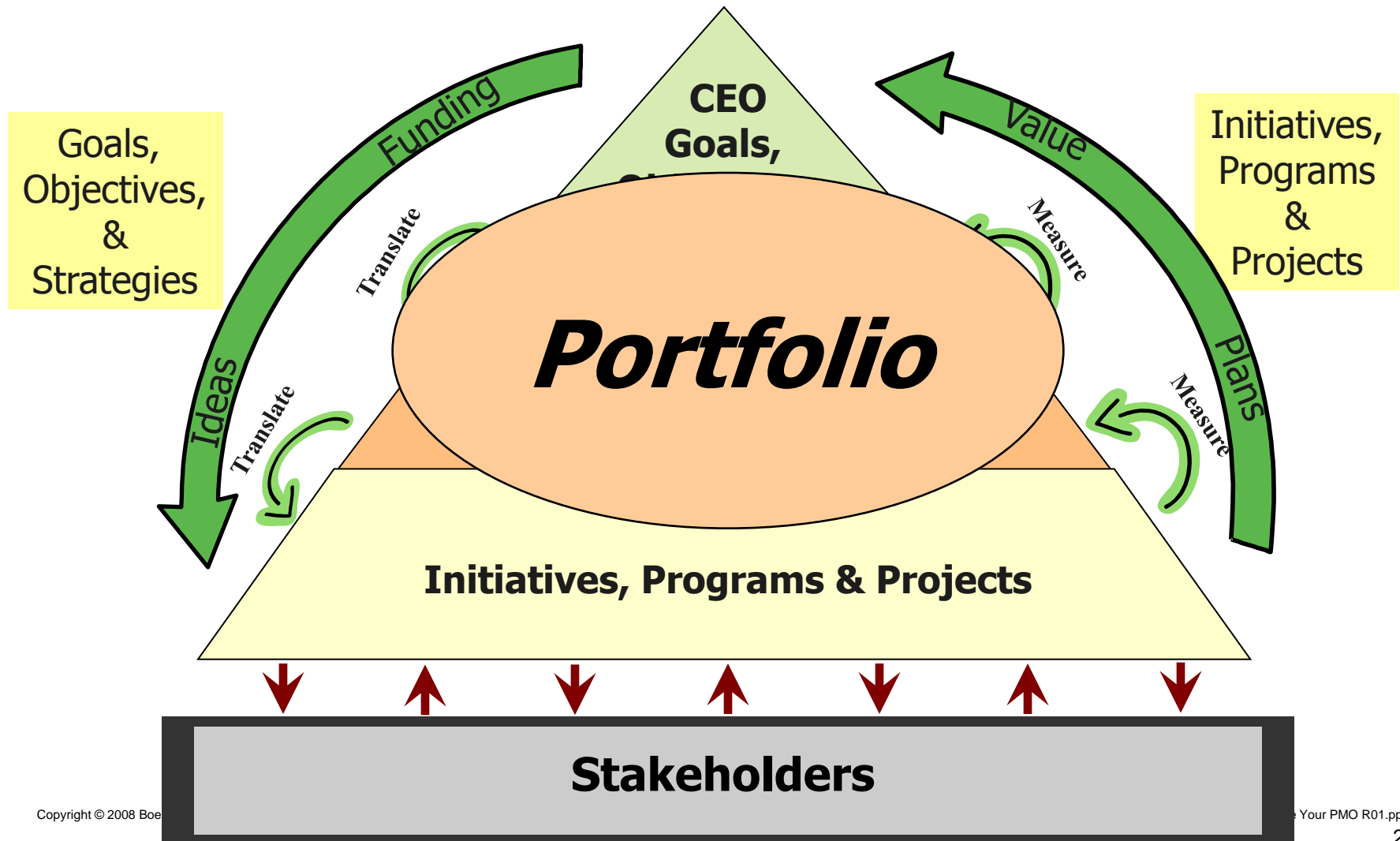
Where do Project Management Offices fit?

Kinds of Project Management Offices (PMOs)

- **PMOs**
  - Come in a variety of shapes & sizes
  - Go by different names
  - Located differently in company's organizational hierarchy
  - Roles remain consistent

- **Kinds:**
  - Enterprise Formal
    - Usually resides high in organizational hierarchy – reports to "C-level"
    - Given formal "power"
  - Business Unit/Organization Formal
    - Resides within the business unit or organizational hierarchy
    - Given some formal "power"
    - Most "power" derived from expertise and relationships
  - Virtual
    - Operates without formal "power"
    - "Power" comes from expertise and relationships
    - Usually plays a role in managing/facilitating the organization's portfolio
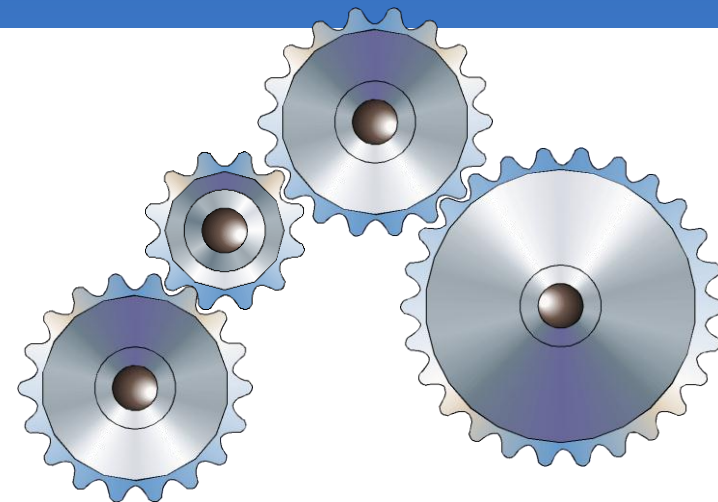
PMO Titles

- **PMOs called a number of different titles**
  - Project Management Office/Organization
  - Program Management Office/Organization
  - Investment Management Office/Organization
  - Portfolio Management Office/Organization
  - Enterprise Portfolio Management Office/Organization
  - etc.

"Official Definitions"

- **Program Management Office (PMO)**
  - The centralized management of a particular program or programs such that corporate benefit is realized by the sharing of resources, methodologies, tools, and techniques, and related high-level project management focus. -- *"PMBOK ® Guide"*

- **Project Management Office (PMO)**
  - An organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain. The responsibilities of a PMO can range from providing project management support functions to actually being responsible for the direct management of a project. -- *"PMBOK ® Guide"*

The PMO Role

- **PMOs deal with the "white spaces"**
  - "White spaces" are the:
    - Areas, or spaces, between business processes
    - Gaps between organizations
  - Processes guide the work
  - Projects are the way work gets done

- **Integrate projects with one another**
  - Key milestones
  - Constraints
  - Dependencies
  - Resource management
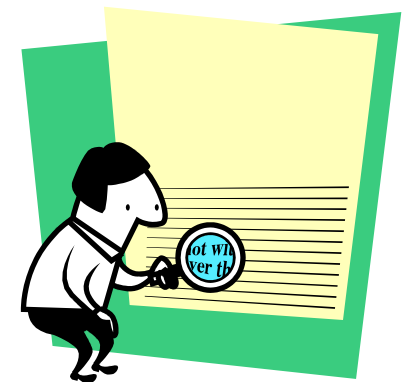
- **Perform oversight role in management of projects**

