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### A Project Management Approach to Implementing Internal Controls Jeff Rogers MBA, CIA, PMP May 9, 2008

# Where to learn more ...

- The Project Management Institute
  - www.pmi.org
  - Project Management Body of Knowledge (PMBOK)
- Phoenix PMI Chapter
  - www.phx-pmi.org
- PMI Breakfast Meetings
- Microsoft Project Association
  - www.mympa.org
- Phoenix Microsoft Project Association
  - www.mpugphx.org
- www.wikipedia.org
  - search for "Project Management"
  - Search for "Capability Maturity Model"

#### Where to learn more ...

- Check your own Professional Standards ... e.g., Project Management is embodied in the IIA Standards & Practice Advisories
  - 2100 Nature of Work (Scope)
  - 2200 Engagement PLANNING
  - 2300 Engagement EXECUTION
  - 2400 COMMUNICATE Results

### Project Management Defined

#### What is Project Management?

- Project Management (*n*.) is a comprehensive process model
  - A tool to help us consistently complete projects on time, within budget, while meeting acceptable quality standards.
  - The discipline of planning, organizing, and managing resources to bring about the successful completion of specific goals and objectives.
- Project Management (v.) is the application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stake holder needs and expectations of the project
  - Identify requirements
  - Establish clear and achievable objectives
  - Balance constraint demands
  - Adapt to change along the way
  - Monitor and Measure

### What is a Project?

- A project is a carefully defined set of activities that use resources (money, people, materials, energy, space, provisions, communication, motivation, etc.) to achieve the project goals and objectives.
- A project is a finite endeavor—having specific start and completion dates—undertaken to create a unique product or service which brings about beneficial change or added value.
  - This finite characteristic of projects stands in sharp contrast to processes, or operations, which are permanent or semi-permanent functional work to repetitively produce the same product or service.

# What is a Project Manager?

- A person responsible for the planning, coordination/controlling, monitoring and measurement, and reporting results of a project from inception to completion
- A successful project manager must be able to envision the entire project from start to finish and to have the ability to ensure that this vision is realized.
- This individual seldom participates directly in the activities that produce the end result, but rather strives to maintain the progress and productive mutual interaction of various parties in such a way that overall risk of failure is reduced.

### The Challenges

- The primary challenge of project management is to achieve all of the project goals and objectives while adhering to classic project constraints—scope, quality, time and budget.
- The secondary—and more ambitious challenge is to optimize the allocation and integration of inputs necessary to meet predefined objectives.

#### The Promise of Project Management

- Better control of financial, physical, and human resources
- Improved customer relations
- Shorter development times
- Lower costs
- Higher quality and increased reliability
- Higher profit margins
- Improved productivity
- Better internal coordination
- Higher worker morale

#### The Project Management Environment

# Recent Trends

- May 2006 IIA meeting emphasized the value of a PMO for implementing Sarbanes-Oxley requirements
- CPA firms use a form of Capability Maturity Modeling to describe achieving SOX goals
- January 2007 the IIA offers formal Project Management training
- The ISO begins work on putting a project management standard into place. Due to be completed by 2011. (PM-Network, 4/08)

# Real Value of Project Management

#### • <u>Primary</u>:

- A systematic approach to resolving operational issues
- <u>Secondary</u>:
  - Comprehensively plan
  - Help ensure projects stay within scope, time, and budget constraints
  - Develop and refine processes continuous improvement
  - Help us compete (a framework for re-engineering) can we do it better, faster, and within scope

[Source: PM-Network, Across the Board, March 2008, Don Stinson, ANHAM LLC, Dubai]

### 69 Percent

 ... the number of U.S. Federal government managers who say that only 1 in 5 projects finish within budget and on time.

• [Source: America Inc. survey of 151 US federal government managers, August 2007, as quoted in PM-Network.]

# Why projects fail ...

- Projects involves uncertainty
  - Difficult to clearly defined objectives (Scope)
  - Difficult to estimate how long to completion (Schedule)
  - Difficult to estimate how much it will cost (Cost)
  - The Product is not fit (or will not be fit) for use (Quality)
  - Mismanagement
    - Absent sponsors
    - Unrealistic deadlines
    - Influence and manipulation to circumvent priority setting process
    - Leaders denying problems exist (if you don't admit it exists, it doesn't)

# Why projects fail ...

- Project goals are not aligned with organization's strategic goals
  - If your organization is not interested in Internal Controls, forget trying to implement them UNLESS you can enlist a powerful champion – like an SEC equivalent.
- In a study of 10,000 projects, 70% failed because of communication breakdowns/failures – that is, people who saw something "wrong" did not say anything about it.

