

Project Management

BY Joe Feliu in conjunction with Harris Kern's Enterprise Computing Institute

Description: Although projects occur throughout all organizations in the IT group, the most urgent need is to have a documented project management process that is followed for application development projects. Business literature is replete with case studies of projects gone wrong, and careers sidetracked. If your organization exhibits any of the following symptoms, make an effective project management process a high priority:

- Approved Initiatives Out-of-Sync with Business Needs
- Key Business Enabling Projects Not Implemented
- Requirements and Costs are Not Well Defined/Understood
- Project Surprises (Dependencies, Unknown Commitments, etc.)
- Staff Make Strategic Decisions, Not Management
- Slipped Due Dates and Project Cost Overruns
- Duplicate or Unclear Project Roles and Responsibilities
- Project Processes and Procedures Defined but “Gathering Dust”
- Project Resources Over-Committed
- New Project Initiative Generation Process is a Mystery
- Frequent Emergencies - Reactive Mode is SOP
- Extensive Rework Late in Development Process
- Overlapping or Duplicative Projects

The challenge is to implement a process that fits the organizational culture, which will give early warning of impending problems so that timely and appropriate action can be taken. The basis for the process is a Project Methodology, most often expressed in terms of a Systems Development Life Cycle. Such a methodology works equally well for infrastructure and applications development efforts. With this methodology in place, project success rests on the adequacy of the Project Control process used by the Project Manager. Figure 1 provides the key elements of an effective Project Control Process. Look for these features in your process, particularly the rigor of the change control sub-process.

PROJECT CONTROL PROCESS

I. Definition

- A. A process in which constant comparisons are made between actual and planned deliverables and due dates, and action taken as appropriate. The Project Manager owns this process

II. Key Elements of Project Control

- A. Tasks are decomposed into a Work Breakdown Structure, attempting to define the lowest level of self-contained work
- B. Tasks are assigned owners and due dates in a Project Plan
- C. Project Plan provides the framework for tracking tasks
- D. Task completion should be validated, with feedback given to the worker
- E. Communication to all stakeholders of project progress is essential and should be frequent

III. Managing Project Change

A. Initiate

- Change Board created to manage the change process
- changes may come from any stakeholder
- perform initial evaluation/approval to discard ideas without management approval

B. Evaluate

- assess resource and schedule implications
- prioritize changes based on established set of criteria
- decision made to proceed, queue or reject change

C. Implement

- project manager schedules approved changes
- project manager informs stakeholders of revised dates/deliverables

IV. Responsibility Matrix

- Specifies the responsibilities of all stakeholders in the project
- Three levels of involvement for each task
 - >> Own a task
 - >> Work on a task
 - >> Review deliverable of a completed task
- Attempt to minimize tasks with shared responsibility
- Example:

<u>Task</u>	<u>P.M.</u>	<u>Team</u>	<u>User</u>	<u>Network</u>	<u>Operations</u>
1	O/W		W	W	
2	O	W			W
3	R	R	O		
4	R		O/W		R
5	W		R		O

V. PROJECT DOCUMENTATION

- A. Project Workbook – a comprehensive catalog of all project documents (electronic and hard copy)
 1. Project Definitions and Scope
 - a. Project Description - several sentences defining the key characteristics of the project (what is the project purpose and outcome?)
 - b. Business Purpose - several sentences describing who is the customer, and the fundamental business reason this project addresses. (Why should senior management find this project worth doing?)
 - c. Project Scope - several sentences describing the extent of the impact of project. (What customers, resources, geography's, etc., will be impacted?)
 - d. Project Approvals – project acceptance and signoff
 2. Project Plan
 - a. Project schedule - include a Microsoft Project Schedule (or equivalent)
 - b. Project Team and Roles - provide a project responsibility matrix (see III.D.)
 3. Project Budget
 - a. Budget Plan - provide details for the capital and expense expenditures
 4. Project Implementation
 - a. Status reports - include copies of all periodic project status reports.
 - b. Project Change Logs - include copy of a documented log of all changes made the scope of the project.
 - c. Change Board Minutes - include a copy of the minutes from the Change Board Meeting in which the project “go live” date is announced.
- B. Status Reports
 - Effective tool for managing project expectations
 - Should be sent to all stakeholders
 - Should be produced periodically so that stakeholders expect its arrival (either monthly or weekly, depending on duration of the project)
 - Ensures consistent and comprehensive communication
 - Essential components of the status report
 - >> Brief overall opening statement of status of project
 - >> Describe what has transpired during the last reporting period
 - >> Describe what is expected to transpire over next reporting period
 - >> Identify specific issues to be brought to management's attention