PMOs Manage

- **The processes, procedures, policies**
  - Stage/Gate process for project decisions, including approval & monitoring
  - Project Management process, including visibility and communication with stakeholders
  - Configuration and change management processes
  - Meetings and/or meeting preparations
- **The tools**
  - Provide templates and guides for project management artifacts
    - Project Proposal document
    - Statement Of Work (SOW) document
    - Business Case document
    - Project Charter document
    - Project Plan
    - etc.
  - Computing systems
    - SOW
    - Scheduling
    - Work flow
    - Portfolio management
    - etc.
- **The training, consulting & mentoring for all of the above**
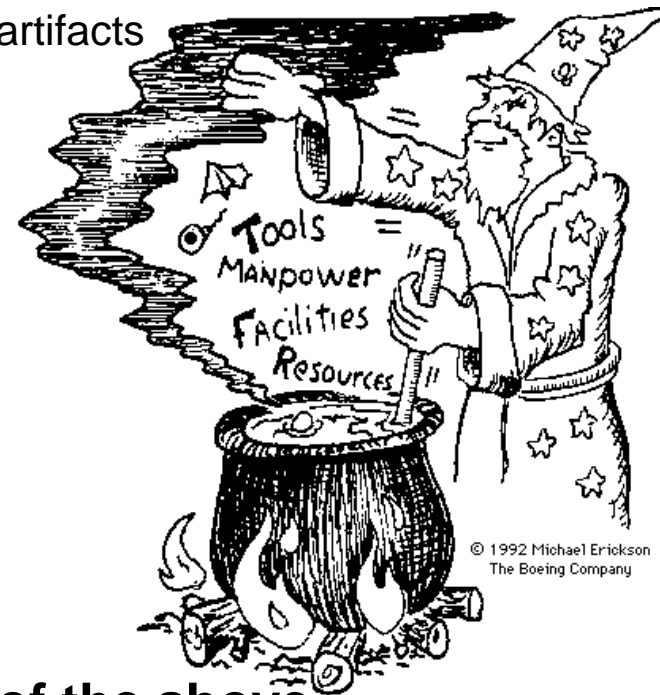
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The Boeing Company

Two Key PMO Best Practices

- **Project Management (PM) –** *MICRO VIEW*
  - Enables change to be implemented in the business
  - Sets the stage for success by doing things in the right order
  - Project Managers manage the projects
  - Many sources of good information on this available in marketplace
- **Project Portfolio Management (PPM) –** *MACRO VIEW*
  - Takes the next step up in viewing the business
  - Helps make PM easier
    - Allows integration of projects for successful business outcomes
    - Addresses resource issues across projects
    - PPM provides visibility of the projects by working with Project Managers
  - Application of financial portfolio principles to projects is relatively new
- **These two practices are not the same … they're different, but complementary**

Project Mgt (Micro) vs. Portfolio Mgt (Macro)

Project Management -- Micro

- **Establish scope**
- **Develop & maintain detail plans**
- **Monitor deliverable quality**
- **Perform project communications**
- **Manage risks, issues & opportunities**
- **Control change**
- **Organize teams**
- **Show outcomes**
- **Improve delivery**

Doing Projects "Right"

Portfolio Management -- Macro

- **Ensure alignment of projects to business strategies & objectives**
- **Perform portfolio communications**
- **Set up standard processes & tools**
- **Oversee projects**
- **Mentor, consult & guide**
- **Integrate projects**
- **Balance resources**
- **Supply governance**
- **Coordinate project managers**

Doing the "Right" Projects

Another Key PMO Best Practice

- **True success is accomplished by people**
  - PMOs provide technical help _**to**_ people
  - More importantly, PMOs work _**with**_ people and help them to be successful with:
    - Stakeholders
    - Other Project Managers
    - Customers
    - Suppliers
    - Management
  - PMOs become the "translators" between projects and management

Where Did Portfolio Management Originate?

Origins of Portfolio Management

- **Harry M. Markowitz, PhD.**
  - Often called the father of modern portfolio theory

    - Published article in 1952 entitled *"Portfolio Selection"* (Journal of Finance, vol. 7, no. 1 (March):77-91)

    - Published book *"Portfolio Selection: Efficient Diversification of Investments"* in 1959 – **called "the single most influential work in modern finance"** (Financial Analysts Journal, 1976)

    - Coined the term **"efficient frontier"** – a set of efficient investments making up a portfolio

  - Received the ***Nobel Prize*** in Economics in 1990 for his work in this area

Concept Applied to Projects

- **Concept began being applied to management of groups of projects and programs in the late 1990s**

- **Pivotal work on the subject: "Portfolio Management for New Products" by Robert G. Cooper, Scott J. Edgett and Elko J. Kleinschmidt in 1998**

What does Portfolio Management do for the business?

Portfolio Management Explained

- **What is it?**
  - Process of actively & dynamically:
    - Prioritizing
    - Selecting
    - Tracking

    Projects

- **Why?**
  - Ensure projects align with the strategies, goals and objectives of the business
    - Communicate project purpose & details
    - Manage projects as a whole
    - Measure project progress
  - Ensure resources used to best advantage and not "over-booked"

Projects Managed as a Whole

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The PPM Conversation

- **PPM enables leaders to discuss the key issues facing the business**
  - Highlights key needs
  - Demonstrates the current operation of the business
  - Validates/corrects the vision
  - Results in consensus among the leadership on direction, objectives and project support

Decisions, Decisions …

So, What is a Decision?

- Decision
- **a : the act or process of deciding**
- **b : a determination arrived at after consideration : CONCLUSION**
- **: a report of a conclusion**

From the Latin for "to decide"

- Decide
- **a : to arrive at a solution that ends uncertainty or dispute about <decide what to do>**
- **b : to select as a course of action -- used with an infinitive <decided to go>**

Source: Merriam-Webster OnLine Dictionary http://www.m-w.com/dictionary

Anatomy of a Decision

What? So What? Now What?

Options

Politics   Scope

Resources   Risk

Facts   Data

Cost
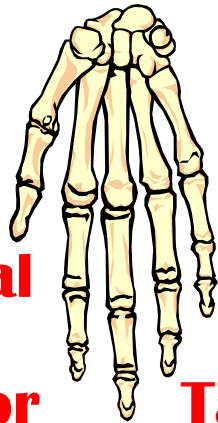
Benefit

Capital   Expense

Labor   Tax

Training

Environment

Urgency
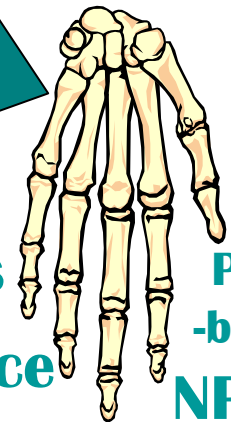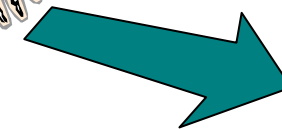
$ Savings   Pay-back

$ Avoidance   NPV

Intangibles

A Foundational Principle …

Business Case: Decision Support Tool

- **Business Case aids leadership**
  - Defines value of a proposed project
  - Shows the life cycle of the project
  - Explains options
  - Gives recommended course of action
- **Project Plan enables Business Case development**
  - Lays out implementation options
  - Estimates resource requirements & timing
- **Enables prioritization scoring**
  - Facts & Data
  - Assumptions
- **Elicits a decision**
  - Asks for "Go/No-Go/Wait"
  - Funding explained/requested

Business Case Expanded Definition

- A *Business Case* is a <u>decision support and planning tool that documents</u> the predicted effect of actions under consideration to solve a problem or take advantage of an opportunity.

