Project Management Lifecycle

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Section I Introduction

There are two different lifecycles that work in conjunction with one another throughout the course of every project. The *project* lifecycle describes the tasks that must be completed to produce a product or service. Different project lifecycles exist for specific products and services. (For example, the lifecycle followed to build a house is very different from the lifecycle followed to develop a software package.) The project *management* lifecycle defines how to manage a project. It will always be the same, regardless of the project lifecycle being employed.

One of a Project Manager's challenges is to understand how to align the specific project lifecycle with the project management lifecycle. Project tasks and project management tasks are concurrent and ongoing, and can be associated by project management deliverables. The Project Schedule, for example, contains both project and project management tasks. Phases in the two lifecycles will overlap, depending upon the project lifecycle being employed. The Project Manager needs to be aware of how the inputs and outputs of one lifecycle affect and shape the other.

The material in this section is organized according to the project management lifecycle. While no two projects are exactly alike, all projects should progress through the same five project management phases:

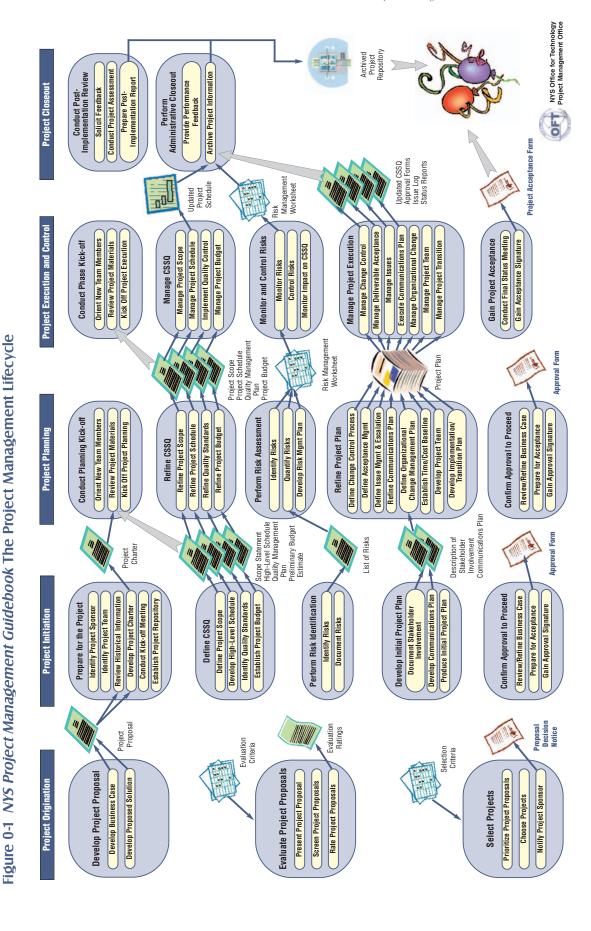
- 1. In Project Origination an individual proposes a project to create a product or develop a service that can solve a problem or address a need in the Performing Organization. The Performing Organization then submits the proposal to an evaluation and selection process. If selected, a budget or further management commitment for the project may also be required before a Project Manager is actually assigned and the project is authorized to progress to Project Initiation. Depending upon the standards and practices of the Performing Organization, a time delay between the project's proposal and selection and its actual initiation may occur.
- 2. At the beginning of Project Initiation, a Project Manager is assigned. The Project Manager works with the Project Sponsor to identify the necessary resources and team members needed to further develop the key project parameters Cost, Scope, Schedule, and Quality (CSSQ). The Project Team documents its charge in the form of a Project Charter, which is based on the Project Proposal, which includes the initial Business Case. Approval of the Project Charter by the Project Sponsor authorizes the designated team to begin the initial planning effort. The initial Project Plan resulting from Project Initiation differs in the level of detail and the validity of its estimates from Project Origination, and must be at a level sufficient to acquire any additional resources needed to progress to the

next phase. The Project Plan also includes plans for involving and communicating with all the parties that are affected by the project, as well as identification of an initial set of foreseeable risks that can threaten the project. At the conclusion of Project Initiation, based on the initial planning documents, the Business Case is revised and re-evaluated and a decision is made to either halt the project, or proceed to Project Planning.

- 3. Project Planning builds on the work done in Project Initiation, refining and augmenting CSSQ and Project Plan deliverables. Usually, additional members join the Project Team, and they assist the Project Manager in further elaborating the details of the Cost, Scope, Schedule and Ouality. A number of key elements are added to the Project Plan, including project-specific items such as change control, acceptance management and issue management, as well as externally-focused items such as organizational change management and project transition. The initial list of project risks is augmented, and detailed mitigation plans are developed. Project Planning marks the completion of the Project Plan – i.e., no work is left uncovered. However, some of the later phases of the project work may continue to be planned in more depth (e.g., Transition and Implementation details may not be developed until later in Project Execution). At the conclusion of Project Planning, the Business Case is revised and re-evaluated based on the completed planning documents and a decision is again made to either halt the project, or to commit the resources necessary for Project Execution and Control.
- 4. Project Execution and Control is where most of the resources are applied/expended on the project. A significant number of team members will join the project at the beginning of this phase. The primary task of the Project Manager during Project Execution and Control is to enable the Project Team to execute the tasks on the defined Project Schedule and develop the product or service the project is expected to deliver. The Project Manager uses the processes and plans prepared during Project Initiation and Project Planning to manage the project, while preparing the organization for the implementation of the product/service and for transitioning the product/service responsibility from the Project Team to the Performing Organization.
- 5. In Project Closeout, the Project Team assesses the outcome of the project, as well as the performance of the Project Team and the Performing Organization. This is accomplished primarily through soliciting and evaluating feedback from Customers, Project Team members, Consumers and other stakeholders. The primary purpose of this assessment is to document best practices and lessons learned for use on future projects. Key project metrics are also captured to enable the Performing Organization to compare and evaluate performance measurements across projects.

The following diagram illustrates every phase, process and task in the project lifecycle.

NYS Project Management Guidebook



Project Roles and Responsibilities

Throughout this *Guidebook*, reference is made to specific roles that must be performed at various times throughout the life of the project. The following section provides an overview of the various roles that are required on projects, what the responsibilities are for each role, and some examples of how organizations have filled those roles on projecs of varying size.

There are many groups of people involved in the project lifecycle.

The **Project Team** is a group that is responsible for planning and executing the project. It consists of a Project Manager and a variable number of Project Team members, who are brought in to deliver their tasks according to the Project Schedule.

- The **Project Manager** is the person who is responsible for ensuring that the Project Team completes the project. The Project Manager develops the Project Plan with the team and manages the team's performance of project tasks. It is also the responsibility of the Project Manager to secure acceptance and approval of deliverables from the Project Sponsor and Stakeholders.
- The **Project Team Members** are responsible for executing tasks and producing deliverables as outlined in the Project Plan and directed by the Project Manager, at whatever level of effort or participation has been defined for them. On larger projects, some Project Team members may serve as **Team Leaders**, providing task and technical leadership.

The **Project Sponsor** is a manager with demonstrable interest in the outcome of the project who is responsible for securing spending authority and resources for the project. Ideally, the Project Sponsor should be the highest-ranking manager possible, in proportion to the project size and scope. The Project Sponsor initiates the Project Proposal process, champions the project in the Performing Organization, and is the ultimate decision-maker for the project. The Project Sponsor provides support for the Project Manager, approves major deliverables, and signs off on approvals to proceed to each succeeding project phase. The Project Sponsor may elect to delegate any of the above responsibilities to other personnel either on or outside the Project Team.

Performing Organization Management (POM) includes all members of the organization's management team that may exert influence on Project Team members or be affected by and involved in the development and implementation of the product of the project. The committees that are formed to evaluate and select proposed projects for the Performing Organization are comprised of members of the Performing Organization Management.

- The **Project Proposal Team** is a group responsible for preparing the Project Proposal in the Origination phase. It is organized by the Project Sponsor.
- The **Project Selection Committee** comprises members of the Performing Organization Management team who meet on a regular basis to evaluate Project Proposals and select projects for initiation. They maintain the Project Proposal rating models and project selection criteria.

Customers comprise the business units that identified the need for the product or service the project will develop. Customers can be at all levels of an organization, from Commissioner to entry-level clerk. Since it is frequently not feasible for all the Customers to be directly involved in the project, the following roles are identified:

- Customer Representatives are members of the Customer community that are identified and made available to the project for their subject matter expertise. Their responsibility is to accurately represent their business units' needs to the Project Team, and to validate the deliverables that describe the product or service that the project will produce. Customer Representatives are also expected to bring back to the Customer community the information about the project. Towards the end of the project, Customer Representatives will test the product or service the project is developing, using and evaluating it while providing feedback to the Project Team.
- Customer Decision-Makers are those members of the Customer community who have been designated to make project decisions on behalf of major business units that will use, or will be affected by, the product or service the project will deliver. Customer Decision-Makers are members of the POM responsible for achieving consensus of their business unit on project issues and outputs, and communicating it to the Project Team. They attend project meetings as requested by the Project Manager, review and

approve process deliverables, and provide subject matter expertise to the Project Team. On some projects, they may also serve as Customer Representatives.

Consumers include all the people that will use the product or service that the project is developing. Consumers internal to the Performing Organizations may also be Customers.

Internal Stakeholders include all the people that are in any way affected by the new product or service within the Performing Organization. This may include the Project Team, the Performing Organization Management, Customers, as well as Customer co-workers who will be affected by the change in Customer work practices due to the new product or service; Customer managers affected by modified workflows or logistics; Customer correspondents affected by the quantity or quality of newly available information; and other similarly affected groups.

External Stakeholders include all the people outside the Performing Organization that are in any way affected by the new product or service. Within the context of New York State Government, this group may include the Legislature, the Executive Chamber, other agencies, the media, and the citizens. Consumers may also be External Stakeholders.

Vendors are contracted to provide additional products or services the project will require and may be members of the Project Team.

The following examples illustrate how agency titles map to project roles on small, medium and large projects. Each example includes project description, comparison of project roles and agency titles, and a project organizational chart.

Example 1 – Small Project

Project Description:

The creation of a Security Research Lab is an example of a small project. The following is a summary of the roles filled on the Project Team:

PROJECT ROLE STATE TITLE

Project Sponsor Deputy Commissioner for Policy/Standards, OFT

Project Manager Emergency Response Team (ERT) Manager (Person

responsible for development and implementation of

the Security Research Lab)

Team Members: Prog

Technical Member

Program Technology Analyst

Team Members:
Purchasing Unit

Staff Member

Purchasing Assistant

Team Member:

Space Planning Staff Member Office Services Manager

Customers OFT Security, Network and Application units and other

state agencies.

Customer Representatives State Agency Information Security Officers (ISO's)

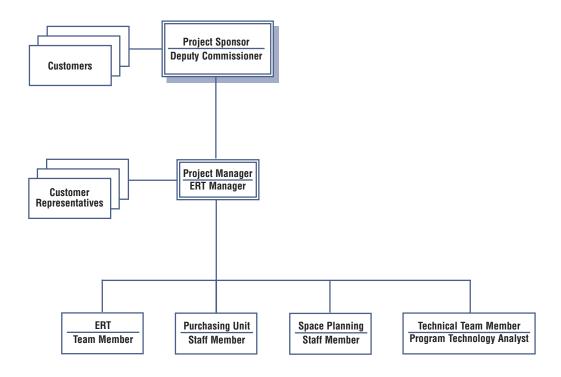
External Stakeholders The purpose of the project is to provide an environment

for the Emergency Response Team (ERT) to simulate attacks with viruses and hacker tools so that appropriate countermeasures may be developed. Thus, stakeholders include the Legislature, the Executive Chamber,

the citizens, and all agencies within NYS.

Internal Stakeholders Emergency Response Team

Figure 0-2 Organizational Chart for Example 1 – Small Project Example



Example 2 - Medium-sized Project

Project Description:

The definition of the New York State Project Management methodology and the creation of this *Guidebook* was a medium-sized project. The following roles were filled on the Project Team:

PROJECT ROLE STATE TITLE

Project Sponsor Director of Project Management Office, OFT

Project Manager Contract Project Manager (A contractor was hired to fill

this role because the OFT PMO was not staffed when the

project was begun.)

Team Members:

Content Author (4) Program Technology Analysts (3), OFT

Administrative Analyst Trainee (1), OFT

Team Members:

Content Author (3) Consultant (Experienced professional Project Managers)

Team Member:

Technical Writer (1) Consultant (Experienced professional Technical Writer)

Customers All New York State government entities, Project Mana-

gers in state agencies, in particular.

Customer Representatives The Guidebook Advisory Committee was made up of rep-

resentatives from approximately 20 state agencies. Their titles ranged from Directors of IRM (grade level varies by agency) to Managers of DP Services (G27). We also solicited input from several G23 to G25 level staff members that serve in project management capacities.

External Stakeholders The purpose of the project is to improve the success of

projects undertaken in NYS government entities. Thus, stakeholders include the Legislature, the Executive Chamber, the citizens, and all agencies within NYS.

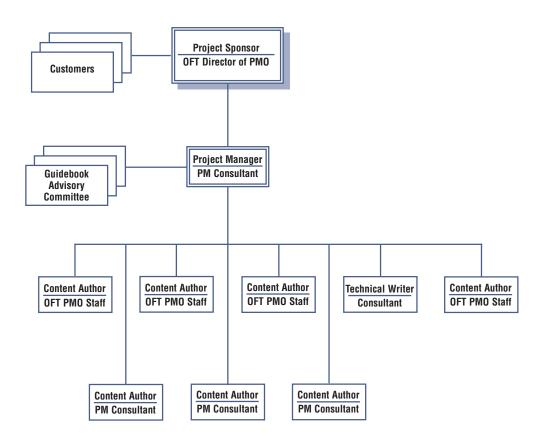
Internal Stakeholders OFT is the Performing Organization, so by definition

internal stakeholders must reside within that organization. All OFT Program Directors are internal stakeholders, as all of their projects will be managed using the product (methodology & *The Guidebook*) of this project.

Subject Matter Experts

OFT Strategic Assessment and Acquisition Team, OGS Procurement Group, OFT Counsel's Office, OFT Contract Management Office.

Figure 0-3 Organizational Chart for Example 2 – Medium Project Example



Example 3 – Large Project

Project Description:

The New York State Workers' Compensation Board OPTICS project was a large-sized project. The following roles were filled on the Project Team:

PROJECT ROLE STATE TITLE

Project Sponsors Chairman of the Workers' Compensation Board

Designees in his absence were the Executive Director,

the Deputy Executive Director

Project Manager Director of the Information Management Services

Division

Teams

There were many different teams at various points in the project lifecycle. Asterisks mark team members that were dedicated to the project for the duration of their involvement.

Team	Sub-team	Team Roles	##	Comments
Re-engineering Procurement Team		Team Lead	1	Project Manager
		Team Members – Technical Evaluators, Customer Representatives	4	Project Manager, Technical Managers
		Team Members – Financial Evaluators, Subject Matter Experts, Finance	2	Financial Analysts
	Selection Committee	Committee Members, Customer Decision-Makers	3	Deputy Executive Director, Senior Managers
Re-engineering Study Team		Team Lead	1	Project Manager
		Team Facilitators, Subject Matter Experts, Re-engineering and Change Management	5	Price Waterhouse Change Management Practice
	Core Team	Team Members, Customer Representatives	15	Individuals from every functional area, ranging from M-4 Managers to Grade 14 Individual Contributors
	Guidance Team	Team Members, Performing Organization Management	25	Mid-level managers from all regions and functional bureaus
	Executive Steering Committee	Team Members, Customer Decision-Makers	6	Chairman, General Counsel, Executive Director, Deputy Executive Director Operations, Deputy Executive Director Administration, Deputy Executive Director Compliance
*Imaging Team		Team Lead	1	Manager, Data Processing Services
		Team Members, Subject Matter Experts, Application Development (contractors)	3	
		Team Member, Subject Matter Expert, Imaging Technical Specialist	1	Systems Programmer
Imaging Outsourcing Procurement Team		Team Lead	1	Project Manager
		Team Members, Technical Evaluators, Customer Representatives	4	Project Manager, Technical and Functional Managers

Team	Sub-team	Team Roles	##	Comments
		Team members, Financial Evaluators, Subject Matter Experts, Finance	2	Financial Analysts
	Selection Committee	Committee Members Customer Decision-Makers	3	Deputy Executive Director, Senior Managers
Application Development Team		Team Lead	1	Chief DPS
	Data Conversion Team	*Team Lead	1	Manager, Data Processing Services
		*Team Members, Subject Matter Experts, Data Conversion Analysts/ Programmers	3-5	Senior Programmer/Analysts
		Team Members, Customer Representatives/ Decision-Makers	2-5	SG-14 up to M-1
	Application Conversion Team	*Team Lead	1	Manager, Data Processing Services
		*Team Members, Subject Matter Experts, Programmer/Analysts	10	Mix of contractors and State staff
		Team Members, Customer Representatives/ Decision-Makers	2-5	SG-14 up to M-1
	Design Team	*Team Lead	1	Manager, Data Processing Services
		*Team Members, Subject Matter Expert, Business Analyst	1	
		Customer Representatives/ Decision-Makers	12	From Grade 6 to M-3
	Development Team	*Team Lead	1	Manager, Data Processing Services
		*Team Members, Subject Matter Experts, Development/Design	15	
Technical Infrastructure Team		Team Lead	1	Director of Technical Services

Team	Sub-team	Team Roles	##	Comments
		Team Members, Subject Matter Experts, Technology Deployment	Up to 30	Technical Services staff were deployed as needed
Facilities Team		Team Lead	1	Director of Facilities Management
		Team Members, Subject Matter Experts, Facilities Management	3-5	Deployed as needed
		Team Members, Subject Matter Experts, Real Estate Specialist	2	OGS
Implementation Leadership Teams	Overall Manager		1	Manager – Continuous Improvement
	One team per district	Team Lead	1	District Manager
		Team Members, Subject Matter Experts in various operational areas	4-10	District Staff
Imaging Conversion Teams		Team Lead	1	Project Manager
	Imaging Rules Team	Team Lead	1	Manager, Data Processing Services
		Customer Representatives/ Decision-Makers	15	From each region
	Imaging Contractor	*Production staff	Peak 300; steady state 100	Specific staff varied as facility and service was developed and then implemented, and peaked, again as conversion and then fell to steady state
Re-engineering Process/		*Team Lead	1	Administrative Analyst
Procedures Development Team		*Team Members, Subject Matter Experts, Technical Writing	5	
		*Team members, Subject Matter Experts, Application Development	2	
		Customer Representatives/ Decision-Makers	3-5	
Training Team		Team Lead Curriculum Developers	1 3	Manager of Staff Development

Figure 0-4 Organizational Chart for Example 3 – Large Project Example

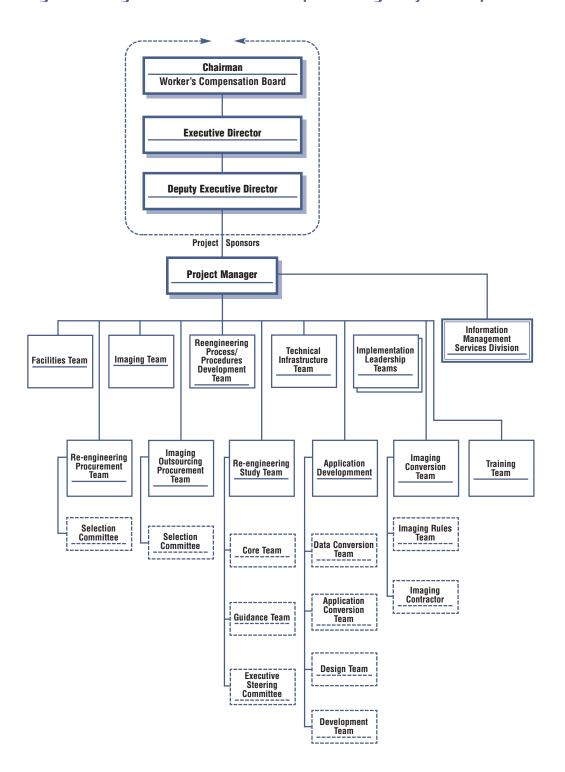


Figure 0-5 New York State Project Management Life Cycle Templates

Phase	Template	Description	Page in Text	Page in Appendix
All Phases	Project Status Report	Written by the Project Manager, this report summarizes project activity and is issued at pre-determined intervals (weekly) throughout the project.	95	39
All Phases	Project Deliverable Approval Form	Indicates Project Sponsor acceptance of deliverables attached and approval to proceed.	110	53
Project Origination	Business Case	Defines the business need for the project and supports the Project Proposal with objective analysis of the costs and benefits of doing the proposed project.	26	17
Project Origination	Project Proposed Solution	Defines the technical solution for how the project's product will support the organization's business need and strategic plan.	29	19
Project Origination	Proposal Decision Notice	Identifies the decision of the Project Selection Committee and communicates that decision to the Project Sponsor and other Stakeholders.	40	21
Project Initiation	Project Charter	Provides authority to establish the project. It is the contract between the Project Team and the Project Sponsor.	61	23
Project Initiation	Project Initiation Kick- off Meeting Agenda	Outlines a meeting agenda for an effective kick-off meeting.	65	27
Project Initiation	Project Scope Statement	Documents the deliverables of the project, its results and/or quantifiable objectives.	72	29
Project Initiation	Project Schedule Worksheet	A preliminary high-level schedule of the entire project.	77	31
Project Initiation	Project Quality Management Plan	Identifies and documents standards for each project deliverable.	81	33
Project Initiation	Preliminary Budget Estimate	Documents a preliminary estimate of the cost to complete the project.	87	37
Project Initiation	Project Communications Plan	Defines how often information will be disseminated, including the format and media to be used to reach the desired audience.	99	45
Project Initiation	Project Plan	The compilation of Project Initiation deliverables that ultimately guides the execution and control of the project.	104	49
Project Planning	Project Planning Kick- off Meeting Agenda	Outlines a meeting agenda for an effective kick-off meeting.	135	57

Figure 0-5 (Continued)

Phase	Template	Description	Page in Text	Page in Appendix
Project Planning	Project Budget	Refines cost estimates based on increased detail in Project Scope and Schedule.	146	59
Project Planning	Project Risk Management Worksheet	Ranks risks based on the likelihood and impact of risk occurrence, and details risk mitigation plans.	150	61
Project Planning	Project Change Request	Documents and defines requested changes.	158	63
Project Planning	Organizational Change Management	Defines and documents a plan to manage the changes that could occur in an organization as a result of implementing the product of the project.	168	67
Project Planning	Project Team Training Plan	Describes the skills required for team members and training target dates.	174	71
Project Planning	Project Implementation and Transition Plan	Describes implementation activities, their timeframes, and the transition of responsibility to the Performing Organization.	179	73
Project Execution and Control	Project Execution and Control Kick-off Meeting Agenda	Outlines a meeting agenda for an effective kick-off meeting.	207	77
Project Execution and Control	Progress Report	Produced by each Project Team member, this report documents time spent on tasks and provides estimates of time needed to complete tasks.	213	79
Project Execution and Control	Project Acceptance Form	Indicates Project Sponsor acceptance of the project deliverables and approval to proceed to the next phase.	250	81
Project Closeout	Post-Implementation Survey	Tool for soliciting feedback on the project.	270	83
Project Closeout	Post-Implementation Report	Summarizes feedback on project effectiveness, lessons learned, best practices and key project metrics.	280	91
Project Closeout	Project Respository Table of Contents	A suggested list of project-related materials to be maintained.	288	97

1

PROJECT ORIGINATION

Purpose

The purpose of Project Origination is to evaluate projects proposed for the next planning cycle and to reach a consensus on the projects to be selected. During this phase, the strength of a project's Business Case is tested, and the viability of the Proposed Solution is explored. A determination is made as to whether the project is consistent with the agency's strategic plan and affordable within budget guidelines.

The Project Proposal process may actually be part of the budget cycle, serving as the justification for budget requests. In this case, Project Proposals may need to be created a full budget cycle prior to the project's anticipated initiation.

Other factors that impact Project Origination include statutory requirements, regulations, legislative restrictions, and civil service rules.

Each organization has its own approach to green-lighting desired projects. The approach outlined below is only one of many possible variations of the evaluation and selection process. There are some general principles, however, that apply to any effective evaluation and selection process:

- ◆ The deciding body must have enough information about the merits of the project's Business Case and the viability of its Proposed Solution to make a meaningful evaluation;
- The competing projects' merits must be evaluated and compared using a consistently applied methodology;
- The selection process must take into consideration the project's fit with the organizational mission and strategic plan.

List of Processes

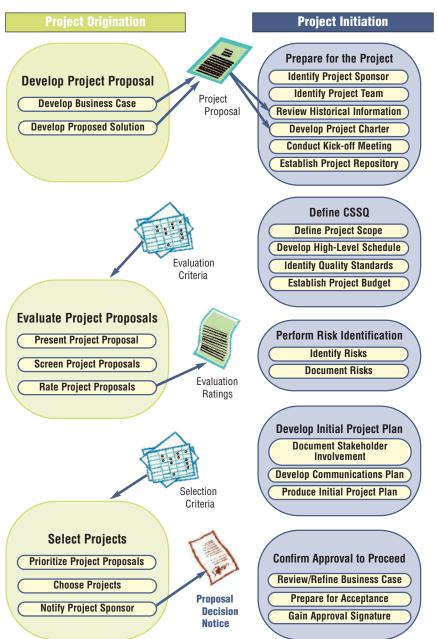
The three major processes in this phase of the project management lifecycle are:

- Develop Project Proposal, where the initial Business
 Case is made, and initial project parameters are defined;
- Evaluate Project Proposals, where cost/benefit analysis is performed, and the projects are evaluated against a set of specific business criteria; and

Select Projects, where a consensus is reached on the project's feasibility and relative importance in comparison to other proposed projects, and a decision is formally made regarding the Project Proposal.

The following chart illustrates all of the processes, tasks, and deliverables of this phase in the context of the project management lifecycle.

Figure 1-1



List of Roles

The following roles are involved in carrying out the processes of this phase. The detailed descriptions of these roles can be found in the Section I Introduction.

- Project Sponsor
- Project Proposal Team
- Project Selection Committee

List of Deliverables

Since a Project Manager is not usually assigned to the project at this time, members of the Performing Organization Management prepare and review Project Origination deliverables.

Figure 1-2 lists all Project Origination tasks and their deliverables (or outcomes).

Figure 1-2

Processes	Tasks	Task Deliverables (Outcomes)
Develop Project	Develop Business Case	Business Case
Proposal	Develop Proposed Solution	Proposed Solution
Evaluate Project Proposals	Present Project Proposal	Project Proposal Understanding
	Screen Project Proposals	Proposals Removed from Further Consideration
	Rate Project Proposals	Evaluation Ratings
Select Projects	Prioritize Project Proposals	Prioritized Proposals
	Choose Projects	Selected Projects
	Notify Project Sponsor	Proposal Decision Notice

1.1

DEVELOP PROJECT PROPOSAL

Purpose

Before a project can be selected for initiation, a persuasive case must be made for its viability given current organization-

al priorities. In **Develop Project Proposal**, the initial Business Case for the project is formulated, and all information required for project selection is formalized in the Proposed Solution. A proposal

Roles

- Project Sponsor
- Project Proposal Team

for a project may come from any place in the Performing Organization, but someone must be identified as the "owner" of the proposal, and must serve as Project Sponsor, at least through the evaluation and selection process. The Project Sponsor may be in executive management, in a specific functional program area, or a representative of the Customers or the Consumers within the Performing Organization.



Since information from the Business Case is included in the Proposed Solution – and vice versa – the tasks to develop those documents should be performed not consecutively, but concurrently, with one document informing and influencing the other.

Tasks

1.1.1 Develop Business Case

The Business Case is one of the defining documents of the project, providing information necessary to support the decision to

The tasks to Develop Project Proposal are:

- Develop Business Case
- Develop Proposed Solution

launch the project at the end of Project Origination and to continue the project in subsequent phases. The Business Case must identify an existing business need and lay the foundation for developing a potential solution to meet that need. The cost of implementing the solution must be estimated and compared to the bene-

fits gained, and justification for the potential project should also depend on whether the project is consistent with the organization's mission. For a sample Business Case template, see Figure 1-3, the New York State Project Business Case.

The Business Case must provide a compelling case for the project. A careful study should be made of expected benefits to the organization implementing the project. An analysis of the costs, benefits and risks associated with the proposed approach can be made, and the justification necessary to obtain the proper level of commitment from the decision-maker(s) can be formulated. Once an original cost estimate for the project is derived during Develop Proposed Solution. The Business Case can also identify special funding sources available for the proposed initiative, and should align the project's costs with the agency budget cycle. If the project is going to span multiple budget cycles, a multi-year strategy for project funding should be discussed with the agency fiscal officer, who may find it useful to review the Business Case with another constituency – the Division of the Budget (DoB).

During Project Origination, any estimates are acknowledged to be high-level at best. As the project progresses through the Initiation and Planning phases, those estimates will become more precise as more is learned about the true parameters of the project, and additional go/no go decisions will be made based on the latest information. It is also important to note that, in order to define project parameters with adequate precision, Initiation and Planning will require substantial resources, and initial estimates should reflect that fact.

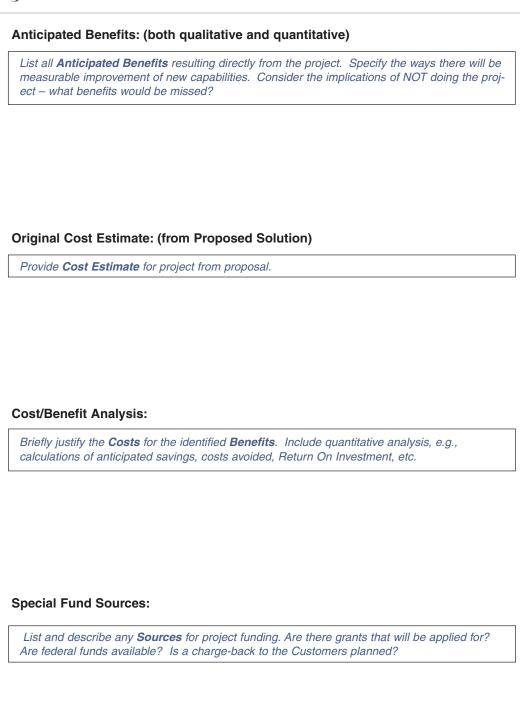
Before presenting the proposal for evaluation, the Project Sponsor should have the Business Case reviewed by the people most intimately familiar with its imperatives – Customer Decision-Makers.

The Business Case will continue to be a critical component of the decision-making process throughout the entire project management lifecycle – from the initial decision to proceed with the project to the decisions made at periodic project reviews to continue, modify or terminate the project. At the end of each project management phase and whenever there is a significant change to the project or the business function, the Business Case will be reviewed and re-validated.

Figure 1-3 New York State Project Business Case

New York State Project Business Case PROJECT IDENTIFICATION Project Name: _____ Date: ___ Agency: ____ Business Unit/Program Area: Project Sponsor: _____ Project Manager: _____ Enter the **Project Name**. Enter the current **Date**. Enter the name of the Business Unit or Program Area. Enter the name of the **Project Sponsor** and the **Project Manager** (if known). **Business Need/Problem:** Briefly describe the **Need** or **Problem** driving the proposed project. Solution (as described in Proposed Solution): Briefly describe the product of the project that would resolve the Business Need or Problem, and the **Solution** proposed to create it Consistency/Fit with Organization's Mission: Describe how the project is consistent with the mission or provide rationale if it is not .

Figure 1-3 (Continued)



1.1.2 Develop Proposed Solution

A Proposed Solution starts with the summary of the business need (abstracted from the Business Case), defines the optimal solution to address that need, and describes how the solution fits into the organization's strategic plan.

The Proposed Solution should include an evaluation of all alternatives considered, and a justification of the solution selected. The basis of time and cost estimates for the Proposed Solution (expert judgment, availability of historical data on similar projects, Request For Information (RFI) responses, etc.), as well as the accuracy of the estimates (+/- 100%, +/- 50%, etc.), should be documented. Some initial risk factors should be considered, along with strategies for mitigation. An initial assessment of the project's impact on the organization is made, laying a foundation for a successful transition at the end of Project Execution and Control.

It may be advisable to include a description of the project's profile/visibility, documenting, for example, whether the project is required as a result of federal or state legislative action, gubernatorial or executive mandates, or agency program priorities. In general, highly visible projects will receive higher priority.

If the Performing Organization uses standard evaluation forms/ formats, the Proposed Solution may include a "self-assessment" performed by the Project Sponsor or the Project Proposal Team. Such a self-assessment may assist the Project Sponsor to realize weaknesses in the proposal before formal submission for evaluation and selection.

The Proposed Solution should also identify legislative, regulatory, and policy systems that will facilitate, compel, or constrain the project. For example, the project may be funded by a specific line item in the recently passed state budget, or the project may be constrained by necessary interfaces to state or federal funding and/or control/oversight agencies. All affected Stakeholders should be identified.



It is highly advisable to have an independent party verify the Proposed Solution and associated estimates.

The completed Proposed Solution is combined with the Business Case to complete the Project Proposal, which will be presented to the project evaluation and selection process.

Figure 1-4 New York State Proposed Solution

New York State Proposed Solution					
PROJECT IDENTIFICATION					
Project Name:	Date:				
Business Unit/Program Area:					
Project Sponsor:	Project Manager:				
Enter the Project Name . Enter the current Date . Enter the name of the Business Unit or Progr Enter the name of the Project Sponsor who is ed, and the Project Manager if known.	ram Area. Is the contact person if more information is need-				
Summary of Business Need for the Proje	ect (from the Business Case):				
Briefly summarize the Business Case. This see Customers and anticipated Consumers of the p particular business problem or need the project	project's product and a description of the				
Proposed Solutions / Project Approach: Alternatives considered	Why chosen/not chosen				

This section should include a description of the **Solution** being proposed and others that have been considered. Describe why this solution was selected instead of the others, and why the others were not. The decision should summarize the strategy that will be used to deliver the project and identify high-level milestones and dates. It is possible that a single solution cannot yet be recommended; in that case, indicate when – and how – the decision is likely to be made.

Figure 1-4 (Continued)

Project Objectives:

Briefly describe the Objectives of the project.

Consistency/Fit with Organizational Strategic Plan:

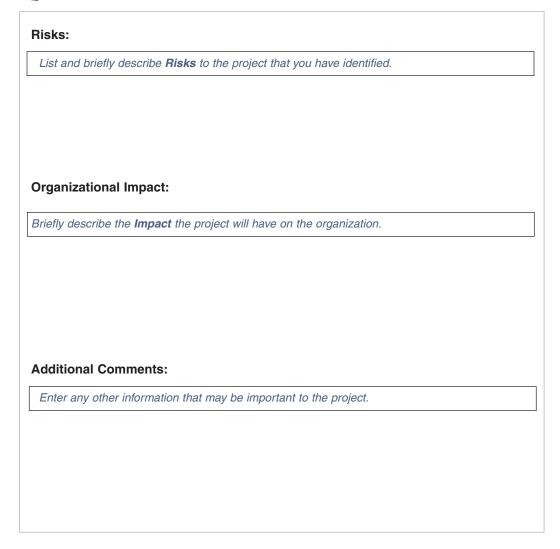
Describe how this project and its objectives specifically support the organization-wide **Strategic Plan**?

BUDGET/RESOURCES:

Type of Outlay	Initial (Development)	Annual (Recurring)	Remarks
Hardware			
Software			
Supplies			
User Training			
Consultant Services			
Other:			
TOTAL			
Estimated Resources/F	Personnel:		
Estimateu nesources/F			
Program Areas	hours	hours	
		hours hours	
	hours		
	hours	hours	
Program Areas	hours hours hours	hours	

Enter the **Estimated Costs** for each of the items listed, both **Initial**, during project development, and **Recurring**. Add any **important** relevant information under **Remarks**. Enter the **Resources/Personnel** estimated for the project and the number of hours required of each resource during the **Initial** project period, and then **Annually**.

