Manajemen Project dan Keunggulan pada IT Governance

Chapter 5

Universitas Dian Nuswantoro
Objectives

• Provide an overview of the key principles, issues, concepts and processes for effectively managing enterprise wide and limited scope programs and projects.
• Understand the driving forces and value proposition of PM
• Review the PM maturity model and framework
• Understand how to link the IT plan to programs and projects
• Understand the mandatory and discretionary key performance indicators and metrics to manage programs and projects effectively
Flexible Discipline and Teamwork

Planning  Measurement

Improved Performance (and Less Stress)
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>Consists of multiple interrelated projects and is usually large, complex and with high visibility &amp; high $</td>
<td>SAP</td>
</tr>
<tr>
<td>Project</td>
<td>A discrete, one-time event that consists of such attributes as time, cost, resources, risk, deliverables, etc.</td>
<td>Sap Module - Purchasing</td>
</tr>
<tr>
<td>Task</td>
<td>A discrete element of work</td>
<td>Order equipment</td>
</tr>
<tr>
<td>Process</td>
<td>A continuous work effort to support a business or IT function</td>
<td>Service Management; Service Desk; Sales Order Process</td>
</tr>
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</table>
Value Propositions & Benefits of Program/Project Management from Leading Organizations

- Provided **better control of scope changes** & ensures efficient use of project (Ford)
- **Consistent & repeatable use of PM processes** on a global basis reduced project time & costs & sped up deliverables and facilitated training (IBM)
- Developed a **better working relationship and communications with the customer** and other project constituents (Nortel)
- Aligned project initiatives and investments more effectively with **business and improved quality** (GE)
- **Improved** IT project accountability and documentation (Purdue Pharma)
- **Increased** our **customer satisfaction** (Lucent) by demonstrating our commitment to schedules
- Project Management **education and certification** resulted in more cost effective and timely program/project performance and vendor (outsourcing) management (Federal Technology Service)
Program/Project Management is Complex & Requires Multiple Competencies
Major Causes of Program/Project Failures

- Slow to Market
- Unrealistic Expectations
- Poor Project Leadership
- Lack of Exec. Commitment & Support
- Lack of Measurable Controls & Metrics
- No Plan, No Risk Assessment, Mitigation and Contingency
- Ineffective Implementation Strategy
- Limited Constituent Involvement
- Lack of Training
- Lack of Internal Communication
- Underestimation of Complexity
- Lack of Integration with the Organization
- Lack of Dedicated or Sufficient Resources
- Poorly Defined Requirements/Scope
- Poor Vendor Management
The Cost of Failure

Nearly \( \frac{3}{4} \) of all projects fail or run into trouble

An estimated $100 - 150 billion per year is spent on failed and cancelled projects in USA (out of a total estimated spend of $250 billion)

Successful (S) = completed on-time, on budget and within scope

Challenged (C) = completed, but with time and/or budget overruns and fewer features than originally specified

Failed (F) = cancelled before completion

<table>
<thead>
<tr>
<th>Company Size</th>
<th>S</th>
<th>C</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>9%</td>
<td>62%</td>
<td>29%</td>
</tr>
<tr>
<td>Medium</td>
<td>16%</td>
<td>47%</td>
<td>37%</td>
</tr>
<tr>
<td>Small</td>
<td>28%</td>
<td>50%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Source: Blend surveys by the Standish Group and Gartner
<table>
<thead>
<tr>
<th>Obstacles</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistance to PM due to time investment</td>
<td>Create flexible and scalable PM processes with mandatory and discretionary components (e.g. “fast track” vs. “full risk mitigation”)</td>
</tr>
</tbody>
</table>
| Lack of PM value proposition awareness        | • Quantify PM benefits (time savings, quality improvements, cost reductions, customer satisfaction and create/maintain a scorecard)  
• Create PM advocacy groups that share information, follow uniform process and document PM value lessons learned  
• Market and communicate value of PM to multiple constituencies |
| Limited support from the top                  | • Identify proactive PM executive champions and use them to persuade others  
• Demonstrate benefits of PM by using key metrics (e.g. improved customer satisfaction, reduced cycle time) to gain supports |
| Insufficient dedicated qualified PM resources  | • Continuous training of relevant constituencies  
• Reward and recognition of certification  
• Career path options – professionalize PM  
• Funding and support of “PM Centers of Excellence” |
A Telecom company strongly supported project management disciplines and developed a series of PM documentation for different constituents. A PM sales brochure was developed for its customers that promoted the idea that by implementing a PM best practices, the customer’s benefited in many ways, including on time delivery of products.
Principles for Achieving Program/Project Management Excellence