- A true business case includes financial, strategic and other commercial, industrial or professional outcomes of the change.

- The action under consideration must have more than one option to be considered <u>and</u> the need for a decision to be made from among the options for the business.

- The business case should include a recommendation from among the options.

- Ultimately, it elicits a business decision from those individuals with the responsibility, authority and accountability for the resources to be allocated to achieve the desired outcome.

The Business Case is a Decision Support Tool

Business Case – How Long?

Cost/Effort
-- Fidelity of Estimates
-- Data Collected/Evaluated

Extensive

Full

Lite

Minimal

Benefit
-- Confidence in Outcome
-- Quality

Business Case

Time
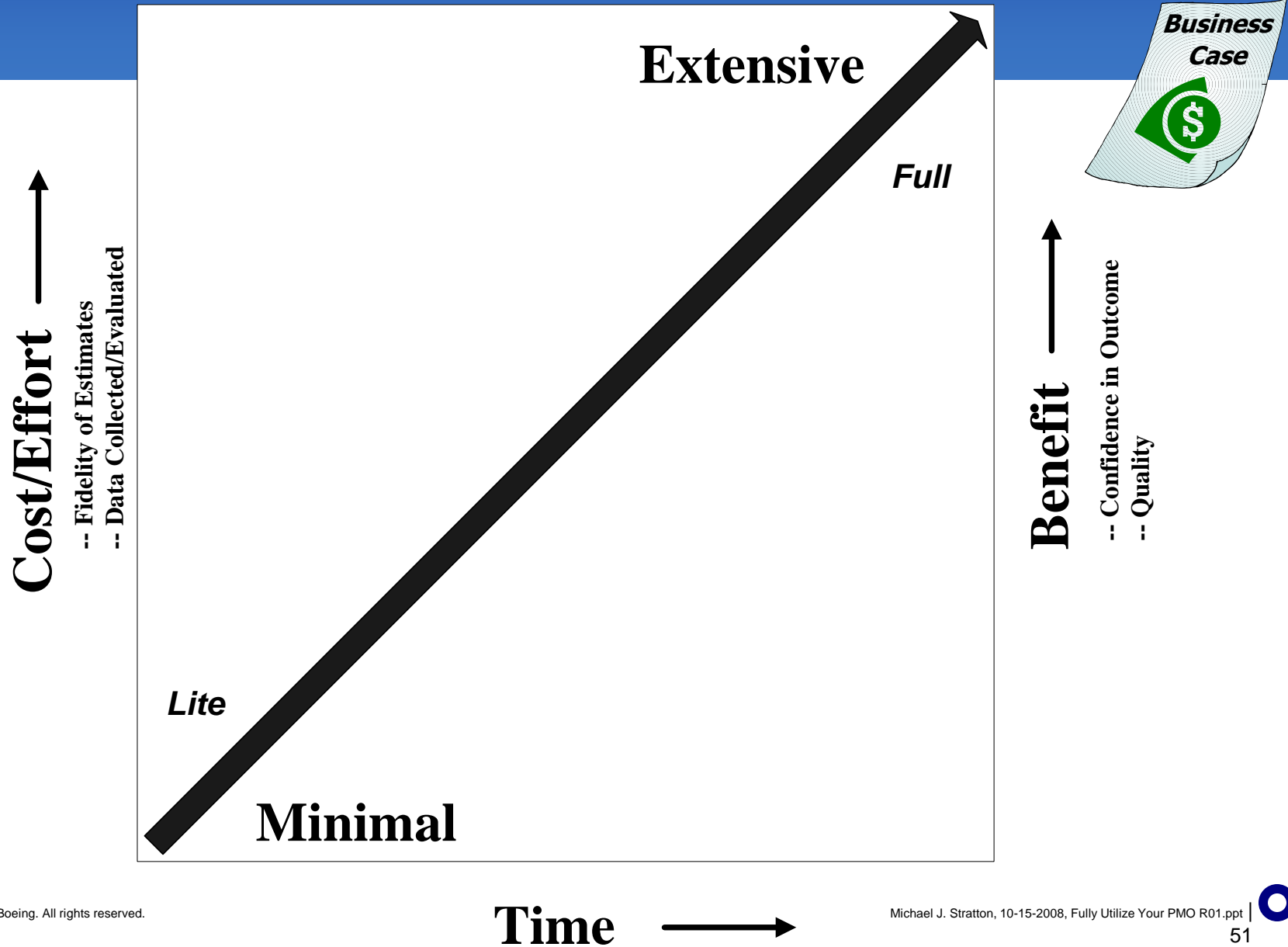
Business Case Outline

- **Executive Summary**
- **Overview**
- **Current Situation**
- **Assessment of Alternatives**
- **Sensitivity & Risk Analysis**
- **Contingencies & Dependencies**
- **Recommendations & Conclusions**
- **Metrics**

BOEING

{Business Case Name Here}

Business Case Document
{Organization Name Here}

(Author's NAME)
The Boeing Company
P.O. Box 3707 MC _____
Seattle, WA 98124-2207
{Author's Email Address}

Business Case Blank Template Version R07.0
May 2, 2004

<DATE>

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Major Headings in Business Case Document

Decision Matrix

{Title of Business Case goes here}				
Criteria Type	Decision Criteria	**Options**		
		Option 1 Business As Usual	Option 2	Option 3
Must	{List key decision criteria here}	Met	Not Met	Met
Must	{List key decision criteria here}	Met	Not Met	Met
Desired	{List key decision criteria here}	Not Met	Not Met	Met
Desired	{List key decision criteria here}	Medium	Medium	Low
Desired	{List key decision criteria here}	Low	Medium	Medium

Options Comparison

Dollars in X

Business Item	Option 1 Business As Usual	Option 2	Option 3
NPV			
Payback			
IRR			
Capital Requirement			
Total Project Investment			
Probability of Success			
Strategic Alignment			
{List others here. Add lines as needed}			

Metrics Defined by Business Case

- **Primary Metrics**
  - The primary metrics for the project are shown in the business case
  - Include, at a minimum, a Financial Analysis Payback Graphic
  - These metrics are used as a base of comparison to other projects underway and under consideration
- **Project-Unique Metrics**
- **Used at Gate & Project Reviews**

Metrics Aid in Deciding to Continue Funding

Project Proposal Template Example

Project Proposal Template

Originating Organization:		User Defined:						
Project Proposal #:		Date:						
Data Focal:								
Title:								
Description:								
Project Attributes:								
Strategy Linkage								
Project Type								
Committed in Budget								
Dependent On Other Project								
Multiple Organizational Funding Required								
IT Applications or Infrastructure Involved								
Multiple Organizations/Programs Involved & Integration Required								

Green-colored cells require input by Originating Organization

Investments:	Capital Expenditures - Type	Investment Expense K$'s (Include Depr)	Capital Expenditures K$'s	Your Investment Cost Savings K$'s	Your Investment Cost Avoidance K$'s	Others Investment Cost Savings K$'s	Others Investment Cost Avoidance K$'s	Investment Staffing Rqd (In FTE)
Year	**Capital Type**	**Investment**		**Investment Returns**				**Staffing**
2008								
2009								
2010								
2011								
2012								
2013								
Total		$ -	$ -	$ -	$ -	$ -	$ -	0.0

How Does this Project Portfolio Management Process Work?