Figure 1-4 (Continued)



Deliverable

◆ Project Proposal – a document describing the project that is submitted by the Project Sponsor to the selection process. It comprises the Business Case and the Proposed Solution, which include such items as a description of the product, the benefit to the performing organization, alignment with the organization's mission and strategic plan, a high-level estimate of the required resources, costs and timeframes, and any other information specifically required by the Performing Organization for selection consideration.

1.2 EVALUATE PROJECT PROPOSALS

Many organizations generate multiple proposals for various new initiatives on a continuing basis; however, budgetary and other constraints allow only a fraction of those efforts to occur.

Choosing the right projects, which support the organization's mission and assist with the implementation of its strategic plan, becomes a crucial activity, starting with an objective evaluation of proposed

Roles

- Project Sponsor
- Project Selection Committee

initiatives. **Evaluate Project Proposals** presents an approach to rating competing proposals in a methodical, impartial fashion; the results are indispensable to the success of the subsequent project selection process. Organizations may implement this process in a variety of ways – from relying on unilateral decisions of a chief executive or designee, to convening crossfunctional deliberative councils. The tasks presented below are designed to illustrate the components of an effective proposal screening and evaluation process, and not to prescribe a particular format required to reach a desired objective.

The frequency of an organization's evaluation/selection process may be dictated by many factors, including the size of the proposed projects, the vacillations of the budget cycle, and the occurrence of external mandates and internal imperatives.

1.2.1 Present Project Proposals

Because the quality and level of detail among typical Project Proposals tends to vary a great deal, it is beneficial to allow the Project Sponsor to make a case for the project in person. This also allows decision-makers to ask questions and gather addi-

The tasks to Evaluate Project Proposals are:

- Present Project Proposals
- Screen Project Proposals
- Rate Project Proposals

tional information on the spot, without resorting to more formal – and slower – channels of communication. The presentation should be based on the Proposed Solution and the Business Case, but it can take many forms – from a formal slide presentation to an informal run-through of existing material. The objective

is to allow the decision-makers to interact with those who best understand the business reasons for the initiative, and its Proposed Solution.

1.2.2 Screen Project Proposals

Before a great deal of effort is expended on rating, prioritizing and selecting presented projects, it may be useful to screen competing proposals by asking some important questions, such as:

- Does the project support the organization's mission?
- Does the Proposed Solution align with the organization's strategic plan/technical architecture?
- Is there an available/plausible funding source for this effort?
- Does the project's cost/benefit analysis justify its initiation?

Unless a project is legislatively (or otherwise) mandated, simply working through these questions will result in elimination of some proposals from further consideration. The Project Sponsor should be notified, and the decision should be documented on the Proposal Decision Notice form (see Figure 1-7).

1.2.3 Rate Project Proposals

Rating of Project Proposals is generally performed by executive management or by a group designated by executive management (Project Selection Committee). The group may meet on a regular or an as-needed basis to perform this function, or the rating of proposals may be an integral part of the organizational strategic/tactical planning and budgeting process.

The process is usually formal, with specific forms/formats and procedures. In smaller organizations, however, it may be more informal, and may even be combined with the selection process. In these cases, a brief presentation to the Commissioner, Director, or other organization head may be all that is required to commit resources (funding, personnel, equipment, etc.) and initiate the project.

Proposals are generally rated according to a set of specific business criteria. The process may include a broad technical review to determine if the proposal follows current agency standards and technical architectures. The funding associated with a project is also a critical component of the rating process. A Performing Organization may have unique rules regarding funding for proposals. During Project Origination, the Project Sponsor must identify whether funds are expected from the Performing Organization's current/future operating budget, or whether additional funding sources are available.

The level of approvals needed may vary depending on whether the project exceeds or falls below defined thresholds. Thresholds may be based on cost, involvement of more than one functional area, project needs within or outside of standards and procedures, or other areas specific to the Performing Organization. The rating process generally assigns a score to each project, to inform the selection process. See Figure 1-5 for a Sample Project Rating Matrix.

Figure 1-5 Sample Project Rating Matrix

	SAMPLE PROJECT RATING MATRIX								
	Project Name	Project Sponsor	Strategic Alignment*	Risk*	Cost/ Benefit*	Total			
1									
2									
3									

*Each of these categories would have a separate matrix or worksheet as supporting documentation, which would typically roll up to a single rating within each category. These worksheets should be standard across projects to provide comparative rankings.

STRATEGIC ALIGNMENT

Mandatory Requirement:

- 0 Initiative not mandatory
- 1 Initiative inferred by or strongly suggested in law, regulation
- 2 Initiative specifically required by law, regulation

Alignment to Mission, Goals, & Objectives:

- -1 The initiative does not map to any mission, goal, or objectives
- 0 Explicit documentation somewhat maps this initiative to missions, goals, and objectives.
- 1 Explicit documentation clearly maps this initiative to missions, goals, and objectives.
- 2 Accomplishment of mission, goals, and objectives is highly dependent on this initiative and clear documentation exists which supports this assertion.

Process Improvement:

- -1 Initiative does not assist or generate process improvements.
- O There is documented evidence that the initiative will assist or generate process improvements within a workgroup.
- 1 There is documented evidence that the initiative will assist or generate process improvements across a division.
- 2 There is documented evidence that the initiative will assist or generate process improvements across the agency.

Other categories that might be included within strategic alignment include:

- Consequences of not doing the initiative
- ♦ Impact on Internal and/or External Customers
- Cross-Functional/Organizational Impact
- Scope of Beneficiaries

RISK

- -1 The initiative's impact depends on another initiative not yet completed AND scheduled risk mitigation actions have not been identified.
- There are no predicted or foreseen adverse impacts on the initiative's schedule – OR – the initiative's impact does not depend significantly on any other initiative yet to be completed.
- 1 There are no predicted or foreseen adverse impacts on the initiative's schedule AND there are no major interfaces with other initiatives or systems.

COST/BENEFIT

- -1 The cost estimate is highly dependent upon uncontrolled variables (e.g., availability of external funding sources, changes in component pricing or maintenance contracts) and is therefore subject to significant change (>10%).
- O Situation may arise which may cause this year's costs to vary by no more than 10% of estimates.
- Measures to identify in a timely manner and reduce variances between the actual cost of work performed and the budgeted cost of work performed are clearly documented.
- Measures to identify in a timely manner and reduce variances between the actual cost of work performed and the budgeted cost of work performed are clearly documented AND cost estimates are not significantly dependent upon identifiable uncontrolled variables.

A simple method to compare projects uses pairwise comparisons. For all projects being considered, make a comparison between two projects and determine which has the most overall value to the organization.

The example below shows a pairwise comparison done for five (5) projects. When a project is compared to itself, the result is NA. (Ex.: row 2, column 2) First, compare Project A across row 2 to each of the other projects. Next, compare Project B across row 3 to each of the other projects, and so on. When done comparing, total the scores across each row and note that number under "Rating" in column 7. The highest number indicates the highest rated project.

A more detailed process could also be developed which evaluates the projects for a variety of specific criteria (priority, cost, benefit, etc.), and then the ratings combine for an overall score.

Figure 1-6 Sample Pairwise Comparison

			Column 3				
Row 1	Project	Α	В	C	D	E	Rating
Row 2	Α	NA	1	1	1	0	3
Row 3	В	0	NA	0	1	0	1
Row 4	С	0	1	NA	1	0	2
Row 5	D	0	0	0	NA	0	0
Row 6	E	1	1	1	1	NA	4

Project A is of greater value than Project B

Project A is of greater value than Project C

Project A is of greater value than Project D

Project B is of greater value than Project D

Project C is of greater value than Project B

Project C is of greater value than Project D

Project E is of greater value than Project A

Project E is of greater value than Project B

Project E is of greater value than Project C

Project E is of greater value than Project D

Final Ranking	3.
Priority	Project
4	E has the highest value
3	A
2	C
1	В
0	D has the lowest value

Deliverable

 Evaluation Ratings – a score assigned to each project as a result of the project evaluation process. The ratings are used during project selection to rank projects in terms of their overall benefit to the Performing Organization.

3 SELECT PROJECTS

Once the Project Proposals have been uniformly and objectively rated, it is necessary to prioritize them to reflect how they compare to one another in various aspects, including support-

Roles miss point decise the total dates

ing current organizational priorities, the mission and the strategic plan. At that point in the **Select Projects** process, a decision can be made as to how many of the top-rated proposals can be accommodated by the agency's budget, resources, and ability to absorb organizational

change. Whether the project is approved, declined, or sent back for additional information, the Project Sponsor must be notified, and the decision documented.

1.3.1 Prioritize Project Proposals

Quantitative ratings derived through the evaluation process make the prioritization process a simple matter of sorting the

higher scores to the top. However, it may be useful to review the generic rating criteria once again and decide if some additional

The tasks to Select Projects

- 1.3.1 Prioritize Project Proposals
- 1.3.2 Choose Projects
- 1.3.3 Notify Project Sponsors

measurements are needed. Complying with legislative mandates or executive chamber initiatives, for example, may trump even well conceived process improvement opportunities. These are the factors evaluated to determine a project's feasibility and its relative importance in comparison to other proposed projects. Whatever the final set of criteria, they should be documented and applied equally to each competing proposal, to enable a fair and competent selection process.

1.3.2 Choose Projects

A committee of executives from the Performing Organization usually makes project selection decisions. Even if the Commissioner or other agency head (Chairman, Director, etc.) makes the final decision, a Project Selection Committee generally reviews and develops recommendations. It may be useful to, once again, invite the Project Sponsor to make a presentation to the Committee and answer questions.

The Project Selection Committee must choose projects that, in combination, will provide the best investment for the Performing Organization. The Committee considers competing priorities in determining what is best for the whole. All proposals must be evaluated in the context of other proposals, current projects and ongoing operations in order to set priorities and determine resource availability. This process may be accomplished through discussion and vote, or the Committee may use specific tools (software, spreadsheets, etc.) designed to facilitate comparison of the proposals.

The projects chosen as a result of this process may not necessarily reflect what is best for an individual employee or a single work unit. Sometimes a lower-priority project will be approved simply because it is low-risk or low-cost, and can deliver needed benefits or services. Sometimes a project can be undertaken because it needs few resources, and can be performed while larger initiatives are delayed. Projects may be approved for immediate action or with a delay for obtaining resources. It is also possible that a proposal could be returned to the Project Sponsor for further development without approval or rejection.

Choosing a project does not necessarily guarantee that the project will be undertaken by the Performing Organization. That is generally dependent upon the availability of necessary funding. Each Performing Organization may have a different process whereby chosen projects are actually authorized to proceed to Project Initiation.

1.3.3 Notify Project Sponsors

Once the decisions have been made, it is imperative to document them and to explain their rationale to the Project Sponsors and other Stakeholders. One of three outcomes can occur:

- A decision is made to proceed with the project. In this
 case, a determination must be made when Project
 Initiation can begin. At that point a Project Manager
 must be assigned to the project. The finance office must
 be brought on board to ensure adequate funding for the
 project, and control agencies may be notified that the
 project is being initiated.
- 2. A decision cannot be made on the project without some additional information. In this case, the specific information required for an informed decision should be documented, and communicated to the Project Sponsor, along with some guidelines for submitting the proposal again in the next evaluation/selection cycle.
- 3. A decision is made to decline the proposal. In this case, a detailed explanation for the decision should accompany the message, outlining where the proposal came up short in the screening, evaluation, prioritization and/or selection.

In all three cases, the same Proposal Decision Notice can be used to document and communicate the decision (see Figure 1-7).

Figure 1-7 Proposal Decision Notice

	ew York S al Decisio	tate on Notice	
PROJECT IDENTIFICATION			
Project Name: Agency:			
Business Unit/Program Area:			
Project Sponsor:	Proje	ect Manager:	
Enter the Project Name . Enter the current Date . Enter the name of the Agency requesting Enter the names of the Project Sponso .			it or Program Are
Proposal Decision Decision		Indicator	Date
Project Proposal Approved		maioator	Date
Additional Information is Required for De	cision		
Project Proposal Declined			
Put a check-mark in the Indicator box no Make sure to fill out corresponding section Project Selection Committee Signat	on below and		
Project Selection Committee Member Name		Signature	Date

Figure 1-7 (Continued)

Project Proposal Approved

Target Date for Project Initiation start:

Project Sponsor Assigned:

Project Manager Assigned:

If known, indicate target date for start of Project Initiation. Enter names of assigned **Project Sponsor** and **Project Manager**.

Additional Information Required for Decision

Specific Additional Information Required:

Proposal re-submission date for the next Project Selection Cycle:

Other comments:

Provide guidance to the **Project Sponsor** on specific information required for an informed decision, along with guidelines for re-submitting the proposal again in the next evaluation/selection cycle.

Project Proposal Declined

Explanation of decision:

Screening results:

Evaluation results:

Prioritization/Selection results:

Provide a detailed explanation for the decision to decline the Project Proposal. Outline where the proposal came up short in the **Screening**, **Evaluation**, **Prioritization** and/or **Selection**.

Deliverable

◆ Proposal Decision Notice – a formal document indicating one of the three possible outcomes of the Project Selection process: proposal approval and project selection, request for additional information, or proposal declination. The Proposal Decision Notice is used to document the Project Selection Committee's decision, and to communicate it to the Project Sponsor.

Project Origination End-of-Phase Checklist

How To Use

Use this checklist throughout Project Origination to help ensure that all requirements of the phase are met. As each item is completed, indicate its completion date. Use the Comments column to add information that may be helpful to you as you proceed through the project. If you elect NOT to complete an item on the checklist, indicate the reason and describe how the objectives of that item are otherwise being met.

Figure 1-8

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Develop Project Proposal:	24			
Formulate business need/ problem and anticipated benefits to all parties	24			
Review project's fit with organization's mission	24			
Identify project objectives	28			
Research potential approaches and solutions	28			
Identify and recommend one (or more) chosen solution(s)	28			
Review solution's fit with organization's strategic plan	28			
Estimate costs of all resources and materials required for the project, both initial and recurring	28			
dentify potential project risks	28			
dentify organizational impacts of the project	28			
Identify any legislative, regulatory or policy dependencies or implications of the project	28			
Perform project cost/benefit analysis	28			
dentify project funding strategies	28			
Complete Business Case and Proposed Solution forms	28			

Figure 1-8 (Continued)

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Evaluate Project Proposals:	32			
Submit Project Proposal to the Selection process	32			
Schedule and conduct proposal presentation	32			
Identify and/or utilize proposal screening criteria	33			
Identify and/or utilize proposal rating criteria and methods	33			
Select Projects:	37			
Identify and/or utilize proposal prioritization criteria	37			
Evaluate projects' requirements vs. organizational capacity	37			
Recommend projects for selection	37			
Choose projects for initiation	38			
Notify Project Sponsor of unfavorable screening outcome	39			
Document decision process and outcome for each proposal	39			
Complete Proposal Decision Notice forms	40			
Get signatures from Project Selection Committee members	40			
Notify Project Sponsor(s)	41			

Measurements of Success

Success in Project Origination is not only receiving permission to proceed on the proposed project, but also understanding the executive decision, which often results in a greater understanding of the organization's mission.

During Project Origination, certain assumptions and projections are made regarding the main project parameters – cost, benefit, scope, and timeframe. These initial estimates are used to rate the project under consideration against all other competing initiatives. The main measurement of success for Project

Origination is the consensus of the Performing Organization Management that the projects were weighed fairly, and that the ones with the most compelling Business Case received a green light.

Before the final project selection, it is possible to assess how successfully the evaluation process is proceeding by utilizing the measurements outlined below. More than one "No" answer indicates a serious risk to the desired consensus described above.

Figure 1-9

Process	Measurements of Success	Yes	No
Develop Project Proposal	Have the anticipated benefits been reviewed and accepted by the Customer?		
	Does the expected outcome of the project support the organization's mission?		
	Does the Proposed Solution address only the agenda described by the business problem?		
	Has an independent party assessed the estimated costs and resources?		
	Does the Project Proposal make clear how various approaches/solutions were considered and evaluated, and why a particular solution is being proposed?		
Evaluate Project Proposals	Was the project rated on all of the following: Strategic alignment? Risk? Proposed Solution? Cost? Benefit? Funding?		
	Were the evaluation criteria applied equally to all projects under consideration?		
Select Projects	Does the Project Proposal Team understand the reasons for the project's approval or declination, or for additional information that is required?		
	Is there a consensus among the Performing Organization Management that the selection process was objective and fair?		

Phase Risks / Ways to Avoid Pitfalls

Selecting the wrong project is a very costly, and sometimes devastating mistake that many organizations make. Even a great idea may not be worth expending the resources or accepting the associated risk. Or the project may simply need to be delayed until more resources are available or the associated risk can be mitigated. Selecting the right projects in the wrong combination and, therefore, overextending the organization's resources can be just as devastating. It is not always easy to see why good Project Origination procedures, resulting in a well thought out selection of projects, are so critical to the success of the Performing Organization. Hopefully, now that you have read this section, it is easy for you to understand and you can help others see the light!

What are some of the key elements of Project Origination that require the most attention? The following table identifies processes and tasks that are highlighted in this section.

Figure 1-10

Process	Task	Why is it important?
Develop Project Proposal	Develop Business Case	This document is the basis of the project's acceptance or rejection not only in this phase, but throughout the rest of the project lifecycle.
	Develop Proposed Solution	Having the proposed solution approved before launching into project activities protects the project team, the project, and the whole organization from anarchy.
Select Projects	Choose Projects	Selection of the projects with the greatest value and greatest chance for success is key to the success of any organization.

PITFALL #1 - IT'S NOT THAT EXPENSIVE, LET'S DO IT!



A high-level cost/benefit analysis must be included in your proposal. It might initially appear that a wonderful benefit to your employees is to supply donuts every day. It might build morale. It might increase their energy levels from the sugar high. However, what are the costs? Good donuts cost money. Could agency funds be expended elsewhere for greater benefit? Is there a less distracting morale builder? There may be decreased productivity as the post-sugar slump hits. Should fresh fruit be considered instead? Cleaning costs might increase as crumb trails cover the floors. You might need to hire pest control as the ants and mice move in. Should the idea of an agency-provided snack be vetoed, as the outcome would actually be more of a problem than it is a benefit?

Your proposal must clearly show that you have at least considered the cons as well as the pros. It must show that you have examined the costs as well as the benefits. It must exhibit that you've considered the long-term ramifications as well as the short-term gains.

PITFALL #2 - CHICKEN BEFORE EGG, INITIATION BEFORE APPROVAL



It's very tempting to get the project started before you get final approval as a way of showing management what a great idea it is. ("I'll show them what a good idea this is and they won't be able to say no!") For novice Project Managers, and for organizations first implementing a formal methodology, it may be very easy to go too far into Project Initiation and Project Planning while you create the proposal for the project. ("Once we expend the resources to do the planning, it doesn't even make sense to turn down the Project Proposal.")

Moving into Project Initiation and Project Planning before the project has received approval through the project selection process can lead to wasted time and resources, especially if the project is not ultimately approved. If this is done repeatedly, it could lead to a loss of trust in those involved – the originator of the proposal as well as the selection committee and the Project Sponsor. A delicate balance must be maintained between providing enough information to adequately support your Project Proposal and expending too much time and effort (read "expense") at this phase. But don't ever throw anything out! If you accidentally gather more information than you need, save it for Project Initiation and Planning after your proposal IS approved.

PITFALL #3 - ONE-PLUS-ONE DOES NOT EQUAL TWO



Selecting the proper combination of projects to be worked on simultaneously within an organization is often a delicate balancing act. If Project A is going to take six months, and Project B is going to take eight months, you cannot conclude that working on the two projects simultaneously means they will both be done at the end of eight months. Both projects may require the same resource during the first two months. Even if both projects are very high priority, it may make more sense to delay the start of one for several months to allow resources to concentrate in one place. The outcome may very well be that more total work can be accomplished.

For example, if you have one staff person doing a task in two different cities that requires three days each, she can get both tasks done in 10 days if she spends three consecutive days in city A and three consecutive days in city B. However, if you make her do both by spending one day at a time in each city, you add travel days and weekends for a total of seven additional days.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Scenari	0 1:																		
Α		X	X	X															
Travel	X				X			X				X							
В									Х	Х	X								
Scenari	o 2:																		
Α		X							X							X			
Travel	X		X		X			X		X		X			X		X		X
В				X							X							X	

This may seem to be an extreme example, but it has a similar effect to going back and forth between tasks. It takes time to repeatedly wrap up and pick up new tasks. Too many projects at once can result in so much task thrashing that very little gets done.

Determining the proper combination of projects to be done at the same time requires that each project have clear resource requirements and time schedules. At a high level, this can be determined during Project Origination. Dependencies between projects must be considered at this time.

PITFALL #4 – CONGRATULATIONS! YOUR PROJECT WAS SELECTED. NOW WAIT.



The vagaries of the state budget process are such that months, if not years, may have elapsed between that euphoric moment you learned that your dream project passed its final Origination hurdle, and the day that you, wizened, weary and bedraggled – but infinitely more astute – actually performed the first Initiation task by asking, "Whazzit all about?"

Often, by the time the project actually gets going, original players have either gone to bigger and better things, or have forgotten all about your puny little project, and the only thing that stands between your success and oblivion is good documentation. Dust off that old Business Case; dig out that forgotten Proposed Solution; and shake that Proposal Decision Notice into any face that dares to challenge your authority to proceed.

Anticipate – and mitigate – the consequences of the likely delay by developing good Origination documentation, keeping it ready and up to date, and keeping your eyes peeled for good candidates for the eventual Project Team.



Frequently Asked Questions

Why should project selection be done at the enterprise level? I know how to run my division!

No one has expertise in every area. Division heads do not usually know all of the activities in every other division. How often have you seen more than one division inventing solutions to the same problem? Not only do you waste resources developing multiple solutions, you then continue to waste resources maintaining two solutions to one problem. An enterprise view, with appropriate executive oversight, of all initiatives is vital to coordinate activities and maximize productive use of time.

How am I supposed to make the Commissioner (Chairman, Director, etc.) understand the importance of this proposal? They are just too far removed.

It is your responsibility to provide information that is sufficient to enable the Performing Organization's executive management to understand the value of your project in the written proposal. Show the benefits. Identify the targeted Customers. Explain the significance of the product. Illustrate the value at the level necessary to promote a clear understanding. Use the proposal to educate the executive management on the merits of your idea.

Why should we expend the time and effort to create a proposal when we could just start doing the work?

If everyone followed this philosophy, the organization would be pulling itself in so many directions that perhaps nothing of value would ever get done. Managers and executives need to manage the work of the organization to ensure its alignment with its mission. Proposals provide executive management with the information they need to manage the organization's resources.

Why should we wait for their approval?

Forging ahead without the appropriate approvals results in wasted resources if the proposal is declined, significantly altered, or delayed. For example, moving ahead without approval could cause you to use technology that executive management has already chosen to replace and you will now have to start over with a new hardware and software platform. The executive staff representatives on the selection committee may be privy to information that is not publicly announced yet. It is the responsibility of the executive staff to determine the priorities that staff is to address.

Purpose

The purpose of Project Initiation is to begin to define the overall parameters of a project and establish the appropriate project management and quality environment required to complete the project.

Development of the Project Charter is a pivotal starting point for the project, establishing the project definition that will serve as the foundation for all future efforts. The completion of this process is marked by the Project Kick-off Meeting, in which the Project Manager presents the Project Charter.

Successful projects begin with a detailed project definition that is <u>understood and accepted</u> by Stakeholders. Putting everything down in writing helps ensure a commitment among Project Team members and between the team and the Stakeholders. As part of Project Initiation, an initial Project Plan is developed, which comprises the Project Charter, Cost/Scope/Schedule/Quality (CSSQ) documents, and preliminary risk identification list. These documents, once approved, ensure a consistent understanding of the project, help to set expectations, and identify resources necessary to move the project to the next level of detailed planning. Potential problems are identified so that they can be addressed early in the project.

Also during Project Initiation, a high-level Project Schedule is developed as the roadmap to more detailed Project Planning and Project Execution and Control. This high-level schedule will be refined over time, and will serve as the primary source of information regarding project status and progress. An accurate, realistic, and complete schedule, rigorously maintained, is essential to the success of a project.

Sponsorship of the project must be confirmed or gained during Project Initiation. Having a Project Sponsor, and securing approval early in the project management lifecycle, helps to ensure a commitment to the project.

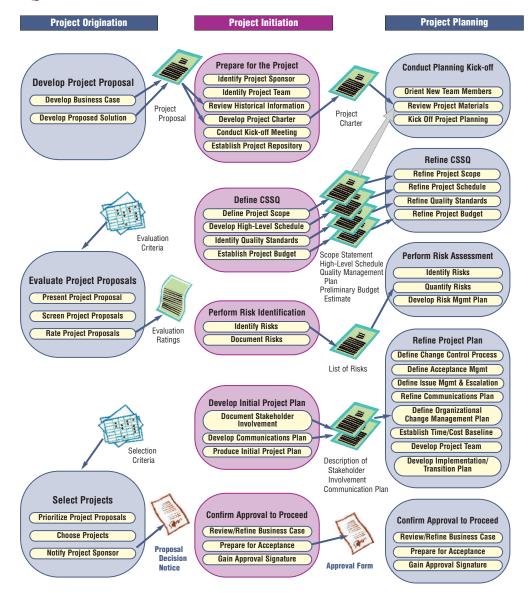
List of Processes

This phase consists of the following processes:

- ◆ Prepare for the Project, where the Project Sponsor and initial Project Team are identified and work with the Project Manager to create the Project Charter.
- ◆ **Define Cost/Scope/Schedule/Quality (CSSQ)**, where the Project Manager, along with the Project Team define the scope of the project and identify the preliminary budget, high-level schedule and quality standards to complete the project.
- ◆ Perform Risk Identification, where the Project Manager and Project Team begin to identify and document any risks associated with the project.
- ◆ **Develop Initial Project Plan,** where the Project Manager and Project Team identify all Stakeholders and document their involvement in the project, develop means of communicating with them, and compile all documentation created during Project Initiation to produce the Initial Project Plan.
- ◆ Confirm Approval to Proceed to Next Phase, where the Project Manager reviews and refines the Business Case, secures resources required for Project Planning and prepares the formal acceptance package for review and approval by the Project Sponsor.

The following chart illustrates all of the processes and deliverables of this phase in the context of the project management lifecycle.

Figure 2-1



List of Roles

The following roles are involved in carrying out the processes of this phase. Descriptions of these roles can be found in the Section I Introduction.

- Project Manager
- Project Sponsor
- ◆ Project Team Members
- Customer
- Customer Representatives
- Stakeholders
- Performing Organization

List of Deliverables

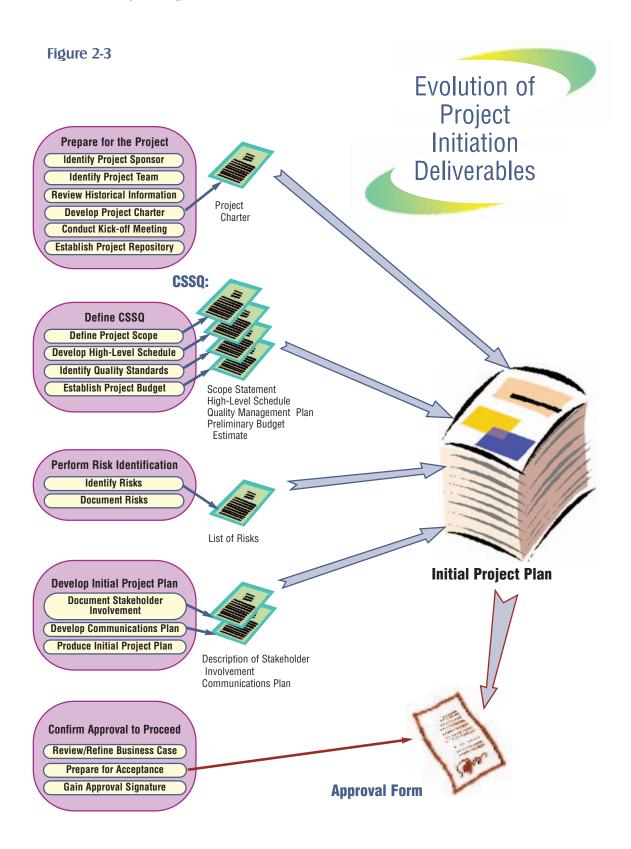
Project deliverables for this phase fall into three categories of importance and formality:

- ◆ Phase deliverables major deliverables approved by the Project Sponsor or a designated alternate that allows the project to proceed to the next phase.
- ◆ Process deliverables drafts of major deliverables or minor deliverables that may or may not require a formal sign-off but nevertheless must be reviewed by Project Team members, Customer Decision-Makers, and the Project Sponsor. The review validates the project's progress, and allows the Project Manager to move on to the next process in confidence.
- ◆ Task deliverables drafts of process deliverables or works-in-progress that are verified within the Project Team, and may or may not be reviewed by the Project Sponsor or Customer Representatives. Each task culminates with the production of one or more tangible deliverables, which allows the Project Manager to monitor project progress using concrete and real results.

Figure 2-2 lists all Project Initiation tasks and their outcomes and deliverables.

Figure 2-2

Processes	Tasks	Task Deliverables (Outcomes)
Prepare for	Identify Project Sponsor	Project Sponsor
the Project	Identify Initial Project Team	Project Team
	Review Historical Information	Information Reviewed
	Develop Project Charter	Project Charter
	Conduct Project Kick-off Meeting	Kick-off Meeting
	Establish Project Repository	Project Repository
Define CSSQ	Define Project Scope	Scope Statement
	Develop High-Level Schedule	High-level Project Schedule
	Identify Quality Standards	Quality Management Plan
	Establish Project Budget	Preliminary Budget Estimate
Perform	Identify Risks	Risks and Impacts
Risk Identification	Document Risks	List of Risks
Develop Initial Project Plan	Identify and Document Stakeholders' Involvement	Description of Stakeholder Involvement
	Develop Communications Plan	Communications Plan
	Compile All Information to Produce the Initial Project Plan	Initial Project Plan
Confirm Approval to	Review/Refine Business Case	Refined Business Case
Proceed to Next Phase	Prepare Formal Acceptance Package	Approval Form
	Gain Approval Signature from Project Sponsor	Signed Approval Form



2.1

PREPARE FOR THE PROJECT

Purpose

After formal project approval, the project is assigned to a Project Team whose first responsibility is to **Prepare for the**

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Stakeholders

Project. The Project Manager must work to ensure that the Performing Organization's expectations and all available project information are effectively conveyed to the Project Team. This can be done collaboratively with the Performing Organization's management team.

Tasks

2.1.1 Identify the Project Sponsor

If a Project Sponsor has not been identified, the Project Manager must work with Performing Organization management to identify and formally appoint someone to that position. Because the Project Sponsor will champion the project within the organization, secure spending authority and resources, and provide support to the Project Manager, it is imperative that he/she be identified as early in the project management lifecycle as possible. Building the relationship between the Project Manager and the Project Sponsor is critical to project success.

2.1.2 Identify the Initial Project Team

The extent to which the Project Team has been defined at this point may vary. At a minimum the manager for the project and

certain individuals who can provide support in preparing for the project should be identified.

The tasks to Prepare for the Project are:

- 2.1.1 Identify the Project Sponsor
- 2.1.2 Identify the Initial Project Team
- 2.1.3 Review Historical Information
- 2.1.4 Develop the Project Charter
- 2.1.5 Conduct Project Kick-Off Meeting
- 2.1.6 Establish the Project Repository

During Project Origination, a Project Proposal was created. During Project Initiation, the Proposal is reviewed to determine the roles required to staff the project. With the help of appropriate Stakeholders, the Project Sponsor should take the lead in identifying the names of individuals within the Performing Organization who could fill the roles and become Project Team

members. Names of the individuals needed to complete Project Initiation tasks will be documented in the Project Charter. In selecting the Project Team, definition of the skills required to perform current tasks as well as skills for future project tasks is needed. Immediate project needs should be met first. After Project Team members have been identified, the Project Manager should provide them with a project orientation and review with individual team members their current and future roles on the project. This establishes a baseline understanding of team members' project responsibilities, which will be useful for conducting performance reviews later in the project.

© Some agencies hold a meeting at the beginning of Project Initiation, where all potential Stakeholders come together to review the Project Proposal, discuss required roles, and assign Project Team members. In other agencies, establishing a Project Team is a less formal process. You should choose and use the method to identify your Initial Project Team that will work best for your project and within your organization.

Take the opportunity, from the outset, to establish the concept of a Project Team that comprises not only the folks reporting directly to you, but also your Project Sponsor, Customer Representatives, Customer Decision-Makers, and all other players participating in the Project Schedule.

2.1.3 Review Historical Information

Development of the Project Charter will require review of documentation compiled or presented during Project Origination. Materials and information reviewed may include:

- the strategic plan, a formal document produced by the Performing Organization that outlines the business goals and direction over a designated number of years
- the Project Proposal, including the initial Business Case, which describes the project objectives and how they support the Performing Organization's strategic business direction
- project selection criteria, defining the parameters used in determining whether or not to undertake a project and identifying its business justification and measurements of its success
- information from a previous project similar in size, scope and objectives
- project knowledge and experience of the individuals on the Project Team

2.1.4 Develop the Project Charter

The purpose of developing the Project Charter is to document critical success factors and define and secure commitment for the resources required to complete Project Initiation. The charter also documents the project's mission, history, and background, describes the business problem the project is intended to resolve, and lists the benefits to be realized by the Performing Organization as a result of implementing the product or service.

Information compiled during Project Origination is used and applied in the development of the Project Charter. To further understand how the project was selected and to write an effective, comprehensive charter, the Project Manager must work with the Project Sponsor and any appropriate subject matter experts and Stakeholders.

If issues or conflicting project expectations are uncovered while developing the Project Charter, the Project Manager must communicate with Stakeholders to resolve the discrepancies, elevate the issues when appropriate, and obtain consensus. Decisions that impact project expectations significantly should be thoroughly documented.

The Project Charter contains the following sections:

- Background
- Objective
- Critical Success Factors
- Required Resources
- Constraints
- Authority

(see Figure 2-4, the New York State Project Charter)

Developing the Project Charter is a collaborative effort. Working with the Project Sponsor, the Project Manager should document the outcomes that must be achieved in order for the project to be considered a success. These critical success factors should correlate with the goals and objectives of the project.



An effective way to define a critical success factor is to complete the following sentence, "The project will be a success if ______."

Various areas of the Performing Organization may be required to provide resources to the project in order to complete Project Initiation. The Project Sponsor and Project Manager must determine specific resource requirements and effort estimates, and include them in the charter. The Project Sponsor must communicate with the affected areas of the Performing Organization, proactively gaining agreement and securing the necessary resources.

Once the Project Charter has been developed, the Project Manager should schedule a meeting to review its contents, secure necessary resources, and gain formal approval. Meeting attendees should always include the Project Sponsor and the members of Performing Organization Management whose resources are affected. Attendees may also include other members of the Performing Organization who are able to provide resources that will add value to the project. During the meeting, the Project Manager presents the Project Charter for review. Resources are formally secured by gaining the signatures of the appropriate Performing Organization managers. At the conclusion of the meeting, the Project Sponsor will formally approve or reject the charter. Should the Project Sponsor reject the charter, he/ she must provide the reasons for rejection to allow the Project Manager to make necessary adjustments.

Based on the contents of the Project Charter, the Project Manager should have a general understanding of the amount of effort that will be required to complete Project Initiation and produce an initial Project Plan. It is imperative that the Project Manager begins to track the remaining Project Initiation efforts and communicate status. Items to discuss during status meetings include accomplishments, progress against schedules, work to be done, and any open issues that need resolution. As part of the Communications Plan for the project, a Project Status Report should be prepared and reviewed during the meetings. See 2.4.2, Develop a Communications Plan and Figure 2-10, the Project Status Report template, for more information.