• Create the right environment and culture:
• Establish the appropriate organizational mindset, culture and environment
• Obtain executive sponsorship, commitment and multi-level management buy-in
• Obtain customer/other stakeholder/project team commitments and ownership
• Success depends on creating a sustainable foundation (e.g. policy, process, metrics,) for managing programs and projects and integrating results and methodologies into the culture of the organization
• Define roles - Get the right people involved in every program/project phase
• Market and re-enforce (e.g. training, rewards, mentors, tools, flexible processes) the value and benefits of good PM practices
• Adopt a flexible and scalable PM process (phases, templates, repository, tools) [tailor when required] to accommodate different program and project types (complexity, size, value, etc.) based on current and emerging industry best practices
Develop program/project plans (based on a flexible and scalable process):

- Define the project’s scope, objectives, requirements and deliverables
- Establish well-defined phases/tasks, go/no go gates and milestones (break the job down into manageable work packages – 80 hour rule) with realistic baselines (costs, time, resources and contingencies) based on short term incremental and visible deliverables
- Define a responsibility assignment matrix – Responsible, Inform, Consult and/or Approve
- Establish formal change management and risk management processes
Principles for Achieving Program/Project Management Excellence

• Ensure governance and excellent communications:
  • Establish a governance, control, reporting and escalation policy and process
  • Manage expectations of all stakeholders proactively
  • Identify, measure and track vital signs, metrics, key issues and take necessary actions quickly – knock obstacles out of the way
  • Establish frequent and open communications with stakeholders (both formal and informal review meetings – daily, weekly, monthly, quarterly
  • Ensure accurate, timely and meaningful monitoring and progress reporting and take decisive actions
• Institutionalize a PM policy with flexible and scalable processes

  • Create PM Centers of Excellence (e.g. Advocacy Center, Help Desk, Education,
  • Training, Expert Help, Process, Project Tracking, Certification, etc.)
  • Create a reward and/or recognition policy to re-enforce and sustain
  • Conduct formal program/project reviews
  • Develop and use consistent, flexible and scalable PM processes (e.g. Fast
    Track versus Full Risk Mitigation Projects & Automate processes and tools
    (Web based)
  • Capture and apply lessons learned and focus on continuous improvement
Project Management Science/Processes (30%)

Plan, WBS, Gantt Charts, Standards, CP/Precedence diagrams, Controls, Variance Analysis, Metrics, Methods, Earned Value, Risk Management, Status Reports, Meeting Agendas, Resource Estimating, Leveling, Training, Mentoring, Governance, Change Management

THE PROJECT MANAGEMENT ICEBERG

Project Management Art - Soft Skills (70%)

Effective Communications, Trust, Integrity, Honesty, Sociability, Leadership, Values, Team Building, Flexibility, Decision making, Perspective, Sound Business Judgement, Negotiations, Customer Relations, Problem Solving, Managing Change, Managing Expectations, Common Sense, Listening
Project Management Life Cycle Phases & Key Components - Overview

- **INITIATING**
  - Business Need/Case
  - Feasibility
  - Authorization
  - Funding
  - Project Charter
  - Project Organization
  - Project Management Office (PMO)
  - Critical Success Factors
  - Project Metrics & Vital Signs
  - Go/No Go Gate

- **PLANNING**
  - Requirements & Scope
  - Objectives
  - Deliverables
  - Work Breakdown Structure
  - Stakeholders
  - Assumptions & Constraints
  - Estimates–Costs, Resources, Effort & Time
  - Sequence Tasks
  - Schedule
  - Resources
  - Roles, Responsibilities &

- **EXECUTING**
  - Executing the Plan & Delivery (e.g. SDLC; PMLC)
  - Governance Structure & Escalation
  - Developing the Team (separate module)
  - Progress Reporting, Communications & Meeting Management
  - Comparison of Metrics & Vital Sign Baseline to Actuals
  - Education & Training

- **CLOSING & TERMINATION**
  - Project Acceptance & Approval
  - Final Documentation
  - Lessons Learned
  - Finalize Project File
  - Administrative & Contract Closure
  - Post Implementation Review & Follow-Up (1 month, 3 months, 6 months)
Enterprises must develop consistent, but scalable & flexible PM processes to fit different types & sizes of programs and projects.