# Why projects fail ...

- Even though the June 2007 PM-Network reported that, based on a survey of 10,000 projects, in 2006 35% more projects were completed on time, on budget, and within requirements, up from 29% in 2004 ...
- Top 9 causes for Project Failure (January 2007 web poll of 1,007 respondents)
  - 28% Poor communication
  - 18% Insufficient resource planning
  - 13.2% Unrealistic schedules
  - 9.8% Poor project requirements
  - 6.7% Lack of stakeholder buy in
  - 5.2% Undefined project success/closure criteria
  - 4.8% Unrealistic budgets
  - 4.4% Insufficient of no risk planning
  - 4.3% Lack of control/change process

### Why Projects Fail ... The Number One Risk

# Individual Behavioral, and Cultural (Group) issues, sabotage projects

### **Risk Management**

- Capability Maturity Models help define the "profile" of the enterprise and identify the behavioral and cultural issues that will doom a project before it ever starts.
- For Project Managers, a working knowledge of CMM could help evaluate risk, set goals, manage change, measure progress, predict outcomes.

#### -3: Undermining Organizations

- Most all performance measurements are faked
- Efforts of internal rivals individuals and departments are routinely sabotaged

#### -2: Contemptuous Organizations

- While processes exist, they are routinely ignored
- Those charged with overseeing the processes are regarded with hostility.
- Measurements are fudged to make the organization look good.

#### -1: Obstructive Organizations

- Processes, however inappropriate and ineffective, are implemented with rigor and tend to obstruct work.
- Adherence to process is the measure of success.
- Any actual creation of viable product is incidental.

#### **0 : Negligent Organizations**

- Indifferent, and actively counterproductive
- The organization pays lip service, often with excessive fanfare, to implementing processes, but lacks the will to carry through the necessary effort.
- Generally fail to produce any product, or do so only by abandoning regular procedures in favor of crash programs

#### 1: Fragmented Organization

- Recognized by the level of Random Processes
  - Project centric Inconsistent and chaotic environment, ad hoc processes
  - Often produce products and services that work
  - Frequently exceed the project budget and schedule
  - Characterized by a tendency to over commit, abandon processes in the time of crisis, and not be able to repeat their past successes again.
  - What success there is largely depends on having quality people.

#### 2 : Functional Organization – Level 1

- Recognized by the level of Repeatable Processes
  - Project centric
  - Assigned accountability
  - Successes are repeatable, but not necessarily for all projects.
  - Still a significant risk of exceeding cost and time estimate.

#### 3 : Functional Organization – Level 2

- Recognized by the level of Defined Processes
  - Program Centric
  - assigned accountability
  - processes are defined/confirmed as a standard business process

#### 4 : Integrated Organization

- Recognized by the level of Managed Processes
  - Process-centric
  - Shared responsibilities
  - Quantified process management and measurement takes place
  - A critical distinction between maturity level 3 and maturity level 4 is the predictability of process performance.

#### 5 : Embedded Organization

- Processes are optimized, the way we do business; the culture of the organization.
- Cultural centric
- Focus on continually improving process performance through both incremental and innovative technological improvements.
- Depends on the participation of an empowered workforce aligned with the business values and objectives of the organization.

What will it take to make your Internal Controls project a success?

- Executive leadership that actually understands how strategically important it is
- Executive leadership's unflagging support
- A scope and goal aligned to the strategic goals of the organization
- Commitment from everyone
- A proactive environment
- Doing things right, and doing the right things.

### The Mechanics of Project Management

### The Universal Constraints

- Time (Schedule)
- Cost (Budget)
- Quality (Fitness For Use)
- Scope (Focus)

# Project Life Cycle Process Groups

- Initiation (Start)
- Planning
- Executing
- Monitoring and Controlling
- Closing

#### Project Life Cycle: Start, Plan, Execute, Control, Close



Figure 2-5. Level of Process Group Activity Over Time

Source: Kathy Schwalbe, Information Technology Project Management, Thomson Learning, 2000

# Initiation (Start)

 The initiation stage determines the nature and scope of the development. If this stage is not performed well, it is unlikely that the project will be successful in meeting the business's needs. The key project controls needed here are an understanding of the business environment and making sure that all necessary controls are incorporated into the project. Any deficiencies should be reported and a recommendation should be made to fix them.