Portfolio Management Process Funnel

Make the Case → **Establish the Project** → **Implement the Change**

Circles: IP, BC, IP, BC, BC (red), IP, BC, BC, BC, Project, Project, Project, Project, Project, Project, Project, Project (yellow), Project, Project, BC (yellow), IP (red), Project (yellow), Project (yellow)

Graphical View

Legend

🟩 Active	IP = Investment Proposal
🟨 Inactive	BC = Business Case
🟥 Cancelled	

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Project Portfolio Management Context View

Portfolio Tiering

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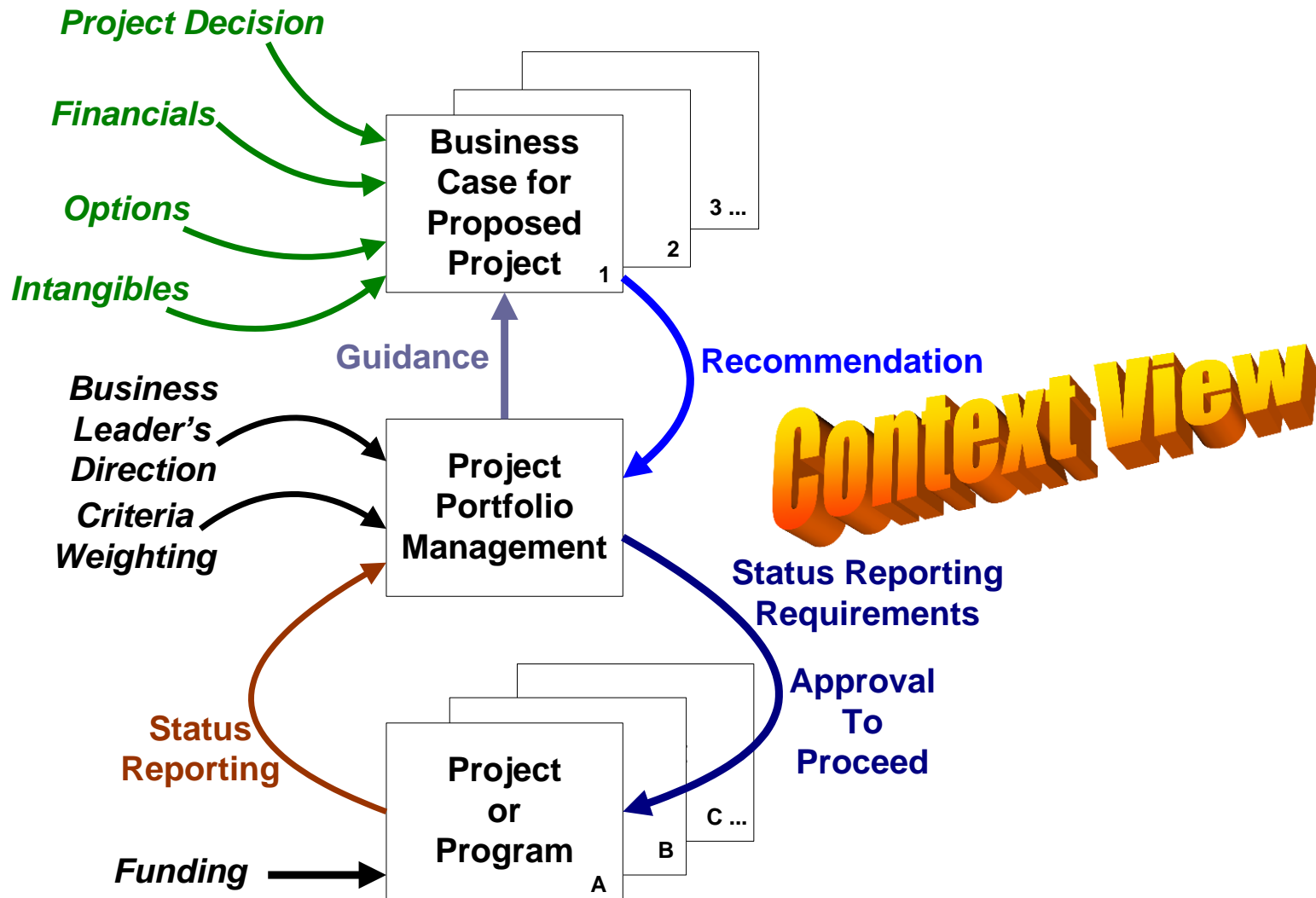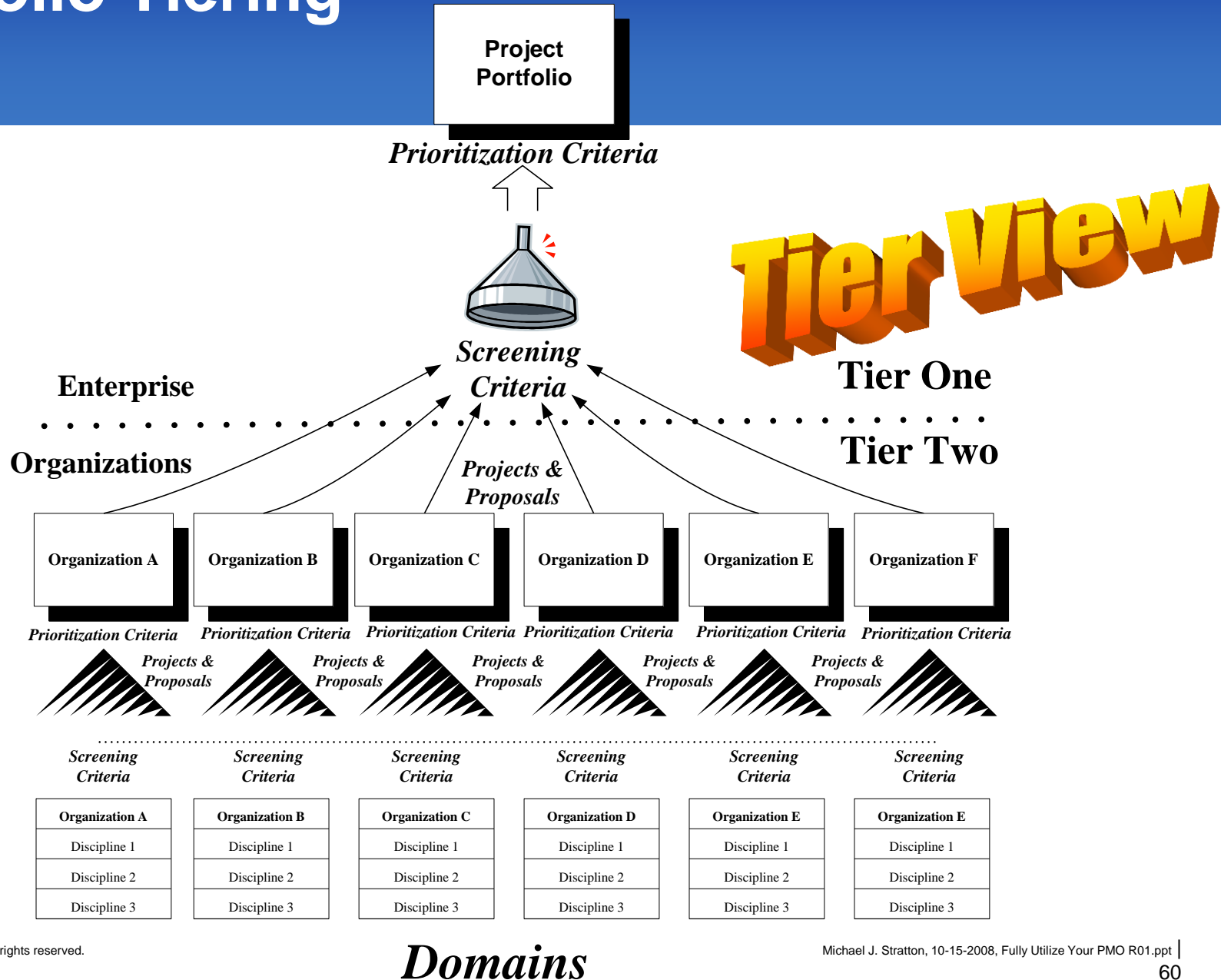
Generic Project Portfolio Management Process