- Staffing Plan
- Quality Management Plan
- Risk/Contingency Management Plan
- Disaster Recovery Plan
- Change Management Plan
- Communications Management Plan
- Acceptance Management Plan
- Integrated Project Plan (of multiple inter-related projects)
- Vendor/Outsourcing Plan

- Vendor/Outsourcing Management
- Change Control
- Risk Control
- Quality Control
- Go/No Go gate

Governance & Control Spans all Phases
IT Demand Management – Classifications

IT Demand Management Generally Comes in Several Flavors – Mandatory and Discretionary – Both should be identified and resourced in the IT Strategic and Operating Plan and Budgets - If they are not in the plan, each request should be evaluated on its own merits against consistent alignment, investment and service criteria. A steady state (normalized and repeatable) service could be included in a service catalogue.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Type of Request or Demand Mgt.</th>
<th>Comments/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory (Business Enablement)</td>
<td>Service Interruption (Break &amp; Fix)</td>
<td>A problem caused the disruption of IT service and must be fixed and restored as soon as possible</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>Scheduled maintenance must be performed to keep applications and infrastructure operating efficiently</td>
</tr>
<tr>
<td></td>
<td>Keep the Lights On and Legal/Regulatory</td>
<td>The costs and resources required to support the basic steady state operations of the business, including some components of infrastructure</td>
</tr>
<tr>
<td>Discretionary* (Require ROI)</td>
<td>Major New/Change (Complex) Initiatives (Full Risk Mitigation)</td>
<td>Complex new initiatives or major changes (major enhancements or modifications) to systems, processes or infrastructure and provide new or additional functionality or capacity</td>
</tr>
<tr>
<td></td>
<td>Fast Track (New/Change) (Simple or Limited Scope)</td>
<td>Simple new initiatives and minor changes that do not required the rigor and discipline of a complex initiative and be fast tracked.</td>
</tr>
<tr>
<td></td>
<td>Standard (Repetitive) Request</td>
<td>Describe product/service (functions, features and price and place in a product/service catalogue)</td>
</tr>
<tr>
<td>Strategic</td>
<td>Major initiative – Realistic ROI may not be doable – too early</td>
<td>A strategic initiative may fall into several categories – first market mover (new product or service); R &amp; D; competitive advantage, etc.</td>
</tr>
</tbody>
</table>
## Executive Summary (Synopsis of Business Case Assessment):
- Purpose, Objectives, Strategy and Scope
- Description of Opportunity, Value and Alignment
- Dependencies, Assumptions, Constraints
- Sponsor and Management Team
- Costs/Benefits/Risks/Issues

## Assessment of Current Environment (Reference Base—Where are we today?):
- Current Processes, Functions and Technology
- Current Costs, Resources, Volumes, Locations
- Major Issues, Constraints and Sensitivities

## Proposed Solutions (What Could We Do?)
- Proposed Requirements, Processes, Functions and Technology
- Proposed Cost/Benefit Analysis
- Major Issues, Constraints and Sensitivities
- Impact on the Organization, Resources, People, Technology
- Pros/Cons of each solution

## Recommended Approach (What Should We Do and How Do We Get There?)
- Macro Plan, Milestones and Schedule
- Critical Success Factors
- Macro Plan, Milestones and Schedule
3. Change Analysis (Why Change?)
   - Value Proposition Analysis
   - Financial Analysis (description and quantification; full economic life cycle; best case, worse case, most likely case; cash flow (cash in and cash out); costs/savings)
   - Non-Financial benefits
   - Risk Analysis & Mitigation

Conversion, Transition Plan and Team
Quality and Test Plan
Key Performance Indicators