# Initiation (Start)

- The initiation stage should include a cohesive plan that encompasses the following areas:
  - SWOTT analysis
  - Study analyzing the business needs in measurable goals
  - Review of the current operations.
  - Conceptual design of the operation of the final product.
  - Equipment requirement.
  - Financial analysis of the costs and benefits including a budget.
  - Select stake holders, including users, and support personnel for the project.
  - Project charter including costs, tasks, deliverables, and schedule.

### Initiation - Charter

- A document that confirms a common understanding of the project scope that includes:
  - Project business needs justification
  - Project Product: what will the project produce
  - Project Deliverables: project plan, the WBS, cost estimates, measurement reports, change Control Plan, etc.
  - Project Success Criteria: measurement plan

# Initiation - Objectives

- Project objectives define target status at the end of the project, reaching of which is considered necessary for the achievement of planned benefits. They can be formulated as SMART
  - Specific
  - Measurable
  - Achievable
  - Relevant
  - Time terminated (bounded)

# Initiation – Purpose/Objectives

- Increase the public's confidence level in government operations.
- Increase management's accountability for financial reporting and information disclosed to the public.
- Reveal the critical need for management's well-defined job requirements.
- Reduce fraud and increase accountability.

Source: <u>http://www.governmentauditors.org/content/view/273/123/</u>

### Sample Scope Statements

- "Evaluate the existing control environment and recommend appropriate solutions."
- "Evaluate available and emerging Internal Control Frameworks and recommend potential application to existing environment."
- "Implement selected Control Framework."

# Plan

- After the initiation stage, the project is designed.
- Occasionally, a small prototype of the final product is built and tested. Testing is generally performed by a combination of testers and end users, and can occur after the prototype is built or concurrently. Controls should be in place that ensure that the final product will meet the specifications of the project charter. The results of the design stage should include a product design that:
  - Satisfies the project sponsor, end user, and business requirements.
  - Functions as it was intended.
  - Can be produced within quality standards.
  - Can be produced within time and budget constraints.

#### Plan

- Planning involves answering questions -
  - What must be done?
  - Who will do it?
  - How will it be done
  - When must it be done?
  - How much will it cost?
  - What do we need to do it?
  - Do you need to break this project up into many smaller projects?

### Execute

- Executing consists of the processes used to complete the work defined in the project management plan to accomplish the project's requirements.
- Execution process involves coordinating people and resources, as well as integrating and performing the activities of the project in accordance with the project management plan.
- The deliverables are produced as outputs from the processes performed as defined in the project management plan.

#### Execute

- Once created, plans must be made to happen!
- Plans can become dynamic living blueprints for success.

### Monitor and Control

- Monitoring and Controlling consists of those processes performed to observe project execution so that potential problems can be identified in a timely manner and corrective action can be taken, when necessary, to control the execution of the project.
- The key benefit is that project performance is observed and measured regularly to identify variances from the project management plan.
- Monitoring and Controlling includes:
  - Monitoring the ongoing project activities against the project management plan and the project performance baseline
  - Influencing the factors that could circumvent integrated change control so only approved changes are implemented
  - In multi-phase projects, the Monitoring and Controlling process also provides feedback between project phases, in order to implement corrective or preventive actions to bring the project into compliance with the project management plan.

#### Monitor and Control

- CHECKLISTS
- TARGETS
- SCHEDULING
- MILESTONES
- DEADLINES
- PERFORMANCE
- RESOURCES

- MODIFICATIONS
- CONTINGENCY PLANS
- OBSTACLES
- COMMUNICATION
- RELATIONSHIPS
- DELIVERY

### Close

- Closing includes the formal customer acceptance of the project.
- Administrative activities include the archiving of the files and documenting lessons learned.
- Closing phase consist of two parts:
  - Close project: to finalize all activities across all of the process groups to formally close the project or a project phase
  - Contract closure: necessary for completing and settling each contract, including the resolution of any open items, and closing each contract applicable to the project or a project phase.