Customize for your company
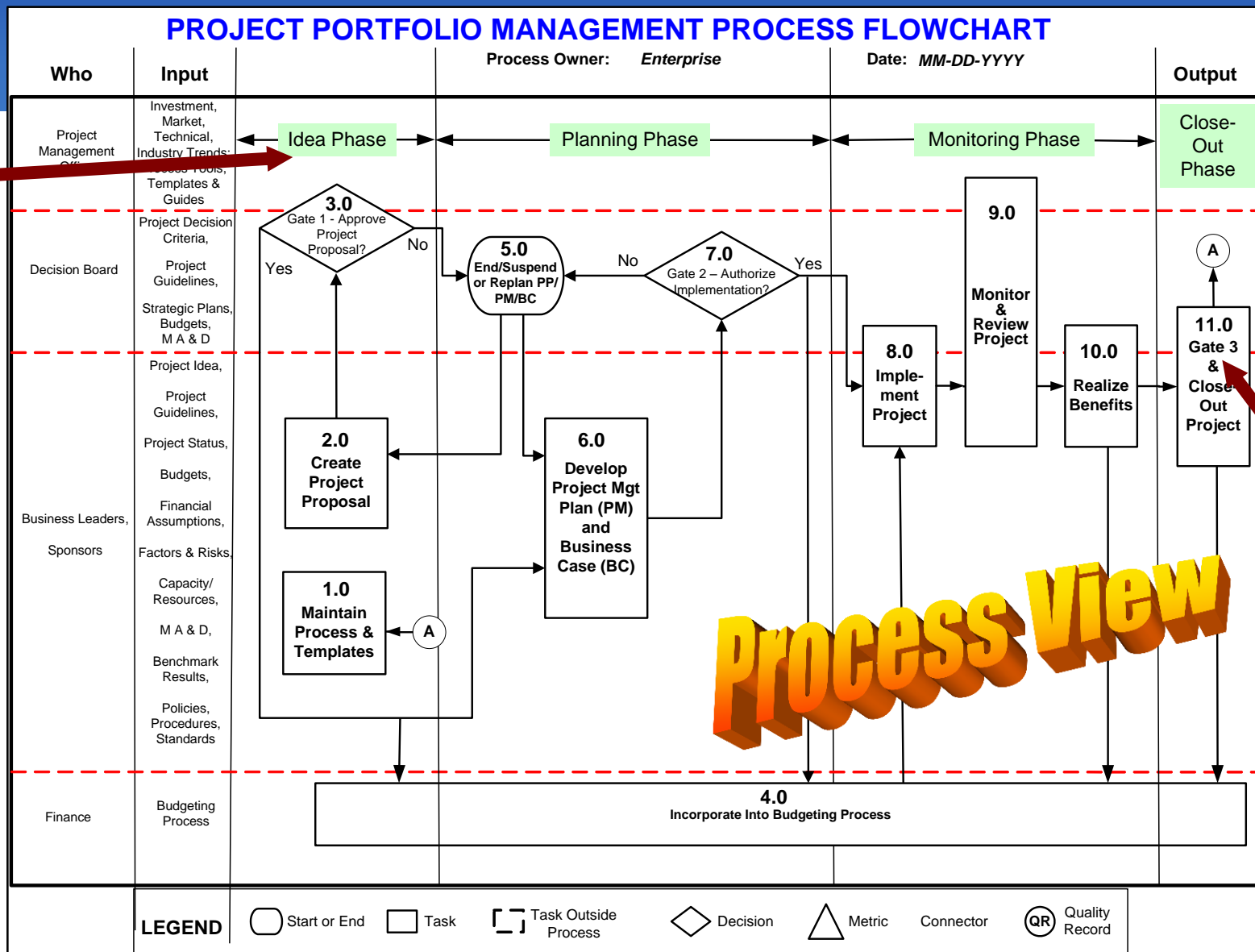
Generic Project Management Process
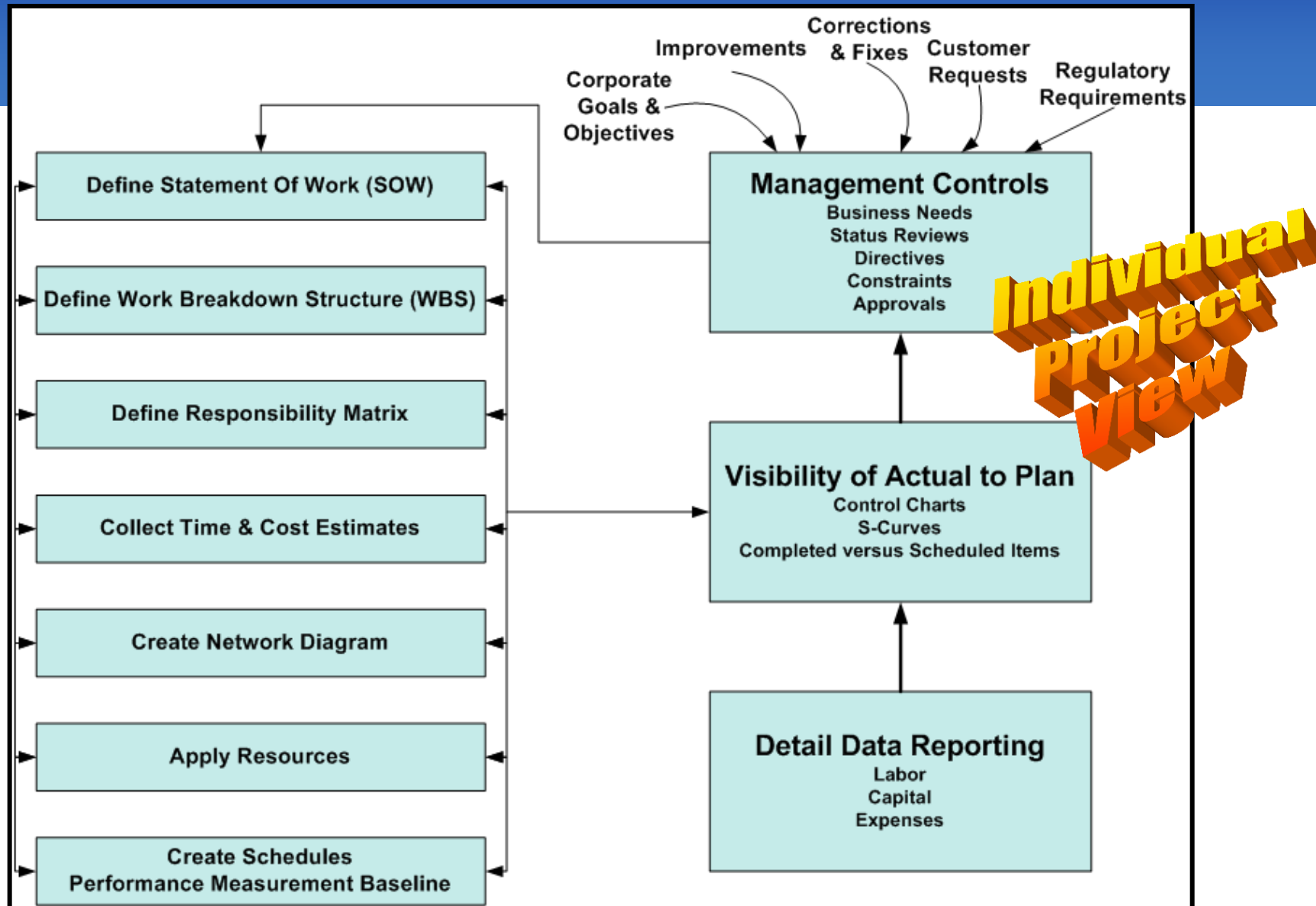
What Drives the Portfolio Management Process?