At this early stage in the project management lifecycle, the Project Manager needs to ensure that only Project Initiation resources are secured. Resources required in subsequent project management lifecycle phases will be determined and documented later, in the Project Plan.

Figure 2-4 New York State Project Charter

	New York State Project Charter
PROJECT IDENTIFICATION	
Project Name:	Date:
Project Manager:	Project Sponsor:
Enter the Project Name . Enter the current Date . Enter the name of the Project Spo Enter the name of the assigned Project Spo	

Figure 2-4 (Continued)

PROJECT DESCRIPTION

Project Background:

Explain the events leading up to the project request. Describe any related projects that have or could have led to this project. Identify who has been involved, how they have been involved, and the current state of the project.

Project Objective:

The **Project Objectives** identified in the Proposed Solution should serve as the basis for this Section. Be explicit as to how the expected outcome of the project will benefit the organization and help it achieve its business needs or fix the business problem. Provide details relative to the business cost benefit. It may be advantageous to provide a one-to-one correlation as follows:

Business Need or Problem: Project Objectives:

- Business Need 1
- Project Objective 1
- Business Need 2
- Project Objective 2
- Project Objective 3

In developing this list, consider that a business need may be addressed by multiple project objectives and the same project objective may address multiple business needs.

Critical Success Factors:

Provide a list of at least five (5) project **Critical Success Factors**. Critical success factors are outcomes that must be achieved in order for the project to be considered a success. They should correlate with the **Project Objectives** described in the section above.

Required Resources:

List the names of all individuals needed to perform Project Initiation and whose participation must be approved by Performing Organization Management.

Constraints:

List any known factors that limit the project's execution. The most frequent **Constraint** is the project end date. For each **Constraint** listed, be sure to elaborate on how it is limiting the project and how the project would benefit from its removal.

Project Authority:

This section of the Project Charter describes the levels of **Authority** to the project. It identifies who is involved with the project and their expected authority, who has the ability to resolve decision conflicts, and who will provide overall direction to project efforts.

This section should contain, at a minimum, the roles and responsibilities of the Project Team and the Stakeholders. It should also identify any known governing body or steering committee to which the project is accountable and how they are accountable.

Figure 2-4 (Continued)

PROJECT CHAR	RTER APPROVAL	
Project Sponsor I	Name:	
Action:	Approve:	Reject:
Comments:		
Project Sponsor S	Signature:	
Date:		
Project Charter by		nonsor should indicate approval or rejection of the or Reject box. If the Sponsor is rejecting the charter, nments field.
	viding his/her signature or	the Project Charter (including securing individual n the Project Sponsor Signature line and the
Approver Comme	ents:	Role:
Approver Signatu	re:	
Date:		
Management. He		approver is a member of Performing Organization reement to provide required resources for the project and the approval Date .
NOTE: Duplicate signature is require		section on this template if more than one approval

2.1.5 Conduct Project Kick-off Meeting

When the Project Charter is complete, the Project Kick-off Meeting is conducted. The Project Kick-off Meeting is the event that formally marks the beginning of the project. It is most likely the first opportunity for the Project Sponsor to assemble the entire Project Team to discuss his/her vision of the project, demonstrate support, and advocate project success. Project Team members are introduced to each other and given the opportunity to discuss their areas of expertise and how they will contribute to the project. The Project Charter is presented by the Project Manager and discussed in an open forum, to foster a mutual understanding of and enthusiasm for the project. At the conclusion of the meeting, Project Team members will understand their "next steps," and will leave the meeting ready and excited to begin work.

Prior to the meeting, an agenda and a presentation highlighting the contents of the Project Charter should be prepared by the Project Manager. The Project Manager should designate one of the Project Team members as the scribe for the session, to capture decisions, issues, and action items. The Project Charter and any applicable supporting materials are distributed to attendees for their review. The review of the charter contents ensures that expectations for the project and its results are in agreement. If not already done, the Project Manager must ensure that the Project Sponsor has provided his/her signature on the Project Charter, indicating his/her approval of the contents of the document. If the Project Sponsor does not approve the charter, he/she must indicate the reason, to allow the Project Manager to make necessary adjustments.

Following the session, the notes and action items should be compiled into meeting minutes and distributed to all attendees. (See Figure 2-5 for a sample agenda.)

Figure 2-5 Project Initiation Kick-off Meeting Agenda

Project Initiation	Project:				
Kick-off Meeting	Date:				
Agenda	Time: From:	To:			
, .	Location:				
Invitees: List the names of individuals in Invitees should include the Project Manage Customers with a vested interest in the state.	r, Project Team, Project Sp	ponsor, and any			
Attendees: During the meeting, note wheleft early, indicating they missed some of departure time.					
AGENDA					
Use the following suggested times as guide vary depending upon the needs of the proje		cover agenda topics will			
PR	ESENTER NAME	TIME (MINUTES)			
Introductions Pro	oject Manager	5 min.			
Allow individuals to introduce themselves, a Performing Organization and their area of e. the project efforts. The material to be presented by the following Project Charter.	xpertise and how they may	/ be able to contribute to			
Sponsor's Statement Pro	oject Sponsor				
After brief introductions, the Project Sponso		5 min.			
strate support, and advocate for its success		n for the project, demon-			
strate support, and advocate for its success		n for the project, demon-			
strate support, and advocate for its success Project Request & Background Pro	, setting it as a priority for	n for the project, demon- all parties involved.			
strate support, and advocate for its success Project Request & Background Project Goals & Objectives Project Goals & Objectives	, setting it as a priority for pject Manager	on for the project, demonall parties involved. 5 min.			
Project Goals & Objectives Project Scope Project Scope Strate support, and advocate for its success Project Request & Background Project Goals & Objectives Project Scope	pject Manager pject Manager	on for the project, demonall parties involved. 5 min. 10 min.			
Project Goals & Objectives Project Scope Project Scope Strate support, and advocate for its success Project Request & Background Project Goals & Objectives Project Scope	pject Manager	on for the project, demonall parties involved. 5 min. 10 min. 10 min. 10 min. seriative to stakeholder			
Project Request & Background Project Goals & Objectives Project Scope Pr	pject Manager	on for the project, demonall parties involved. 5 min. 10 min. 10 min. 10 min. seriative to stakeholder			
Project Request & Background Project Goals & Objectives Project Scope Pr	pject Manager	n for the project, demonall parties involved. 5 min. 10 min. 10 min. 10 min. rs relative to stakeholder ct.			
Project Request & Background Project Goals & Objectives Project Scope Pr	pject Manager	n for the project, demonall parties involved. 5 min. 10 min. 10 min. 10 min. srelative to stakeholder ct. 5 min.			
Project Request & Background Project Goals & Objectives Project Scope Pr	pject Manager	n for the project, demonall parties involved. 5 min. 10 min. 10 min. 10 min. srelative to stakeholder ct. 5 min.			

Figure 2-5 (Continued)

Project Initiation Kick-off Meeting	Project:	
	Date:	
	Date: Time: From:	To
	Location:	
	Location.	
Be sure that one of the Project Team ing important project-specific informat potential issues that could impact the and Project Team should review these members to identify any additional acminutes to be distributed to all the atte	tion that requires further review or a project. At the end of the meeting, e points as well as any other notes of tions required. The notes will be con	liscussion as well as the Project Manager captured by other team mpiled into meeting
DECISIONS		
Decision Made	Impact	Action Required?
Document each project decision reach follow-up actions. If so, these should be		ne decision requires
ISSUES		
	Impact	Action Required?
Issue Description	Impact	Action Required?
	Impact	Action Required?
	Impact	Action Required?
Document any project issues identifier up actions. If so, these should be capt	d and its impact. Also indicate if the tured below.	
Document any project issues identifier up actions. If so, these should be capted ACTION ITEMS FOR FOLLOW UP	d and its impact. Also indicate if the tured below.	issue requires follow
Document any project issues identifier up actions. If so, these should be capt	d and its impact. Also indicate if the tured below.	
Document any project issues identifier up actions. If so, these should be capted ACTION ITEMS FOR FOLLOW UP	d and its impact. Also indicate if the tured below.	issue requires follow
Document any project issues identifier up actions. If so, these should be capted ACTION ITEMS FOR FOLLOW UP	d and its impact. Also indicate if the tured below.	issue requires follow
Document any project issues identifier up actions. If so, these should be capted ACTION ITEMS FOR FOLLOW UP	d and its impact. Also indicate if the tured below.	issue requires follow

2.1.6 Establish the Project Repository

Maintaining information about the project in an organized fashion facilitates new team member transitions and creates a central point of reference for those developing project definition documents. Most importantly, it provides an audit trail documenting the history and evolution of the project.

All relevant project-related material, documents produced, decisions made, issues raised and correspondence exchanged must be captured for future reference and historical tracking. The project repository can be kept as hard copy in a binder or notebook, or as electronic files and email folders, or both, at the discretion of the Project Manager, in accordance with organizational records management policies. All files related to the project should be grouped by categories within project-specific folders. The structure should be intuitive so that anyone browsing the directory can easily locate needed information. Within the primary hard copy repository, information should be organized in indexed volume(s) to enable easy access. An index should provide reference to all material maintained electronically (e.g., a file directory or email folder by drive, directory, and filename). The most current hard copy of documentation should be kept in the primary hard copy repository, with earlier versions in the electronic file.

By the end of the project, a project repository may include the following materials:

- Project Proposal and supporting documentation, including the Business Case
- Project description/definition documents such as the Project Charter, the CSSQ, and the Project Plan
- Any working documents or informal documents defining Cost, Scope, Schedule and Quality (CSSQ) of the project
- Project Schedules (baseline and current)
- Project financials
- Project Scope changes and requests log
- Project Status Reports
- Team member Progress Reports and timesheets
- Issues log and details (open and resolved)

- Project acceptance log by deliverable
- Products
- Risk identification/model documentation
- Audit results, if encountered
- Correspondence, including any pivotal or decision-making memos, letters, email...etc.
- Meeting notes, results, and/or actions

The project repository should be available to everyone involved in the project and must, therefore, be considered "public information." It is not advisable to keep sensitive information concerning individuals on the project, such as salaries or evaluations, in the project repository. Some project-related documents may also be regarded as confidential. A confidential project repository should be established in a separate location to secure sensitive information.

Deliverable

◆ Project Charter – this is a document that provides authority to establish the project, broadly defining its purpose, goals, and objectives. Resources required to complete Project Initiation are also identified and secured. The charter serves as a contract between the Project Team and Project Sponsor. The Project Charter is the first in a series of project definition documents defining the business goals and objectives the project will meet. Information within the Project Charter is provided at a general level that will be further refined in documentation produced during subsequent project activities.



CSSQ is the acronym derived from a project's quadruple constraints: Cost, Scope, Schedule, and Quality. Because the con-

straints are interdependent, they are defined and managed together. The CSSQ concept is incorporated throughout all project management lifecycle phases and is, therefore, documented throughout this *Guidebook*. The CSSQ work products are first created during Project Initiation.

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer Representatives
- Stakeholders
- Performing Organization
- Customer Decision-Maker

The purpose of **Defining CSSQ** is to:

- Develop a written Project Scope statement to define the project. The scope statement will be used as the foundation for scope and schedule refinement during Project Planning.
- Establish a preliminary Project Schedule to define, at a very high level, the activities that must be accomplished at certain points in the project in order to deliver the product described in the scope statement.
- Define the quality processes and standards that will be used throughout the project.
- Determine the appropriate approaches for staff and materials acquisition, and establish a preliminary budget for the project.

Tasks

2.2.1 Define Project Scope

The written scope statement is a document that serves as input to future project planning efforts. The scope statement (see Figure 2-6) should include:

The tasks to Define CSSQ are:

- 2.2.1 Define Project Scope
- 2.2.2 Develop High-Level Schedule
- 2.2.3 Identify Quality Standards
- 2.2.4 Establish Project Budget

- the business need the project will address.
- what the project will accomplish, how it will be accomplished and by whom.
- what the end result of the project will be (e.g., a product, service, other).
- a list of project deliverables, which, when produced and accepted, indicate project completion. Also included is a list of those items/deliverables that are

not in scope for the project. The Project Manager must be **specific** about what is in scope and what is not in scope, as the weaker the boundaries between the two, the more difficult it will be to effect the change control process if required later in the project. Also, the details regarding what is in and what is out of scope are critical input to the creation of a detailed Project Schedule.

critical success factors (usually cost, schedule, and quality measurements) that determine whether or not a project was successful.

The Project Charter, including the project outcome description, provides necessary information for defining the Project Scope relative to the business need and benefit for the organization undertaking the project. The scope statement will build on the outcome of the project described in the Project Charter by developing an approach to deliver that result, and by developing additional detailed information about the scope of work to be done. Interviews with other Project Managers who have had experience developing scope statements for similar projects can also be helpful.

"Scope creep" is a major bane of project management. How do you combat it? By pre-empting it with a thorough, accurate, precise, and mutually agreed upon Scope Statement. Avoid words and statements that require judgment or invite interpretation, such as 'improve," "enhance," "better," "more efficient" and "effective." Use numbers, facts, and concrete results. Use quantifiable terms, and provide target values or ranges. Emphasize outcome, not process. "We will work very hard for a long time to improve our response capability and enhance our effectiveness" belongs in a Dilbert cartoon.

While writing the Project Scope, the Project Manager and Customer Representatives must consider the effect the outcome of the project may have on the Performing Organization. The organization must be prepared to support the product once it is transitioned. If implementing the product will result in a change to the way the organization will conduct business, the Project Manager, Project Sponsor, and Customer must anticipate impacts and communicate them proactively to the Consumer community. Sometimes people are resistant to change. Selling the positive aspects of the project and the benefits of its product throughout the project's duration will facilitate acceptance. If adaptation to the new environment requires new skills, the Project Manager will need to identify appropriate training opportunities and include them in the Project Scope and Project Plan. (for information regarding training and training plans, see Develop Project Team, 3.4.7)

Figure 2-6 New York State Project Scope Statement

New York State Project Scope Statement PROJECT IDENTIFICATION Project Name: _____ Date: ____ Project Sponsor: _____ Project Manager: ____ Enter the **Project Name**. Enter the current **Date**. Enter the name of the **Project Sponsor**. Enter the name of the assigned **Project Manager**.

Figure 2-6 (Continued)

New York State Project Scope Statement

A. BUSINESS NEED/PROBLEM:

State the **Business Need/Problem** the project will address. This should be consistent with the Project Business Case developed during Project Origination. Tie the business need to the agency's mission.

B. PROJECT OBJECTIVES (FROM PROJECT CHARTER):

Include a description of the deliverables that will be produced as part of the project. Be specific when describing what is in scope and out of scope. Note: This section will most likely be several pages in length.

C. PROJECT RESULTS:

State what will signify that the project is complete. Include the measures that will determine whether or not the project was successful from a cost, schedule and quality standpoint.

D. PROJECT CONTENT:

Describe the **Contents** of the project, listing all deliverables of the project in detail. Also include items NOT in scope.

2.2.2 Develop High-Level Schedule

A Project Schedule is a calendar-based representation of work that will be accomplished during a project. Developing a schedule means determining the start and end dates for all tasks required to produce the project's product, and the project management deliverables.

At this early stage in the project management lifecycle, information required to complete a Project Schedule is known only at an overview level, often based solely upon the expert judgment of the Project Manager or other individuals with experience managing projects with similar lifecycles. Even at a high level, this information still provides insight into preparing the first draft of a Project Schedule. The activities documented in the schedule at this early stage will be further broken down during Project Planning, when the schedule will be refined to include the specific individuals assigned and the amount of time required to complete the work.

A Work Breakdown Structure (WBS) is a very useful work product that a Project Manager should create to facilitate development of a Project Schedule. A WBS is a graphical representation of the hierarchy of project deliverables and their associated tasks. As opposed to a Project Schedule that is calendarbased, a WBS is deliverable-based, and written in business terms. All tasks depicted are those focused on completion of deliverables. There are no dates or effort estimates in a WBS. Using a WBS, Project Team members are better equipped to estimate the level of effort required to complete tasks, and are able to quickly understand how their work fits into the overall project structure.

The first hierarchical level of a WBS usually contains the phases that are specific to the lifecycle of the project being performed. (For example, the first level of the WBS for a software development project would most likely contain System Initiation, System Requirements Analysis, System Design, etc.) For this reason, a WBS may be reused for other projects with the same lifecycle. Once the first level has been completed, it is broken down into more detailed sub-levels, until eventually all tasks are depicted. When defined to the appropriate level of detail, a WBS is very useful as input to both creating and refining a Project Schedule, including estimating required resources, level of effort, and cost.

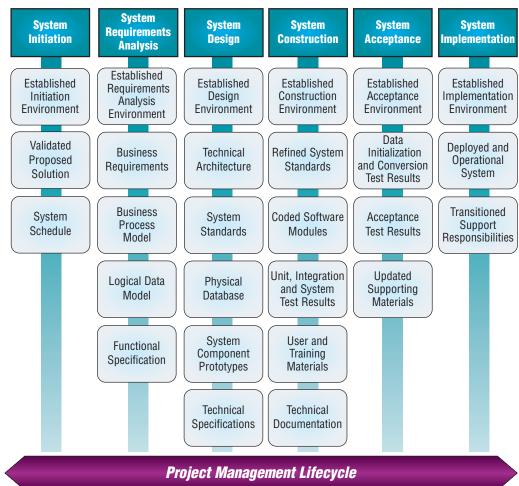
In Project Initiation, the information required to illustrate a complete WBS representing the entire project will not be known in sufficient detail. There will be enough information, however, to illustrate the tasks required to produce Project Initiation deliverables. The WBS is not static - the Project Manager should work with the Project Team during each project lifecycle phase to refine the WBS and use it as input to refining the Project Schedule.

Figure 2-6A is a sample High-Level Work Breakdown Structure organized by lifecycle phase for a software development project.

Figure 2-6A High-Level Work Breakdown Structure for Software Development Project

System Development Lifecycle

Work Breakdown Structure



A preliminary list of the roles and skills required to perform the necessary work (e.g., Architect, Team Leader) should be created at this stage in the project. This list will be refined in subsequent phases, as more becomes known about the project. Additional constraints, such as completion dates for project deliverables mandated by the Project Sponsor, Customer, or other external factors, will most often be known early in the project management lifecycle and should be noted. There may be financial, legal, or market-driven constraints that help dictate a project's high-level timeline.

Using the information from the WBS as input, the Project Manager should begin to document effort estimates, roles and dependencies, in preparation for creating a Project Schedule using a project management tool. It may also be helpful to solicit input from past Project Managers, Project Team members and subject matter experts for insight into past project performance, and to help uncover required activities, dependencies, and levels of effort. Researching and documenting this information first will not only help organize thoughts on paper, but may bring new information to light. (See Figure 2-7, New York State Project Schedule Worksheet.)

Figure 2-7 New York State Project Schedule Worksheet

New York State Project Schedule Worksheet PROJECT IDENTIFICATION Project Name: ______ Date: _____ Project Sponsor: _____ Project Manager: ______ Enter the Project Name. Enter the current Date. Enter the name of the Project Sponsor. Enter the name of the assigned Project Manager.

Figure 2-7 (Continued)

New York State Project Schedule Worksheet

PROJECT SCHEDULE INFORMATION

Phase	Process	Task	Estimated Hours	Dependent Upon	Role

Enter the name of the project **Phase**. Identify the **Process** within that Phase, and then list the **Tasks** that make up that Process.

Enter the **Estimated Hours** needed to complete each Task. If the current Task is dependent upon the completion of a prior Task, identify that prior Task under **Dependent Upon**.

Enter the **Role** and/or individual(s) to complete the activity, if known (e.g., Architect, Programmer, Civil Engineer).

Information entered on this worksheet will be used as input to the High-Level Schedule.

Once the worksheet has been completed and reviewed, the Project Manager should enter the information into a project scheduling tool (e.g., Microsoft Project® or PlanView®) to produce the high-level Project Schedule. Information typically required for a project management tool includes activities, effort estimates to complete the activities, the role or individual assigned to them, and any known dependencies among them. The activities entered into the tool should be those required to complete the deliverables described in the Project Scope statement. Information will only be known at a very high level at this point, but will be refined during Project Planning.

2.2.3 Identify Quality Standards

If the Performing Organization has established quality standards, the Project Manager can reference the document containing the quality standards the organization already has in place. In most cases, however, this document does not exist, or the quality standards are not in place. The Project Manager and Customer Representatives must identify and document standards for each project deliverable during Project Initiation. If quality standards are not identified and documented, the Project Manager will have no way to determine if deliverables are being produced to an acceptable quality level.

The Project Scope statement documents what the outcome of the project will be, and will help determine the appropriate quality standards to use. Additional information discovered when defining your project approach (e.g., your materials acquisition strategy) that is above and beyond that contained in the scope statement may aid in identifying quality standards. Performance of a cost/benefit analysis can show whether the benefits of implementing the desired quality standards outweigh the cost of implementing them. Research of past projects that implemented quality standards similar to those that are candidates for the current project can also be helpful.

The amazing thing about quality standards is that nobody has them available when the project starts, but everybody knows what they were supposed to be when the product is delivered. Do not accept lack of documentation as an excuse to skimp on your homework. On the contrary, dig down through organizational layers to discover what was used in the past (here's another way your historical data research pays off!) and what will be expected in the future. And if you can't find anything – create it, document it, publicize it, and put it in your Project Status Report and your project repository.

Compliance to specific New York State standards and regulations may be required and could dictate the quality standards to be measured against for a particular project. Preliminary standards should be reviewed again and modified or refined during Project Planning. (See Figure 2-8, the New York State Project Quality Management Plan.)

Figure 2-8 New York State Project Quality Management Plan

New York State

	y Management Plan
PROJECT IDENTIFICATION	
Project Name:	Date:
Project Sponsor:	Project Manager:
Enter the Project Name . Enter the current Date . Enter the name of the Project Sponsor . Enter the name of the assigned Project Ma	nnager.

Figure 2-8 (Continued)

New York State Project Quality Management Plan

PART A. QUALITY PLANNING – IDENTIFIED QUALITY STANDARDS List the Quality Standards that have been identified for each deliverable of the project.

Figure 2-8 (Continued)

New York State Project Quality Management Plan

PART B: QUALITY ASSURANCE ACTIVITIES

Describe the processes that will be implemented to evaluate project performance on a regular basis, and validate that the quality standards defined in Part A are appropriate and able to be met.

(To be defined during Project Planning and refined during Project Execution and Control.)

Figure 2-8 (Continued)

New York State Project Quality Management Plan

PART C: QUALITY CONTROL ACTIVITIES

Describe the processes that will be implemented to measure project results, compare results against the Quality Standards defined in Part A, and determine if they are being met. This also identifies ways to minimize errors and improve performance.

(To be defined and implemented during Project Execution and Control.)

2.2.4 Establish Project Budget

Using available tools, the Project Manager calculates the preliminary budget that will be required to complete project activities. All aspects of the project, including the cost of human resources, equipment, travel, materials and supplies, should be incorporated. At this point information will be presented at a summary level, to be refined during Project Planning, as more detailed information becomes known. However, the budget should be more detailed and more accurate now than it was during Project Origination. The Project Manager should use manual or automated tools to generate a Preliminary Budget Estimate. The budgeting tools may be simple spreadsheets or complex mathematical modeling tools. (See Figure 2-9 for the Preliminary Budget Estimate.) For historical purposes, and to enable the budget to be refined, the Project Manager should always maintain notes on how this preliminary budget was derived. Cost estimating checklists help to ensure that all preliminary budgeting information is known and all bases are covered.

The Project Manager must also have a general understanding of the cost of both the human resources and the equipment and materials required to perform the work. The method by which staff and products will be acquired for the project will directly affect the budgeting process.

In coming up with the project's budget, many Project Managers fall into either of the two extremes, depending on their temperaments and prior experience: those that are risk-averse or have been burned in the past "aim high," inflating the Project Budget to protect against all eventualities; and those that are "green," optimistic, or afraid of rejection "aim low," underestimating the risks and realities. Neither approach, of course, is optimal: both put the whole project at risk, the former by either disqualifying the project in view of limited funds or inviting uninformed wholesale cuts, the latter by setting unrealistic expectations and guaranteeing multiple additional requests for more money. The best approach is to use organizational experience, your own expertise, and the best advice you can muster, to predict with the greatest possible accuracy what the project will actually cost, and then set up a separate change budget.

Above all, document the basis of your estimates!

A number of constraints, financial, political, and organizational, may dictate the methods by which required individuals, equipment, and materials are acquired. The Project Manager needs to be aware of existing resource acquisition policies, guidelines, and procedures. In addition, the preferences of the Performing Organization's management team and/or the

Customer Representatives may influence acquisition decisions. In any case, the strategies defined should satisfy the needs of project Stakeholders. Information from similar past projects can be used to gain an understanding of acquisition strategies; those that were successful and applicable may be considered for implementation on the current project.

Once the Project Manager assesses the needs of the project, financial considerations, time constraints, and individual skills and availability, a method is defined for acquiring project staff. Depending on the way different organizations relate to one another, strategies used to acquire staff may vary. It is important for the Project Manager to understand the reporting relationships, both formal and informal, among different organizations, technical disciplines, and individuals. Staff may be allocated from within an organization or from an outside source using an established staff procurement procedure. The Project Manager should work with the Project Sponsor to determine staffing options.

The skills required for the project influence the means by which staff members are acquired. If there are limited qualified inhouse resources available to staff a project or if a Project Manager has had positive experiences with contract staff, for example, he/she may elect to retain contractors to fill the positions rather than allocating resources from within. If it is determined that it is necessary to recruit staff from outside the Performing Organization, the Project Manager should work with the agency Human Resource office. The Human Resource office can assist in the recruitment of qualified staff in accordance with Civil Service Rules. If the decision is made to utilize private consultants or contractors, the Project Manager should contact the agency Contract Management office for assistance regarding State Contract vendors, and Procurement Guidelines, as established by the NYS Office of General Services.

As is the case with human resources, a method is defined by which equipment, materials, and other non-human resources will be obtained. The Project Manager, in conjunction with the Project Sponsor, should determine the method to be used to acquire these resources. Section II:3 contains more information regarding Procurement and Contractor Management.

Regardless of how staff and products are acquired for the project, the Project Manager must add the estimated cost of all resources to the Preliminary Budget Estimate.

Figure 2-9 New York State Preliminary Budget Estimate

New York State Preliminary Budget Estimate PROJECT IDENTIFICATION Project Name: _____ Date: _____ Project Sponsor: _____ Project Manager: _____ Enter the **Project Name**. Enter the current **Date**. Enter the name of the **Project Sponsor**. Enter the name of the assigned Project Manager.

Figure 2-9 (Continued)

New York State Preliminary Budget Estimate

BUDGET INFORMATION

Phase	Process/Task	Labor Cost	Material Cost	Travel Cost	Other Cost	Total Cost	Planned Date of Expenditure
	TOTAL Budget						

The Phase, Process, and Task Names come from the High-Level Schedule.

The Labor Cost is the cost of human resources required.

The Material Cost is the cost for equipment and supplies.

The **Travel Cost** is any predicted cost that will be incurred if travel is required.

Enter any costs outside person, material, and travel costs under Other Costs.

Total the costs for each activity and enter the total under **Total Cost**. Then enter the **Planned Date** the expenditure will be made.

Calculate the total of all rows in the table and enter the values in the TOTAL Budget row at the bottom of the worksheet.

COMMENTS: (List any assumptions pertaining to the costs entered above.)

Deliverables

- ◆ Project Scope Statement documents a description of the project's deliverables, results, and critical success factors, and defines what is out of scope.
- ◆ High-Level Project Schedule a representation of tasks, durations, dependencies, and resources, to the extent that is currently known about the project. It should be produced using an automated project management tool. This schedule should be reviewed and approved by the Project Sponsor and Customer Decision-Makers.
- **Quality Management Plan** describes how the Project Team will implement the identified quality standards, the plan can be a very informal or highly detailed document, based on the needs of the project. It defines how project reporting will work, controls to be used in managing the project, audit needs, communication commitments, and any other quality processes that will be used throughout the course of the project. The Quality Management Plan will become part of the final Project Plan created during Project Initiation and revised during Project Planning. At the end of Project Initiation, the Quality Management Plan should include a description of the policy and standards the organization has put in place to address quality. Any type of structured tool or checklist can be used to ensure that all quality measures have been considered. It may be a complex, industry-standard tool, or a simple "To Do" list.
- ◆ Preliminary Budget Estimate documents a preliminary estimate of the cost to complete the project.

2.3 PERFORM RISK IDENTIFICATION

Purpose

Risks are events that can potentially affect the cost, schedule, and/or efforts of a project. **Risk Identification** begins during

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer Representatives

Project Initiation with the documentation of known project risks so that early planning can mitigate their effects. Throughout the duration of the project, risks must continue to be identified, tracked and analyzed to assess the probability of their occurrence, and to minimize their potential impacts on the project.

Tasks

2.3.1 Identify Risks

The Project Manager solicits input from the Project Team, Project Sponsor, and from Customer Representatives, who try to anticipate any possible events, obstacles, or issues that may

The tasks to Perform Risk Identification for Project Initiation are:

- 2.3.1 Identify Risks
- 2.3.2 Document Risks

produce unplanned outcomes during the course of the project. Risks to both internal and external aspects of the project should be assessed. Internal risks are events the Project Team can directly control, while external risks happen outside the direct influence of the Project Team (e.g., legislative action).

A list of risks is started, and as the scope, schedule, budget, and resource plan are refined during Project Planning, it is updated to reflect further risks identified.

The project should be analyzed for risk in areas such as:

- culture of the Performing Organization
- anticipated impact on the Performing Organization of the resulting product or service
- the level to which the end result is defined (the more complete the definition, the lower the possibility of risk)
- technology used on the project (proven vs. new)
- relationships among team members
- impact on work units

Documentation associated with Project Initiation can also be used to help identify risks. Some examples are:

- the Project Scope Statement may uncover previously unidentified areas of concern (again, the more complete the scope definition, the lower the possibility of risk);
- project constraints indicate likely risk sources;
- the High-Level Project Schedule may produce extremely aggressive or unrealistic scheduling
- preliminary staffing requirements may be problematic if required resources have limited availability or unique skills that would be hard to find and/or replace should they leave the project.

Refer to the parts of this document concerning CSSQ and Project Charter information, to review for possible areas of risk.

Historical information can be extremely helpful in determining potential project risks. Data and documentation from previous projects, or interviews with team members or other subject matter experts from past projects provide excellent insight into potential risk areas and ways to avoid or mitigate them.

2.3.2 Document Risks

The Project Manager documents identified risks to inform the risk identification and assessment process. Risk identification lists are typically organized by source of risk to help the Project Manager organize and record ideas. These lists may be generic or industry-specific. The Project Manager may even decide to create risk identification lists specifically geared toward the current project. At this point, the Project Team is simply identifying and listing risks. During Project Planning, the items on the list will be transposed to a Risk Management Worksheet, where they will be quantified and plans will be developed to mitigate them should they occur.

Deliverable

◆ The List of Risks – a listing of identified sources of risk and potential risk events. Risk Assessment will be performed during Project Planning using the list of risks.

2.4

DEVELOP INITIAL PROJECT PLAN

Purpose

The Project Plan is a collection of information used to describe the environment that will govern the project. The work products previously produced during Project Initiation become part

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer Representatives

of the **Initial Project Plan**. In addition to compiling these work products, developing the Initial Project Plan involves identifying the Stakeholders that will be involved in the project and establishing and documenting a plan for project communications. The Project Plan is an evolving set of documents - new information will continue to be added and existing information will be revised during Project Planning.

Tasks

2.4.1 Identify and Document Stakeholders' Involvement

The Project Manager defines the organization of the Project Team and outlines Stakeholders' roles and responsibilities. All Stakeholders who will be involved in some capacity on the project should be identified. Some may be indirectly involved in an ancillary agency unit, a Steering Committee, or as external vendors or suppliers. Necessary contacts with agencies such as the Department of Civil Service, Division of the Budget, Office

The tasks to Develop Initial Project Plan are:

- 2.4.1 Identify and Document
 Stakeholders' Involvement
- 2.4.2 Develop a Communications Plan
- 2.4.3 Compile All Information to Produce the Initial Project Plan

For Technology, CIO's office, and Office of the State Comptroller must be included. Members of these agencies are key Stakeholders in many projects and interaction with them should be coordinated and planned.

In defining the high-level schedule for Define CSSQ, a preliminary list of roles and skills required for the project was produced. This list may be useful when creating the list of stakeholder roles needed to perform the tasks lead-

ing to the desired project outcome and the responsibilities for each role. Even if the information is known only at a preliminary level, it is helpful to the Project Manager. When documenting roles and responsibilities, the Project Manager should evaluate whether the individuals being assigned are in appropriate roles, if this information is known. If it is decided that assigned individuals may be weak in certain areas, or there are no individuals to fill certain roles, the Project Manager documents this information.

One of the greatest challenges in project management is getting the work done by individuals and business units that do not report to the Project Manager, or even to the Project Manager's entire chain of command. The earlier you can identify whom you need cooperation from, and the more detail you can provide as to the extent and outcome of that cooperation, the better your chances of actually influencing the work done. Make your case early and convincingly (emphasizing how the folks that DO have influence will benefit), and you may actually get them to do what your project requires.

2.4.2 Develop a Communications Plan

The Communications Plan is a document describing the means by which project communications will occur. The communication process must be bi-directional. The Project Manager must receive input from Project Team members and Stakeholders about their information and communications requirements, determine the best and most cost effective way in which the requirements can be met, and record the information in a formal, approved document. Similarly, the Project Manager must provide details to the team and the Stakeholders regarding the communications he/she expects to receive, and document these requirements in the plan.

The Communications Plan is developed early in the project management lifecycle. It must be reviewed regularly throughout the course of the project and updated as necessary to ensure it remains current and applicable.

Some of the requirements the Project Manager and Stakeholders will need to communicate and understand, and which should be documented in the Communications Plan include:

- How often and how quickly information needs to be disseminated.
- By what means the Project Manager and Stakeholders prefer to receive information (via phone, email, paper).

- The communication mechanism currently used in the organization, and how it might be leveraged or improved.
- The effectiveness of communications in past projects and whether specific improvements were recommended.

The methods and technologies used to communicate information may vary among departments or organizations involved in the project, and by Stakeholders. These differences must be considered when creating a Communications Plan. For example, will all departments have access to email, or will exceptions need to be made? Are there any other considerations that may affect or limit communication? For example, there may be regulatory or contractual obligations that will affect the means by which communication can take place.

A great way to communicate with the Project Sponsor and the Customer Representatives is to conduct a status meeting. Some items to discuss during the meeting include accomplishments, progress against schedules, work to be done, and any open issues that need resolution. A Project Status Report should be prepared and reviewed during the meeting. Use Figure 2-10, the Project Status Report template, as a guide.

Figure 2-10 New York State Project Status Report

Agency Name Project Name

Project Status Report

As of (Date)

Distribution:

Original Copy

Project Repository

Project Team

(List names)

Stakeholders

(List names)

Prepared By:

(Project Manager name)

Figure 2-10 (Continued)

Project Status Report

STATUS SUMMARY:

Summarize the project's **Status**. This section should be brief, presenting a few major accomplishments or possibly a critical issue. On large projects with many teams it may present the points you most want noticed. Remember, the point(s) in the Status Summary will be repeated in the appropriate section of the Status Report. If possible, present a high level Gantt chart of deliverables to visually represent the schedule below.

SCHEDULE:

Project Phase	Project Process	Planned Start	Actual Start	Planned End	Actual End	Explanation of Variance

Enter planned and actual start and end dates pertaining to each Phase and Process of the project. Explain variance when planned and actual dates are not in agreement.

FINANCIAL INFORMATION:

А	В	С	D	Е	F	G
Original Project Estimate	Total Approved Changes	Total Current Estimate	Amount Expended to Date	Estimated Amount to Complete	Forecast Total	Project Variance

Explanation of Variance:

Enter the dollar amount of the Original Project Estimate.