Figure 1 – Project Control Process

Benefits: A rigorous Project Management Process is a necessity. Here's what it offers:

- Provides a common language for cross functional communication
- Integrates actions of all stakeholders
- Identifies problems early so that corrective action can be taken
- Minimizes rework
- Provides a framework against which to assess project changes

First Steps: If there is not an effective project management discipline within your organization (e.g. projects are started and not completed, or time/cost estimates are regularly missed) take the following steps:

1. search through your senior staff to identify a resource with expertise in project management (use external resources if necessary)
2. have this individual document a project management process, with components similar to those provided in the previous example, tailored to the culture and development processes in your group
3. quickly institute project phase reviews (tied to your Systems Development Life Cycle) to ensure that projects do not get far off track while you are implementing the more formal project management process
4. consider creating a “competency center” of a small number of experienced project managers who can be allocated to projects as they arise

Example: A high level sample project plan for the technical aspects of the implementation of a major system is provided in Figure 2 below. Each task in this plan would be expanded into numerous subtasks of typically several days in duration. Further, this project plan will be a subset of a broader plan that includes the complementary business-related activities involved in the successful implementation of any information system.

Task No.	Task Name	Task Duration	Start Date	End Date	Task Dependency	Task Owner
	1.0 I.T. Infrastructure Readiness Plan	247 days	6/9	2/10		
1.1	Obtain Project Signoff (Inception Phase)	1 day	6/9	6/9		Sam
1.2	Generate Detailed Project Plan	5 days	6/10	6/15	1.1	Sam
1.3	Define Technical Requirements (Requirements Phase)	16 days	6/15	7/1	1.2	Sam
1.4	Conduct Technical System Design (Design Phase)	31 days	7/1	8/1	1.3	Steve
1.5	Plan Production Support Strategy (Begin Development Phase)	20 days	10/28	11/25	1.4	Howie
1.6	Complete Quality Assurance System Site Preparation	5 days	8/8	8/12	1.4	Steve
1.7	Complete Production System Site Preparation	10 days	8/10	8/21	1.4	Steve
1.8	Define and Implement a Printing & Spooling Strategy	54 days	9/25	12/23	1.4	Mike
1.9	Assess and Install a Storage System Strategy	35 days	9/18	11/7	1.4	Mike
1.10	Define and Implement a Backup/Restore Strategy	46 days	11/7	12/23	1.9	Joe
1.11	Identify and Implement High Availability Capability	89 days	8/15	12/19	1.4	Shelton
1.12	Define and Install a Disaster Recovery Plan Strategy	89 days	8/24	12/30	1.4	Shelton
1.13	Define, Implement and Train - Operations Management	101 days	8/25	1/26	1.4	Brenda
1.14	Assess and Install Sufficient Network Capacity	76 days	7/15	11/25	1.4	Brenda
1.15	Implement Production System Management Capability	65 days	10/2	12/22	1.4	Glenn
1.16	Define and Implement Desktop Management Strategy	58 days	11/26	1/23	1.4	Glenn
1.17	Assess Production Readiness	2 day	1/23	1/24	1.16	All
1.18	Conduct Go Live Meeting – Sign Off for Production Cut Over	1 day	1/24	1/24	1.17	All
1.19	Production Cut Over	1 day	1/25	1/25	1.18	Bob
1.20	Execute Post Go-Live Activities (Begin Support Phase)	12 days	1/26	2/10	1.19	Sam

Figure 2 – High Level Project Plan