6. Appendices
   - Detailed Project Plan
   - Detailed Cost Benefit Analysis
   - Detailed Risk Management Plan
   - Detailed Contingency and Backup Plan
   - Detailed Communications Plan
   - Critical Success Factors
Helps to evaluate the feasibility and priority of a Program/Project/IT Services and their ultimate disposition (go/no-go) (Illustrative Example)

**What?**
- Planned
- Unplanned

**Gate 0 – Initial Filter**
- Preliminary Approval

**Stage 0**
- Good Idea? Yes
  - Reject
- Reject

**Gate 1 – Rationalize**
- (Type/Scale)

**Stage 1**
- How does It Fit? Yes
  - Reject

**Gate 2 – Sequence and Allocate Resources**
- (Final Filter)

**Stage 2 Implications**
- When?

**Resource Allocation**
- Final Approval

**IT Project Request (Demand) Gate Approval Process Flow**

**Templates/Tools**
- Request or e-Mail
- Type/Scale Matrix
- Project Request or PIR

**Service (Repeatable)**
- P
- M
- L
- C

**Criteria**
- Critical business need?
- Cost/Benefit acceptable?
- Project visibility?
- Portfolio implications?
- Mandatory legal or policy requirement?
- Project Sponsor/Owner
- Alignment with Business Strategy?
- Is it in the Capital or Operating Budget?

- Part of larger program? Project?
- Redundant?
- Support Obsolescence?
- Aligned with infrastructure strategies?
- Aligned with data strategies?
- Aligned with application strategies?
- Scope appropriate and impact understood?

- Are resources available when needed?
- Deployment schedule?
- Dependencies with other projects?
- Is program/project identified?

Program/Project Management
(To be used as a guideline to assist in evaluating New or Changes in Scope Requests for IT Services)

Technical/Interoperability/Enterprise Architecture

• Is this a new technology? Has it been tested?
• Is it an extension or replacement of an existing technology?
• Does the proposed solution impact the approved enterprise architecture and approved infrastructure components?
• Does the solution represent a standard solution? A proprietary solution?
• Is the proposed solution independent or is it dependent on other infrastructure components?
• Does it comply with the interoperability standards and guidelines?
• Does the solution require back-up, redundancy and contingency plans?
• What degree of risk does the proposed solution pose? High? Medium? Low?
• Is the capacity of the proposed solution expandable to accommodate growth in volume? Locations?
• Employees? Etc.?
Cont...

**Scope, Impact, Business Need and Feasibility**
- What is the scope and impact of the request? Enterprise wide? Geography? Number of People?
- Is it solution technically feasible? Economically feasible? Legally feasible?
- Is the request identified in the strategic and/or operating plan and budget?
- What is the impact of the proposed solution on the user community? High? Medium? Low?
- What business need will be satisfied by approving this request? High Impact? Low Impact? Mandatory?
- Strategic? Discretionary?

**Legal, Regulatory and Security**
- Is the request legal?
- Is this request ethical?
- Does this request comply with current regulatory policies and guidelines?
- Does the request comply with published security regulations and guidelines?
- As a result of this request, are new or modifications required to security regulations and guidelines?
Core Competencies and Human Resources

• Do we have the core competencies to design and implement the proposed solution?
• Do we have sufficient and the right kind of human resources to implement the solution?
• Do we have to outsource the solution to an industry partner? Other?

Alternatives Considered

• What alternative solutions have been analyzed?
• Why was the recommended alternative selected?
Funding and Financials
• Is this request a funded (budgeted) requirement defined as part of the annual budget process?
  - Defined/explicit?
  - Realignment/reallocation?
• Is this an unplanned and unfunded request?
• Does this request impact the enterprise architecture and/or infrastructure integrity?
• Does the request require a reallocation of previously approved funding?
• Is the requested completion date acceptable? Doable?