Criteria Drive the PPM Process

- **Screening (Qualification) Criteria – Yes/No**
  - Key business absolutes
  - Numbers of criteria can vary by company & environmental conditions
  - Example criteria
    - Mandatory
      - Regulatory requirement
      - Company directive
    - Runs counter to strategy "*X*"
    - Breeches thresholds
      - Cost in excess of "*$Y*"
      - Risk is above *"Z"*

- **Prioritization (Evaluation) Criteria -- Weighted**
  - Value
    - Cost Savings (NPV, Payback)
    - Cost Avoidance
    - Return In (XX) Months
  - Strategy
    - Corporate
    - Group
    - Business Unit
  - Balance
    - Intangible Benefits
    - Probability of Success
    - Resource Availability

Two Types of Criteria, Two Different Purposes

Business Case Enables Prioritization

- **Business Case**
  - Provides data for scoring each criteria used for prioritization
  - Lists assumptions
  - Details options considered
  - Even "mandatory" projects have options
    - *Meet requirements with motorcycle?*
    - *Meet requirements with sport utility vehicle (SUV)?*
    - *Not just proceed because "we have to do it" – planning and analysis needed*
- **Coupled with project plan enables scenario & option analysis**
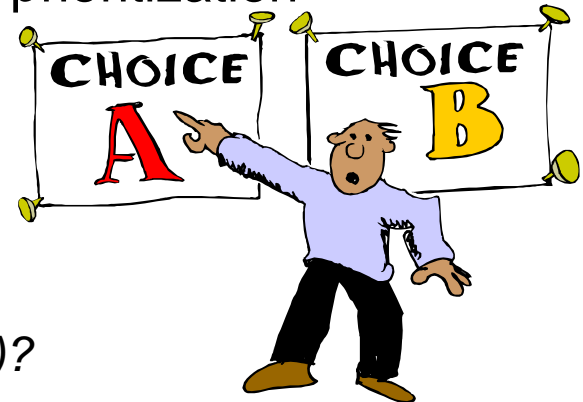
Why weight prioritization criteria?

- **Helps determine project ranking within portfolio**
  - Orders projects according to current priorities
  - Allows leadership discretion in final project ranking
- **Enables leadership to reorder portfolio of projects dynamically by changing criteria weighting**
  - Accommodate changing business conditions
  - Implement shift in strategic direction
  - Execute change in priorities

Weighting Gives Flexibility

Project Portfolio Management Equalizer

Criteria Grouping

Individual Criteria Weighting

Individual Criteria

Project Portfolio Management Prioritization Criteria
for Project Proposals & Business Cases

Criteria	Weighting (1 to 10, L to R)
Value	
1. Cost Savings	
2. Cost Avoidance	
3. Return Rate for 12 Months	
Strategy	
4. Corporate Strategies	
5. Business Unit Strategies	
6. Organizational Strategies	
Balance	
7. Intangible (non-dollar) Benefits	
8. Probability of Success	
9. Resource Availability	
Linkage	

Example Weighting Shown

Scoring Projects

- **Score each project independently**
- **Using prioritization criteria**
- **Document scores on a prioritization scorecard/matrix**
- **Record reasons for scores as needed**
- **Numerous acceptable methods for scoring projects**
  - Prioritization by total numbers
  - Prioritization with Criteria Group Weighting
  - Prioritization with % Balancing by Criteria Grouping
  - Prioritization with % Weighting by Individual Criteria Only

Prioritization by Total Numbers

#	Criteria	Raw Assessment	Raw Score	Weighting	Weighted Score
				Totals	293
	Value				
1	Cost Savings	Medium	5	8	40
2	Cost Avoidance	Medium	5	5	25
3	Return in next 12 months	Medium	5	10	50
	Strategy				
4	Corporate Strategies	Medium	5	5	25
5	Business Unit Strategies	Medium	5	9	45
6	Organizational Strategies	Medium	5	4	20
	Balance				
7	Intangible (non-dollar) Benefits	Medium	5	3	15
8	Probability of Success	Medium	5	7	35
9	Resource Availability	Medium	5	8	40
	Linkage				

Prioritization with Criteria Group Weighting

#	Criteria	Raw Assessment	Raw Score	Weighting	Weighted Score
				Totals	**96.40**
	Value			*20%*	*155.00*
1	**Cost Savings**	High	10	8	80
2	**Cost Avoidance**	Medium	5	5	25
3	**Return in next 12 months**	Medium	5	10	50
	Strategy			*60%*	*99.00*
4	**Corporate Strategies**	High	10	5	50
5	**Business Unit Strategies**	Medium	5	9	45
6	**Organizational Strategies**	Low	1	4	4
	Balance			*20%*	*30.00*
7	**Intangible (non-dollar) Benefits**	Medium	5	3	15
8	**Probability of Success**	Low	1	7	7
9	**Resource Availability**	Low	1	8	8
Linkage					

Prioritization with % Balancing by Criteria Group

#	Criteria	Raw Assessment	Raw Score	Weighting	Conversion %	Weighted Score
				Totals	**100%**	**4.98**
	Value				*20%*	*6.74*
1	**Cost Savings**	**High**	**10**	**8**	35%	3.48
2	**Cost Avoidance**	**Medium**	**5**	**5**	22%	1.09
3	**Return in next 12 months**	**Medium**	**5**	**10**	43%	2.17
	Strategy				*60%*	*5.50*
4	**Corporate Strategies**	**High**	**10**	**5**	28%	2.78
5	**Business Unit Strategies**	**Medium**	**5**	**9**	50%	2.50
6	**Organizational Strategies**	**Low**	**1**	**4**	22%	0.22
	Balance				*20%*	*1.67*
7	**Intangible (non-dollar) Benefits**	**Medium**	**5**	**3**	17%	0.83
8	**Probability of Success**	**Low**	**1**	**7**	39%	0.39
9	**Resource Availability**	**Low**	**1**	**8**	44%	0.44
Linkage						