If any changes have been approved, enter the Total Approved Changes in dollars.

Total the dollar amounts in columns A and B and enter the result as **Total Current Estimate**.

Enter the dollar Amount Expended on the project as of the date of this report.

Enter the dollar Amount Estimated to Complete the project.

Total the dollar amounts in columns D and E and enter the result as **Forecast Total**. Subtract the dollar amount in column F from the dollar amount in column C and enter the result for **Project Variance**.

Figure 2-10 (Continued)

Project Status Report

ISSUES AND ACTION ITEMS:

Issue Identification	entific	ation			Action Plan	lan		
# enssl	Date	Priority	Issue # Date Priority Issue Name Description	Description	Action	Owner	Action Owner Due Date Status	Status
								
2.								
3.								

Develop an Action Plan for each identified Issue, and track its progress via the Activity Log. Assign an **Issue** # to each Issue on the report, for easy reference. Enter **Date** when the Issue was originally raised.

Record Priority (High, Medium or Low) that the Issue was assigned.

Assign a short but descriptive **Issue Name**, and provide a detailed **Description of the Issue** and its impact on the project.

Describe an Action (or a series of Actions) that will be performed to resolve the Issue.

Assign an Owner to that Action, and establish a Due Date by which the Action should be complete.

Record action **Status** (Open or Closed). As long as any Actions for an Issue are open, the Issue itself stays on the Issues and Action Items page of the Project Status Report; when all Actions are Closed, the Issue moves to the Closed Issues page for one reporting period, and subsequently is removed from the report.

There are likely to be multiple Actions per issue.

Figure 2-10 (Continued)

ACCOMPLISHMENTS THIS REPORTING PERIOD:

For Reporting Period of xx/xx/xxxx - xx/xx/xxxx

Enter project **Accomplishments** for the reporting period, identifying activities, meetings, and any deliverables produced.

PLANNED ACTIVITIES FOR NEXT REPORTING PERIOD:

For Reporting Period of xx/xx/xxxx - xx/xx/xxxx

List project activities planned for the next reporting period. Use the Project Schedule as a basis for this information, adding meetings, presentations, etc. as necessary.

ACCEPTANCE AND CHANGE MANAGEMENT:

Deliverable Acceptance Log

Deliverable Name	Sent for Review	Sent for Approval	Action	Action Date
	(Date)	(Date)	Approve/Reject	

List the **Deliverable Name** of each deliverable completed, the **Date** it was **Sent for Review**, the **Date** it was **Sent for Approval**, the **Action** taken and the **Date** the action was taken.

Change Control Log

Change #	Log Date	Initiated By	Description	Action Accept/Reject	Action Date	Reject Description	

As change requests are received, indicate the **Change Number**, the **Date** it was received in the **Log Date** column, the name of the person who **Initiated** the change request, a **Description** of the change, the status of the change (whether **Accepted** or **Rejected**), the **Date** it was **Accepted** or **Rejected**, and a brief **Description** of the reason for **Rejection**.

Lost Time

If there was time on the project during the report period when no productive work could be done by the Project Team due to actions outside of their control, explain how much time and why. For example, if there was a power outage necessitating leaving the building, this is considered lost time. This period of inactivity may result in project variance. It is important to note that this is not due to the inability of the team to meet work estimates. Change control may be instituted to cover the effort and cost impact for this lost time.

Closed Issues

This follows the same format as open issues. Use the table for Issues and Action Items above. Identify **Closed Issues** and retain only until the next Status Reporting period.

Staffing

Team Member	Role	Information/Notes

Identify the name of each **Team Member**, their **Role** on the project, and any pertinent **Information** relative to the project, such as availability, pre-planned absences, etc.

Project Communications Plan New York State Project Manager: Date: Figure 2-11 New York State Project Communications Plan Enter the **Project Name**.

Enter the current **Date**.

Enter the name of the **Project Sponsor**.

Enter the name of the assigned **Project Manager**. PROJECT IDENTIFICATION Project Sponsor: Project Name:

Figure 2-11 (Continued)

Frequency **Delivery Vehicle** Project Communications Plan **New York State** Message/Information Need Project Team Member Quality Team Member Other Stakeholder Stakeholder Project Manager Project Sponsor Team Member Procurement

Enter the Stakeholder role in the **Stakeholder** column. Sample stakeholders are provided for your use. Describe the different types of information needed in the **Message/Information Need** column, and how each type of information will be delivered to the stakeholders in the **Delivery Vehicle** column. (Phone, email, formal documentation, etc.) Describe how often and how quickly the project stakeholders will need information in the Frequency column.

EXISTING SYSTEMS: Discuss any communications vehicles (or methods) already in place, and how they will be leveraged on this project. METHOD FOR UPDATING THE COMMUNICATIONS PLAN: Describe how and when the plan will be updated throughout the project. OTHER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	EXISTING SYSTEMS: Discuss any communications vehicles (or methods) already in place, and how they will be leveraged on this project. METHOD FOR UPDATING THE COMMUNICATIONS PLAN: Describe how and when the plan will be updated throughout the project. OTHER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	Project Communications Plan
Discuss any communications vehicles (or methods) already in place, and how they will be leveraged on this project. METHOD FOR UPDATING THE COMMUNICATIONS PLAN: Describe how and when the plan will be updated throughout the project. OTHER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	Discuss any communications vehicles (or methods) already in place, and how they will be leveraged on this project. METHOD FOR UPDATING THE COMMUNICATIONS PLAN: Describe how and when the plan will be updated throughout the project. OTHER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	EXISTING SYSTEMS:
METHOD FOR UPDATING THE COMMUNICATIONS PLAN: Describe how and when the plan will be updated throughout the project. OTHER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	METHOD FOR UPDATING THE COMMUNICATIONS PLAN: Describe how and when the plan will be updated throughout the project. OTHER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	Discuss any communications vehicles (or methods) already in place, and how they will be leveraged on this project.
Describe how and when the plan will be updated throughout the project. THER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	Describe how and when the plan will be updated throughout the project. OTHER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	METHOD FOR UPDATING THE COMMUNICATIONS PLAN:
THER COMMUNICATIONS INFORMATION: Discuss any communications information not yet covered.	DISCUSS any communications information not yet covered.	Describe how and when the plan will be updated throughout the project.
Discuss any communications information not yet covered.	Discuss any communications information not yet covered.	OTHER COMMUNICATIONS INFORMATION:
		Discuss any communications information not yet covered.

2.4.3 Compile All Information to Produce the Initial Project Plan

All work products and deliverables from Project Initiation processes will be compiled for the Initial Project Plan. At this point in the project management lifecycle, the Project Plan will consist of the following information:

- Project Charter
- CSSQ
- List of Risks
- Description of Stakeholder Involvement
- **■** Communications Plan

This information will be refined and supplemented in later project phases as the Project Manager and team become more knowledgeable about the project and its definition. The Project Plan is not a static document; it requires iterative refinement.

"Don't judge the book by its cover." Hogwash! While we are not advocating style over substance, the format, style, and presentation do mean a lot. During the few minutes that most decision-makers will spend reviewing your written deliverables you want them to be well disposed towards you, and able to abstract the most information in the least amount of time. A professional-looking document will make a good first impression; a well-organized text that clearly and logically builds your case will solidify that impression. So don't just slap some papers together, snap a rubber band around them, and submit it as the deliverable; treat your Project Plan as a repository of your brightest hopes for the future.

Deliverables

◆ Description of Stakeholder Involvement – a document describing, to the level of detail currently known, the roles and responsibilities of all Stakeholders, internal and external, who will in any way be involved in the project. This document is part of the Project Plan. This document will most likely be updated later as more about the project becomes known.

- ◆ Communications Plan a document written by the Project Manager that describes:
 - How often and how quickly information will be needed by internal and external Stakeholders
 - How different types of information will be disseminated to the Stakeholders (via email, phone, spreadsheets, formal documentation, etc.)
 - The communications systems already in place and how they may be leveraged on the current project
 - How the Communications Plan will be updated throughout the course of the project
 - Any other information regarding the means by which information will be communicated to all project Stakeholders
- ◆ Initial Project Plan the key deliverable produced during Project Initiation. The initial plan will be refined iteratively throughout the entire project management lifecycle and will serve as the main guide to follow during Project Execution and Control. The Initial Project Plan incorporates the deliverables above and is used to:
 - Document project planning assumptions
 - Document project planning decisions regarding alternatives chosen
 - Facilitate communication among internal and external Stakeholders
 - Define key management reviews as to content, extent and timing
 - Provide a baseline for progress measurement and project control

For an example of a Project Plan, see Figure 2-12, the New York State Project Plan.

Figure 2-12 New York State Project Plan

		New York State Project Plan	е						
PROJECT IDENTIFICATION									
Project Name: Date:									
Project Sponsor: Project Manager:									
Enter the curre	Enter the Project Name . Enter the current Date . Enter the name of the Project Sponsor . Enter the name of the assigned Project Manager .								
REVISION HIS	STORY								
Revision #	Revision Date	Section Revised	Revision Description						
tracked for hist retained. The F	Once the Project Plan has been approved, changes to any component of the plan should be tracked for historical purposes. Prior to applying the change, the previous version(s) should be retained. The Project Manager should append the following revision information to the new version being created:								
Revision # is the next sequentially generated number based on the method established by the Project Manager.									
Revision Date is the date on which the revisions were started.									
Project Charte	Section Revised highlights which component of the plan was updated. This could include the Project Charter, the Communications Plan, the Quality Planetc. A revision could affect more than one component of the Plan. If a revision affects all components, the use of "ALL" would								
and what was	changed. This co	uld be the same for each	the component required updating, component listed (i.e., all components n) or could be very specific.						

Figure 2-12 (Continued)

New York State Project Plan

EXECUTIVE SUMMARY

Describe, at a summary level, what is presented within this document, to allow the reader to understand its contents at a glance.

The Executive Summary may include, but is not limited to:

- Purpose of the document
- Structure of the document
- Material presented provide a short description of each component of the Project Plan and its relevance

Figure 2-12 (Continued)

New York State Project Plan

DESCRIPTION OF STAKEHOLDER RESPONSIBILITY

Name/Title	Agency/ Department	Project Role	Responsibility	Phone	Email

List all Stakeholders involved in the project, with their associated Agencies, Roles, Responsibilities, Phone numbers and Email addresses. Be sure to include NYS Employees, contractors and consultants.

Figure 2-12 (Continued)

New York State Project Plan

PROJECT PLAN DOCUMENTS SUMMARY

When compiling information to produce the Project Plan, prepare the following documents in a consistent, comprehensible format. Be sure to provide a logical flow between documents, to enable the reader to follow and understand the collection of material being presented.

Documents to be Created in Project Initiation	Documents to be Created in Project Planning
Project Charter	
Project Scope Statement	Refined Project Scope
Project Schedule Worksheet	Project Schedule
Project Quality Management Plan	Refined Project Quality Management Plan
Preliminary Budget Estimate Including Staff Acquisition Plan and Materials Acquisition Plan	Project Budget
List of Risks	Risk Management Worksheet
Description of Stakeholder	Refined Description of Stakeholder
Involvement	Involvement
Communications Plan	Refined Communications Plan
	Change Control Process
	Acceptance Management Process
	Issue Management and Escalation Process
	Organizational Change Management Plan
	Project Team Training Plan
	Project Implementation and Transition Plan

2.5 CONFIRM APPROVAL TO PROCEED TO NEXT PHASE

Purpose

The purpose of **Confirm Approval to Proceed to Next Phase** is to formally acknowledge the completion, review and accept-

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer Decision-Makers

ance of all deliverables produced during Project Initiation. Formal acceptance and approval by the Project Sponsor or an authorized designee also signifies that the project can continue into its next phase, Project Planning.

Acceptance and approval are ongoing. The Project Manager should review and gain approval from the Project Sponsor and Customer Decision-

Makers for all interim deliverables upon their completion. Interim acceptances should streamline final acceptance.

Tasks

2.5.1 Review/Refine Business Case

At the completion of Project Initiation, the Project Manager must review the Business Case that was created during Project

The tasks to Confirm Approval to Proceed to Next Phase are:

- 2.5.1 Review/Refine Business Case
- 2.5.2 Prepare for Formal Acceptance
- 2.5.3 Gain Approval Signature from Project Sponsor

Origination. Because more information is now known about the project, the Project Manager will need to refine the Business Case to include the new information. The refined Business Case will be presented to the Project Sponsor as part of gaining approval to proceed.

2.5.2 Prepare for Formal Acceptance

At this time, the Project Manager should schedule a meeting to discuss and gain agreement to secure Project Planning resources. Meeting attendees should always include the Project Sponsor and the members of Performing Organization Management whose resources will be affected. Attendees may also include members of other agencies who are able to provide resources that will add value during Project Planning. During the meeting, resources are formally secured by gaining the signatures of the appropriate Performing Organization managers

on the Project Deliverable Approval Form. (See Figure 2-13 for an example of a Project Deliverable Approval Form.)

In addition to reviewing the Business Case, all other deliverables produced during Project Initiation should be reviewed by the Project Manager to ensure that Customer and Project Sponsor approvals have been received. Once the review has been completed, the Project Manager should organize the refined Business Case and all other deliverables into a cohesive package and prepare a formal approval form.

2.5.3 Gain Approval Signature from Project Sponsor

The Project Manager must review the revised Business Case and the Initial Project Plan with the Project Sponsor. Based upon changes to the Business Case and policies within the Performing Organization, the Project Sponsor must decide if a project re-approval cycle is warranted. If project re-approval is necessary, the Project Manager should ensure the appropriate Project Origination processes are followed.

At this point in time, the Project Sponsor may decide to terminate the project. This "go/no-go" decision may be based upon factors outside the control of the Project Manager (i.e., the organization may have new priorities that are in direct conflict with the project or increased risk may have been introduced to the project.) Realistically, termination of a project could happen at any point during the life of a project and is something a Project Manager should always keep in mind.

At the end of this task, the Project Manager must present the deliverable acceptance package to the Project Sponsor or an authorized designee and obtain his/her signature on the Project Deliverable Approval Form, indicating approval to proceed to Project Planning. If the Project Sponsor does not approve the contents of the acceptance package, he/she should indicate the reason for rejecting it. It is then the responsibility of the Project Manager to resolve any issues regarding the deliverables and to present the updated package to the Project Sponsor again.

Deliverable

◆ Signed Project Deliverable Approval Form – a formal document indicating that the deliverable has been reviewed and accepted.

Figure 2-13 New York State Project Deliverable Approval Form

New York State

Project Deliverable Approval Form			
PROJECT IDENTIFICATION			
Project Name:	Date:		
Project Sponsor:	Project Manager:		
Enter the Project Name . Enter the current Date . Enter the name of the Project Sponso Enter the name of the assigned Projec			
DELIVERABLE INFORMATION Project Phase:	Date:		
	Author:		
	ng presented for approval and the Author's name. deliverables may be included for approval on a single		
	describe the Criteria that must be met in order for the e. The text from the Project Plan can be used.		

Figure 2-13 (Continued)

New York State Project Deliverable Approval Form
REVIEWER INFORMATION
Reviewer Name: Role: Deliverable Name: Reject: Recommended Action: Approve: Reviewer Comments:
Reviewer Signature: Date:
Provide the above information for each individual designated as a Reviewer for a deliverable. The Reviewer should include his/her recommendation for Approval or Rejection of the deliverable, any Comments , and the Date reviewed. If the recommended action is rejection of the deliverable, the reviewer must explain the reason. NOTE: If the deliverable being presented for approval is a project MANAGEMENT deliverable, the reviewer is most likely a member of Performing Organization Management who is agreeing to secure required resources for the next project management phase. If the deliverable being presented for approval is a PROJECT deliverable, the reviewer is most likely a subject matter expert who is providing subject expertise and recommending that the approver either approve or reject the deliverable. Duplicate the above if more than one reviewer is required. APPROVER INFORMATION
Approver Name: Role: Role:
Approver Comments:
Approver Signature: Date:
Provide the above information for each individual designated as an Approver for a deliverable. The Approver should check whether he/she is Approving or Rejecting the deliverable and include any Comments . If the approver is rejecting the deliverable, he/she must provide the reason. If the deliverable is being approved, the approver should sign the form and enter the Date approved.
Duplicate the above section if the signature of more than one Approver is required.

Figure 2-13 (Continued)

New York State Project Deliverable Approval Form PROJECT MANAGER INFORMATION Name (Print) Signature Date Once a deliverable has been approved, the Project Manager should indicate his/her agreement by providing a Signature and Date.

Project Initiation End-of-Phase Checklist

How To Use

Use this checklist throughout Project Initiation to help ensure that all requirements of the phase are met. As each item is completed, indicate its completion date. Use the Comments column to add information that may be helpful to you as you proceed through the project. If you elect NOT to complete an item on the checklist, indicate the reason and describe how the objectives of that item are otherwise being met.

Figure 2-14

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Prepare for the Project:	57			
Identify and assign the Project Manager	57			
Identify and appoint the Project Sponsor	57			
Identify Project Team Members	57			
Identify Customer Representatives	58			
Review historical information	58			
Document how issues were resolved and decisions made	59			
Review Project Charter template	60			
Work with Project Sponsor and Project Team to gain consensus on project expectations	60			
Write the Project Charter document	60			
Schedule time and location of Kickoff meeting	60			
Invite appropriate attendees	64			
Prepare meeting presentation and agenda	64			
Designate meeting scribe	64			
Prepare materials for distribution at meeting	64			

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Conduct Kick-off meeting	64			
Distribute notes to all attendees	64			
Establish the project repository	67			
Update the repository with all project correspondence	67			
Define CSSQ:	69			
Write the Project Scope Statement	70			
Create preliminary list of roles and skills required	76			
Complete the Project Schedule Worksheet	76			
Create High-Level Schedule	79			
Identify organization's existing quality standards, if any	79			
Identify and document quality standards for each deliverable	79			
Develop staff and materials acquisition plans	85			
Estimate costs of all resources	86			
Calculate the preliminary project budget estimate	86			
Perform Risk Identification:	90			
Solicit input on risk identification from Project Team, Project Sponsor, and Customer Representatives	90			
Analyze scope, charter, historical information	91			
List all risks identified	91			
Develop Initial Project Plan:	92			
Identify Internal and External Stakeholders	92			
Outline Stakeholders' roles and responsibilities	92			

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Understand Stakeholder communication requirements	93			
Write Communications Plan	94			
Compile all documentation and deliverables from Project Initiation	102			
Produce Initial Project Plan	103			
Confirm Approval to Proceed to Next Phase:	108			
Review and refine the initial Business Case	108			
Review all other deliverables from Project Initiation	108			
Obtain buy-in from other managers	108			
Organize deliverables into package	109			
Prepare formal approval form	109			
Present approval package to Project Sponsor for signature	109			
Resolve any issues	109			
Update package as needed to resubmit to Project Sponsor	109			
Get Approval Signature	109			

Measurements of Success

The main measurement of success for Project Initiation is the decision to proceed with – or to halt – the project. While in the majority of cases, a well-executed Project Initiation leads to a transition to Project Planning, in some cases the organization is best served by deciding that the project should not continue.

Before the final sign-off, however, the Project Manager can assess how successfully the project is proceeding through its processes by utilizing the measurement criteria outlined below. More than one "No" answer indicates a serious risk to the continued success of your project.

Figure 2-15

Process	Measurements of Success	Yes	No
Prepare for the Project	Do you have a committed, interested and influential Project Sponsor attached to the project?		
	Did you verify that your Project Charter reflects the vision of the areas of the Performing Organization affected by/involved in the project?		
	Did you identify specific benefits the product or service developed by your project will bring to the Customer?		
	Do you have a clear structure for the project repository?		
Define CSSQ	Has your Scope Statement been reviewed and accepted by Customer Representatives who will benefit from your project?		
	In your High-Level Project Schedule, do you know if the effort allocated to various project phases correlate to industry-accepted norms?		
	Has your Quality Management Plan been approved by the member of your organization responsible for quality assurance?		
	Did you review the impact your project costs will have on upcoming fiscal year budgets with the Finance office?		
	Have your staff and materials acquisition plans been reviewed with the Performing Organization who will be paying for the staff and products being acquired?		
Perform Risk Identification	Has the Project Sponsor reviewed your list of risks?		
Develop the Initial Project Plan	Are your Internal and External Stakeholders satisfied with the frequency and content of communications you are providing (consistent with your Communications Plan) as evidenced by a lack of complaints?		
	Have you proactively sought to gauge Stakeholders' satisfaction level?		
Confirm Approval to Proceed to Next Phase	Do you have an approval form signed by your Project Sponsor authorizing you to proceed to Project Planning, or halting the project?		
	Have you provided sufficient information in your Initial Project Plan to allow the Project Sponsor to take the necessary action?		

Phase Risks / Ways to Avoid Pitfalls

Project Initiation lays the foundation for the rest of the project management lifecycle. In the same way that a faulty foundation will result in an unstable and eventually unusable building, an incomplete or improperly executed Initiation will result in a flawed project.

What are some of the key elements of Project Initiation that require the most attention? The following table identifies processes and tasks that are highlighted in this section.

Figure 2-16

Process	Task	Why is it important?
Prepare for the Project	Identify Project Sponsor	A project without a Project Sponsor is like a ship without a rudder – no matter how sleek the hull or how tall the masts, it just can't get anywhere useful.
	Conduct Kick-off Meeting	To continue with a ship metaphor, it's important to get everybody on board before setting sail!
Define CSSQ	Develop High-Level Schedule	Can't sail the seven seas without a map!
Perform Risk Identification	Identify and Document Risks	Identifying and documenting risks is like putting up lighthouses. Fewer wrecks.
Develop Initial Project Plan	Develop Communications Plan	Frequent and comprehensive communications is one of the key project success factors.
Confirm Approval to Proceed to Next Phase	Gain Approval Signature	Just how far out on the plank are you willing to walk? Thought so.

PITFALL #1 - NO SPONSOR, NO CHAMPION



In Prepare for the Project, the first imperative is securing a Project Sponsor. Without the Project Sponsor to guide and support the project, the Project Manager has an impossible choice of either trying to take on the responsibilities of a Project Sponsor – for which he has no authority, or trying to secure the commitment of unwilling or uninterested executives – over whom he has little influence.

Having one Project Sponsor who is high enough in the organization to be of help, and interested enough in the outcome to be involved, is ideal. However, in many cases, the organization insists on two people – usually managers from two main business functions involved in the project – serving as joint Project Sponsors. This situation is not a disaster – unless the managers are severely at odds with each other, especially about what the project ought to accomplish. In most cases, the Project Manager can sit down with the Project Sponsor(s) (as early as possible), and hammer out a common vision of what the project is supposed to do. Some of the useful questions to ask to gain consensus are:

- What are we trying to accomplish? What is the desired outcome?
- Who will benefit, and in what ways?
- Why is the project important to YOU?
- How is it going to change the way people do their work?
- How will the organization adjust?

However, when the number of Project Sponsors exceeds two, trouble may be afoot. There will be so many more delays getting everyone to the same place, or chasing everyone down, so many more difficulties achieving a consensus, so many more corrections to deliverables, so many more minds to convince, so many more personalities to please. You'd better add lots of time to your schedule for securing necessary approvals!

The effort you will expend in securing an interested, influential Project Sponsor now will pay dividends throughout the duration of the project. In some organizations, often those with a defined project selection method, projects may only be requested by someone willing to be the Project Sponsor.

PITFALL #2 – INEFFECTIVE KICK-OFF MEETING



The importance of selecting an effective Project Team and writing a comprehensive Project Charter is self evident and well understood. However, the other key, but frequently overlooked or lightly regarded task in Prepare for the Project is the kick-off meeting. When conducted, the kick-off meeting is often wasted in a pro-forma, listless exercise of bringing unwilling participants together and stultifying them with boring recitations of project objectives, replete with industry buzzwords and technical jargon. Instead, you should look at the kick-off meeting as your opportunity to ignite interest in the project, secure enthusiastic participation in crucial activities later on, and set accurate expectations about what the project is – and is not – likely to accomplish.

How? First of all, the kick-off meeting should be a creative, participatory exercise, involving all attendees. Second, it should emphasize and focus on how the project and its eventual product will benefit each attendee. And third, it should be a showcase for the Performing Organization's commitment – and interest – in this project, and your team's enthusiasm for it.

To make it a creative, joint exercise, you may consider asking the attendees to share ideas on why the project is important and how it will benefit the organization as a whole. To involve self-interest, you may also want to ask participants to explain how the project will benefit each of them specifically, making their jobs better, easier or more fulfilling; and if they can't come up with anything, have the Project Sponsor make appropriate suggestions. To showcase executive commitment, develop a draft of "talking points" for the Project Sponsor to use in a statement at the beginning of the kick-off meeting, explaining why the organization is making a significant investment in this project, from both budgetary and human resource standpoints. Finally, this is a great opportunity to showcase yourself and your team, and demonstrate great enthusiasm for the project, which will be contagious and will set the tone for the activities to come.

PITFALL #3 – CHICKEN BEFORE EGG, SCHEDULE BEFORE TASKS



The task that gives Project Managers the most trouble is coming up with a Project Schedule before the project tasks are well defined and before many important project decisions are made. It is a lucky Project Manager who is not seized by "analysis paralysis" at this stage of the game. How can I commit myself to an estimate (and let's not kid ourselves – the estimate you do put down will become a commitment, which the Performing Organization will immediately embed in whatever budgetary or strategic plan they are developing) without knowing enough about the project? This paradox is easily resolved if you can estimate as you go along – one phase at a time. Unfortunately, that is a luxury afforded few, if any, Project Managers. The budgeting process demands answers well ahead of the game, and there is no avoiding it.

The one thing that can help at this stage is experience – either personal, or in the form of organizational historical data. If you have been involved in similar projects in the past, you develop a feel for how long things take, and what obstacles – other than product-related – must be overcome and accounted for in the schedule. However, if you are new to project management, to the Performing Organization, or to the technology, you need to fall back on organizational knowledge. If you are lucky, the organization captured lessons learned from prior projects, and you can find out how long similar efforts have taken. More likely, no such knowledge base exists other than in people's heads, and your Project Sponsor can perform an important service in helping identify and recruit Project Managers who may have been involved in similar efforts. Make sure those efforts were actually successful - after all, you do not want to make the same mistake twice. Ask to see their initial and final Project Schedules. If they don't have either one (or worse, both) move along – anecdotal evidence is of very limited use in real life.

Armed with all applicable knowledge, the moment finally comes to grab a mouse and start scheduling. Most of the time, the end date for the project will be pre-defined by some event outside your control – executive commitment, governmental mandate, or some physical constraint. In that case, "backing into" an estimate is eminently reasonable. Walk through the entire project lifecycle backwards, making informed "guesstimates" along the way, and see if you end up at the beginning with today's date.

c Keep in mind that most early estimates tend to be on the optimistic side, before reality sets in. Consider your first attempt optimistic. Now make a second, more pessimistic attempt, assuming Murphy's law. This will provide you with the worst-case scenario. The truth is probably somewhere in the middle.

In other cases, there is a budget limit that must be adhered to. Once again, you can back into your schedule by estimating how many weeks, months or years of effort by a reasonably-sized team the expected budget would support, and from there you can use the industry-standard percentages for product development lifecycles to approximate what your effort is going to be. Decide whether you will schedule according to effort, which is defined as the number of hours, days, or weeks per person, versus duration, which is defined as the number of work days or work weeks per task regardless of number of people. For a phase for which you have the most data (or experience), run a "reasonableness" check to see if the estimate makes sense. Finally, you may have a completely blank slate – freedom to commit necessary resources over a reasonable time frame to get the job done in quality fashion. And when you wake up from that pleasant dream, you will go back to the first two options.

But most of all, do not obsess over your preliminary schedule (that's why it's called "high-level"). <u>Document carefully all your estimating assumptions</u>, and run it by as many experienced and <u>knowledgeable people as you can – not the least, your Project Sponsor (that's also why it's called "high-level")</u>.

PITFALL #4 – PRETENDING NOTHING WILL GO WRONG



The one process that shockingly few organizations engage in despite the fact that it can provide the most "bang for the buck" is risk management, which consists of risk identification, assessment, and mitigation. Notice, there is nothing here that says "risk avoidance." You can't avoid risk – stuff will happen, and most of it will negatively impact your project, if you let it. What you can do is anticipate it, and be ready with a solution before the problem arrives. Once again, either your own experience, or organizational knowledge (captured as historical data in a repository, or as knowledge in people's heads) is the

key. What obstacles, problems and disasters did other projects run into before? How were they dealt with? What was the impact on the schedule?

Consider every aspect of your project. Ask yourself, what can possibly go wrong? What assumptions am I making that may not be accurate, or consistent? Then, for every risk factor that you identify, you need to determine how it can affect your project.

PITFALL #5 – NOT ENOUGH TALK



Another activity that costs very little, but can provide enormous benefits, is communication. In fact, one of the few success factors consistently cited by the majority of New York State agencies in analyzing successful projects was frequent and comprehensive communication. Communication keeps all the players in the loop, avoids unpleasant surprises, and builds confidence in project progress and success. Nobody ever complains that they are being told too much, but they usually resent being told too little.

Building an effective Communications Plan starts with accurately accounting for all the players. Don't forget the Project Team, the Project Sponsor(s), all of the Customers, and internal and external Stakeholders. Anyone who will be in any way affected by the product or service that your project will develop must be communicated to at some point, and most likely throughout, the project lifecycle. For every player involved, determine how frequently the communication should occur (hint: early and often) and what it should contain (hint: the more the merrier). Of course, make sure it's OK with your Project Sponsor(s), but if you run into opposition on that front, remind them that even the old Soviet Union did end up discovering glasnost (openness).

PITFALL #6 – IS THE PROJECT OFFICIAL?



Finally, you are all done with Initiation. Your schedule is a work of art. Your Project Charter inspires masses to commit great deeds. Your Project Plan is correct and complete. You think you are done? Not until you have a signature of someone that matters on a piece of paper that certifies that your opinion of your

work is justified, and that you have authorization to proceed to the next phase.

Remember that unless you are in the highly unusual situation of being your own boss, you do not have the authority to certify your own work, or the clout to commit resources to continue. And unless you want to go very far out on that proverbial limb, you need to have proof that someone with proper authority – most likely, your Project Sponsor – is on board with what you have done, and what you are about to do.

No matter how happy your Customers and your Project Sponsor may be with your approach and your schedule, no matter how enthusiastic your Project Team, or your whole department, is with your plans, the only cover that you will have when things go terribly wrong (which, of course, if you've done everything correctly – including getting the approval form – will not happen) is that signature on that piece of paper. So please, do yourself a favor, and get that bulletproof vest before venturing into the shooting gallery known as The Rest of the Project.

PITFALL #7 – WE DON'T REALLY NEED TO FOLLOW ALL THESE STEPS, DO WE?



Skipping tasks and their documentation in Project Initiation can cause serious consequences affecting all of the subsequent phases of your project. Project Management (as well as just basic Management) methodologies were developed not because people had nothing better to do with their time, but in response to crises and disasters that resulted precisely from seat-of-the-pants approaches. (See PITFALL #5 in Project Planning.)



Frequently Asked Questions

What if no one will agree to be the Project Sponsor?

Although no one may have assumed the official role of Project Sponsor, someone secured the funding for this project, and someone appointed you to manage it. Talk to that person, explain the role of the Project Sponsor, and notify him that you will consider him your Project Sponsor unless someone else is identified to fill that position. (See Pitfall #1, No sponsor, no champion.)

What happens later on if my time/money estimates are off by 50 to 100 percent?

Accurate estimating takes a lot of effort, knowledge, available historical data, and a bit of luck. Chances are, your estimates are going to be off; the only questions are, by how much, and what will you do about it.

Your lack of accuracy could be due to one or both of the following: (1) you did a lousy job estimating (usually due to lack of historical comparative data) and/or (2) things changed. In the first case, take responsibility for your mistake, use it as a "learning opportunity," and make sure everyone realizes what you are doing. In the second case, make sure everyone's aware of the changes as soon as they occur, and use the change control umbrella to cover you. Remember - management hates "surprises." It is better (for your career, at least!) to be off by a lot if everyone knows about it well ahead, than to be off by a little – and have it be a total surprise to the decision-makers. In both cases, it behooves you to document your estimating process and assumptions, and reforecast on a regular basis. If an underestimate becomes apparent, identify root causes, define corrective actions and alternatives, and work back with the Project Sponsor to head off any significant degradation of Project Schedule.

And finally, if your project is in real trouble, it may be time to initiate Project Triage. (See Section II:1, Project Triage.)

How do I justify the initiation time to the Project Sponsor or Customer who just wants it done?

It's called "Customer education." Encourage your Project Sponsor and your key Customers to read (or at least peruse) this *Guidebook*. Explain to them the benefit they will derive from proper planning. Illustrate your arguments by pointing to other projects (hopefully, disastrous) and explaining why they failed (hopefully, due to lack of planning). Seek persuasive allies among their colleagues. And finally, use it as a continuous improvement opportunity: explain what has to be accomplished, and ask for a creative way of getting the same result using some other means. Who knows, they may actually come up with a process improvement that you can use as a best practice later on. (See Pitfall #7 for more details.)

What can you do if the Performing Organization doesn't recognize the importance of project management or feels that they can do it better?

This is a kind of variation on the theme of the previous question. You can either try to persuade the folks that it's the right thing to do, or lead by example and just do it the right way. It is unlikely that everyone doesn't understand project management; seek out people with similar ideas, and have them bolster your arguments. Seek assistance from OFT PMO with justifications and examples of successful projects done right. Brandish this *Guidebook* and follow the practices it advocates.

Is the Project Manager expected to perform all of the tasks required of the role? Can some tasks be delegated in whole or in part?

Great question! Management means "getting work done through others." Delegation is one of its principal tenets. Depending on the size of the project, the Project Manager may be physically unable to perform some of the duties outlined in this book. For example, take new team member orientation. Ideally, the Project Manager would spend a chunk of time with every team member, inculcating proper disciplines and techniques. However, what if the Project Team comprises hundreds of members? Project Team Leaders must be identified to take on those responsibilities. But remember, it is still the Project Manager's responsibility to verify that delegated tasks are being executed correctly.

The most succinct way to answer this question is this: the Project Manager must do whatever it takes to have every task

done right, on time, and within budget. Whether you accomplish this by sitting on the beach and firing off occasional e-mails (improbable), or by spending all your waking moments in the office (undesirable), you are still doing a fine job.

What do you do if the Project Sponsor doesn't fulfill his/ her role to the level of satisfaction expected by the Project Manager?

The first thing to remember is it doesn't pay to fight your Project Sponsor. The Project Sponsor is your principal ally and benefactor. Reason, persuasion and education are the way to go.

First, make sure your Project Sponsor knows that you are both trying to accomplish the same goal: to solve a business issue with the product of the project. Second, make sure the Project Sponsor understands – and agrees with – the approach the project is taking. Finally, once you have established commonality of interests, you can gently educate your Project Sponsor on the responsibilities of the position, and if his understanding differs, try to come to terms to which you both agree. Always argue from the benefit standpoint, explaining how a particular action on her part will benefit the project – and eventually the Project Sponsor.

Purpose

The purpose of Project Planning is to define the exact parameters of a project and ensure that all the pre-requisites for Project Execution and Control are in place.

Project Planning builds upon the work performed during Project Initiation. The project definition and scope are validated with appropriate Stakeholders, starting with the Project Sponsor and Customer Decision-Makers. Project Scope, Schedule and Budget are refined and confirmed, and risk assessment activities advance to the mitigation stage. The Initiation deliverables – CSSQ, and Initial Project Plan – are further developed, enhanced, and refined, until they form a definitive plan for the rest of the project.

Additional Project Team members are brought on board and familiarized with the project objectives and environment, and additional resources are ready to be brought in following the finalized staff and material acquisition plans.