Schedule and Time Frame
• Is the requested schedule doable with the resources available?
• Can the request completion date be met, given other priorities?
## Program/Project/Service Request Type/Scale Matrix

<table>
<thead>
<tr>
<th>COMPLEXITY FACTOR</th>
<th>LOW = 1</th>
<th>MED = 3</th>
<th>HIGH = 5</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Type</td>
<td>UPGRADE</td>
<td>NEW ADDITION</td>
<td>REPLACEMENT</td>
<td>Degree of difficulty influenced by new technology and whether it replaces older technology or is simply added to the environment</td>
</tr>
<tr>
<td>Technology</td>
<td>Established GSA standard</td>
<td>A standard in the industry, but new to FTS</td>
<td>A new technology, not necessarily a standard, no internal expertise.</td>
<td>Open standards should be encouraged</td>
</tr>
<tr>
<td>Scope</td>
<td>Involves only one location and one function</td>
<td>Involves only one region and up to four functions</td>
<td>Involves all regions (locations) and cross-functional</td>
<td>The wider the geographic scope the more complex the project</td>
</tr>
<tr>
<td>End User Impact</td>
<td>Completely transparent to end users</td>
<td>Minimal amount of communication necessary to inform end users of planned changes. No training</td>
<td>Changes require frequent communication and some degree of end user training</td>
<td></td>
</tr>
</tbody>
</table>

<p>| Enter Score (1, 3 or 5) |</p>
<table>
<thead>
<tr>
<th></th>
<th>Capital Required (Life Cycle)</th>
<th>Operating Costs (Annual)</th>
<th>Vendor relationship</th>
<th>Resource Requirements</th>
<th>Project Duration</th>
<th>Other</th>
<th>Total Project Type/Scale Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Relatively small capital (&lt;$50k)</td>
<td>Small operating costs (&lt; $100k/yr)</td>
<td>No new vendors involved, upgrade using existing vendor product</td>
<td>Can be completed with use of only internal FTS resources (and industry partners)</td>
<td>&lt;3 months</td>
<td>Legal requirement and/or critical to business</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Medium capital required ($50k - $2.5 mil)</td>
<td>Medium operating cost ($101k-$999k/yr)</td>
<td>No new vendor involved, using a new product from existing vendor</td>
<td>Requires minimal resource dependency outside FTS (e.g. Phone Bridge)</td>
<td>3-12 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Large capital required (&gt;$2.5 mil)</td>
<td>Large operating cost (&gt;1.0 mil/yr)</td>
<td>New vendor with no prior business relationship</td>
<td>Requires significant resource requirement from outside FTS and/or vendor (e.g. Enterprise Architecture, participation on project)</td>
<td>&gt;12 months</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEFINITIONS**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Key Attributes</th>
<th># of points</th>
<th>Recommended Template</th>
<th>Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>Low Complexity</td>
<td>Less than 20 Pts</td>
<td>Template - PR, PCR*</td>
<td>Director or Delegate</td>
</tr>
<tr>
<td>Moderate</td>
<td>Medium complexity</td>
<td>Between 20 and 35 Points</td>
<td>Template - PR, PIR, DTD, PCR (Others Optional)</td>
<td>CIO or Delegate</td>
</tr>
<tr>
<td>Complex</td>
<td>High visibility; AC directed; Multiple organizations affected</td>
<td>Greater than 35 Points</td>
<td>Template - All for tech. projects, otherwise TAD, IITQR, RFI opt.</td>
<td>ITRB or Delegate</td>
</tr>
</tbody>
</table>
In general, a small number of projects consume a majority of the IT project resources (80/20 rule). Therefore, these require more planning & control.

<table>
<thead>
<tr>
<th>Programs and Projects</th>
<th>#</th>
<th>% of IT Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>95%</td>
</tr>
</tbody>
</table>
PM/SDLC Phases, Processes and Templates Should Accommodate Multiple Program/Project Types (e.g. Simple, Moderate & Complex) and Therefore, Be Scalable

The following chart illustrates the relationship between PM & various life cycle scenarios that should be accommodated by the PM processes, templates, documentation and tools:

- **PROJECT MANAGEMENT**
  - **FAST TRACK**
    - Small or Quick Projects
  - **FULL RISK MITIGATION** (complex program or project)
  - **SDLC/IDLC/PDLC** (must accommodate multiple methodologies such as: Waterfall, Spiral [Iterative], Hybrid, RAD, DSDM Development Processes)
    - **PURCHASED**
      - Simple**
      - Complex**
    - **BUILT**
      - Simple**
      - Complex**