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Prioritization with % Weighting by Individual Criteria

#	Criteria	Raw Assessment	Raw Score	Weighting	Conversion %	Weighted Score
				Totals	**100.0%**	**4.81**
	Value					*2.63*
1	**Cost Savings**	High	10	8	13.6%	1.36
2	**Cost Avoidance**	Medium	5	5	8.5%	0.42
3	**Return in next 12 months**	Medium	5	10	16.9%	0.85
	Strategy					*1.68*
4	**Corporate Strategies**	High	10	5	8.5%	0.85
5	**Business Unit Strategies**	Medium	5	9	15.3%	0.76
6	**Organizational Strategies**	Low	1	4	6.8%	0.07
	Balance					*0.51*
7	**Intangible (non-dollar) Benefits**	Medium	5	3	5.1%	0.25
8	**Probability of Success**	Low	1	7	11.9%	0.12
9	**Resource Availability**	Low	1	8	13.6%	0.14
Linkage						

Example Individual Prioritization Criteria Scoring

#	Prioritization Criteria	Scoring Choices	Value	Score Assigned
1	**Cost Savings** - What is the After-Tax/NPV of the expected savings per year after project completion? 1. $X or more 2. $Y to $X-$1 3. $Negative Value to $Y-$1	 High Medium Low	 10 5 1	

Scoring the portfolio … it's different than scoring a project

Classify Each Project

- **"Must do"**
  - Strategically essential
  - Mandatory to meet
    - Regulatory requirement
    - Company directive
- **"Need to do"**
  - Important
    - Meet customer requirement
    - Major improvement in product or cost
  - Not mandatory
- **"Should do"**
  - If enough resources are available
  - Moderate improvement in product or cost (avoidance or savings)
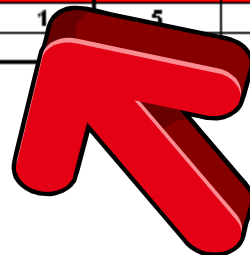- **"Could do" – nice if we can get to it**

"Rack and Stack" the Projects

- **Collect individual project scores by criteria**
- **Collect project classifications**
- **Multiple acceptable methods for viewing the scores for projects in priority order by each project's:**
  - Total score
  - Score by classification
  - Score by major criteria
  - Contribution to portfolio by criteria, major criteria and overall
    - Advanced technique
    - Implement after portfolio is up and running for a time
- *Remember, this is only the starting point … numbers are just indicators of priority, the <u>final decision</u> is still up to the leaders*

Prioritized Project Portfolio Example

Prioritized Project Portfolio

Ranked Projects		Previous Ranking	Current Ranking	Total Score	Weighting for Evaluation Criteria									Linkage
					8	5	10	5	9	4	3	7	8	None
					Evaluation Criteria									
					Value			Strategic Importance			Balance			Linkage
Project ID	Project Name	Previous Ranking	Current Ranking	Total Score	Cost Savings	Cost Avoidance	Return Rate for 12 Months	Corporate Strategies	Business Unit Strategies	Org. Strategies	Intangible (non-dollar) Benefits	Probability of Success	Resource Availability	No Score
11	Project A	3	1	445	10	10	5	5	10	5	5	5	10	
2	Project B	1	2	383	10	5	5	10	5	5	1	10	5	
8	Project C	2	3	348	5	5	1	10	10	5	1	10	5	
3	Project D	4	4	159	1	1	1	5	5	5	1	5	1	

"The Line"

Weighting Indicates Ranking, Leaders Decide

Your PMO R01.ppt

What about the projects "below" the line?

- **Acknowledge the business need**
- **Make sure that the score is not the only reason for the project being "below" the line**
- **Explain that the project just cannot be done right now, rather it may:**
  - Require adjustments to the project management constraints:
    - Time
    - Money
    - Quality
    - Scope

  - Be able to be accomplished in another manner (e.g., contractors, outsourcing)

When Should We Do Project Portfolio Management?
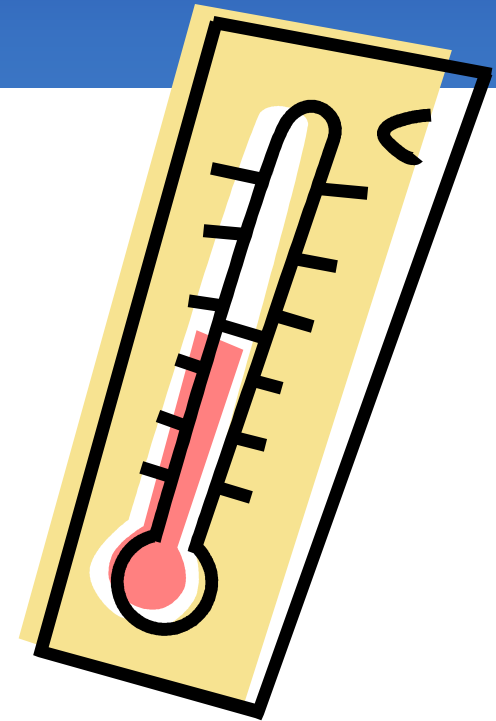
Indicators Project Portfolio Management Needed
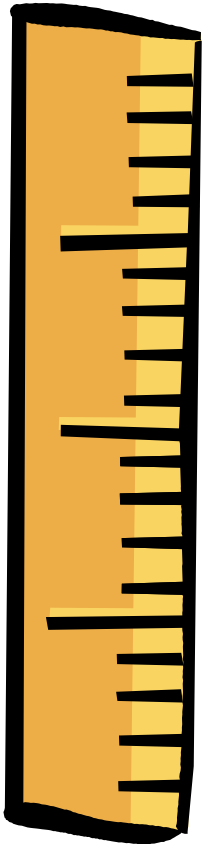
- Business goals & objectives not being met

- Projects frequently finish late, over-budget, less scope

- Time, money, resources spent on lower-value projects

- Once approved, project's value not re-examined regularly

- "Pet" projects become the norm

- Project relationships go undiscovered

- Projects become resource constrained

- Project approvals are done individually

- Duplicate projects exist

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Other Indicators

- **Resources are limited/overtaxed**

- **"Everything" is *"top priority"***

- **Budgets have been, or are being, slashed**

- **Investments, projects, programs and initiatives**
  - Need to be treated holistically
  - Including funding and tracking using PPM

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Key Best Practice

- **Investments, projects, programs and initiatives**
  - Need to be treated holistically
  - Including funding and tracking using PPM

How Do We Start Portfolio Management?
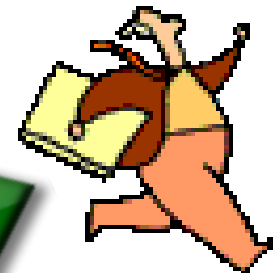
Crawl – Walk – Run Implementation

Full service with computing tools

Add scope & possibly computer tools

Start with simple basics

PPM Process Development

Step   **_Action_**

1. Obtain executive sponsorship for the process development and implementation.
2. Form a cross-functional team for development and implementation. (This includes a charter, etc.)
3. Develop process requirements.
4. Define process steps, inputs, outputs, customers and suppliers. This includes identification or roles, responsibilities and accountability for those involved in the process.
5. Document the process. This includes tools, templates, criteria & thresholds.
6. Develop implementation plan, including communication.
7. Obtain executive approval and participant buy-in for the process.
8. Communicate the process. This includes waterfall communication and training. Web sites and portals are helpful for disseminating communication, process documentation, tools and templates.
9. Implement the process.