Project Planning is an opportunity to identify and resolve any remaining issues and answer outstanding questions that may undermine the goals of the project or threaten its success. It is an opportunity to plan and prepare, as opposed to react and catch up.

Project sponsorship and commitment are re-confirmed at the end of the phase, with approval signifying authorization to proceed and commit funds for Project Execution and Control.

List of Processes

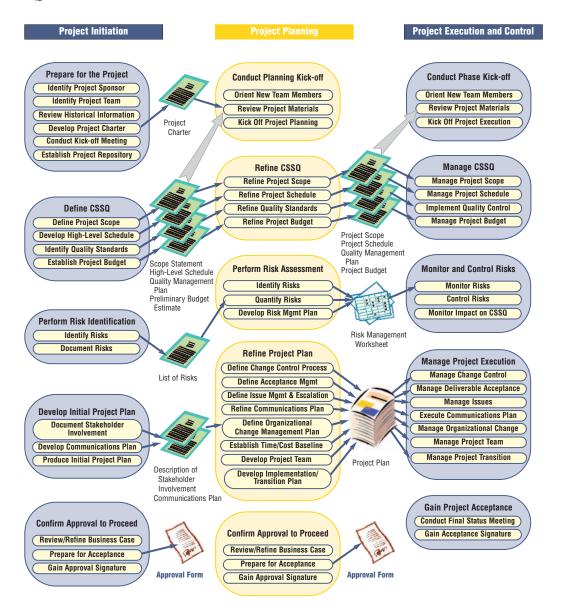
This phase consists of the following processes:

Conduct Project Planning Kick-off, where the Project Manager conducts a meeting to formally begin the Project Planning phase, orient new Project Team members, and review the documentation and current status of the project.

- ◆ Refine CSSQ, where the Project Team refines the cost, scope, schedule and quality components of the project to more accurately reflect the additional information is learned about the project.
- ◆ Perform Risk Assessment, where the Project Team and Project Manager review the list of risks identified in Project Initiation, identify new risks, evaluate each risk based on the likelihood of its occurrence and magnitude of its impact, and develop a plan to respond to each risk.
- ◆ Refine Project Plan, where additional management procedures and plans are developed and all updated documents created during Project Planning are compiled into the Project Plan to be utilized in Project Execution and Control.
- Confirm Approval to Proceed to Next Phase, where the Project Manager reviews and refines the Business Case, secures resources required for the Project Execution and Control phase and prepares the formal acceptance package for review and approval by the Project Sponsor.

The following chart illustrates all of the processes, tasks, and deliverables of this phase in the context of the project management lifecycle.

Figure 3-1



List of Roles

The following roles are involved in carrying out the processes of this phase. The detailed descriptions of these roles can be found in the Section I Introduction.

- Project Manager
- Project Sponsor
- Project Team Member
- Customer
- Customer Decision-Maker
- Customer Representative
- Performing Organization Management
- Stakeholders

List of Deliverables

Project deliverables in this phase fall into three categories of importance and formality:

- Phase deliverables major deliverables signed by the Project Sponsor or a designated alternate that allow the project to gain approval to proceed to the next phase.
- ◆ Process deliverables drafts of major deliverables or minor deliverables that may or may not require a formal sign-off but nevertheless must be reviewed by Project Team members, Customer Decision-Makers, and the Project Sponsor. The review validates the project's progress, and allows the Project Manager to move on to the next process in confidence.
- ◆ Task deliverables drafts of process deliverables or works-in-progress that are verified within the Project Team, and may or may not be reviewed by the Project Sponsor or Customer Decision-Makers. Each task culminates with the production of one or more tangible deliverables, which allows the Project Manager to monitor project progress using concrete and real results.

The following table lists all Project Planning tasks and their deliverables or outcomes. Starting with CSSQ, all task deliverables are eventually included as part of the Project Plan and the final acceptance package for this phase. Depending on available resources, some of these processes can be performed in parallel. The initial Project Schedule produced in Project Initiation will include the detailed schedule for the processes and tasks in Project Planning.

Figure 3-2

Processes	Tasks	Task Deliverables (Outcomes)
Conduct Project	Orient New Project Team Members	Team Members Oriented
Planning Kick-off	Review Outputs of Project Initiation and Current Project Status	Project Outputs Reviewed
	Kick Off Project Planning	Kick-off Meeting Agenda Kick-off Meeting Notes
Refine CSSQ	Refine Project Scope	Project Scope Statement
	Refine Project Schedule	Project Schedule
	Refine/Define Quality Standards and Quality Assurance Activities	Quality Management Plan
	Refine Project Budget	Project Budget Refined Staff/Materials Acquisition Strategy
Perform Risk Assessment	Identify New Risks, Update Existing Risks	Risk Management Worksheet
	Quantify Risks	Risk Management Worksheet
	Develop Risk Management Plan	Risk Management Worksheet
Refine Project Plan	Define Change Control Process	Change Control Process
	Define Acceptance Management Process	Acceptance Management Process
	Define Issue Management and Escalation Process	Issue Management and Escalation Process
	Refine Communications Plan	Communications Plan
	Define Organizational Change Management Plan	Organizational Change Management Plan
	Establish Time and Cost Baseline	Time and Cost Baseline
	Develop Project Team	Project Team Training Plan
	Develop Project Implementation and Transition Plan	Project Implementation and Transition Plan
Confirm Approval	Review/Refine Business Case	Refined Business Case
to Proceed to Next Phase	Prepare Formal Acceptance Package	Approval Form
NCAL I HUSC	Gain Approval Signature from Project Sponsor	Signed Approval Form

3.1 CONDUCT PROJECT PLANNING KICK-OFF

Purpose

Conduct Project Planning Kick-off formally marks the beginning of Project Planning and facilitates the transition from Project Initiation. It ensures that the project remains on track and focused on the original business need. New Project Team

members are thoroughly prepared to begin work, the current project status is reviewed, and all prior deliverables are re-examined. All deliverables produced during Project Initiation are used in Project Planning.

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Stakeholders

Tasks

3.1.1 Orient New Project Team Members

The goal of orientation is to enhance the ability of new team members to contribute quickly and positively to the project's desired outcome. If individuals have recently joined the team, it is imperative they have adequate workspace, equipment, security access, and supplies necessary to perform their required tasks. The Project Manager (or Team Leader, if appro-

The tasks in Conduct Project Planning Kick-off are:

- 3.1.1 Orient New Project Team Members
- 3.1.2 Review Outputs of Project Initiation and Current Project Status
- 3.1.3 Kick Off Project Planning

priate) must convey to each new team member, in a one-on-one conversation, what his/her role and responsibilities are related to the project. In order to streamline interaction among the team, new team members must also become familiar with the roles and responsibilities of all other Project Team members and Stakeholders as soon as possible, and immediately receive copies of all project materials, including any deliverables produced so far. It is usually the Project Manager's responsibility to get new members of the team up to speed as quickly as

possible. On large projects, however, if the team is structured with Team Leaders reporting to the Project Manager, it may be more appropriate to assign a Team Leader to "mentor" the new individual.

Information that would be useful to new team members includes:

- All relevant project information from Project Origination and Initiation
- Organization charts for the Project Team and Performing Organization
- Information on project roles and responsibilities
- General information about the Customer and Performing Organization
- Logistics (parking policy, work hours, building/office security requirements, user id and password, dress code, location of rest rooms, supplies, photocopier, printer, fax, refreshments, etc.)
- Project procedures (team member expectations, how and when to report project time and status, sick time and vacation policy)

Orientation sessions can be held for new members to ensure that they read and understand the information presented to them.

Some Project Managers make use of orientation checklists to ensure that nothing is forgotten during orientation sessions. It's a good idea to retain a package containing a checklist, an orientation meeting agenda, project materials and logistical information. Then, when a new member joins the Project Team, you can just copy its contents. Remember to keep the contents of the package current.

3.1.2 Review Outputs of Project Initiation and Current Project Status

Before formally beginning Project Planning, the Project Charter and all components of the Initial Project Plan should be reviewed. This is a checkpoint process – to recap what has been produced so far and analyze what will most likely be refined as Project Planning takes place. It is especially useful for any new members joining the team during this phase. The review of materials may spark innovative ideas from new team members since they bring different and varied experiences to the project.

3.1.3 Kick Off Project Planning

As was the case for Project Initiation, a meeting is conducted to kick off Project Planning. At this meeting the Project Manager presents the main components of the Initial Project Plan for review. Suggested items on the agenda (see Figure 3-3, Project Planning Kick-off Meeting Agenda) to highlight during the Project Planning kick-off include:

- Introduction of new team members
- Roles and responsibilities of each team member
- Restating project background and objective(s)
- Most recent Project Schedule and timeline
- Identified risks
- Communications plan
- Current project status, including open issues and action items

The goal of the kick-off meeting is to verify that all parties involved have consistent levels of understanding and acceptance of the work performed to date and to validate and clarify expectations of each team member in producing Project Planning deliverables. Attendees at the Planning Kick-off Meeting should include the Project Manager, Project Team, Project Sponsor, and any other Stakeholders with a vested interest in the status of the project.

As in Project Initiation, the Project Sponsor should reinforce his/her support for the project and the value it will provide to the organization. The Project Manager should also be sure one of the Project Team members in attendance is designated as the scribe for the session, to capture pertinent project decisions, issues, and action items. Following the session, the information captured should be compiled into meeting notes to be distributed to all attendees for review and approval. Meeting materials should be added to the project repository.

Figure 3-3 Project Planning Kick-off Meeting Agenda

Project Planning	Project:	Project:			
Kick-off Meeting	Date:				
•	Date: To: To:				
Agenda	Location:				
	200a.ioiii <u></u>				
Invitees: List the names of individua	als invited to the meeting	g			
Invitees should include the Project Mad Customers with a vested interest in the		ect Sponsor, and any			
Attendees: During the meeting, not left early, indicating they missed som departure time.					
AGENDA					
Use the following suggested times as g vary depending upon the needs of the		ed to cover agenda topics will			
	Presenter Name	TIME (MINUTES)			
Introductions	Project Manager	5 min.			
Performing Organization and their area the project efforts. The material to be presented by the fol- Project Charter.					
Sponsor's Statement	Project Sponsor	5 min.			
After brief introductions, the Project Spartate support, and advocate for its suc					
Project Request & Background	Project Manager	5 min.			
Project Goals & Objectives	Project Manager	10 min.			
Project Scope	Project Manager	10 min.			
Roles & Responsibilities	Project Manager	10 min.			
When reviewing roles and responsibilities be explicit about expectations relative to stakeholder availability and Project Sponsor commitment and support for the project.					
Next Steps	Project Manager	5 min.			
Questions	Project Manager	10 min.			
ADDITIONAL INFORMATION:					
Handouts:					
Provide a list of the material to be distri	ibuted to the attendees.				

Figure 3-3 (Continued)

Project Planning		Project:	
Kick-off Meeting		Date: Time: From:	To:
	ı	Location:	
ing important project-specific inf potential issues that could impa- and Project Team should review members to identify any addition	ormation that ot the project these points nal actions re	ers in attendance is scribing for the trequires further review or discust. At the end of the meeting, the F as well as any other notes captured. The notes will be compiled and retained in the project repos	esion as well as Project Manager ured by other team and into meeting
DECISIONS			
Decision Made		Impact	Action Required?
SSUES			
Issue Description			Action Required?
Document any project issues ide up actions. If so, these should be	e captured be	ts impact. Also indicate if the issuelow.	le requires follow
Action		Responsible	Target Date
Capture any follow up activities	and the indiv	idual responsible for them as wel	ll as set a date as

to when the action needs/should be completed.

At the end of the meeting, the scribe should recap the action items. These should also be included in the meeting minutes to be distributed.

REFINE CSSQ

CSSQ is the acronym for a project's quadruple constraints: Cost, Scope, Schedule, and Quality. During Project Initiation, the Project Team created the initial CSSQ, a set of formal documents defining the project and how its desired outcome(s) will

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer
- Customer Representative

be reached. During Project Planning, each section of the CSSQ will be refined as more information becomes known about the project. The CSSQ is not static – some of the components will continue to change throughout the life of the project.

It should be noted that refining CSSQ occurs in parallel with other project-specific tasks. Project Execution and Control tasks are not put on hold while the Project Team waits for the plan to be

finalized. In fact, the execution of project-specific tasks usually provides additional information necessary to further elaborate the planning efforts.

The purpose of **Refine CSSQ** is to use additional knowledge about the product of the project and the approach to be taken to:

- Improve the definition of Project Scope.
- Refine the Project Schedule by more accurately defining and sequencing project activities, estimating their durations, determining the dependencies among them, and assigning resources to them. The schedule will need to be adjusted according to the approach that will be used to produce the product and the availability of resources.
- Improve the understanding and definition of the processes and standards that will be used to measure quality during Project Execution and Control.
- Refine the appropriate approaches for staff and material acquisition defined during Project Initiation, implement the plans, and more accurately define the budget required to produce the desired outcome of the project. The project budget will be affected based upon the approach that will be used to produce the product and the availability of resources.

When refining CSSQ, the Project Manager should create a revised version of each document while maintaining the integrity of the original documents. This will provide an audit trail as to how CSSQ has evolved throughout the project lifecycle.

Tasks

3.2.1 Refine Project Scope

It is important to remember that refinements to the Project Scope must include discussions and interviews with the

The tasks for Refine CSSQ are:

- 3.2.1 Refine Project Scope
- 3.2.2 Refine Project Schedule
- 3.2.3 Refine/Define Quality Standards and Quality Assurance Activities
- 3.2.4 Refine Project Budget

Customer and other appropriate Stakeholders. The scope document, therefore, will reflect a mutual agreement between all parties, which is more likely to ensure that buy-in is achieved.

A clearly defined Project Scope is critical to the success of a project. Without a clear definition, work already performed may be subject to rework, resulting in lower team productivity. During Project Initiation, a scope statement was written to document a basic description of

the project and its deliverables. (See Figure 2-6, New York State Project Scope Statement.) Refining the Project Scope breaks deliverables into smaller pieces of work, allowing the scope and the existing Project Budget, Schedule, and quality measurements to be more accurately defined. Where the initial Project Scope statement highlighted the deliverables to be produced in support of the desired project outcome, the revised Project Scope must go one step further. Using the information learned during Project Initiation, and based upon input gained by communicating regularly with the Customer and other appropriate Stakeholders, the Project Team must refine the Scope statement to clearly define each deliverable – including an exact definition of what will be produced and what will not be produced.

Break each deliverable described in the Project Scope statement down into smaller, more manageable components. Repeat this until the components are small enough to be defined in the greatest possible detail. Questions to ask to determine if each deliverable has been broken down sufficiently are:

- Am I able to clearly define the component?
- Am I able to clearly state what will be done to complete the work and what will NOT be done?
- Am I able to estimate the time needed to complete the component? Am I able to assign an individual who will be responsible for completing the work?
- Am I able to assign a dollar value to the cost of completing the work?

If the answer to any of these questions is "No," that particular component needs to be further broken down. This "decomposition" exercise assists project staff to better understand and properly document the Project Scope. It also provides information needed for Project Schedule and budget revision.

The nature of the specific line of business associated with the product of each project will drive how the Project Scope is refined. For example, for building construction projects, architectural drawings will be completed; for application software projects, detailed requirements definition and design will be completed. (See Section III, SDLC.)

Anything that impacts the team's ability to perform the work required by the project may be important to consider when refining the Project Scope. For example, impacts may occur due to a Legislative decision. Both formal deliverables and less formal documents created during the Project Initiation, such as status reports, memos, and meeting minutes will be of assistance to the Project Team in revising the scope definition.

Changes to a Project Scope document must be made using a defined change control process. This process should include a description of the means by which scope will be managed and how changes to scope will be handled. Once documented, the process becomes part of the Project Plan. It is vital to document a clear description of how to determine when there is a change in scope to facilitate change control during Project Execution and Control. Documenting how to determine what constitutes change is a difficult process, but one that is critical to the change control management process. Additionally, while updating the Project Scope, the Project Manager and Customer must consider the effect the updates may have on the organi-

zation, anticipate impacts, and communicate them proactively to the user community. As in Project Initiation, selling the positive aspects of the project, the benefits of its product, and the value of changes to the scope during the entire duration of the project will facilitate acceptance down the road. (See 3.4.1 Define Change Control Process).

Once again, communication between the Project Manager and the Customer is crucial in creating a scope document that clearly reflects what the Customer needs and ensuring a mutual agreement between all parties. If the Project Scope is not accurately described and agreed upon, conflict and rework is almost certain to occur.

3.2.2 Refine Project Schedule

Using the Project Scope revised in the previous task, the Work Breakdown Structure created during Project Initiation must be revised. Deliverables illustrated in the Work Breakdown Structure should be broken into smaller components, until each component is defined to the level of detail currently understood, or is small enough to allow the Project Manager to accurately estimate the time and cost required for its completion (using the Project Schedule Worksheet). Using information from the Project Schedule Worksheet as input, the Project Manager should update the Project Schedule to more accurately define required activities, dependencies, levels of effort, and deliverable due dates.

You probably will not have sufficient information to break each and every component down into excruciating detail, especially if your project spans a long period of time. How can you predict the amount of work required to produce a deliverable that is scheduled to begin two years from now? You can, however, provide an estimate for the entire project at a high level, and should be able to provide accurate detail for the level of work required for the next 3 to 6 months. Describe the entire project to the level of detail you currently understand. Remember, as the project progresses, you will gain the information you need to break components down and provide estimates for the NEXT 3 to 6 months!

A good rule of thumb to follow is the "eighty-hour rule": if the task requires more than two weeks duration to complete, it should be broken down further. This provides a solid basis for estimating level of effort, task planning, assignment of work, and measurement of performance in Project Execution and Control. Use of the "eighty-hour rule" not only greatly facilitates scheduling, but also lays a foundation for accurate tracking of actuals; reporting on progress is reduced to an objective, binary mode: each task (and its deliverable) is either done or not done.

On smaller projects a Project Manager works directly with Project Team members to obtain individual input on effort estimates. On larger projects with multiple components, the Project Manager most likely relies on the input of Team Leaders or individuals who are expert in the specific subject areas. In either case, the Project Manager should gain input from individuals who will actually perform the work or who have performed similar work in the past. This will not only make the effort estimates more accurate, but will help generate excitement and buy-in from the Project Team, as they will feel more a part of the process.

Estimating the time to complete an activity is directly influenced by the capabilities of the individual assigned to perform it. The skill level of each person on the team should, therefore, be considered when doing effort estimates. A good practice is to base estimates on an assumed level of skill. This will allow the Project Manager to adjust his/her estimates up or down when the actual team is in place and the exact skill levels are known. It is imperative that all assumptions used in estimates are documented.

An experienced Project Manager also takes into account absenteeism, meetings, discussions, and staff interaction. A successful schedule builds in reality factors. Specific team members may have ongoing responsibilities occupying a portion of their time, and this must be factored into the schedule. Once effort estimates have been determined for each activity, the Project Schedule must be revised to reflect them. Any revisions or refinements that were made to the Project Scope will directly affect the Project Schedule and must be reviewed and incorporated into the schedule as needed.

Dependencies among tasks can be defined now, or adjusted as necessary. The Project Manager must recognize:

mandatory dependencies – those dependencies that are inherent to the type of work being done. They cannot and will not change, no matter how many individuals are working on a task or how many hours are allocated to a task (e.g., the frame of a building cannot be built until the foundation is in place). The Project Manager must recognize mandatory dependencies since they will dictate the way certain pieces of the schedule will need to be structured.

- **discretionary dependencies** those dependencies that are defined by the Project Team or Customer that force the Project Manager to schedule tasks in a certain way. For example, the Project Team may be required to use an inhouse "best practice" to complete an activity that forces other activities to be completed in a specific sequence.
- **external dependencies** outside the realm of the project or outside the control of the Project Manager or Customer, these dependencies may direct how portions of the project schedule must be defined. For example, a project activity may be dependent upon an outside vendor delivering a piece of equipment. This is something neither the Project Team nor the Customer can control, but it must be defined and considered when revising the schedule.

Project Schedule revision must also take into account:

Calendars – the hours and days when project work is allowed, including seasonal restrictions, holidays, labor contract restrictions, vacation or training schedules.

Constraints – completion dates for project deliverables mandated by the Project Sponsor, Customer, or other external factors, which will most often be known early in the project. Additionally, there may be financial, legal, or Legislative-driven constraints that help dictate a project's timeline.

Once the schedule has been revised to include tasks, effort estimates, resources, and dependencies, the Project Manager should study the schedule to determine its critical path. The critical path is the sequence of tasks in the schedule that takes the longest amount of time to complete. If any task on the critical path is delayed, the entire project will be delayed.

A Project Manager can determine the critical path in a Project Schedule by looking at all tasks that run in parallel and computing the total amount of estimated time to complete them. The path that takes the most time to complete is the critical path. Tasks on the critical path that are completed late will delay the project, unless the Project Manager takes proactive steps to finish subsequent critical tasks ahead of schedule. Because of the important relationship between critical tasks and the project end date, the Project Manager must always be cognizant of the critical path and understand how it is affected when changes are made to the Project Schedule.

Work with an experienced Project Manager, if you can, to learn tips and techniques for breaking work down, estimating time required to complete certain pieces of work, and refining the Project Schedule. Someone familiar with the process and the scheduling tools can save a more inexperienced Project Manager a lot of time and frustration!

If experienced Project Managers are not available, consider getting effort estimates from multiple sources, comparing results and estimating the duration based on the multiple inputs. Involving the Project Team in the planning process will not only help ensure estimates reflect reality, but will also help gain team buy-in and acceptance.

And remember...always document any and all assumptions made when deriving estimates or updating the Project Schedule. This "audit trail" will prove invaluable if you need to retrace your steps down the road or must explain why schedule revisions are necessary!

3.2.3 Refine/Define Quality Standards and Quality Assurance Activities

The Project Manager and Customer must determine if changes have occurred to the Project Scope, Customer requirements, external standards or regulations, or any other aspect of the project that will affect the quality standards established for each deliverable during Project Initiation. If the standards are no longer valid, the quality policy must be changed appropriately to refine existing standards or define additional ones.

Also during Project Planning, the Project Manager communicates with the Customer to establish and document all quality activities to be implemented during the course of the project to ensure the defined quality standards will be met. This is called quality assurance. Sometimes quality assurance for specific types of deliverables is performed by a separate Quality Assurance Department. If an organization does not have the luxury of a Quality Assurance Department, the required activities will need to be performed by designated Project Team members or Customers. Examples of quality assurance activities include:

- Collecting project documentation
- Conducting audits
- Verifying business requirements
- Performing testing

A description of all quality activities to be implemented during the course of the project should be included in the Quality Management Plan. (See Figure 2-8, New York State Quality Management Plan.)

3.2.4 Refine Project Budget

Based on the information now known about the project as a result of Project Planning activities, the Project Manager recalculates the budget required to complete project activities and tasks. (See Figure 3-4, New York State Project Budget.) As in the previous phase of the project, all costs must be considered including the cost of human resources, equipment, travel, materials and supplies. In addition, the following project components must be taken into account:

- Project Schedule the schedule created during Project Initiation has been revised during Project Planning to include more detail and greater accuracy regarding project activities, tasks, and durations. This information will be used as direct input to the refined cost budget.
- Staff Acquisition the Project Manager must identify additional staffing requirements. Strategies defined in Project Initiation need to be changed accordingly. Note that if the reporting relationships among different organizations, technical disciplines, and/or individuals have changed in any way, the strategy used to acquire human resources may need to be changed. Also, if the skills required to staff the project are different from those known during Project Initiation, the means by which staff members are acquired could be different. The Project Manager must update the Project Schedule to include all tasks needed to acquire Project Team members. (See Section II:3, Procurement and Contractor Management, for more information.)
- Resource Requirements and Costs at this point in the project, a more detailed understanding of the resources required to perform the work and their associated costs is most likely known and can be used in refining the budget.
- Materials Acquisition the Project Manager must verify whether product requirements have changed since Project Initiation. If changes have occurred, the product acquisition strategies need to be changed accordingly. The Project Manager must update the Project Schedule to include all tasks needed to acquire equipment, materials, and other non-human resources. (See Section II:3, Procurement and Contractor Management, for more information.)

Preliminary Budget Estimate – also produced during Project Initiation, this spreadsheet should be the place to start to refine information pertaining to the budget. The Project Manager should add to this spreadsheet the more detailed cost estimates for the project defined in the Project Schedule, and revise the hours and cost columns based upon the revised Project Schedule, resource rates and requirements, and cost estimates. The Project Manager can use cost estimating checklists to ensure all preliminary budgeting information is known and all bases are covered.

It is also recommended that you take the time to document a preliminary disbursement schedule. This will help you and the Project Sponsor understand how the total budget will be expended over the course of the project.

Figure 3-4 New York State Project Budget

New York State Project Budget								
PROJECT IDENTIFICATION								
Project Name:	Date:							
Project Sponsor:	Project Manager:							
Enter the Project Name . Enter the current Date . Enter the name of the Project Sponsor . Enter the name of the assigned Project Man	ager.							

Figure 3-4 (Continued)

New York State Project Budget

BUDGET INFORMATION

Phase/Process/Task	Labor Cost	Material Cost	Travel Cost	Other Cost	Total Cost per Activity	Planned Date of Expenditure
TOTAL Budget						

The Phase, Process, and Task Names come from the High-Level Schedule.

The Labor Cost is the cost of human resources required.

The Material Cost is the cost for equipment and supplies.

The **Travel Cost** is any predicted cost that will be incurred if travel is required.

Enter any costs outside person, material, and travel costs under Other Costs.

Total the costs for each activity and enter the total under **Total Cost**. Then enter the **Planned Date** the expenditure will be made.

Calculate the total of all rows in the table and enter the values in the TOTAL Budget row at the bottom of the worksheet.

COMMENTS: (List any assumptions pertaining to the costs entered above.)

Consult with past managers of similar projects to gain their perspectives on the actual time/costs to produce their projects' outcomes. Solicit input from past Project Team members to gain insight into the actual effort required to perform similar project tasks.

Again, for historical purposes, and to enable the budget to be further refined during Project Execution and Control, the Project Manager should maintain notes on how the budget was revised.

Deliverables

- ◆ Project Scope the document that describes in detail the project boundaries, including defining the deliverables: how they will be produced, who will produce them during the course of the project, and the means by which changes to the deliverables will be identified and managed.
- ◆ Project Schedule a revised, definitive representation of activities, durations, dependencies and resources to the level understood at this point in the project lifecycle. The schedule has multiple uses. It is both a task list for further planning, if necessary, and a structure for reporting status during Project Execution and Control. As individual tasks are completed, project progress can be assessed. It also serves as a useful management communication tool by which results can be compared with expectations. Because it is critical to the success of the project going forward, the schedule must be reviewed and accepted by both the Customer and the Project Team during Project Planning.
- Refined Quality Management Plan the quality standards defined during Project Initiation and refined during Project Planning become part of the Quality Management Plan. The Quality Management Plan will be expanded during Project Execution and Control and is included as part of the Project Plan.
- Project Budget a revised, more accurate estimate of the dollars required to complete the project. It includes the cost of all required human resources, equipment, travel, and supplies, and the anticipated timing of expenditures.

3.3

PERFORM RISK ASSESSMENT

Purpose

Risks require continual review and assessment throughout the project management lifecycle. The goals of **Risk Assessment**

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer Representatives

are to predict the likelihood that a risk will occur, to quantify its potential impact on the project, and to develop plans for risk management. Risks documented during Project Initiation should be reassessed during Project Planning.

Next, an approach for risk management is developed. Actions can be taken to avoid, mitigate or accept each risk, depending upon the probability of

its occurrence and the magnitude of its impact on the project. If a risk event can be anticipated, there should be sufficient opportunity to weigh consequences and develop actions to minimize its negative impacts or maximize its positive ones.

The list of risks created during Project Initiation is entered into a Risk Management Worksheet (see Figure 3-5, New York State Project Risk Management Worksheet) and supplemented by any additional risks identified in Project Planning. Within the worksheet, information is added to describe the risk probability, impact, and the timeframe in which the impact may occur. Based on these factors, the priority level of the risk event can be derived. Last, and most important, risk management plans must specify the individuals responsible for the mitigation actions, the timing of the actions to be implemented, and the expected results of the actions.

In addition to quantifying risk probability and impact and formulating risk responses, the risk assessment process facilitates establishment of an agreement for the Project Team, Project Sponsor and Customer Representatives to collaborate in managing risks as they arise during the project.

Figure 3-5 New York State Project Risk Management Worksheet

Figure 3-5 (Continued)

There are two templates available to assist you in managing project risks. The first, which is in the Appendices of the Guidebook, is a Word document that will walk you through the risk management process. The second template is an automated tool that can be found on OFT's

You can also use this tool in hardcopy form, without making use of the automated Order or Print functions. You can download the Microsoft Excel tool from the OFT web site (see The following instructions apply to the Risk Management Worksheet Microsoft Excel tool. Guidebook templates at www.oft.state.ny.us).

- 1) Select the appropriate Project Duration using the Project Duration drop down box at the top of the page.
- 2) The Baseline As-of-Date field defaults to today's date. Change this date if you wish.
- 3) Transfer the current list of risks (identified and documented in Project Initiation and augmented as needed) to the Risk column
- Determine the Risk Probability on a five-point scale (Very Low Low Medium High Very High), and record it in the Risk Probability column. Be sure to enter either the WORDS Very Low, Low, Medium, High or Very High, or the corresponding abbreviations VL, L, M, H or VH. Do NOT enter numbers in the Risk Probability column. 4
- Identify the Impact that each risk event may have on the project, and record a textual description in the Impact Description column 2
- Impact column. Again, be sure to enter either the WORDS Very Low, Low, Medium, High or Very High, or the corresponding abbrevia-Determine the impact magnitude on a five-point scale (Very Low - Low - Medium - High - Very High), and record it in the Level of tions VL, L, M, H or VH. Do NOT enter numbers in the Impact column (9
- Ascertain the date of impact and record it in the Date of Impact column, in the format MM/DD/YY. This is the date on the Project Schedule when you expect a risk event to start affecting CSSQ. It is not the date of the event itself.
- 8) Click on the Order button to order risks according to Priority Level calculated by the tool

Tasks

3.3.1 Identify New Risks, Update Existing Risks

The Project Manager must review the list of risks initially identified for the project to determine if all risks remain applicable.

The tasks for Performing Risk Assessment during Project Planning are:

- 3.3.1 Identify New Risks, Update Existing Risks
- 3.3.2 Quantify Risks
- 3.3.3 Develop Risk Management Plan

As a result of Project Initiation and Planning, the Project Manager and team members should be considerably more knowledgeable about the project and, therefore, better able to recognize and predict risk events.

Through other activities taking place in Project Planning specific to Cost, Scope, Schedule and Quality (CSSQ), additional risk variables may be introduced to the project. Further refinement of the Project Scope may uncover areas of

concern that were previously unknown. A more detailed schedule may introduce a new level of complexity and interdependencies to the project, possibly producing more risk. More accurately defined staffing requirements may call for resources with unique skills whose availability may be diminishing. These are only a few examples of how risks in a project evolve over time, with the focus shifting from one risk source to another.

The Project Manager verifies the updated list of risks with the Project Team and Project Sponsor. As in Project Initiation, the Project Manager must consider both internal and external risks, internal risks being those events the Project Manager can directly control (e.g., staffing), and external risks, those that happen outside the direct influence of the manager (e.g., legislative action).

Once again, data and experiences from previous projects may provide excellent insight into potential risk areas and ways to avoid or mitigate them. If the organization has a list of common project risks, it can be useful to ensure that the Project Manager has considered all potential risk elements in the current list. The Project Manager should update the organization's list as necessary based on the results of the current project.

Solicit input from experienced Project Team members and/or the Project Sponsor to uncover potential areas of risk and to help you identify what types of risks the Project Sponsor views as relevant. Jointly identifying and updating the risk variables for a project results in the sharing of risk awareness by all parties involved.

3.3.2 Quantify Risks

The Project Manager and Project Team members evaluate each risk in terms of the likelihood of its occurrence and the magnitude of its impact. Both criteria should be quantified using a five-point scale: very high, high, medium, low and very low. These measurements are used as input into the Risk Management Worksheet for further analysis when determining how the risk threatens the project.

There are many tools available to quantify risks. The Risk Management Worksheet presented here has been selected for its simplicity and ease of use. More sophisticated tools may be necessary for large-scale high-risk projects.

A factor to be considered when quantifying risks is stakeholder risk tolerance, the threshold to which the Performing Organization will assume risk, which is dependent on its attitude toward and motivation for the project. For example, an agency may view a 15% chance of a project overrun as acceptable since the cost benefit for the organization to do the project far outweighs this factor. The Project Manager's understanding of the organization's strategic direction and the motivation of both the Project Sponsor and the Customer will help determine the level of risk tolerance for the project.

3.3.3 Develop Risk Management Plan

The Project Manager evaluates the results of the previous task to determine an appropriate response for each risk: avoidance, mitigation or acceptance. Each case will require a decision by the Project Team. The Project Manager is then responsible for communicating the steps necessary to manage the risk and following up with team members to ensure those steps are taken.



Identifying the risk is good; but planning a wise course of action around it is infinitely better.

Be aware that by addressing one risk, you may be introducing another. For example: you identified a risk that your cost estimates may be off by as much as 15%. Your mitigation plan is to request a 20% increase in funds to cover the increased cost. You may have introduced a new risk, because a red flag may be raised, inviting an audit.

Since each risk may have more than one impact, the Risk Management Plan must describe the actions to be taken to avoid, mitigate or accept each risk impact, including contingency plans. It should also specify the individuals responsible for the mitigation actions or contingency plan execution. Attention should be directed to those risks most likely to occur, with the greatest impact on the outcome of the project. On the other hand, a conscious decision can also be made by the Project Team to accept or ignore certain risks. These decisions must be documented as part of the Risk Management Plan for subsequent re-evaluations.

Some commonly employed risk mitigation strategies may include:

Procurement – some risks can be mitigated through procurement. For example, if the project requires staff with particular skills it may be advisable to retain resources through an outside organization. Unfortunately, this may introduce other risk factors such as the resource's unfamiliarity with the agency.

Resource Management – it may be beneficial to leverage a lead resource that has already worked on a project with similar characteristics by assigning that resource as a mentor to more junior team members. This will mitigate delays in the schedule due to the learning curve of more junior resources.

Use of Best Practices/Lessons Learned – some organizations already have repositories of project specific or business function best practices, which may help you to prepare for unanticipated risks. Taking advantage of other project best practices, whether they are process or tool based, will help to mitigate risk. Implementing processes that have worked successfully on other projects will save time.

The frequency with which the Risk Management Plan will be monitored, reviewed and maintained, and the method of communicating progress of risk mitigation actions, must be incorporated in the Project Schedule and Project Plan. The Risk Management Worksheet should be reviewed at every status meeting, and updated with each change to the project.

At the end of this task, the Risk Management Worksheet should be complete.

When updating the Risk Management Worksheet, maintain the original. Each revision should be kept to provide an audit trail demonstrating how the risks evolved throughout the project management lifecycle.

Deliverable

◆ Risk Management Worksheet – An updated record of risk variables, impact, probability, date of impact, level of priority and risk response actions. The review and update cycle for risk assessment should be built into the Project Plan and Schedule.

3.4 REFINE PROJECT PLAN

Purpose

Refining the Project Plan includes development of all

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer Decision-Maker

required management processes and plans for team development and project execution and implementation. All updated work products and deliverables produced during Project Planning are compiled and included in the Project Plan.

Tasks

3.4.1 Define Change Control Process

Every aspect of the project defined during Project Initiation and Planning has the potential to change. In fact, change should be

The tasks for Refine Project Plan are:

- 3.4.1 Define Change Control Process
- 3.4.2 Define Acceptance

 Management Process
- 3.4.3 Define Issue Management and Escalation Process
- 3.4.4 Refine Communications Plan
- 3.4.5 Define Organizational Change Management Plan
- 3.4.6 Establish Time and Cost Baseline
- 3.4.7 Develop Project Team
- 3.4.8 Develop Project Implementation and Transition Plan

expected to occur throughout every project phase; but if an effective change control process is defined and agreed upon during Project Planning, any change should be able to be handled without negative effect on the project outcome.