- **MINIMUM PM TEMPLATES** (ILLUSTRATION ONLY)
  - PROJECT (SERVICE) REQUEST
  - USER REQUIREMENT/OBJECTIVES/SCOPE
  - PROJECT PLAN/BUDGET/MILESTONES/DelIVERABLES
  - STATUS REPORTING, METRICS AND GOVERNANCE

Note: Will vary by organization:
* Can include new development or technology, enhancements & maintenance or change in scope
** Small Project = < 3 months (duration); < 4 FTE; < $250k; etc.
Large Project = > 3 months; > 4 FTE; > $250k; strategic, etc.
PM Lifecycle Phases and Related Templates

*Industry Partners may use their own equivalent processes and templates

Note:
"V" diagram assumes multiple iterations within each stage (phase) and between stages and concurrent (parallel) work on select stages.
## Description of PM Lifecycle Templates

<table>
<thead>
<tr>
<th>Phase(s)</th>
<th>Template(s)</th>
<th>Purpose/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation</td>
<td>0. Program/Project Request (PR)</td>
<td>Obtains customer or other constituent authorization to request IT services</td>
</tr>
<tr>
<td></td>
<td>1. Program/Project Initiation Report (PIR)</td>
<td>Provides sufficient high-level information on a program or project to either approve or reject the request (e.g. scope, requirements, etc.)</td>
</tr>
<tr>
<td>Planning</td>
<td>2. Business Project Definition (BPD)</td>
<td>Describes the major business objectives that the system, component or deliverable will satisfy and/or impact</td>
</tr>
<tr>
<td></td>
<td>3. RFI, RFQ, RFP Checklists</td>
<td>Identifies the contents of a solicitation to vendors in the form of: Request for Information, Request for Quote and/or Request for Proposal</td>
</tr>
<tr>
<td></td>
<td>4. Technical/Functional Architecture Definition (TAD)</td>
<td>Describes the complete system and/or component from a functional, technical and operational aspect</td>
</tr>
<tr>
<td>Phase(s)</td>
<td>Template(s)</td>
<td>Purpose/Description</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Execution**</td>
<td>5. Implementation, Integration, Testing and QA Requirements (IITQR)</td>
<td>Describes how the system and/or components is to be implemented, tested and transitioned to the customer, operations and other environments</td>
</tr>
<tr>
<td></td>
<td>6. Deployment, Training and Documentation (DTD)</td>
<td>Describes the actual installation and cutover of the system or components and identifies the training and documentation requirements</td>
</tr>
<tr>
<td>Closure</td>
<td>7. Program/Project Delivery/Closure Report (PCR)</td>
<td>Verifies and evaluates that the program/project objectives, costs, benefits and deliverables have been satisfactorily implemented and documents lessons learned</td>
</tr>
</tbody>
</table>
Program/Project Governance, Change and Escalation Hierarchy

A formal program/project review process should be established and followed with clearly defined roles and responsibilities

- Last possible option
- Approves major initiatives
- Resolves critical issues
- Approves major changes
- Prioritizes resource allocations
- Manages performance/corrective actions

- Resolves issues escalated from PM and/or core team
- Supports PM
- Cross project impacts and priorities
- Change Control Board
- Manages performance/corrective actions

- Communicates status and actions
- Escalates issues and conflicts not resolvable: supports PM
- Assigns and monitors resources
- Manages performance/corrective actions

- Do work per project baseline
- Do work per authorized change form
Program/Project Key Performance Indicators (KPIs)

Purpose - Measures progress against a baseline and may trigger corrective actions

Characteristics of KPIs – Quantifiable, trackable, measurable, comparable and actionable

**Mandatory**

- Time - Schedule and suspense (due date)
- Costs - Actual versus budgeted $ (Cost)
- Status of critical path - are we on target based on date
- Deliverable hit ratio - # planned versus # completed deliverables (Schedule)
- Top issues - # of open issues should be a minimum
- Top risks of the project (should always be in focus) –with contingency plans
- Customer Satisfaction - quarterly