Tools, Templates & Guides

- **Work to provide simple, fool-proof tools & templates**
  - These change & mature over time
  - Eventually automation may be chosen
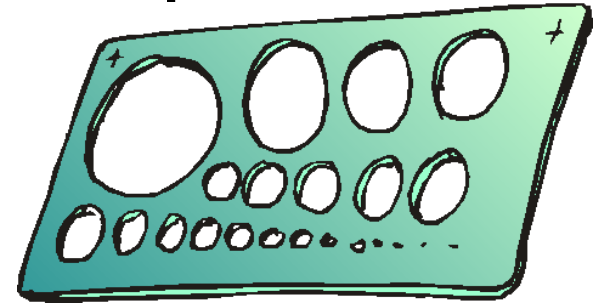
- **Create guides for use of the tools & templates**
  - Intuitive & built-in
 - Build detailed guides for the novice & as reference for others

When and How Do We Review the Portfolio?

Gates plus …

- **Implementing a gate process**
  - Great first step
  - Watch out for:
    - Evaluating projects one at a time at a gate
    - Not comparing projects to one another at a gate
    - Ignoring, or not considering resource constraints
  - Otherwise may end up with:
    - Sub-optimized portfolio
    - Virtually every project getting a "Yes" vote at each gate
    - Clog in the project pipeline due to over-burdened resources
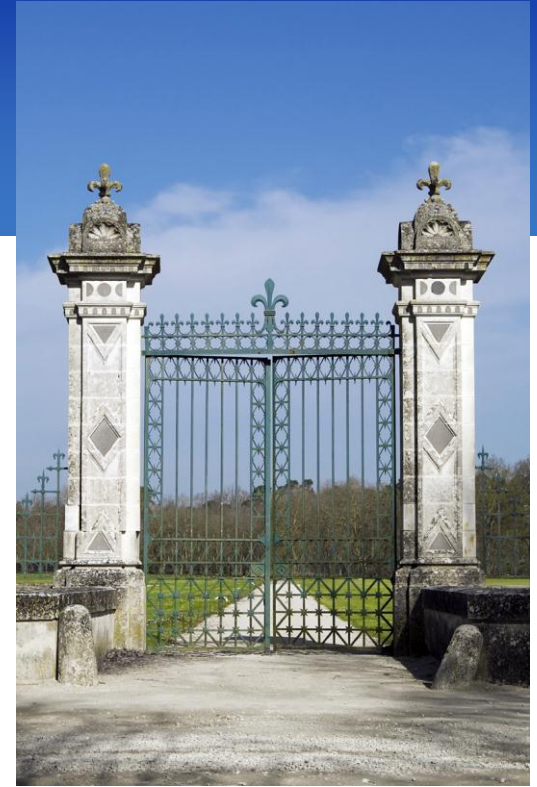
Steps to maintain an effective portfolio

- **At gates**
  - Employ a portfolio review also
  - Look at the entire portfolio
  - Helps guarantee:
    - The right projects get the "yes" vote
    - Balanced portfolio with regards to:
      - Risk
      - Project types
      - Objectives
    - Right priorities of projects
    - Efficient and sufficient resources to do the "yes" projects
- **Perform a thorough portfolio review:**
  - At least four times per year
  - Anytime a new project is added to the portfolio

Decision Factors During Project Reviews

- **Projects reviewed for performance to:**
  - Schedule
  - Cost
  - Technical
  - Key Requirements
- **Additional considerations:**
  - Market conditions
  - Environmental changes
  - Emergent requirements
  - Budget/Funding changes
  - Customer/Partner feedback

Typical project portfolio prioritization

- **All projects initially part of prioritization exercise**
  - Just because a project was number one, does not mean it will stay there
  - Conditions change, priorities of projects may need to change also
  - Projects need to "earn" their way onto the priority list
- **Place projects into project classifications**
  - "Must do"
  - "Need to do"
  - "Should do"
  - "Could do"
- **Put "must do" projects at the top of the list**
- **Under the "must do" projects put those from the other classifications that are:**
  - Strategically essential
  - Almost completed and still viable
  - Meeting a key customer commitment
- **These two groups of projects are removed from the balance of the exercise**
  - Designated as top priority
  - Resources protected
  - Put at the top of the portfolio ranking

Prioritize Balance of Projects

- **Use criteria**
  - Individual
  - Groupings

- **Put projects in scoring order**

- **Evaluate and validate scoring**

- **Place projects in final priority**

Draw the "line"

- **Apply resources to projects, especially:**
  - Key resources
  - "Drum" resources
- **Draw "line" at point where resource capacity is maximized**
- **Check for portfolio balance**
  - Determine approximate share of resources going to projects according to pertinent attributes
    - Attribute examples: dollar value, strategic value, market, business area, risk level, driving force behind project
    - Pie charts, bubble diagrams, histograms help in communicating balance
  - Compare resource shares to pre-set thresholds for pertinent attributes
- **Reorder projects as needed**
- **Adjust resources as needed**

Wrap-up

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Remember …

- **No process is perfect -- modify as needed**

  … but only as needed

- **Criteria are not perfect – modify as needed**

  … but only as needed

- **Without a process project approval and monitoring may be based on a:**
  - Gut feeling
  - Politics
  - Shoot-from-the-hip approach
  - Squeaky wheel getting the grease manner

- *So … <u>any</u> project portfolio management process … will be better than <u>no</u> process at all !!*

It's About Balancing … & … Conversation

Key PMO Best Practices

- **Project Management (PM) Process –** *Micro View*

- **Project Portfolio Management (PPM) Process –** *Macro & Holistic View*

- **True success is accomplished by** *People* **… PMOs simply**
  - Provide technical help **_to_** people
  - Work **_with_** people and help them to be successful
  - Become the **_"translators"_** between projects and management
  - **_Communicate, communicate, communicate …_**

- **All projects, programs & initiatives need to do** *Business Cases*

- **Clearly define PPM** *Criteria* **– drives the process & decisions**

Conclusion & Lessons Learned

- **Project Portfolio Management (PPM) needed in business today when:**
  - Resources are limited
  - Projects/work needs to be prioritized
  - Budgets have been, or are being, slashed
  - Investments, projects, programs and initiatives need to be treated holistically, including funding and tracking using PPM
- **Implementation is a process, not a "big-bang"**
  - Not everything will be "perfect" at first
  - PPM will mature with time & experience
  - Start simple – Crawl, Walk, Run
- **Decisions are decisions, only the scale changes**
- **Keep simplifying the process, tools & templates**
- **PPM applies to profit or cost centers in a company**

Thank You !!

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BACKUP SLIDES

Project Management Plan

- **Project Management Plan**
  - A formal, approved document that defines how the project is executed, monitored and controlled. It may be summary or detailed and may be composed of one or more subsidiary management plans and other planning documents. --*"PMBOK ® Guide"*