#### Close

- ACCOMPLISHMENTS
- CHALLENGES
- OPPORTUNITIES
- LESSONS LEARNED

# Nine Knowledge Areas

- Integrating:
  - Integration Management: Developing and Executing the Project, and Managing Change
- Core:
  - Scope management: Planning, Defining, Verifying, and Managing Change
  - Time management: Estimating, Sequencing, Duration Estimating, Schedule Development, Schedule Control, and Managing Change
  - Cost management: Resource Planning, Cost Estimating, Budgeting, Cost Control, and Managing Change
  - Quality management: Quality Assurance, Quality Control, and Managing Change
- Facilitating:
  - Human resources management: Organizational Planning, Staff Acquisition, Team Development, and Managing Change
  - Communication management: Communications Planning, Information Distribution, Performance Reporting, Administrative Closure, and Communicating Changes
  - Risk management: identifying, analyzing (Qualitative and Quantitative), and Planning Response to Risk, Risk Monitoring and Control
  - Procurement management: Resource planning, Solicitation Planning, Solicitation, Source Selection, Contract Administration, Contract Closeout, and Managing Change
- Benefits Management (emerging tenth Knowledge Area?)

### **Visual Scope Statement**



Source: Med Yones, President, International Institute of Management (IIM), www.iim-edu.org

### Time Management

The processes required to ensure timely completion

- Activity definition: activity or task is an element of work that has an expected duration, cost, resource requirements; identifying specific activities that team members and stake holders must perform to produce Project deliverables
- Activity sequencing: identify and document the relationships between activities/tasks
- Activity duration estimating: estimating the number of work periods
- Schedule development: analyzing activity sequences, activity duration estimates, and resource requirements
- Schedule Control: controlling and managing changes to the project schedule

### Cost Management

- Rough estimate: done early in the project;
- Budgetary estimate: used to allocate money into budget
- **Definitive estimate:** used for making purchasing decisions
- Cost management plan: A document that describes how cost variances will be managed on the project

# Quality

- Fitness for use
- Conformance to requirements
- Quality Assurance (before) = activities to meet standards
- Quality Control (during and after) = acceptance and rejection framework determines level of rework

# Nine Knowledge Areas

- Core:
  - Scope management: defining and managing all work
  - Time management: estimating acceptable time to completion
  - Cost management: preparing and managing the budget
  - Quality management: ensure satisfying stated or implied needs
- Facilitating:
  - Human resources management: making effective use of people
  - Communication management: generating, collecting, disseminating, and storing project information
  - Risk management: identifying, analyzing, and responding to project related risk
  - Procurement management of: acquiring or procuring goods and services from outside the organization
- Integrating:

### Human Resources

- Organizational planning: identifying, assigning, and documenting project roles, responsibilities, and reporting relationships;
  - Output includes organizational chart
- Staff acquisition: getting the needed personnel assigned to and working on the project
- Team development: Building individual and group skills to enhance project performance
- Do NOT micro-manage
  - You hired good people, let them do what they are good at

### **Communication Plan**

- Information distribution: Getting project information to the right people at the right time in a useful format
- **Performance reporting:** Keeps stake holders informed about how resources are being used to achieve project objectives
- Administrative closure: Verifying and document project results. Formalizes customer acceptance of project products

# Risk Management

- Risk identification
- Risk quantification
- Risk response
- Risk control
- Market risk: will the product be useful
- Financial risk: is this the best way to use our resources
- Technology risk: is the project technically feasible given our resources and the state of available technology

### Procurement

- **Procurement planning:** what to procure and when; involves a make or buy a decisions
- Solicitation planning: document requirements and identify potential sources; request for proposal
- Solicitation: obtaining quotations, bids, offers a, proposals
- **Source selection:** choosing potential vendors, evaluating, negotiating, and awarding
- **Contract Administration:** managing the relationship
- **Contract closeout:** completion and settlement including resolution of open items

# Integration

• The ability to integrate the eight knowledge areas to ensure that the project is successful

# My Take

- Identify Needs
- Socialize (Get a sponsor)
- Research
- Document
- Socialize
- Plan
- Document

- Socialize
- Execute
- Monitor
- Document
- Report (Socialize)
- Measure
- Document
- Close

# Summary

 "Many of the methodologies taught in textbooks are idealizations. What we encounter in reality are plenty of stumbling blocks."