Project change is not defined simply as a change to the cost, end date, or Project Scope. Change should be defined as ANY adjustment to ANY aspect of the Project Plan or to ANY already approved deliverable(s). This includes anything formally documented in the Project Charter, Project Plan, or any deliverable produced during the course of the project.

The Project Manager and Customer Decision-Maker must agree on the change control process, which then must be formalized, docu-

mented, and included as a section in the Project Plan. Items that must be defined are:

Identification of the individual(s) authorized to request a change.

- Identification of the person responsible for analyzing the request to understand its impact on the Project Cost, Scope, Schedule, and Quality, as well as the Customer Representative who has authority to approve the request. The Project Manager should never give the Project Team the go-ahead to begin work until a change request form has been signed by the Customer Decision-Maker. (See Figure 3-6, New York State Project Change Request.) It should be noted that the impact to the Project Schedule must take into account time spent to analyze the change request.
- The timeframe (number of business days) allowed for a change request to be approved or rejected by the Customer. It is important to document the fact that approval or rejection by default is not permitted, so acceptance or rejection cannot be assumed if there is no response to a submitted change request.
- The process to follow if no timely decision on approval or rejection of a change request is made. The Project Manager should follow up with the person to whom it was submitted to determine why the change request has not been processed. If its identification as a change is disputed, the situation should become an open issue in the Project Manager's status report. The Project Manager should attempt to negotiate a compromise, but, if there is no resolution, executive intervention may be required.
- The percentage of the overall Project Budget that has been reserved for project changes. It is important to predetermine a change budget to prevent project work from being interrupted while funds are secured to do the work.

Should you advise your Project Sponsor to set up a change budget – set aside a pot of money (10 to 20% of the project total) for unforeseen eventualities? Let's see. Does your Project Sponsor enjoy "going to the well" time and time again to ask for additional funds? Do you enjoy writing justifications and groveling repeatedly? Enough said.

Figure 3-6 New York State Project Change Request

New York State

Project Change Request	
PROJECT IDENTIFICATION	
Project Name:	
Project Manager:	
Enter the Project Name . Identify the assigned Project Manager .	
CHANGE REQUEST INFORMATION	
Request Date:	
Requested By: Agency:	
Description of Change:	
Scope Impact:	
Schedule Impact:	
Quality Immedia	
Quality Impact:	
Cost Impact:	
Oost Impaoti	

Figure 3-6 (Continued)

New York State Project Change Request

This form is likely to pass through several hands. The person who is requesting the change will initiate the form, entering the **Change Request Date** and his or her **Name** and **Agency**. This person should then include a detailed description of the change being requested in the **Description** area. (If more space is required for a thorough justification, attach additional documentation to this form.)

The designated **Reviewer** (usually a subject matter expert) should then analyze the request being made, and communicate to the Project Manager the estimated impact to the project. The Project Manager will include this information on this form, along with his/her estimate of the cost and schedule impact. When completed, this form should describe the impact to the quadruple constraints, CSSQ.

Once the impact has been documented, this form is presented to the appropriate approvers.

REVIEWER INFORMAT	ION		
Reviewer Name:			Role:
Recommended Action:	Approve:	Reject:	
Reviewer Comments:			
Date:			
			a Reviewer for the change

the request, any comments, and the date reviewed. If the Recommended Action is to reject

the change request, the reviewer must explain the reason.

Figure 3-6 (Continued)

New York State Project Change Request APPROVER INFORMATION Approver Name: ______ Role: _____ Action: Approve: Reject: Approver Comments: Approver Signature: Date: _____ Provide the above information for each individual designated as an **Approver** for a change request. The **Approver** should check whether he/she is **Approving** or **Rejecting** the request and include any Comments. If the approver is rejecting the change request, he/she must provide the reason. If the request is being approved, the approver should sign the form and enter the date approved. PROJECT MANAGER INFORMATION Name (Print) Signature Date Once a change request has been approved, the Project Manager should indicate his/her agreement by providing a Signature and Date.

3.4.2 Define Acceptance Management Process

A detailed definition of each deliverable that will be produced during the course of the project is included in the Project Scope. A deliverable is considered complete when it has been accepted by the Customer. The Project Plan must be revised to include a definition of the acceptance management process to be used for the project.

It is recommended that "acceptance" be defined as an authorized Customer Decision-Maker's written approval signifying that a deliverable meets expectations. It should be clearly stated that verbal acceptance or acceptance by default is not sufficient. To expedite the acceptance process, it is recommended that one individual per deliverable be given final decision-making authority. This person will be responsible for obtaining feedback from and representing the Customer.

In order for a deliverable to be considered "complete" and "acceptable," it must be measured against pre-determined acceptance criteria. The Project Manager and Customer must agree on the required criteria and the criteria must be documented and included in the Project Plan.

To ensure timely acceptance of deliverables, the Project Manager and Customer Decision-Makers should agree on the format, content and appearance of deliverables before they are produced. This information should be documented and included in the Project Plan. This helps to prepare the Customer to receive deliverables, and to avoid situations where deliverables are rejected because they do not meet Customer expectations. It is also important for the Project Manager to solicit feedback on deliverables throughout their development. Interim reviews of deliverables will streamline final acceptance.

In addition to acceptance criteria, the Project Manager and Customer Decision-Maker must agree on, formalize, and document the deliverable acceptance process. Items that must be defined are:

The number and identity of Customer Representatives who may be required to review deliverables before final approval from the designated individual(s) is sought. A reviewer is usually an expert who is very knowledgeable about the details of the subject matter in the deliverable. In many organizations a Customer Decision-Maker with approval authority will not sign an approval form until a deliverable is thoroughly reviewed by an expert.



Don't be afraid to list the names of several reviewers, as different experts may need to be consulted depending upon the contents of the deliverable being produced.

- The number of business days in which deliverables must be either approved or rejected by the Customer. When establishing an agreement regarding the acceptable number of business days for deliverable review, the Project Manager must consider that the process is iterative and may take more time than initially thought. The amount of time for deliverable acceptance must be included in the Project Schedule, and should be sufficient to include the following activities:
 - ▲ Presentation of the deliverable by the Project Manager to the appropriate Customer Representative.
 - ▲ Independent review of the deliverable by subject matter expert(s). The more experts, the more time it will take.
 - ▲ Independent review of the deliverable by Customer Representatives. Again, the more decision-makers, the more time it will take.
 - △ Group review sessions, if required.
 - A Rework of portions of the deliverable, if required.
 - A Resubmission of the deliverable.
 - Re-review by the subject matter expert and Customer Representatives.
 - △ Pursuit of approval signature by the Project Manager.
- The number of times a deliverable can be resubmitted to the Customer for approval. It is very important for the Customer to include reason(s) when rejecting the deliverable so the Project Team can address them when resubmitting. If the number of iterations exceeds the number defined in the deliverable acceptance process, further work on the deliverable will require a change request. If the number of iterations becomes unreasonable, the Project Manager should recognize that a bigger problem most likely exists. Setting the maximum number of deliverable revisions and iterations will avoid the situation where a deliverable is "never quite done." Whatever the number of iterations that is agreed upon, the Project Manager must build time to accommodate them into the Project Schedule.

The escalation process that will be followed if a timely decision on approval or rejection of a deliverable is not met. Will the situation simply become an open issue in the Project Manager's status report? Will executive intervention be required? Or will it be a combination of both?

Maintain an "Acceptance Log" in your Project Status Report to track the status of a deliverable as it goes through iterations of the acceptance process. (See the Project Status Report, Figure 2-10.)

3.4.3 Define Issue Management and Escalation Process

Issue management involves capturing, reporting, escalating, tracking, and resolving problems that occur as a project progresses. A process must be in place to manage issues, since they can potentially result in the need for change control and can become major problems if not addressed. The following items must be agreed upon between the Project Manager and Project Sponsor and must be documented and included as a section of the Project Plan:

- How issues will be captured and tracked many Project Managers make use of some type of repository to ensure that issues are not lost. This repository may be either electronic or manual, depending upon the needs and size of the project. At a minimum, an issue repository must contain a description of the issue, its potential impact, the date it is recorded, its anticipated closure date, its priority, and the name of the person responsible for resolving it or getting it resolved. The due date for closure must be a specific date (i.e., the date cannot be "ASAP"). The responsible party must be a specific individual, not a functional group (i.e., an issue should not be assigned to the "IT Department"). As progress occurs on the resolution of an issue, the Project Manager should update the issue repository to reflect what has occurred. An issue log (whether electronic or paper-based) should be updated regularly, possibly as often as daily depending upon the needs of the project and issue resolution progress. (See Figure 2-10, Project Status Report.)
- How issues will be prioritized the characteristics about the issue that will determine whether its resolution will be

- a high, medium or low priority. Impact to the schedule, level of effort, or cost are usually the factors that determine the priority.
- How and when issues will be escalated for resolution whether they will be escalated if they are not resolved in a given period of time or when a delivery date is missed or only when the Project Budget is severely affected. Whatever the decision, details of the escalation process need to be clearly stated. It is also vital to document to whom issues will be escalated.

3.4.4 Refine Communications Plan

A preliminary Communications Plan was developed for inclusion in the Initial Project Plan during Project Initiation, and describes how communications will occur. (See Figure 2-11, New York State Project Communications Plan.) As a project progresses, certain events may occur that alter the way information is accessed or change communication requirements. For example, a department may move to a new building, allowing Project Team Members access to email for the first time. Or a change in personnel may dictate a change in the frequency of communications. During Project Planning and subsequent phases. the Project Manager should review Communications Plan with the Project Team to be sure it is still viable. If it is determined that any portion of the plan is no longer applicable, the Project Manager must develop appropriate revisions to the plan.

Also, at this point in the project, sufficient information is most likely known to allow the Project Manager to describe in further detail what the distribution structure will look like. Part of the Communications Plan describes how communications will be managed. Depending on the project, communications management may be very informal or highly sophisticated. When deciding how to manage communications on a project, a Project Manager solicits information from the Project Team and Stakeholders and together they decide:

- How project information will be collected and stored, and what procedures will be followed to disseminate the information. If an electronic filing structure will be used, someone must be responsible for its setup and maintenance. Information access should be defined.
- The distribution structure, specifically detailing what, how, and when information will flow to Stakeholders. For

Internal Stakeholders, communication channels currently established in the organization should be used. For External Stakeholders, different channels may be required for each discrete Stakeholder group. The team must decide when it should occur, what information should be communicated, and how it should be delivered. The distribution structure for External Stakeholders must take into account how the particular Stakeholder group will be affected by this project. New York State projects also have to be concerned with the Freedom of Information Law (FOIL) and the potential impact of the release of project information.

The method by which information will be accessed if it is needed between regularly scheduled communications.



Sometimes communications break down. To try to avoid these disconnects, you should:

- Be as concise and clear as possible in both written and verbal messages.
- Solicit feedback to determine if your messages have been received by the appropriate parties and interpreted correctly.

When there are problems, try to learn from them so that you can do better in the future. (See Communication. Section II:2.1.)

Information requiring communication comes from different sources. Sometimes it is already documented in hard copy or electronic form, but sometimes it is conveyed during formal meetings, informal gatherings, or simple conversations. The Project Manager must be aware that this information exists and be prepared to convey it using the communications management system. Some sources of project information that may require communication include:

- Status Meetings
- Status Reports
- Memos
- Newsletters
- Executive Correspondence
- Meeting Notes
- **Executive Meetings**
- Steering Committee Meetings

c Conducting a status meeting regularly with your Customer is a great habit to adopt. If you plan to discuss a certain subject area during the meeting, don't be afraid to invite members of the Project Team with expertise in that area. It's also not a bad idea to invite other Stakeholders who have something constructive to contribute. Use the status report to drive the meeting discussion points. (See Figure 2-10, Project Status Report.) Remember, there can never be TOO MUCH communication!

3.4.5 Define Organizational Change Management Plan

When planning the project, the Project Manager and Customer must consider the impact the resulting product will have on the Performing Organization. The organization must be prepared to accept and use the product once it is implemented.

The Project Manager needs to define and document a plan to manage the changes to the organization that could occur as a result of implementing the product. This Organizational Change Management Plan becomes part of the Project Plan. Organizational change management must be explicitly planned if it is to be effective. (See Figure 3-7, Organizational Change Management Plan template.)

Items to include as part of an Organizational Change Management Plan are:

- **People:** The plan must consider how the individuals using the product will be affected by its implementation. The organization may initiate reductions or expansions in the workforce, and shift rote clerical activities to automated processing; decision-making power may be distributed further down the chain of command, or even regionally. If specific job duties are being added or removed, staff reductions or increases are anticipated, or the organizational structure itself will change, the plan must identify the steps to be taken. For example, the human resources manager in the Performing Organization must be involved in planning for and performing many of these change management tasks. Labor/management committees, union representatives, the external agencies involved, such as Civil Service and the Governor's Office of Employee Relations, may all need to be included in planning for such changes, depending on the scope of the changes.
- Process: The plan must consider how the product of the project will affect already existing business processes in the Performing Organization. Business processes may take advantage of streamlined workflows to reduce the flow of

paper, or technology advances may enable electronic communications to more quickly deliver information. Procedures will need to be redesigned to align with the change. The new procedures may effect changes in the way the Performing Organization develops, documents, and trains staff, and must be addressed in the Organizational Change Management Plan.

"culture: The plan must consider how severe the project's "culture shock" will be. The Project Manager must determine how much the project will affect the Performing Organization's business strategy, established norms for performance, leadership approach, management style, approach to Customers, use of power, approach to decision making, and the role of the employee. Plans might include performing an assessment of the Performing Organization's "readiness for change," and include development of action plans to increase the organization's readiness and ability to adapt to change through education and training.

In cases where implementing a project will result in a significant change to the way an organization will conduct business, the Project Manager, Customer, and Project Sponsor must be able to anticipate when and how the major impacts will occur, and plan for the specific activities that will adequately prepare the Performing Organization. (See Leading the Change Management Effort, Section II:2.2 for additional information on change management.)

Figure 3-7 New York State Organizational Change Management Plan

Organization	New York State Organizational Change Management Plan
PROJECT IDENTIFICATION	
Project Name:	Date:
Project Sponsor:	Project Manager:
Enter the Project Name . Enter the current Date . Enter the name of the Project Sponsor . Enter the name of the assigned Project Manager .	

Figure 3-7 (Continued)

New York State Organizational Change Management Plan

PEOPLE CHANGE MANAGEMENT

Status					
Required Completion Date					
Individual/Group(s) Responsible for Implementation					
Individual/Group(s) Affected					
Organizational Change Activities					

and interaction with Civil Service and Unions; decreasing staff in a specific unit; preparing unit for reduction in workforce. Identify the Individual/Group(s) that will be affected by the activity and the Individual/Group(s) Responsible for Implementation of the activity. Describe any Organizational Change Management Activities specific to PEOPLE that must be completed in order to ensure that the organization is ready to accept and use the product once it has been implemented. Examples of PEOPLE activities include: developing a plan for timing Include the Required Completion Date.

When managing this Organizational Change Management Plan during Project Execution and Control, remember to update the status of each activity in the Status column.

Figure 3-7 (Continued)

New York State Organizational Change Management Plan

PROCESS CHANGE MANAGEMENT

Status					
Required Completion Date					
Individual/Group(s) Responsible for Implementation					
Individual/Group(s) Affected					
Organizational Change Activities					

Describe any Organizational Change Management Activities specific to PROCESS that must be completed in order to ensure that the organization is ready to accept and use the product once it is implemented. Examples of **PROCESS** activities include: rewriting process and procedures; conducting training. Identify the **Individual/Group(s)** that will be affected by the activity and the **Individual/Group(s)** Responsible for Implementation of the activity. Include the Required Completion Date.

When managing this Organizational Change Management Plan during Project Execution and Control, remember to update the status of each activity in the Status column.

Figure 3-7 (Continued)

New York State Organizational Change Management Plan

CULTURE CHANGE MANAGEMENT

Status					
Required Completion Date					
Individual/Group(s) Responsible for Implementation					
Individual/Group(s) Affected					
Organizational Change Activities					

Describe any Organizational Change Management Activities specific to CULTURE that must be completed in order to ensure that the organization is ready to accept and use the product once it is implemented. Examples of CULTURE activities/tasks may include: identifying individuals impacted by the project; prepare and educate individuals regarding the impact. Once you have documented the activities, identify the Individual/Group(s) that will be affected by the activity and the Individual/Group(s) Responsible for Implementation of the activity. Include the Required Completion Date.

When managing this Organizational Change Management Plan during Project Execution and Control, remember to update the status of each activity in the **Status** column.

3.4.6 Establish Time and Cost Baseline

A time and cost baseline is a project "snapshot in time," taken at the conclusion of Project Planning, against which performance on the project is measured. It is one way the Project Manager can determine if the project is on track. Using the electronic Project Schedule revised during Refine CSSQ, a baseline is captured. Once the baseline version is approved, the Project Manager should revise it only if a change control is approved that results in a change to the schedule. The time and cost baseline becomes part of the Project Plan. As the project progresses, subsequent schedules may be compared to the baseline version to track project performance.



If you revise the baseline as a result of change control, be sure to save the original baseline for historical purposes.

3.4.7 Develop Project Team

To effectively perform the activities required to produce project deliverables, Project Team members must have appropriate levels of skill and knowledge. It is the job of the Project Manager to evaluate the skills of team members and determine whether or not they meet the current and future needs of the project. It is important to remember that there are many kinds of skills. Some are technical and others are "soft skills," such as management, presentation, and negotiation skills. If it is determined that the team needs training, the Project Manager must include training in the Project Schedule and Project Budget. Some skills can be learned on the job, some can be learned through informal mentoring, some can be learned using computer-based courses, and others may require formal classroom training.

When the training needs and the method of training for each team member have been determined and documented, the Project Manager or Team Leader documents the Training Plan, including a training schedule. (See Figure 3-8, New York State Project Team Training Plan.) Subsequently the Project Schedule

must be updated to reflect all added training tasks: when and where training will take place and who will do it. The target date for completion of each team member's training program should be determined. As training takes place, the Project Manager should update the Training Plan with the names of the trainees and actual training completion dates. Not only will this help the Project Manager measure the success of the Training Plan, but it will also help him/her evaluate team members and prepare staff performance appraisals.

Figure 3-8 New York State Project Team Training Plan

	_	New Yo Project Team	New York State Project Team Training Plan			
PROJECT IDENTIFICATION						
Project Name:			Date:			1
Project Sponsor:			Project Manager: _			- 1
Enter the Project Name . Enter the current Date . Enter the name of the Project Sponsor . Enter the name of the assigned Project Manager .	oonsor. Project Manager.					
TRAINEE INFORMATION]
Name	Project Role	Agency	Phone	Email	Skills Required	
Enter the Name, Project Role, A	Agency, Phone Number, Email Address, and Skills Required for each member of the Project Team.	ber, Email Addres	s, and Skills Requir	ed for each member	of the Project Team.	

Figure 3-8 (Continued)

New York State

new York State Project Team Training Plan		Type of Description Planned Planned Actual Actual Actual Training Start Completion				
Project						
	RAINING PLAN	Name				

Certification

Document how each team member will gain the required skills entered above.

Enter the Name of the team member requiring training.

Enter the training Description (i.e., name of the class), Planned Start date and Planned Completion date information for each training event. Enter the **Type of Training**. Some examples of types of training are "On the Job", "Computer Based", and "Classroom".

As training occurs, maintain this training plan by entering Actual Start and Actual Completion dates for each training event. If completion of a Systems Engineer", enter it under Certification. This information will be useful to the manager doing team member performance evaluations. training event results in the team member gaining some sort of certification (e.g., "Project Management Professional", "Microsoft Certified

Be sure to record the time required to complete all training tasks in the Project Schedule.

3.4.8 Develop Project Implementation and Transition Plan

The Project Manager must formulate and document a plan for implementing or deploying the product of the project and for transitioning the responsibility for the outcome of the project from the Project Team to the Performing Organization. The Transition Plan must include all the necessary activities to perform and procedures to follow to ensure a smooth and satisfactory hand-off. (See Figure 3-9, New York State Project Implementation and Transition Plan.)

When planning the implementation and transition, the Project Team must consider the impact the resulting product will have on the Performing Organization and Consumers. The Consumers must be prepared to use the product and the Performing Organization must be prepared to support it.

The Project Manager needs to define and document a plan to implement the product, and should consider:

- What needs to be done to ensure the organization will be ready to receive the product. These steps may include acquiring the necessary physical space, installing appropriate software, obtaining the appropriate building permits, etc.
- How and when the Customer will test and accept the product and confirm and authorize its implementation.
- The steps to be taken to ensure Consumers will be ready to use the product once it is transitioned. These steps must be coordinated with the Organizational Change Management Plan, and will include training and orientation on the use of the product. They also may include plans for training Customers or Consumers as trainers for the future. The plan must define which of the Customer(s) require training, the level of training necessary, who will provide the training, and when it will occur.
- The appropriate strategy for implementing the product into the Performing Organization, given the specific Consumers and Customers. For example – phased by location, phased by specific product functionality, "big bang," etc.

The Project Manager should define and document a plan to transition the ongoing support of the product to the Performing Organization and should consider:

- The people from both the Project Team and the Performing Organization who need to be involved in the transition, and their associated roles and responsibilities. Examples include Customers, Consumers, and members of other specific support units within the Performing Organization.
- The steps that should be taken to ensure that the appropriate individuals are ready to support the product once it has been implemented and is in use. This may include negotiating with various internal organizations to determine the appropriate timing of the transition of responsibility, assigning specific organizations and individuals to support the specific products, and providing necessary training.
- The relationship between the implementation plan and the transition plan. The Project Team and the Performing Organization must agree on the point in implementation at which the Performing Organization takes responsibility for production problems, "help" or trouble calls, and for resolving the problems.
- The Performing Organization's expectations regarding any documentation that is required as part of transition.



Many otherwise successful projects fail due to a lack of transition planning. Don't let this happen to you!

Deliverable

◆ Project Plan – the revised Project Plan (see Figure 2-12, New York State Project Plan) is the main deliverable of the Project Planning Phase, incorporating the revised outputs of all other Project Planning components. The document should now be thorough and accurate enough to be used as the main guide to follow during Project Execution and Control. It is important to remember that the plan will continue to be revised throughout the course of the project.

At the end of Project Planning, the Project Plan should contain the following:

- 1. Project Charter
- 2. CSSQ (Cost, Scope, Schedule, Quality)
- 3. Risk Management Worksheet
- 4. Description of Stakeholder Involvement
- 5. Communications Plan
- **6.** Change Control Process
- 7. Acceptance Management Process
- 8. Issue Escalation and Management Process
- 9. Organizational Change Management Plan
- 10. Time and Cost Baseline
- 11. Project Team Training Plan
- 12. Project Implementation and Transition Plan

Figure 3-9 New York State Project Implementation and Transition Plan

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New York State Project Implementation and Transition Plan			.: ::			
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k Stai n and		Date:	Project Manager:			
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	PROJECT IDENTIFICATION			Enter the Project Name . Enter the current Date . Enter the name of the Project Sponsor . Enter the name of the assigned Project Manager .		
	IDEN	me:	Project Sponsor:	Enter the Project Nam Enter the current Date . Enter the name of the tenter the name of the tenter the name of the s		
	JECT	Project Name:	ect Spo	er the I er the c er the r		
	PRO	Proje	Proje	Ent Ent Ent Ent		

Figure 3-9 (Continued)

New York State Project Implementation and Transition Plan

PROJECT IMPLEMENTATION PLAN

	-		
Owner	Who is	Who is	Timing/
	Affected?	Involved?	Dependency

example of an implementation activity is producing a mailing for those affected by the new product, describing when and how the new product will Implementation Activity is a step or event that will take place to move the product from the Project Team to the Performing Organization. (An be introduced to them.)

Owner is the individual responsible for executing or verifying that the implementation activity takes place.

Who is Affected? identifies individuals, groups or organizations that are affected by the implementation activity (e.g., for a mailing, this may be the target audience.)

Who is Involved? identifies individuals, groups or organizations that need to be involved as part of executing the implementation activity (e.g., for a mailing, the print design or writing team.)

Timing/Dependency describes when the activity must be done, and any other activities that are dependent upon it (e.g. "the mailing must go out before the December 1 power outage.")

Figure 3-9 (Continued)

Project Implementation and Transition Plan **New York State**

PROJECT TRANSITION PLAN					
Transition Activity	Owner	Who is Affected?	Who is Involved?	Timing/ Dependency	

Transition Activity is a step or event that will take place to transition ongoing support of the product from the Project Team to the Performing Organization.

Owner is the individual responsible for executing the transition activity or verifying that it takes place.

Who is Affected? identifies individuals, groups or organizations that are affected by the transition activity.

Who is Involved? identifies individuals, groups or organizations that need to be involved as part of executing the transition activity. Timing/Dependency describes when the activity must be done, and any other activities that are dependent upon it.

3.5 CONFIRM APPROVAL TO PROCEED TO NEXT PHASE

Purpose

The purpose of **Confirm Approval to Proceed to Next Phase** is to formally acknowledge that planning activities have been completed and that all deliverables produced during Project Planning have been completed, reviewed, accepted, and

Roles

- Project Manager
- Project Sponsor
- Project Team Members
- Customer Decision-Maker

approved by the Project Sponsor. Formal acceptance and approval also signify that the project can continue into the next phase, Project Execution and Control.

The acceptance and approval process is ongoing. As changes are made during Project Planning, the Project Manager should be in constant communication with the Project Sponsor. Keeping the lines

of communication open will avoid a situation where a Project Sponsor is surprised by a deliverable or receives something he/she does not anticipate.

In addition, the Project Manager should review the interim deliverables or work products for each process with the appropriate Customer Decision-Maker upon their completion and gain approval before moving on to the next process. These interim acceptances should streamline the final acceptance process.

Tasks

3.5.1 Review/Refine Business Case

At the end of Project Planning, the Project Manager and Project Sponsor should review the Business Case that was developed during Project Origination and revised during Project Initiation.

Because more information is now known about the project, the Business Case may need to be refined. Any refinements should be made before proceeding to Project Execution and Control.

The tasks to Confirm Approval to Proceed to Next Phase are:

- 3.5.1 Review/Refine Business Case
- 3.5.2 Prepare Formal Acceptance Package
- 3.5.3 Gain Approval Signature from Project Sponsor

3.5.2 Prepare Formal Acceptance Package

At this time, the Project Manager should schedule a meeting to discuss and gain agreement to secure Project Execution and Control resources. Meeting attendees should always include the Project Sponsor and the members of Performing Organization Management whose resources will be affected. Attendees may also include members of other agencies who are able to provide resources that will add value during Project Execution and Control. During the meeting, resources are formally secured by gaining the signatures of the appropriate Performing Organization managers on the Project Deliverable Approval Form. (See Figure 2-13 for an example of a Project Deliverable Approval Form.)

In addition to reviewing the Business Case, all deliverables produced during Project Planning should first be reviewed by the Project Manager to verify that Customer Decision-Maker approval has been obtained; these are the Refined CSSQ, Risk Management Worksheet, and Refined Project Plan. If approval is not clear and explicit, the Project Manager must pursue it again. When the review has been completed, the Project Manager should organize the deliverables into a cohesive deliverable package and prepare a formal approval form.

3.5.3 Gain Approval Signature from Project Sponsor

Before gaining an approval signature, the Project Manager must review the revised Business Case with the Project Sponsor. Based upon changes to the Business Case and policies within the Performing Organization, the Project Sponsor must decide if a project re-approval cycle is warranted. If project re-approval is necessary, the Project Manager should ensure the appropriate Project Origination processes are followed.

At this point in time, the Project Sponsor may decide to terminate the project. This decision may be based upon factors outside the control of the Project Manager (i.e., the organization may have new priorities that are in direct conflict with the project or increased risk may have been introduced to the project.) Or it is possible that, having done more detailed planning, the costs of doing the work are greater than initially estimated and outweigh any project benefits. Realistically, termination of a project could happen at any point during the project. The

Project Manager must be comfortable and confident enough to approach the Project Sponsor at any time during the course of the project if he/she feels the project has reached a point where termination is the best possible solution.

At the end of this task, the Project Manager must present the acceptance package to the Project Sponsor and obtain his/her signature, indicating approval to proceed to Project Execution and Control. If the Project Sponsor does not approve the package, he/she should indicate the reason for rejection. The Project Manager is then responsible for resolving issues with the deliverables and presenting the updated package to the Project Sponsor.

Sometimes a Project Manager needs to gain approval of a large number of deliverables at the same time. The Project Plan is a good example, as it comprises several very important (and sometimes very complex) documents. Should the Project Sponsor become overwhelmed by the number or volume of documents requiring his/her attention, the Project Manager should take steps to work with the sponsor to streamline the Acceptance Management Process (See Section 3.4.2).

Deliverables

- Project Plan a compilation of refined CSSQ, Risk Management Worksheet, and the Refine Project Plan deliverables packaged into a comprehensive plan for the remainder of the project.
- ◆ Signed Project Deliverable Approval Form a formal document indicating that the deliverable has been reviewed and accepted.

Project Planning End-of-Phase Checklist

How To Use

Use this checklist throughout Project Planning to help ensure that all requirements of the phase are met. As each item is completed, indicate its completion date. Use the Comments column to add information that may be helpful to you as you proceed through the project. If you elect NOT to complete an item on the checklist, indicate the reason and describe how the objectives of that item are otherwise being met.

Figure 3-10

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Conduct Planning Phase Kick-off:	132			
Ensure team members have whatever is required to perform their tasks	132			
Meet with each team member to convey roles and responsibilities	132			
Mentor or assign Team Leader to mentor new team members	132			
Distribute copies of all project materials and deliverables to all team members	133			
Hold orientation sessions	133			
Review previous deliverables and components of Initial Project Plan	133			
Schedule time and location of kick-off meeting	134			
Prepare materials for distribution at meeting	134			
Invite appropriate attendees	134			
Prepare meeting presentation and agenda	134			
Designate meeting scribe	134			
Conduct kick-off meeting	134			
Distribute meeting notes to all attendees	134			

Item Description	Page	Completion	Comments	Reason for NOT
		Date		Completing
Update the project repository with all project correspondence	134			
Refine CSSQ	137			
Refine the Project Scope statement, breaking deliverables into smaller pieces of work	138			
Clearly define each deliverable	138			
Write description of scope change management	139			
Estimate effort and cost for each task and enter into schedule	140			
Define dependencies among tasks	141			
Review quality standards and revise as necessary	143			
Initiate/address procurement	144			
Recalculate budget	145			
Perform Risk Assessment	149			
Review identified risks with Project Team and Project Sponsor	149			
Create Risk Management Worksheet	149			
Assess each risk (low/med/high)	153			
Estimate timing of impact on project	153			
Determine mitigation actions	154			
Incorporate actions in Project Schedule and Project Plan	155			
Refine Project Plan	156			
Compile detailed descriptions of all work products and deliverables	156			
Define and document change control process	156			
Define and document acceptance management process	161			
Define and document issue management and escalation process	163			

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Refine Communications Plan	164			
Define and document Organizational Change Management Plan	166			
Capture baseline Project Schedule (effort and cost)	172			
Evaluate team member skills and identify training needs	172			
Establish Training Plan	172			
Define and document Implementation and Transition Plan	176			
Add above items to Project Plan	177			
Confirm Approval to Proceed to Next Phase	182			
Review Business Case and refine, if necessary	182			
Review all deliverables from Project Planning	183			
Organize deliverables into package	183			
Prepare formal approval form	183			
Present acceptance package to Project Sponsor for signature	183			
Resolve any issues	183			
Update package as needed to resubmit to Project Sponsor for signature	183			
Gain Approval to Proceed	183			

Measurements of Success

The ultimate measurement of success for Project Planning is the successful Project Execution that follows, or a decision to stop the project as, once again, the organization may be best served by deciding that the project should not continue.

Nevertheless, the Project Manager can still assess how successfully the project is proceeding by utilizing the measurement criteria outlined below as it proceeds through Planning. More than one "No" answer indicates a serious risk to the continued success of your project.

Figure 3-11

Process	Measurements of Success	Yes	No
Conduct Project Planning Kick-off	Do your team members have complementary skill sets, with no apparent gaps as per project approach?		
	If not, have you obtained authorization to provide them with necessary and timely training?		
Refine CSSQ	Is your Project Schedule defined according to the the 80-hour Rule?		
	Have the supervisors of all resources assigned to tasks on your project agreed to release those resources on the dates your project is expecting them?		
Perform Risk Assessment Does your Project Sponsor agree with your risk prioritization?			
	Do the other decision-makers agree with your risk mitigation actions?		
Refine Project Plan	Do your Customers and Stakeholders agree with your definition of what constitutes a change?		
	Have you verified that the folks responsible for signing off on change control items and deliverable approval forms actually have authority, and are willing, to approve the items of expected magnitude and type?		
	Do your Customers understand the pre-determined acceptance criteria for all deliverables?		
	Have the persons you identified as "arbiters" for issue escalation agreed to serve in that capacity? Have the expenditures associated with your team Training Plan been approved?		
	Is your Project Sponsor sure that your organization will be ready to implement the product or service that your project will develop?		
Confirm Approval to Proceed to Next Phase	Do you have an approval form signed by your Project Sponsor authorizing you to proceed to Project Execution and Control, or halting the project?		

Phase Risks / Ways to Avoid Pitfalls

Project Planning may afford the Project Manager the last opportunity to plan for the successes – and prepare for the disasters – that may follow. Once the Project Plan has been accepted (read: set in stone and put aside) the events will unfold in their own due course: following the plan (more or less), or arising spontaneously, haphazardly and perniciously to jeopardize it. Your mission for this phase, should you choose to accept it, is to position the project so as to enable the former and impede the latter, or your plan will self-destruct in no time flat.

What are some of the key elements of Project Planning that require the most attention? The following table identifies processes and tasks that are highlighted in this section.

Figure 3-12

Process	Task	Why is it important?
Conduct Project Planning Kick-off	Orient New Team Members	Choose your Impossible Mission Force wisely - they must be fully prepared and totally committed
Refine CSSQ	Refine Project Schedule	The more impossible the mission, the greater the need for precise planning
Perform Risk Assessment	Develop Risk Management Plan	It matters not what you know about the ambush, but what you will do to avoid, or overcome it
Refine Project Plan	Define Change Control Process	Who has the authority to change mission parameters? When and how?
	Define Issue Escalation and Management Process	What is your "exit strategy?"

PITFALL #1 - YOU HAVE THE WRONG TEAM



Note: certain aspects of this topic are also covered in Section II:2, Leadership.

Before you get to play the leader, you first need to form your team. As a Project Manager appointed to a project, you probably think that you have very little latitude in selecting your team. Most likely, you are right – but it never hurts to try! And considering that these are the people who will define your success (flashback: what is the definition of "management?" –

answer, getting work done through others) you should certainly make every effort to surround yourself with folks who not only have the right alphabet soup on their resumes, but also have the "right stuff" to form a high-performing team.

It is a hard, and maybe even a counter-intuitive lesson to learn, that the right combination of character and intelligence – or, in other terms, of attitude and ability to learn – is far more important than a particular type or even length of experience. Here are some pointers for selecting – and weeding out – team member candidates.