**Discretionary**

- Milestone hit ratio - # planned versus # actual
- Actual versus budgeted resources (# of people)
- Number of program/project changes and variances
- % of Rework
- Cost performance index (CPI)
- Schedule performance index (SPI)
- Earned Value – requires a time reporting system in place
Program/Project Management Office – Roles and Areas of Focus (Illustrative Example)

Growing trend to establish PMOs at CEO/COO level to track Enterprise Wide Initiatives

PMO can be located at CIO level or distributed level or both

Planning and Govern.
- Charter
- Organization
- WBS
- Resources
- Economics
- Schedule
- Escalation
- Baseline
- Estimate
- Networks
- Issues Mgmt.
- Communications
- Metrics
- Authorization
- Reporting
- Follow-Up
- Change Mgmt.

Regmts. Mgmt.
- Needs
- Alternatives
- Sanity Check
- Feasibility
- Economics

Change Mgmt.
- Baseline
- Impact Analysis
- Formal Approval
- Change Control
- Documentation
- Tracking

Risk Mgmt.
- Identification
- Analysis
- Quantification
- Mitigation
- Contingency Plans
- Disaster Recovery Plans
- Config. Mgmt.

Resource Mgmt.
- Workforce
- Vendors
- Equipment
- Assets
- Technologies
- Facilities

Cost Mgmt.
- ROI/NPV
- Cash flow
- Activity Based Costing
- Earned Value
- Variance Analysis
- Cost Performance Index

Quality Mgmt.
- Continuous process improvement
- Valuation
- Testing
- Sanity Checks
- Best Practices

Integration/Interface
- Interface and integration issues and processes within a project and between projects, systems, functions and SBUs

Education/Competencies
- Training
- Education
- Advocacy
- Competencies
- Certification
- Q12

Roles
- Focal point for project planning, control and coordination processes
- Coordinate, control and report time, costs, resources and performance reporting
- Establish/Maintain/Administer all project processes, tools, templates & software
- Center of Excellence – Subject Matter Experts (for staff augmentation or to manage troubled projects
- Help Desk/Web Site
Sample PM Organization Structure - Major Multinational Corporation
(Illustrative Example) - PM organizations work closely together and support the geographic regions and business units in those regions

Vice President

Head, European CoE

Head, Asia/Pacific PM CoE

Head, Latin/S. America PM CoE

Head, Rest of World PM CoE

VP

SBUs

VP

Head, PM Center of Excellence (CoE)
- Professional Development (training, mentoring, career paths, certification)
- Community (awareness, communications, PR)
- Methods and Tools (processes, software tools, templates)
- Project controls (governance, vital signs, metrics, reporting, escalation)
- Deployment/operational support (PM help desk, troubled/complex project resource)
- Intellectual Capital (corporate memory, lessons learned, PM knowledge mgt.)
Environment & Drivers

- Federal government is focusing on reducing costs and becoming more efficient through automation performance management
- This agency provides IT systems and infrastructure support for several other agencies
- Key areas of focus on government professionals and executives are greater accountability and improving their IT organizational and individual skills, competencies and maturity levels

Approach

- Completed assessment of one function within the IT organization and identified gaps and a plan to fill gaps
- Sponsored by CIO
- Three levels of steering were established:
  - Business/IT Steering Committee – senior managers who focused on prioritizing initiatives and funding
  - IT Technology Steering Committee – concerned with architecture, interoperability standards and compatibility issues
  - IT PMO – established to develop consistent and scalable PM policies and processes
**Issues and/or Opportunities**

- Improve CMMI level of maturity from the low end of Level 1 to Level 3 within a three year period, initially in the PM area and then in other IT governance areas.
- Due to significant outsourcing, government employees had to be trained in more formal PM.
- Ad hoc and inconsistent PM and operational policies and processes throughout IT organization.