- 1. When selecting new team members, the first attribute to determine is aptitude. Whatever the technology or tools they will have to use, do they have a "knack," a natural inclination for it? Do they take to it, do they do it on their own time, do they innately like it? Have they chosen and succeeded at it in the past? No degree, no level of erudition or IQ, guarantees that a person has an aptitude for a given job. And if they don't beware. No matter how hard they work, or how much they study they will still not produce the same results as someone with an aptitude who seems to knock off tasks left and right with nary an effort.
- 2. The second desirable attribute is work ethic. Whatever your expectations are of the level of effort required on the project, you must be able to answer an emphatic "Yes!" to these two questions about each new team member: (1) in the normal course of events, will the person put in an honest day's work? and (2) when the circumstances require it, will the person do whatever it takes to get the job done? Both questions are equally important, and both demand an affirmative answer.
- 3. The third requisite attribute is versatility. Despite what you forecast on your schedule, and what you outline in roles and responsibilities, your team members will have to either substitute for one another, or perform some tasks you cannot currently anticipate. The team will need to be able to adapt to different circumstances and to learn new skills. Consequently, people who have a track record of performing well in disparate environments are certainly preferable over fragile personalities who are thrown off their pace for a week when a time sheet format changes, or who cannot function unless they have the right view out their window. Likewise, folks who have a track record of

learning new skills and techniques, especially on their own, are vastly preferable over the types who must attend weeklong vendor seminars (preferably in tropical locales) before they can be persuaded to learn anything new.

4. The fourth, and final, attribute to look for – and look out for! – is temperament. Or disposition, or attitude, or character – whatever you want to call it. It makes a difference between enjoying camaraderie and synergism of a close-knit team and dreading coming to work in the morning.

Another way to "stack your deck" is to make sure you have the right combination of "types" for your team. Every team can benefit from one or more of the following:

- An "Eager Beaver." This is a person who typically has little experience with whatever technology your project is employing, but more than makes up for it in sheer persistence. You need these folks to carry the load.
- A "Guru." This is someone who knows everything there is to know about the subject, and is willing to teach anyone everything he or she knows; hopefully, the subject is what your team will actually need the most of. You need these folks to provide expertise and to solve real problems.
- A "Mother Hen." Male or female, this is a person who will remember everyone's birthday, take up collections for baby showers, and organize extracurricular team activities. Hopefully, they will have time left to do some actual work. You need these folks to maintain morale, provide team cohesion and balance the professional with the personal.
- A "Gadfly." Only in the sense of "acting as a constructively provocative stimulus" (The American Heritage Dictionary of the English Language, Houghton Mifflin), this person is indispensable in providing creative new ideas and challenging the status quo when improvement is warranted. You need these folks to help the team come up with creative solutions, and to continuously improve the process.
- A "Leader." Finally, in addition to yourself, you need senior people on your team to inspire the other team members to accomplish their goals, as well as to hold them accountable when they don't.

PITFALL #2 - YOU PLAN FOR SUCCESS. ONLY.



Let's say you are going on vacation, driving through an unfamiliar area. As you are tuning the radio to a local station, you hear that there's a huge tie-up by Exit 11 of the route you're traveling on. You look up and see that you just passed Exit 10. What good is knowing about the obstacle at that point?

Would hearing the news at Exit 9 or earlier make a difference? Only if you had a local map and could plot your way around the obstruction.

But what if you knew, when you were first planning your trip, that Exit 11 on this highway was under construction? Would you not lay your course differently to avoid the delay?

So it is with risk mitigation. Identifying the risk is good; but planning a wise course of action around it is infinitely better. Planning mitigation actions ahead of time also removes the pressure of the moment, and allows you to clearly see the forest without bumping into the trees.

However, planning ahead for an eventuality that may or may not happen does not quite sharpen the mind with the same clarity that an immediate crisis does. It is not easy to be honest and tough, to avoid pat answers and rosy scenarios.

That's why it is useful to prioritize the risks first (using the Risk Management Worksheet) and start working on the ones that have the greatest chance of sinking the project. The anticipation of a disaster ought to concentrate your mind on a realistic solution, and allow you to plot the best course of action around major obstacles.

PITFALL #3 – YOU ARE OVERCOME BY CHANGE



Some projects resemble the Blob from the eponymous 50's movie (and its unnecessary 80's remake): they absorb any obstacle in their paths, growing larger and less well defined all the time until someone finally puts them out of their misery (usually, by freezing the funds). Unfortunately, a lot of people get hurt in the debacle.

One way to avoid this fate is to know what the project is – and is not – and keep it that way. A good Project Plan is certainly a good start. But either according to the risk mitigation planning you did, or in totally new and unpredictable ways, one thing you can definitely count on during the course of the project: CHANGE WILL HAPPEN. And whether you are prepared for it or not, you will have to take actions that deviate from your Project Plan. However, by the very nature of the dutiful signoffs you so diligently pursued, you have no authority to undertake actions that deviate from your Project Plan!

That's where the Change Control Process comes in handy. You will need to know:

- 1. What constitutes a change
- 2. How to respond when a change occurs
- 3. Who can approve the new plan of action

What constitutes a change? Simply put – Anything that in any way deviates from the totality of your Project Plan as the Project Sponsor accepted it. If your project approach is not working – for whatever reason – and you need to modify it – it's a change. If your Project Scope changes (beware the scope creep!) – it's a change. If your Project Schedule needs to be modified – either up or down! – it's a change. If the quality standards in the agency change – it's a change. If the budget gets cut – it's a change. If you adapt a different communications mechanism because it works better – it's a change. If your Project Team composition changes – it's a change.

Of course, not all changes require the same level of response. It would be ludicrous to initiate a formal change control process and demand a sign-off when all you are asked to do is to change the date format on your status report. However, if you get fifty contradictory requests for formatting changes that effectively prevent you from getting your status report out on time – you may well need to wake the change control Cerberus.

All changes need to be documented, but it is useful to separate changes into two categories: those that affect the project's CSSQ (Cost, Scope, Schedule and Quality) and those that don't. Just remember that an accumulation of tiny, seemingly insignificant changes can affect CSSQ just as much as one big obstacle: if you remain still long enough, piranhas can get you just as surely as sharks.

So your change control process needs to explicitly state that you will consider any variation to the Project Plan as a change, and will respond to it in one of two ways:

- Changes that do not affect CSSQ will be documented in your status report.
- Changes that affect CSSQ will trigger a change control process.

Finally, the change control process needs to explicitly define who has authority to approve a change. Usually, different people have the prerogative to approve changes of a different magnitude or kind. Having it clearly spelled out up front will save you many headaches later.

PITFALL #4 - WHY CAN'T WE ALL JUST GET ALONG?



Your schedule is as tight as a drum; you've defined deliverables until no ambiguities remain; everyone knows what to expect and when. You think you are done? Only for as long as it takes one of the decision-makers to disagree with you. And disagree they will! The Customers will disagree that what you are delivering is what they had in mind "all along." The Stakeholders will disagree that they are not being adversely affected by the new product or service. Your own Project Sponsor – your purported guardian and protector – will disagree that the budget commitments were actually made for next year's budget.

When something like that happens, you need to be able to appeal to a "higher authority." Unfortunately, if you have not obtained the higher authority's OK, and others' concurrence, to appeal to them well ahead of time, you don't stand a chance.

You have to define, right up front, who will arbitrate when you and your Customer, you and your Stakeholder, and you and your Project Sponsor, have a difference of opinion and cannot negotiate a compromise. And the time to plan for it is early on, when you are still their best friend and you have no active issues at stake.

PITFALL #5 – WE DON'T REALLY NEED TO FOLLOW ALL THESE STEPS, DO WE?



In most PM-immature organizations, as soon as the project enters a phase when some real work needs to get done and real resources applied, the questions start:

- "Do we really need all this methodology junk?"
- "We should just concentrate on what REALLY needs to get done."
- "It's crazy to expect us to create all these deliverables!"
- "We don't have the luxury of making the plans look pretty."
- "Why do we need to do ... (fill in any deliverable/process)."
- "We need to produce results not waste time on 'methodology'."
- "If we produce all this make-work we will not have time to DO anything."

Etcetera, etcetera, ad nauseam.

Of course, what these comments betray is a fundamental lack of understanding of what Project Management is all about.

Project Management (as well as just basic Management) methodologies were developed, all over the world, in response to crises and disasters that resulted precisely from the kind of seat-of-the-pants approach that the doubters actually advocate. To cure the root cause of this attitude would take massive organizational re-education and PM "conscientiousness raising." Unfortunately, you (the "enlightened" Project Manager) don't have either time or authority for that.

What you can do, though, is to say "No" clearly, articulately and resolutely. No, you will not substitute a vague verbal statement of intent for a thoroughly written scope statement. No, you will not take a promise to "let you have our best people when you need them" instead of a signature on the Project Plan.

But let's be realistic – the pressure may get intense, and you may not have a choice. Your own manager, the Project Sponsor, or an influential Customer, may force your hand into short-changing your deliverables or skipping on your tasks. Your only recourse at that point is documentation. Document the specific risks to the project. Document the fact that a business decision was made to accept those risks.



Just don't become a willing accomplice in jeopardizing your own project. Don't "go along to get along." Resist organizational inertia and stick to your principles.



Frequently Asked Questions

When developing the Project Team, how do you handle different projects competing for the same resources that you have no administrative control over?

In the fight for resources, you have two main allies – your Project Plan and your Project Sponsor. Make sure your Project Plan is well reasoned and detailed enough to specify and justify the number and caliber of resources that your project requires. Then, make sure your Project Sponsor agrees with you (not the least, by signing the Project Plan). Finally, use both to secure the resources the Greater Good of the Project demands. And if you still don't get them – which you may not depending on the priority of competing projects – document that fact, so when the project performance suffers, you have ample justification for the requisite change control.

How much detail should be included in the definition of the deliverables? Should you keep it at a high level until more information is available?

Getting an informed agreement on deliverables ahead of time is one of the most important things you can do to ensure the success of your project. Some of the biggest disconnects that sank many projects before yours involved Customers expecting one thing while the Project Team was developing another.

You should describe the deliverables in excruciating detail. You should dig up examples from other projects and use them to illustrate exactly what will be delivered. If no examples are available, you should prototype the deliverables as closely as possible. And finally, the Customer's signatures must be all over the deliverable descriptions.

Also keep in mind that as the project progresses, the format and/or content of the deliverables may "evolve." Make sure that the Customers are constantly updated as to the latest understanding of what will be delivered! (See the "Project Black Box" Pitfall from the Execution and Control phase for more details.)

What do you do if the team training determined to be necessary cannot be completed within the required timeframe of the project?

Well, it depends on what "necessary" means and who "determined" it. If you have training as a task in your Project Schedule, and Project Team members really cannot function without it, then you should invoke change control until they either get the training, or learn on the job. On the other hand, if you have people that can teach the tool, on-the-job training may be a very viable option. The bottom line is, your resources must be able to produce the results you expect; if they cannot get to that point because of circumstances beyond your control, you have full right to invoke change control.

What do you do when management is making a poor project decision that you as Project Manager feel will doom the project to failure?

This impasse is most likely to occur when management initiates a change to Project Scope, pulls project resources, or alters Project Schedule. Your best course of action, after failing to persuade them of their folly, is to document your objections, including the analysis of the decision and its impact, alternatives you suggested, and all supporting research in a separate document and refer to it in an issues section of the Project Status Report. Subsequent status reports should track the impact of the decision, as well as projections for the potential of continued degradation if the project continues as is.

The best outcome is that as the project progresses, management realizes the impracticality of the situation, and makes changes to the scope, schedule or budget.

Purpose

The purpose of Project Execution and Control is to develop the product or service that the project was commissioned to deliver. Typically, this is the longest phase of the project management lifecycle, where most resources are applied.

Project Execution and Control utilizes all the plans, schedules, procedures and templates that were prepared and anticipated during prior phases. Unanticipated events and situations will inevitably be encountered, and the Project Manager and Project Team will be taxed to capacity to deal with them while minimizing impact on the project's CSSQ.

The conclusion of the phase arrives when the product of the project is fully developed, tested, accepted, implemented and transitioned to the Performing Organization.

Accurate records need to be kept throughout this phase. They serve as input to the final phase, Project Closeout.

List of Processes

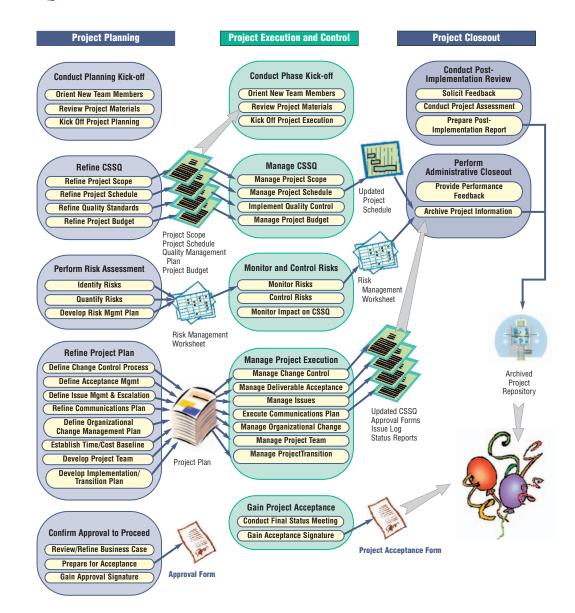
This phase consists of the following processes:

- ◆ Conduct Project Execution and Control Kick-off, where the Project Manager conducts a meeting to formally begin the Project Execution and Control phase, orient new Project Team members, and review the documentation and current status of the project.
- ◆ Manage CSSQ, where the Project Manager must manage changes to the Project Scope and Project Schedule, implement Quality Assurance and Quality Control processes according to the Quality Standards, and control and manage costs as established in the Project Budget.
- Monitor and Control Risks, where the Project Manager and Project Team utilize the Risk Management Plan prepared in previous phases, and develop and apply new response and resolution strategies to unexpected eventualities.

- ◆ Manage Project Execution, where the Project Manager must manage every aspect of the Project Plan to ensure that all the work of the project is being performed correctly and on time.
- ◆ Gain Project Acceptance, where the Project Manager, Customer Decision-Makers and Project Sponsor acknowledge that all deliverables produced during Project Execution and Control have been completed, tested, accepted and approved, and that the product or service of the project has been successfully transitioned to the Performing Organization.

The following chart illustrates all of the processes, tasks, and deliverables of this phase in the context of the project management lifecycle.

Figure 4-1



List of Roles

The following roles are involved in carrying out the processes of this phase. The detailed descriptions of these roles can be found in the Section I Introduction.

- Project Manager
- Project Sponsor
- Project Team Member
- Customer
- Customer Representative
- Consumer
- Stakeholders

List of Deliverables

Project Execution and Control differs from all other phases in that, between phase kick-off and project acceptance, all processes and tasks occur concurrently and repeatedly, and continue almost the entire duration of the phase.

Thus, the earlier concept of a "process deliverable" is not applicable to this phase, and even task deliverables are mostly activities, not products.

Of course, there is the ultimate phase deliverable – the product of the project, and it is formally recognized via the signed Project Approval Form.

The following table lists all Project Execution and Control processes, tasks and their deliverables.

Figure 4-2

Processes	Tasks	Task Deliverables (Outcomes)
Conduct Project	Orient New Team Members	Team Members Prepared to Work
Execution and Control Kick-off	Review Outputs of Project Planning	Project Planning Outputs Reviewed
RICK-OII	Kick Off Project Execution and Control	Kick-off Meeting Agenda Kick-off Meeting Notes
Manage CSSQ	Manage Project Scope	Scope Under Control
	Manage Project Schedule	Updated Project Schedule
	Implement Quality Control	Quality Control Processes In Place
	Manage Project Budget	Updated Budget
Monitor and	Monitor Risks	Risk Management Worksheet
Control Risks	Control Risks	Project Status Report
	Monitor Impact on CSSQ	CSSQ Managed
Manage Project	Manage Change Control Process	Updated CSSQ
Execution	Manage Acceptance of Deliverables	Project Deliverable Approval Forms
	Manage Issues	Project Status Report
	Execute Communications Plan	Project Status Report and Other Communication Tools
	Manage Organizational Change	Organizational Change Processes Executed
	Manage the Project Team	High Performing Team
	Manage Project Implementation and Transition Plan	Product of the Project
Gain Project	Conduct Final Status Meeting	Final Project Status Report
Acceptance	Gain Acceptance Signature from Project Sponsor	Signed Project Acceptance Form

4.1

CONDUCT PROJECT EXECUTION AND CONTROL KICK-OFF

Purpose

The purpose of **Conduct Project Execution and Control Kick-off** is to formally acknowledge the beginning of Project Execution and Control and facilitate the transition from Project

Planning. Similar to Project Planning Kick-off, Project Execution and Control Kick-off ensures that the project is still on track and focused on the original business need. Many new team members will be introduced to the project at this point, and must be thoroughly oriented



and prepared to begin work. Most importantly, current project status is reviewed and all prior deliverables are re-examined, giving all new team members a common reference point.

Tasks

4.1.1 Orient New Project Team Members

As in Project Planning, the goal of orienting new Project Team members is to enhance their abilities to contribute quickly and positively to the project's desired outcome. If the Project Manager created a Team Member Orientation Packet during

The tasks executed in support of Conduct Project Execution and Control Kick-off are:

- 4.1.1 Orient New Project Team Members
- 4.1.2 Review Outputs of Project
 Planning and Current Project
 Status
- 4.1.3 Kick Off Project Execution and Control

Project Planning, the packet should already contain an orientation checklist, orientation meeting agenda, project materials, and logistical information that will again be useful.

The Project Manager should review the contents of the existing Team Member Orientation Packet to ensure that they are current and still applicable to the project. Any changes needed to the contents of the packet should be made at this time. Once updated, packet materials can be photocopied and distributed to new team members to facilitate their orientation process.

The Project Manager or Team Leader should conduct one-onone orientation sessions with new members to ensure that they read and understand the information presented to them. If the orientation packet was not created during Project Planning and new team members are coming on board, the Project Manager must gather and present information that would be useful to new team members, including:

- All relevant project information from Project Origination, Project Initiation, and Project Planning
- Organization charts Project Team, Customer, Performing Organization
- Information on Project Roles and Responsibilities
- General information on the Customer (what they do for a living!)
- Logistics (parking policy, work hours, building/office security requirements, user id and password, dress code, location of rest rooms, supplies, photocopier, printer, fax, refreshments, etc.)
- Project procedures (team member expectations, how and when to report project time and status, sick time and vacation policy)

4.1.2 Review Outputs of Project Planning and Current Project Status

Before formally beginning Project Execution and Control, the Project Team should review recent Project Status Reports and the Project Plan. At this point in the project, the Project Plan comprises all deliverables produced during Project Initiation and Project Planning:

- 1. Project Charter
- 2. CSSQ (Scope, Schedule, Quality Plan, Budget)
- 3. Risk Management Worksheet
- 4. Description of Stakeholder Involvement
- **5.** Communications Plan
- 6. Time and Cost Baseline
- 7. Change Control Process
- 8. Acceptance Management Process
- 9. Issue Management and Escalation Process
- 10. Project Organizational Management Plan
- 11. Project Team Training Plan
- 12. Project Implementation and Transition Plan

See the sections on Project Initiation and Project Planning for detailed descriptions of these deliverables.

This will serve to remind the team of what has been produced so far, to clarify understanding of the work to be produced during Project Execution and Control, and to again communicate the management processes that will be followed during the remainder of the project.

4.1.3 Kick Off Project Execution and Control

As was the case for Project Initiation and Project Planning, a meeting is conducted to kick off Project Execution and Control. During the meeting, the Project Manager should present the main components of the Project Plan for review. (See Figure 4-3, Project Execution and Control Kick-off Meeting Agenda.) Other items to cover during the meeting include:

- Introduction of new team members
- Roles and responsibilities of each team member
- Restating the objective(s) of the project and goals for Execution and Control
- Latest Project Schedule and timeline
- Communications Plan
- Project risks and mitigation plans
- Current project status, including open issues and action items

The goal of the kick-off meeting is to verify that all parties involved have consistent levels of understanding and acceptance of the work done so far, to validate expectations pertaining to the deliverables to be produced during Project Execution and Control, and to clarify and gain understanding of the expectations of each team member in producing the deliverables. Attendees at the Project Execution and Control Kick-off Meeting include the Project Manager, Project Team, Project Sponsor, and any other Stakeholders with a vested interest in the status of the project. This is an opportunity for the Project Sponsor to reinforce the importance of the project and how it supports the business need.

As at every formal project meeting, the Project Manager should be sure that one of the Project Team members in attendance is designated as the scribe for the session, to capture notes and action items. Following the session, the notes and action items should be compiled into meeting minutes to be distributed to all attendees for review and approval, and should be added to the project repository.

Figure 4-3 Project Execution and Control Kick-off Meeting Agenda

Project Execution	Project:				
and Control Kick-off	Date:				
Meeting Agenda	Time: From:	To:			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Location:				
Invitees: List the names of individua					
Invitees should include the Project Manager, Project Team, Project Sponsor, and any Customers with a vested interest in the status of the project.					
Attendees: During the meeting, note who actually attended. If attendees arrived late of left early, indicating they missed some of the topics discussed, note their arrival or departure time.					
AGENDA					
Use the following suggested times as guidelines—the time you need to cover agenda topics will vary depending upon the needs of the project.					
	PRESENTER NAME	TIME (MINUTES)			
Introductions	Project Manager	5 min.			
Allow individuals to introduce themselve Performing Organization and their area the project efforts. The material to be presented by the foll Project Charter.	of expertise and how they n	nay be able to contribute to			
Sponsor's Statement	Project Sponsor	5 min.			
	After brief introductions, the Project Sponsor should describe the vision for the project, demor strate support, and advocate for its success, setting it as a priority for all parties involved.				
Project Request & Background	Project Manager	5 min.			
Project Goals & Objectives	Project Manager	10 min.			
Project Scope	Project Manager	10 min.			
Roles & Responsibilities	Project Manager	10 min.			
When reviewing roles and responsibilities be explicit about expectations relative to stakeholder availability and Project Sponsor commitment and support for the project.					
Next Steps	Project Manager	5 min.			
Questions	Project Manager	10 min.			
ADDITIONAL INFORMATION:					
Handouts:					
Provide a list of the material to be distri	buted to the attendees.				

Figure 4-3 (Continued)

and Control Kick-off		Date:	
Meeting	Neeting		To:
		Location:	
Be sure that one of the Projecting important project-specific potential issues that could impand Project Team should reviewembers to identify any additional minutes to be distributed to an	information to eact the proje w these poil ional actions	hat requires further review or ect. At the end of the meeting nts as well as any other notes required. The notes will be co	discussion as well as the Project Manager captured by other team compiled into meeting
DECISIONS			
Decision Made		Impact	Action Required?
Document each project decision follow-up actions. If so, these			the decision requires
			the decision requires
follow-up actions. If so, these			Action Required?
follow-up actions. If so, these		ptured below.	
follow-up actions. If so, these		ptured below.	
follow-up actions. If so, these	should be ca	Impact d its impact. Also indicate if the	Action Required?
follow-up actions. If so, these SSUES Issue Description Document any project issues	should be ca	Impact d its impact. Also indicate if the	Action Required?
Issue Description Document any project issues up actions. If so, these	should be ca	Impact d its impact. Also indicate if the	Action Required?
Issue Description Document any project issues up actions. If so, these	should be ca	Impact d its impact. Also indicate if the low.	Action Required? The issue requires follow
Issue Description Document any project issues up actions. If so, these	should be ca	Impact d its impact. Also indicate if the low.	Action Required? The issue requires follow

At the end of the meeting, the scribe should recap the action items. These should also be included in the meeting minutes to be distributed.

4.2 MANAGE CSSQ

Purpose

CSSQ is the acronym for a project's inextricably linked quadruple constraints: Cost, Scope, Schedule, and Quality. During Project Planning, each section of the CSSQ was refined. As

project-specific tasks are performed during Project Execution and Control, CSSQ will need to be managed according to the processes established during Project Planning.

Roles

- Project Manager
- Project Sponsor
- Project Team Member
- Customer Representative

The CSSO is not static -

although Project Planning is complete and has been approved, some components of CSSQ will continue to evolve as a result of the execution of project tasks. Throughout Execution and Control, as more information about the project becomes known and the product of the project is developed, CSSQ is likely to be affected and will need to be closely managed.

The purpose of **Manage CSSQ** is to:

- Manage Changes to Project Scope
- Control the Project Schedule and Manage Schedule Changes
- Implement Quality Assurance and Quality Control Processes according to the Quality Standards Revised During Project Planning
- Control and Manage Costs Established in the Project Budget

Tasks

4.2.1 Manage Project Scope

During Project Planning, the Project Manager, through regular communication with the Customer Representatives and Project Sponsor, refined the Project Scope to clearly define the content of the deliverables to be produced during Project Execution and Control. This definition includes a clear description of what will and will not be included in each deliverable.

The process to be used to document changes to the Project Scope was included in the Project Plan. This process includes

The tasks for Manage CSSQ are:

4.2.1 Manage Project Scope

4.2.2 Manage Project Schedule

4.2.3 Implement Quality Control

4.2.4 Manage Project Budget

a description of the way scope will be managed and how changes to scope will be handled. It is important that the Project Manager enforce this process throughout the entire project, starting very early in Project Execution and Control. Even if a scope change is perceived to be very small, exercising the change process ensures that all parties agree to the change and understand its potential impact. Following the process each and every time scope change

occurs will minimize confusion as to what actually constitutes a change. Additionally, instituting the process early will test its effectiveness, get the Customer and Project Sponsor accustomed to the way change will be managed throughout the remainder of the project, and help them understand their roles as they relate to change.

As part of managing scope change, one of the Project Manager's functions is to ensure that the project produces all the work but ONLY the work required and documented in the Project Scope. Any deviation to what appears in the scope document is considered change and must be handled using the change control process. Sometimes, despite the best effort of the Project Manager to carefully document what is in and outside of scope, there is disagreement between the Project Manager and Customer Representative or Project Sponsor regarding whether something is a change. When conflicts occur, the Project Manager and appropriate Customer must be willing to discuss their differences of opinion and reach a compromise. If a compromise cannot be reached, it may be necessary to escalate the issue to a higher level of management.

Once the Project Manager, the Project Sponsor, and the appropriate Customer Representative agree that scope change is occurring, they all must take the time to thoroughly evaluate the change. In order to effectively evaluate change, the Project Manager must forecast the impact of the change on the remaining three "quadruple constraints": Cost, Schedule and Quality. Equipped with this information, the Project Manager and Project Sponsor will be able to determine if implementing the proposed change would be beneficial. If it is determined, for

example, that the cost of implementing a change outweighs the benefit, the change should most likely be rejected or put aside for future consideration.

When a scope change is determined to be beneficial to the outcome of the project, approval and funding for the change is secured. At this point, the Project Manager must follow the procedures defined in the Project Plan to implement the change. (Managing the change control process is described in detail in 4.4.1.)

The Project Manager must incorporate any agreed-upon changes or addenda into the deliverables produced during Project Initiation and Project Planning. This ensures that all project deliverables are in line with the revised Project Scope. Any lessons learned from scope change control should be documented and included in the project repository for later use by the current project and any other projects to be performed by the organization.

Throughout Project Execution and Control, continuous communication between the Project Manager, Project Sponsor, and Customer Representative is crucial in managing scope.

4.2.2 Manage Project Schedule

During Project Planning, an agreed-upon baseline was established for the Project Schedule. This baseline will be used as a starting point against which performance on the project will be measured. It is one of many tools the Project Manager can use during Project Execution and Control to determine if the project is on track.

Project Team members must use the communications mechanisms documented in the Communications Plan to provide feedback to the Project Manager on their progress. It is recommended that each team member prepare a Progress Report. This report documents effort spent on tasks and provides estimates of the effort required to complete them. (See Figure 4-4, the New York State Progress Report.) Progress Reports are used by the Project Manager to update the Project Schedule. For details on the contents of a Progress Report and instructions on how to prepare one, see 4.4.4, Execute Communications Plan.

The Project Manager must emphasize to the team the importance of accurate reporting, and must be vigilant in collecting information at a detailed level. Using the information contained in the Progress Reports, the Project Manager tracks work done against the tasks in the Project Schedule. If the time remaining to complete a task in the schedule differs from the estimated time, the schedule should be updated accordingly. It is recommended that the Project Manager update the Project Schedule on a regular basis. Frequent updates to the schedule not only save time in the long run, they also allow the Project Manager to quickly spot potential problem areas. Small slippages on individual tasks may combine to create significant issues with other, dependent tasks.

Figure 4-4 New York State Progress Report

New York State Progress Report								
To: Report Period Ending:								
From:								
The ta	sks I completed this reporting	period are:						
The ta	sks I plan to complete next re	porting perio	od are:					
	'							
I lost t	ime due to: (Specify hours an	d cause):						
Issues	:							
	Description Date Impact Identified							
Sched	uled Vacation/Training:							
	Description	Start Date	End Date	# of H	ours			
Time R	Time Reporting by Task:							
Task ID	Description	Original Estimate	Hours this Week	ETC	Hours to Date			
	5 5							
	Reporting Period Total							

After updating the Project Schedule, the Project Manager must take the time to review the status of the project. Some questions that the Project Manager should be able to answer by examining the Project Schedule include:

- Is the project on track?
- Are there any issues that are becoming evident that need to be addressed now?
- Which tasks are taking more time than estimated? Less time?
- If a task is late, what is the effect on subsequent tasks?
- What is the next deliverable to be produced and when is it scheduled to be complete?
- What is the amount of effort expended so far and how much is remaining?
- Are any Project Team members over-allocated or underallocated?
- How much of the time allocated has been expended to date and what is the time required to complete the project?

Most project scheduling tools provide the ability to produce reports to display a variety of useful information. It is recommended that the Project Manager experiment with all available reports to find those that are most useful for reporting information to the Project Team, Customer, and Project Sponsor.

When updating the Project Schedule, it is very important that the Project Manager maintain the integrity of the current schedule. Each version of the schedule should be archived. By creating a new copy of the schedule whenever it is updated, the Project Manager will never lose the running history of the project and will also have a copy of every schedule for audit purposes.

The Project Manager should begin tracking actual work in the Project Schedule as soon as the work commences, which is usually as soon as the project is initiated and Project Planning begins. Work done in parallel with planning, before the Project Schedule is completed and approved, must be recorded. Remember that updates to the Project Schedule are not limited to tracking hours worked – ANY change resulting from the execution of the change control process will usually require future tasks to be re-planned and the schedule to be updated! (See Manage Change Control Process, task 4.4.1.) If the Project Schedule is updated to reflect approved change control, a new

baseline schedule must also be created. Updates must then be made against the new baseline. The previous baseline should be saved for historical purposes.

4.2.3 Implement Quality Control

Quality control involves monitoring the project and its progress to determine if the quality assurance activities defined during Project Planning are being implemented and whether the results meet the quality standards defined during Project Initiation. The entire organization has responsibilities relating to quality, but the primary responsibility for ensuring that the project follows its defined quality procedures ultimately belongs to the Project Manager. The following figure highlights the potential results of executing a project with poor quality compared to a project executed with high quality:

Figure 4-5

Poor Quality	High Quality
Increased costs	Lower costs
Low morale	Happy, productive Project Team
Low Customer satisfaction	Delivery of what the Customer wants
Increased risk	Lower risk

Quality control should be performed throughout the course of the project. Some of the activities and processes that can be used to monitor the quality of deliverables, determine if project results comply with quality standards, and identify ways to improve unsatisfactory performance, are described below. The Project Manager and Project Sponsor should decide which are best to implement in their specific project environment.

Conduct Peer Reviews – the goal of a peer review is to identify and remove quality issues from a deliverable as early and as efficiently as possible. A peer review is a thorough review of a specific deliverable, conducted by members of the Project Team who are the day-to-day peers of the individuals who produced the work. The peer review process adds time to the overall Project Schedule, but in many project situations the benefits of conducting a review far outweigh the time considerations. The Project Manager must evaluate the needs of his/her project, determine and document which, if any, deliverables should follow this process, and build the required time and resources into the Project Schedule.

Prior to conducting a peer review, a Project Team member should be identified as the facilitator or person responsible for keeping the review on track. The facilitator should distribute all relevant information pertaining to the deliverable to all participants in advance of the meeting to prepare them to participate effectively.

During the meeting, the facilitator should record information including:

- Peer review date
- Names and roles of participants
- ▲ The name of the deliverable being reviewed
- Number of quality issues found
- Description of each quality issue found
- ▲ Actions to follow to correct the quality issues prior to presenting the deliverable to the approver
- ▲ Names of the individuals responsible for correcting the quality issues
- ▲ The date by which quality issues must be corrected

This information should be distributed to the Project Manager, all meeting participants, and those individuals not involved in the meeting who will be responsible for correcting any problems discovered or for producing similar deliverables. The facilitator should also solicit input from the meeting participants to determine if another peer review is necessary. Once the quality issues have been corrected and the Project Manager is confident the deliverable meets expectations, it may be presented to the approver.

■ Use Quality Checklists – both the Project Manager and Project Team members can create and make use of various checklists to be sure items are not overlooked while a product is being developed. Checklists may be simple hardcopy lists of "things to do," or may be generated using more formal, electronic-based tools. In either case, a checklist should be comprehensive and detailed enough to ensure that the resulting product or deliverable has been built to the level required to meet quality standards. An example of a quality checklist is the End-of-Phase Checklist found at the end of each project management lifecycle phase in this Guidebook.



Checklists can be refined and expanded over the course of several projects. This is a great way to reuse best practices and maintain historical information.

- Maintain and Analyze the Project Schedule this activity should never be taken lightly, regardless of the size of the project. Updating the Project Schedule on a regular basis while keeping a close watch on the timeline and budget is the primary mechanism to measure quality of the schedule. If the project timeline or budget are not on track, the Project Manager can determine why and take immediate action to remedy the problem. (See Manage Project Schedule, task 4.4.2.)
- Conduct Project Audits the goal of a project audit is to ensure that the Quality Assurance activities defined in Project Planning are being implemented and to determine whether quality standards are being met. It is a process to note what is being done well, to identify real or potential issues, and to suggest ways for improvement. Audits should be performed on a regular basis, depending upon the size and length of the project. At a minimum, it is recommended that an audit be performed at the end of each phase, at lease once during Project Execution and Control, and at the end of the project.

The individual(s) performing the audit can be a member of a quality assurance department or team, if one exists, or any Stakeholder determined by the Project Sponsor to be unbiased toward the project. The individual should also be very familiar with the quality standards and procedures in place in the Performing Organization, but should have no involvement in day-to-day project activities.

An auditor will most likely use a checklist questionnaire to interview the Project Manager, selected Project Team members, the Project Sponsor, and selected Customer Representatives to gain insight into how the project is progressing. One of the most important measurements the auditor will look for during these interviews is Project Team and Customer satisfaction. Poor satisfaction is an indicator of an underlying problem that should be uncovered as the auditor delves into the specifics of the project. In addition, the project repository will be examined to determine if it

contains sufficient documentation. An auditor will look for and review the components of the current Project Plan – including the Project Scope, Project Schedule, and Risk Management Worksheet. The questions listed below are examples of what an auditor may be asking when reviewing the Project Plan.

PROJECT DELIVERABLES

(Project deliverables will differ depending upon the project lifecycle being used. Customize the following questions and add others as necessary to properly and sufficiently evaluate the deliverables specific to your project.)

Do the deliverables meet the needs of the Performing Organization?

Do the deliverables meet the objectives and goals outlined in the Business Case?

Do the deliverables achieve the quality standards defined in the Quality Management Plan?

PROJECT MANAGEMENT DELIVERABLES

Does the Project Proposal define the business need the project will address, and how the project's product will support the organization's strategic plan?

Does the Business Case provide an analysis of the costs and benefits of the project and provide a compelling case for the project?

Has a Project Repository been established to store all project documents, and has it been made available to the Project Team?

Does the Project Charter define the project purpose, goals and objectives?

Does the Project Scope provide a description of the project, including its output, approach, and content?

In the Project Scope, is it clear as to what is "in" and "out" of scope?

Is the Project Schedule defined sufficiently to enable the Project Manager to manage task execution?

Was a Project Schedule baseline established?

Is the Project Schedule maintained on a regular basis?

Does the Quality Management Plan describe quality standards for the project and associated quality assurance and quality control activities?

Has a project budget been established and documented in sufficient detail?

Have project risks been identified and prioritized, and has a mitigation plan been developed and documented for each?