**Approach (Cont’d)**

- Formed an IT Governance Tiger Team, with representation of all IT departments and facilities by an external consultant to develop, review and deploy the IT governance framework and phased plan (see next slide) with the following priorities:
  - Program/Project Management and PMO
  - IT work Flows, Decision Rules and Authority Levels
  - IT Operations and Infrastructure
  - Performance Management & Management Controls
<table>
<thead>
<tr>
<th>Results – Alignment</th>
<th>Results - IT Service Management &amp; Delivery</th>
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</thead>
<tbody>
<tr>
<td>• Business/IT Steering Group focuses on alignment and major investment priorities</td>
<td>• Implementing the ITIL processes in the IT Operations and Infrastructure area</td>
</tr>
<tr>
<td>• Capital budgeting is part of but precedes the IT Strategic Plan</td>
<td>• Improved the compliance reporting and documentation process and facilitated</td>
</tr>
<tr>
<td>• IT Annual Operating plan represents the budget authority and authorized spend</td>
<td>adherence to government regulations</td>
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<tr>
<td>levels</td>
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<table>
<thead>
<tr>
<th>Results - Program/Project Management</th>
<th>Results - Performance Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• All agency government employees had to attend mandatory PM training</td>
<td>• Project Management metrics for critical projects were more tightly controlled</td>
</tr>
<tr>
<td>• A consistent, but scalable Pm policy and process was deployed and resulted in</td>
<td>than for smaller projects</td>
</tr>
<tr>
<td>significant reduction in rework and improved productivity through flexible</td>
<td>• IT Operations and Infrastructure used daily, weekly. Monthly and quarterly</td>
</tr>
<tr>
<td>discipline</td>
<td>metrics to measure customer satisfaction and service level performance, which</td>
</tr>
<tr>
<td></td>
<td>is improving consistently</td>
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Critical Success Factors

- CIO must sponsor and support
- All functions must be represented in the initiative to develop trust, better communications and more effective alignment

Lessons Learned

- It always takes longer to implement process changes that anticipated
- Must constantly market the value proposition of IT governance and process disciplines
- Celebrate and communicate wins
IT Governance Plan and Phases

**IT Governance Initiative**

**Phase 0 – IT Operations PMO Pilot**
- Design and Implement a PMO Center of Excellence Pilot
- 3 months

- Completed assessment of environment and gap analysis
- Developed and distributed PMO Lifecycle, Phases and Templates based on current & emerging best practices
- Trained employees & outsourcing partners
- Periodic sanity checks conducted to assure that PM was being deployed effectively

**Phase 1 – CIO PMO**
- Expand PMO Framework to the entire IT Organization
- 3 - Months

- Approved charter
  - Authorized and empowered Tiger Team
  - Reviewed PMO needs of all CIO functions
  - Developed &/or modified PM Lifecycle, Phases and Templates for CIO organization
  - Trained all lanes

**Phase 2 CIO IT Investment and Governance Design**
- Design IT Investment (Portfolio Mgt), IT/Business Alignment, Governance & Performance Management Framework
- 3 Months

- Began PMO pilots in all lanes
- Drafted and distributed CIO IT Workflows, Business Rules & IT Governance Automated Tools Requirements Document
- Developed Automation Tools Evaluation Matrix and evaluated select tools
- Developed CIO PMO and Governance Framework & Roadmap - Executive Summary of Findings & Recommendations & supporting documentation

**Phase 3 – IT Investment and Governance Rollout**
- Deploy IT Investment & Governance Roadmap identified in Phase Two
- 4 Months

- Develop plans to fill gaps identified in Phase Two
- Implement recommended tools
- Develop touch points with external organizations (relationship model)
- Develop portfolio and IT selection approval process & criteria
- Integrate CIO programs, projects, standards, metrics with performance management system
- Identified key performance indicators and associated metrics
- Conduct periodic PMO and governance sanity checks
- Introduced ITIL processes to IT Operations & Infrastructure
Summary

- The CEO (e.g. CIO; CFO; CMO; COO; etc.) is committed to sponsoring and sustaining PM as a core competency and discipline
- Align programs and projects with business strategy using portfolio management criteria
- Get right people involved
- Deliver short term incremental deliverables that work (decompose complex programs or projects) to establish credibility and visibility
- Recognize and reward exceptional team performance
- Over communicating is good
- A formal PM governance process with meaningful metrics and actions is necessary
- Professionalize PM, reward Certification and celebrate successes
- Implement a scalable & flexible PM process & tools

Leverage and adopt industry standards/guidelines to guide your direction - CMMI, PMMM, PMBOK, PRINCE2, etc.