If any risk events have occurred to date, was the risk mitigation plan executed successfully?

Are all Stakeholders aware of their involvement in the project, and has this it been documented and stored in the project repository?

Does the Communications Plan describe the frequency and method of communications for all Stakeholders involved in the project?

Does the Change Control Process describe how to identify change, what individuals may request a change, and the process to follow to approve or reject a request for change?

Has changes to scope been successfully managed so far?

Does the Acceptance Management Process clearly define who is responsible for reviewing and approving project and project management deliverables? Does it describe the process to follow to accept or reject deliverables?

Has the Acceptance Management Process proven successful for the deliverables produced so far?

Does the Issue Management and Escalation Plan clearly define how issues will be captured, tracked, and prioritized? Does it define the procedure to follow should an unresolved issue need to be escalated?

Have issues been successfully managed up to this point?

Does the Organizational Change Management Plan document how changes to people, existing business processes, and culture will be handled?

Has a Project Team Training Plan been established, and is it being implemented?

Does the Implementation and Transition Plan describe how to ensure that all Consumers are prepared to use the project's product, and the Performing Organization is prepared to support the product?

Have all Project Management deliverables been approved by the Project Sponsor (or designated approver?)

Does the Project Plan contain all required components as listed in the Guidebook?

Are each of the Project Plan components being maintained on a regular basis?

PROJECT MANAGEMENT PROCESSES

Does each Project Team member produce regular progress reports, including actual effort expended on tasks and estimates to complete them?

Are regular Project Team meetings conducted? Are meeting minutes kept, disseminated after the meetings, and stored in the repository?

Does the Project Manager produce a status report on a regular basis that contains all recommended components from the Project Status Report template (Figure 2-10)?

Is the Project Status Report being reviewed with the Project Sponsor on a regular basis?

As new team members are introduced, are they being sufficiently oriented to the project and working environment?

PROJECT TEAM AND CUSTOMER SATISFACTION

(To be completed only if Project Team members and Customers have been interviewed as part of this review)

Are Project Team members satisfied with the way the project is being managed?

Do Project Team members feel challenged and excited about their work?

Do Project Team members feel comfortable in voicing concerns or issues to the Project Manager?

Do the Project Manager, Project Sponsor and Customer Decision-Maker(s) share a consistent view of project status and issues?

- Is the Customer Decision-Maker(s) satisfied with deliverables provided by the project?
- Is the Customer Decision-Maker(s) satisfied with the responsiveness and flexibility of the Project Team?
- Is the Customer Decision-Maker(s) satisfied with the skills and capabilities of the Project Team?
- Is the project currently free from serious Customer issues or concerns?

Upon completion of the audit and repository review, the auditor writes a summary report documenting his/her findings and recommendations. This report is reviewed with the Project Manager, who should immediately implement recommendations and corrective actions identified.

Every member of the Project Team must be committed to producing a quality product. Quality control cannot rely on "adding" quality at the end of a process; quality must be built into the work of each individual on the team. It is far more cost effective to have Project Team members add quality into their day-to-day jobs than to have an auditor find a problem after a process has been completed.

As a result of implementing quality control, the Project Manager should be able to determine and take the appropriate actions to increase the project's effectiveness and provide better service to the Customer.



Successful quality control processes always strive to see quality through the eyes of the Customer. The Customer is the ultimate judge of the quality of the product.

4.2.4 Manage Project Budget

The Project Manager must know the extent of his/her authority to make budget decisions. For example, is the Project Manager allowed to authorize work that requires additional hours of salaried personnel time, or must employee time extensions go through the same approval process as contract personnel or equipment purchases? Often, the Project Manager must work closely with fiscal and contract personnel in other divisions to track and control costs. These relationships must be established early in the project management lifecycle. For New York State projects, project staff must record hours expended and the Project Manager must use salary title and grade information to determine the dollar cost of the personal services.

Part of the Project Manager's job is to ensure that the project is completed within the allocated and approved budget. Budget management is concerned with all costs associated with the project, including the cost of human resources, equipment, travel, materials and supplies. Increased costs of materials, supplies, and human resources, therefore, have a direct impact on the budget. Just as task duration estimates are tracked carefully against actuals, the actual costs must be tracked against estimates. The same analysis should be conducted and the same questions asked: What other aspects of the budget were constructed based upon these estimates? Changes to the scope of the project will most often have a direct impact on the budget. Just as scope changes need to be controlled and managed, so do changes to the Project Budget.

It is the responsibility of the Project Manager to closely monitor the financial performance of the project and take responsibility for addressing cost-related issues as they arise. In addition, the Project Manager should always be aware of the effect his/her decisions may have on the total cost of the project, both before and after the product or service is implemented.

Monitoring the financial performance of your project on a regular basis is the only way you can keep a handle on the Project Budget. Don't let the Project Budget get away from you – get into the habit of updating the schedule and analyzing the financial impact on a regular basis. Taking the time to do these administrative tasks will save you countless hours of reconciliation and balancing down the road, and warn you of impending cost issues!

There are several financial characteristics the Project Manager should monitor to determine if a project is performing satisfactorily against its budget. Most often, these values are entered into the scheduling tool by the Project Manager and calculated and displayed using its corresponding capabilities. Some budget-related characteristics the Project Manager should examine each time the schedule is updated include:

- Original Contract Value: the original estimated budget (cost) that was approved by the Project Sponsor.
- **Total Approved Changes:** the total cost of approved changes as a result of change control.
- **Total Current Budget:** the sum of the Original Contract Value and the Total Approved Changes. This is the most current approved Project Budget.
- Cost to Date: the actual dollars (cost) expended to date on all tasks and materials in the Project. The labor costs can be calculated by the scheduling tool based upon the time the Project Manager tracks against the tasks in the Project Schedule.
- **Estimate to Complete:** the dollars (cost) estimated to be expended to complete remaining project tasks. The Project Manager must verify and assess the impact of team members' revised effort estimates to complete tasks. The Project Manager must also validate that the remaining material costs are in line with the budget. These have a direct effect on the Project Budget.
- **Forecast Total:** the sum of the Cost to Date and the Estimate to Complete.
- **Project Variance:** the difference between all estimated and all actual dollars. It is calculated by subtracting the Forecast Total from the Total Current Budget. A positive variance means that the actual cost of the product is less than the budgeted cost. A negative variance means that the actual cost of the product is greater than the budgeted cost.

Whether positive or negative, the Project Manager needs to understand what is causing variance and take proactive steps to keep it under control. The Project Manager must be able to explain the cause of variance to others and determine if corrective actions need to be taken to maintain the project's budget. For example, if a negative effort variance develops while a task is being executed, then more money may be needed than originally planned for, potentially impacting the success of the project. On the other hand, some tasks may finish ahead of schedule, freeing up money and offsetting the negative impact of those that finish late. The Project Manager must remain aware of such situations, working with the Project Team members and Customers to determine the causes of variance and to mitigate any associated risks.

It is the responsibility of the Project Manager to ensure the currency, accuracy, and viability of the Project Schedule as the primary mechanism for managing the budget. He/she must know and be able to communicate exact project status relative to budget, impact of changes, estimates to complete, and variance. This information must be known by task, process, phase, resource, and deliverable and be communicated to the Project Sponsor as part of the Status Meeting.

Deliverable

◆ The CSSQ Deliverables – the Project Budget, Project Scope, Project Schedule, and the Quality Management Plan are applied, monitored and updated during Project Execution and Control.

4.3

MONITOR AND CONTROL RISKS

Purpose

Risks are potential future events that can adversely affect a

Project Manager Project Sponsor Project Team Member Customer

project's Cost, Schedule, Scope or Quality (CSSQ). In prior phases, the Project Manager defined these events as accurately as possible, determined when they would impact the project, and developed a Risk Management Plan. As the impact dates draw closer, it is important to continue re-evaluating probability, impact, and timing of risks, as well as to identify additional risk factors and events.

When the risk event actually occurs, the risk (which is by definition a future, potential event) becomes an issue (which is by definition a current, definite condition) and issue monitoring and control takes over.

The purpose of **Monitor and Control Risks** is to deploy the Risk Management Plans prepared in prior phases to anticipate project challenges, and to develop and apply new response and resolution strategies to unexpected eventualities.

Tasks

4.3.1 MONITOR RISKS

During Project Initiation and Planning, risks were remote events with uncertain probabilities of coming true. In Execution and Control, however, impact dates draw closer, and risks become much more tangible.

The tasks for Monitor and Control Risks during Project Execution and Control are:

4.3.1 Monitor Risks

4.3.2 Control Risks

4.3.3 Monitor Impact on CSSQ

The Project Manager must continually look for new risks, reassess old ones, and re-evaluate risk mitigation plans. The Project Manager should involve the whole Project Team in this endeavor, as various team members have their particular expertise and can bring a unique perspective to risk identification. As the Risk

Management Worksheet is integrated into the status reporting process, this review and re-evaluation should take place automatically, with the preparation of each new status report.

Because the Risk Management Worksheet places risks in order according to their priority level, it is important to update all quantifiable fields to portray an accurate risk landscape. The risk probabilities may have changed; the expected level of impact may be different, or the date of impact may be sooner or later than originally anticipated – all of these variables determine which risks the Project Team will concentrate on first.

Likewise, the Risk Management Plan needs to be constantly re-evaluated. Make sure the right people are still assigned to mitigation actions and that the actions still make sense in the context of the latest project developments.

Another consideration is whether a specific risk's probability level is high enough to warrant incorporating the Risk Management Plan in the Project Schedule via the change control process. If so, the risk should be removed from the worksheet.

Finally, the Project Manager must be constantly on the lookout for additional risks. Reviewing the risks as part of regular status reporting should involve the whole Project Team via bidirectional communications.

4.3.2 Control Risks

Sooner or later, one of the events on the Risk Management Worksheet – or an entirely new and unexpected risk – will actually occur. The Project Manager and Project Team members must evaluate the risk event and invoke the Risk Management Plan. There are generally three possible response scenarios:

- 1. If the risk occurred as expected, the existing Risk Management Plan may be adequate for dealing with it. Example: the project is being required to provide additional documentation to prove compliance with state regulations. However, that risk has been anticipated, and the Risk Management Plan details where and how to get the appropriate materials.
- 2. If the risk occurred in a different manner, or other circumstances have come to bear, the Risk Management Plan may have to be modified. Example: a consumer group brought pressure to examine the environmental impact of the product of the project more closely. As a result, the project is being required to obtain subject matter expert statements. Since the need was not

- anticipated, the original contingency plan needs to be modified to comply with the new requirements.
- 3. If the risk event was unexpected and unanticipated, a whole new Risk Management Plan must be created to address it. Example: The Federal Government issued a mandate that challenges the project from a whole different perspective. The Project Manager needs to understand what the issue is, what response is required, and how to obtain the desired result.

Regardless of the scenario, however, as soon as the risk event occurs it ceases to be a risk (future, possible event) and becomes an issue (current, definite condition). As a result, it should transition from the Risk Management Worksheet and onto the list of current project issues, with the Risk Management Plan becoming the issue's Action Plan.

4.3.3 Monitor Impact on CSSQ

During the entire risk management process, the Project Manager should be especially vigilant regarding the effect on the project's Cost, Scope, Schedule and Quality (CSSQ). With the proper risk management processes in place, many risk events may come to pass without affecting (either positively or negatively) the project's defining parameters. However, when a risk event occurs that threatens the project's scope, quality standards, schedule or budget, the Project Manager must determine the proper course of action to protect the integrity of the project.

Until CSSQ impact is certain, the Project Manager must, at a minimum, introduce the event to the list of current project issues. The issue's Action Plan must reflect all the tasks required to accurately determine what impact (if any) the event will have on CSSQ. Once the impact is certain and quantifiable, the Project Manager should transition the issue to the Change Control process.

Deliverable

◆ Risk Management Worksheet – a record of risk variables, impact, probability, date of impact, level of priority and risk response actions which is continuously monitored and updated, and its Risk Management Plans applied as part of Project Execution and Control.

4.4

MANAGE PROJECT EXECUTION

Purpose

Project Execution is typically the part of the lifecycle of a project when the majority of the actual work to produce the product is performed and the majority of the Project Budget is expended.

Roles

- Project Manager
- Project Sponsor
- Project Team
- Customer

The purpose of **Manage Project Execution** is to manage every aspect of the Project Plan as work is being done to make certain the project is a success. This process is performed concurrently with the Manage CSSQ and Monitor and Control Risks processes. The tasks in this process are performed concurrently and repeatedly as various aspects of the product of the project are constructed, tested, and accepted.

Tasks

4.4.1 Manage Change Control Process

During Project Planning, the Project Manager, Project Sponsor, and Customer agreed on a formal change control process that was documented and included in the Project Plan. The change control process describes:

The tasks to Manage Project Execution are:

- 4.4.1 Manage Change Control Process
- 4.4.2 Manage Acceptance of Deliverables
- 4.4.3 Manage Issues
- 4.4.4 Execute Communications Plan
- 4.4.5 Manage Organizational Change
- 4.4.6 Manage the Project Team
- 4.4.7 Manage Project Implementation and Transition

- The definition of change and how to identify it
- How requests for change will be initiated
- How requests for change will be analyzed to determine if they are beneficial to the project
- The process to approve or reject change requests
- How funding will be secured to implement approved changes

Although changes can be expected to occur throughout every project phase, any negative effect on the project outcome should be avoidable if the change control process is executed and managed effectively.

The need for change is usually discovered during Project Execution, as actual task work is being

performed. It is during Execution that the Project Team may

discover their original effort estimates were not accurate and will result in more or less effort being required to complete their work. It is also during Execution that the Project Sponsor or Customer may realize that, despite their best efforts to thoroughly document the Project Scope, the product being produced is not exactly what they need. It is the responsibility of the Project Manager to keep a close watch on factors that could introduce potential "scope creep" and take proactive steps to prevent it from occurring, or to manage it as it occurs.

Sometimes change control is required if a Project Team member is not able to complete what was documented in the Project Scope, because of lack of skill, time constraints, or other factors outside his/her control. In most cases, these difficult to manage situations often result in lost time in the Project Schedule and can have a major impact on the project.



When someone does not do something he or she was supposed to do as documented in the Project Plan, the resulting change is called a "Non-Compliance" change.

Sometimes change is simply informational and will most likely not affect the Project Scope or Schedule (e.g., the name of a Project Team member or the physical location of the Project Team offices may change). Changes that do not affect the project's CSSQ do not need to follow the formal change control process, but should be documented in the Project Status Report or any other appropriate communication mechanism.

However, for all changes that affect the project's CSSQ, it is vitally important for the Project Manager to implement and manage the change control process in every situation. Not doing so will cause confusion on the part of the Customer as to what constitutes a change. The change control process also helps maintain balance between the requirements of the project and the timeline and cost.

During Project Planning, individuals authorized to be requestors, reviewers, and approvers of change requests were identified and information about them was documented in the change control process. Change control begins when a requestor completes a change request form and submits it to the appropriate reviewer(s). (See Figure 3-6, New York State Project Change Request.)

The role of the reviewer(s) in the change control process is to analyze the request in terms of the level of effort and skill required to implement it. The reviewer, typically an expert in the subject area, will also make a recommendation to accept or reject the change request based upon its feasibility from a technical or implementation standpoint. He/she will communicate this information to the Project Manager and document it on the Project Change Request.

One of the roles of the Project Manager in the change control process is to analyze the reviewer's recommendation, and determine the overall effect of the requested change on the Project Schedule in terms of effort, cost, and resource requirements and availability. This information will be documented on the Project Change Request and presented to the approver(s).

The approver(s) review the information and make a determination whether to approve the change request based upon the potential benefit of its implementation to the organization. If, for example, the implementation costs far outweigh the business benefit, the change request will most likely be rejected. A signature is required of all approvers, whether they are accepting or rejecting the request. If the request is being rejected, the approver must provide a reason. A signature of approval on the Project Change Request indicates that the approver accepts the consequences (impact) of the request on the project's Cost, Scope, Schedule or Quality.



NEVER execute a change request without first obtaining all required approval signatures!

Once a change request has been approved, the Project Manager must incorporate the effect of the change into the Project Schedule. All affected tasks, estimated durations, dependencies, and resources must be modified. A new baseline should then be created for the amended schedule and budget. These become the new tools against which hours will be booked and project performance measured going forward.

REMEMBER: Make a copy of the new baseline schedule and archive it in the project repository BEFORE you book new work to it! If you lose the baseline, you have nothing against which to compare later updates to see if your project is on track!

In addition, if new deliverables will be produced as a result of the change, their exact description must be included in the Project Plan, either as appendices to the Project Scope, or as separate attachments. In addition, any changes that affect the remaining components of CSSQ must be documented. All correspondence, supporting documentation and other information pertaining to the change should be saved in the appropriate location in the project repository.

4.4.2 Manage Acceptance of Deliverables

The goal of this task is to manage the acceptance of deliverables according to the acceptance management process developed during Project Planning. The acceptance management process is part of the Project Plan, and documents:

- The definition of "acceptance"
- The criteria that must be met for each deliverable to be considered "acceptable"
- The number and identity of Customers designated to be reviewers of each deliverable typically reviewers are experts in the subject matter the deliverable covers
- The number and identity of Customers designated to be approvers approvers have the authority to sign the approval form, indicating acceptance
- The number of business days in which deliverables must be either approved or rejected by the reviewers and approvers
- The number of times a deliverable can be resubmitted
- The escalation process that will be followed if a timely decision on approval or rejection of a deliverable is not met

The acceptance management process must be followed throughout the project. As with the change control process, the earlier in the life of the project the process begins, the sooner everyone will understand how it works and what to expect. The

key to facilitating acceptance is first to understand Customer expectations, and then to meet them.

The acceptance management process is not set in stone...if, while executing the process, you discover parts of it are not working as expected, adjust the process to more closely fit the needs of the project. Just be sure to document your changes and get Customer approval before implementing them.

Acceptance begins when the Project Manager presents a completed deliverable and Project Deliverable Approval Form to the approver. (See Figure 2-13, New York State Project Deliverable Approval Form.) When logistically possible, the Project Manager must take the time to formally review the deliverable, in person, with the approver. In some cases, the approver's geographic location or work shift prohibits face-to-face communication. Where in-person communication is feasible, it is recommended that the Project Manager not simply send the deliverable via email or leave it on the approver's desk. If the Project Manager has done a very thorough job in setting expectations, the approver may indicate acceptance at the end of this face-to-face presentation. More likely, however, the approver will prefer to have designated reviewers examine the document or product and recommend a course of action.

The reviewers independently analyze the deliverable and produce a recommendation as to whether to accept the deliverable, providing their comments and signature on the accompanying approval form. This must be done within the turnaround time documented in the acceptance management process. If a reviewer recommends the deliverable be rejected, he/she must provide the reason and forward the package back to the approver. This process should be followed for each person designated as a reviewer in the acceptance management process.



Keep in mind that the review and approval process will take more time if several reviewers or approvers need to get involved!

Using input and recommendations provided by the reviewer, the approver reviews the deliverable and decides if it meets the acceptance criteria documented in the acceptance management process. He/she will indicate acceptance or rejection of the deliverable on the Project Deliverable Approval Form. Once again, this must be done within the turnaround time documented in the acceptance management process. If the approver recommends the deliverable be rejected, he/she must provide the reason and forward the package to the Project Manager. It is then the responsibility of the Project Manager to have the deliverable adjusted as necessary and then resubmit it to the approver. This process should be followed for each person designated as an approver in the acceptance management process. The Project Manager must ensure that for rejected deliverables, specific corrective actions are defined, i.e., "I would accept this if..."

It is the responsibility of the Project Manager to be cognizant of the time elapsing during the review and approval process, in an attempt to complete the process within the maximum number of business days agreed upon and documented. Significant delays in the process should trigger the Project Manager to escalate the situation, following the documented escalation procedure. Similarly, the Project Manager should be aware of the number of times the acceptance process is being repeated. How many times is the Project Team making changes to a deliverable based upon its rejection? The number of times a deliverable can be resubmitted to the approver was also documented in the acceptance management process. If a deliverable is rejected more than once, the Project Manager should take immediate action to analyze the situation, resolve the conflict, or exercise the appropriate escalation procedure to get it resolved. A serious delay in the acceptance of a deliverable will almost always result in project delays.

If the number of iterations becomes unreasonable, the Project Manager should recognize that a bigger problem may exist, and should take the appropriate action to find out what it is and fix it!

The Project Manager should maintain a log of the activity that transpires while a deliverable is going through the acceptance management process. The deliverable acceptance log can be

included as part of the Status Report that is reviewed with the Project Sponsor. (See Figure 2-10, the Project Status Report.)

Once a deliverable is considered acceptable, the Project Manager should gain the appropriate signatures on the Project Deliverable Approval Form. Signatures on the form indicate formal acceptance of the deliverable.

4.4.3 Manage Issues

Managing issues involves documenting, reporting, escalating, tracking, and resolving problems that occur as a project progresses. During Project Planning, the Project Manager and Project Sponsor agreed upon and documented the process for managing issues and included the process in the Project Plan.

The issue escalation and management process addresses the following:

- How issues will be captured and tracked
- How issues will be prioritized
- How and when issues will be escalated for resolution

Issues are usually questions, suggestions, or problems raised by Project Team members, including the Project Manager and Customer. They are different from changes in that they do not usually have an immediate impact on the Project Scope or Schedule. If issues remain unresolved, however, they are likely to affect the Project Schedule or Budget, resulting in the need for change control. It is, therefore, very important to have an issue escalation and management process in place, and to execute the process before change control procedures become necessary.

Anyone involved in a project in any way can and should inform the Project Manager of issues. It is the responsibility of the Project Manager and Project Sponsor to foster an environment where communicating issues is not only acceptable but strongly encouraged. Individuals should feel a responsibility to the organization to voice their concerns. If individuals are fearful of communicating issues, the resulting effect on the project can be devastating.

The Project Manager should be cautious about reacting to an issue that is communicated by "shooting the messenger." This sends the wrong message to the Project Team. No matter how devastating the news or the issue, the Project Manager should thank the person who raised the issue and solicit ideas from that individual and other team members for its mitigation.

The Project Manager is responsible for capturing and tracking issues as soon as they arise, using the issues log section in the Project Status Report. Every issue, whether technical or business related, should be documented in the report. (See the Issues Log section in Figure 2-10, the Project Status Report.) Below are some examples of project issues:

- Computer system will be down for routine maintenance
- Project Sponsor is taking another job
- Project Team member start date may be sooner (or later) than expected
- There is a delay in approving or rejecting a change request or deliverable
- Severe weather is predicted in the area of the building site

Once the description of a new issue has been logged, the Project Manager should estimate the potential impact the issue could have on the project. Based upon potential impact, the Project Manager prioritizes the issue in relation to all other open issues. The goal of issue management is to resolve all concerns completely and promptly, but in reality the issues with the highest priority should be addressed first.

The issues log should also include the date the issue is recorded, its anticipated closure date, and the name of the individual responsible for resolving it or seeing that it is resolved. The due date for closure must be a specific date (i.e., the date cannot be "ASAP"). The responsible party must be a specific individual, not a functional group (i.e., an issue should not be assigned to the "IT Department" or the "DBA group").

While the issue remains open, its continuing impact and the status of its action plan should be discussed at every status meeting. If appropriate resources or materials are not available to complete the action items, or if there is disagreement about any

of the elements on the issues log, the Project Manager should invoke previously-defined escalation procedures. Unresolved issues are one of the leading causes of project failure, and the Project Manager must pursue issue resolution relentlessly.

As progress occurs on the resolution of an issue, the Project Manager should update the issues log to reflect what has occurred. As issues are closed, they should be moved to a different section of the issues log. Along with a description of how the issue was resolved, the Project Manager should document who resolved the issue and the closure date.

When managing issues, document *EVERYTHING* (yes, *EVERYTHING*) that happens as issues are resolved. Be sure to note what happened, when it happened and who was involved. Don't skimp on the details. Keep an issues "diary."

When issues are closed, don't delete them from your issues log – instead maintain the "diary" of closed issues in a separate file or folder or section of the log. This "diary" will ensure that you cover your bases, and the information included in it may become invaluable to you or another Project Manager as lessons learned when resolving similar issues down the road!

4.4.4 Execute Communications Plans

During Project Planning, the Communications Plan was refined to describe how project communications will occur, and expanded to describe the way communications will be managed. As a project progresses, events may occur to alter the way information is accessed or change communications requirements. During Project Execution, the Project Manager and Project Team must again review whether the Communications Plan is still current and applicable to the project. If it is determined that any portion of the plan is no longer applicable, the Project Manager should update the document.

During Project Execution the Communications Plan is carried out so that required information is made available to the appropriate individuals at the appropriate times, and new or unexpected requests receive a prompt response. Communications must continue to be bi-directional during Project Execution. The Project Manager must provide required information to the Project Team and appropriate Stakeholders on a timely basis, and the Project Team and Stakeholders must provide required information to the Project Manager.

In addition to having a solid Communications Plan in place, it is the responsibility of members of the Project Team to exercise good communication skills. When composing correspondence, progress reports, meeting minutes, etc., and when speaking with individuals face to face, the team members are responsible for clear, unambiguous, and complete communication of information. The receiver, in turn, must be sure information is not only received correctly and completely, but that it is understood.

During Project Execution, the Project Manager, Project Team, and Stakeholders will share information using a variety of communication mechanisms. These were defined during Project Planning and may include:

- Status Meetings
- Status Reports
- Memos
- Newsletters
- **Executive Correspondence**
- Meeting Notes
- Executive Meetings
- Steering Committee Meetings

This information is collected, stored and disseminated based upon procedures established and documented in the Communications Plan. While executing the plan, the Project Manager must be aware of how the organization will use the information, and whether the plan is effective. He/she must be flexible and ready to modify the plan if portions of it are not working as expected or communications needs change within the Performing Organization.

Of the many mechanisms available to the Project Manager, status reporting is particularly useful for communicating the performance of a project. Project Team members must complete *Progress Reports* providing regular feedback to the Project Manager. These reports can serve a dual purpose – as a reporting mechanism to the Project Manager and also to the team member's immediate supervisor. Progress Reports should document detailed descriptions of actual work accomplished and include Team members' estimates of the effort they feel will be required to complete tasks. Progress Reports should also con-

tain information regarding work to be done in upcoming weeks, and list any issues preventing completion of required tasks. When correctly completed by the Project Team, the reports are very useful to the Project Manager for updating the Project Schedule, and for anticipating issues and proactively planning ways for their resolution. (See Figure 4-4, the New York State Progress Report.)

Using the Progress Reports prepared by the Project Team, the Project Manager should complete a Status Report to be presented to the Project Sponsor. In this report, the Project Manager measures the "health and progress" of the project against the Project Plan. It is the primary communication vehicle between the Project Manager and the Project Sponsor, and should contain the following information:

- Summary of Progress to Project Schedule a high-level glance at the major project deliverables, with their intended and actual start and end dates.
- Issues and action items a running list of open and closed issues, including the name of the person responsible for taking action to resolve them. (See Manage Issues, 4.4.3.)
- Significant accomplishments a list of the most important completed tasks, or a description of work done toward their completion.
- Significant planned accomplishments for the following weeks – a description of the most important tasks scheduled for completion during the following weeks.
- Deliverable acceptance log a running diary of actions taken toward acceptance of deliverables. (See Manage Acceptance of Deliverables, 4.4.2.)
- Change control log a running diary of actions taken toward acceptance of change control. (See Manage Change Control Process, 4.4.1.)
- Lost time a description of any situation that occurred that resulted in the Project Team being unable to perform work.

Other project documents that should be attached to the Status Report include any Change Control Requests, Deliverable Acceptance Forms, Meetings Notes, and the Risk Management Worksheet. The Status Report becomes the point of discussion for the Status Meeting, the regularly scheduled forum where the Project Manager presents the project status and discusses issues with the Project Sponsor.

Conduct a regularly-scheduled meeting with the Project Sponsor, using the Status Report to drive the agenda. If necessary, invite members of the Project Team who have expertise in a certain area you plan to discuss. Use the meeting time wisely – it is a great opportunity to have focused, dedicated time with your Project Sponsor and is the perfect forum for communicating the status of the project and planning ways to proactively resolve any issues or concerns.

Even though information is presented to the Project Sponsor at a summary level, it is very important to record and maintain ALL the detailed, supporting task-level information. Detailed information can be included as an appendix to your Status Report, or maintained in a separate document. Regardless of its location, detailed information should always be made available to the Project Team, and will be invaluable to you if your Project Sponsor requests clarification or more information.

The Project Manager should periodically assemble the Project Team to review the status of the project, discuss their accomplishments, and communicate any issues or concerns in an open, honest, constructive forum. These meetings are ideal opportunities for the Project Manager to gain insight into the day-to-day activities of Project Team members, especially if the team is large and individual interaction between the Project Manager and each team member is infrequent.

The Project Manager should determine the frequency of status meetings based upon the current state of the project and his/her good judgment. Weekly meetings may be sufficient during times of normal project activity, but during "crunch times" it may be necessary to gather more frequently. When a deadline is approaching and/or the Project Team appears to be under stress, consider holding a quick "sanity check" at the beginning of each day to ensure the team understands and remains focused on the important tasks for that day.

During the meeting the Project Manager should review the Project Schedule with the team and verify with each member the work that needs to be accomplished in upcoming weeks. Part of the meeting should focus on the team's Progress

Reports, to verify estimates to complete tasks and to discuss issues that may impact estimates. The Project Manager can then use information communicated during the Project Team meetings as input to the Status Report.

The regularly-scheduled Project Team meeting is also a good forum to recognize individual accomplishments, and to reward team members for outstanding work.

© On large projects where gathering the entire team is prohibitive, Team Leaders can assemble the appropriate Project Team members for meetings. It will then be necessary for Team Leaders to meet regularly with the Project Manager to ensure all communication lines remain open.

As documents are gathered and generated during Project Execution, the Project Manager is responsible for filing them in the appropriate location in the project repository. The repository must be maintained on a continuous basis, as it represents a history of the project, from its inception through closure. It will be used as a reference manual throughout the project and should, therefore, be made available to every member of the Project Team. At a minimum, the Project Manager should make sure the following repository items are always current:

- Project Schedule, including any project financials
- Status Report, including:
 - ▲ Change control log
 - ▲ Issues log (open and closed)
 - ▲ Deliverable acceptance log
- Team member Progress Reports
- Team member timesheets, if used
- Risk Management Worksheet
- All correspondence, including any pivotal or decision-making memos, letters, email, etc.
- Meeting notes, results and/or actions



4.4.5 Manage Organizational Change

During Project Planning, the Project Manager and Customer developed an Organizational Change Management Plan, taking into consideration the impact the product of the project will have on the Performing Organization.

During Project Execution, as the product is being produced, the Project Manager and Customer must evaluate the Organizational Change Management Plan documented during Project Planning to be sure it is still current. Because more information about the specific changes to the organization in terms of people, process and culture is known, it is quite likely that the plan will need to be adjusted and more details developed.

It is extremely important for the Project Manager and Project Sponsor to be actively involved in the change effort, and to proactively manage communications with the Performing Organization and Consumers. As specific changes are implemented in advance of and in preparation for the final product of the project, all involved parties must be made aware of the anticipated timing of events to give them ample time to prepare and participate as required.

Managing Organizational Change should include:

■ People: Planned workforce changes must be executed in careful coordination with, and usually at the direction of, the Human Resource department of the Performing Organization, and in conjunction with appropriate labor/management practices. Specific changes in job duties, staff reductions or increases, and any changes in the organizational structure itself should be performed in accordance with the plan, and should include appropriate coordination and communication with union representatives and the external agencies involved. These agencies may include the Department of Civil Service and the Governor's Office of Employee Relations. The Project Manager must work with all of these organizations to

- execute the changes as planned and scheduled, being sensitive to minimize any impact to them.
- **Process:** The redesign of existing business processes affected by the implementation of the product of the project, and the development of corresponding procedures, must be managed in coordination with product development. The redesigned processes and procedures must align with the product and associated changes. The implementation of the new processes, and any associated training or announcements regarding their introduction into the Performing Organization, must be integrated with the product implementation (to coincide with or precede the product, as appropriate). The Project Manager must manage these particular aspects of the schedule with diplomacy and tact. The active involvement of the Project Sponsor may be required as changes are implemented.
- **Culture:** Specific plans were developed based on the extent of the "culture shock" the product of the project was expected to introduce into the Performing Organization and its business strategy, established norms for performance, leadership approach, management style, approach to Customers, use of power, approach to decision making, and employee roles. Using the results of the assessment of the Performing Organization's "readiness for change," the Project Manager can develop more specific action plans to increase the organization's readiness and ability to adapt to the changes of the project. Most likely, these will include education and training events that can be targeted to specific audiences affected by the changes. The plans should provide information about the changes well in advance of implementation, so that affected Stakeholders have ample opportunity to express their concerns. To the greatest extent possible, the Stakeholders should be given a "preview" of how the product will actually work. They should also be given adequate training on how to adjust to change, how to work in the new environment, or similar "soft skills."

The Project Manager, with the active participation and support of the Customer and Project Sponsor, must be able to manage the specific activities that will adequately prepare the Performing Organization for the anticipated changes. (See Leading the Change Management Effort. Section II:2.2 for additional information on organizational change management.)

4.4.6 Manage the Project Team

In order to successfully meet the needs of a project, it is important to have a high-performing Project Team made up of individuals who are both technically skilled and motivated to contribute to the project's outcome. One of the many responsibilities of a Project Manager is to enhance the ability of each Project Team member to contribute to the project, while also fostering individual growth and accomplishment. At the same time, each individual must be encouraged to share ideas and work with others toward a common goal. The Project Manager, then, must be a leader, communicator, negotiator, influencer, and problem solver! The level of skills and competencies to successfully fill these roles helps distinguish good Project Managers from great ones. (See Section II:2, Leadership, for more information on Project Manager competencies.)

To maximize the successful performance of the Project Team, the Project Manager must do the following:

Execute the Training Plan

During Project Planning, the Project Manager evaluated the skills of each team member to determine whether he/she met the current and future needs of the project. For each team member requiring training, the Project Manager established a Training Plan. The Training Plan includes the method by which each team member will be trained, and the corresponding training schedule. During Project Execution, the Project Manager must review the contents of the Training Plan to be sure they are still applicable to the project. If additional training is necessary, it should be added to the plan. If it is determined that planned training is no longer necessary, it must be removed from the plan. If new team members have joined the project since the Training Plan was established, the Project Manager must evaluate the skill level of the new members to determine if additional training is needed. In all cases, training tasks must be added to or removed from both the Training Plan and the Project Schedule, since they will affect the end date of the project.

As training takes place during Project Execution, the Project Manager should update the Training Plan with the names of the trainees and actual training completion dates. This information will be used to measure the success of the Training Plan, and enable the Project Manager to provide input for evaluating team members and preparing staff performance appraisals. In addition, the Project Manager should mark the corresponding Project Schedule tasks as complete.

Allocate Work Properly and Ensure Accountability

A basic responsibility of the Project Manager is to assign work to the Project Team and ensure that the work is completed according to the Project Schedule. The Project Manager (or Team Leaders if the project is large) is responsible for allocating tasks to appropriate team members at the appropriate times. A good Project Manager establishes and maintains a Project Schedule that minimizes team member down time. Along with the Team Leaders, the Project Manager must continuously communicate to each member of the team what is required and by when, and then manage the performance of each team member in meeting the requirements.

Since the Project Manager is ultimately responsible for the success or failure of a project, he/she must direct Project Team endeavors and encourage team members to be accountable for their work. Accountability should be formally documented and measured through the use of team member Progress Reports. (See Figure 4-4, the New York State Progress Report.) But the Project Manager must also be willing to communicate face-to-face with the Project Team. Regular personal communication is one of the most effective ways to gather input on the status of project activities, discuss issues and concerns, recognize good work, encourage and provide support to team members who are struggling, and build relationships. It is also one of the primary ways to discover and take action to resolve team member performance issues.

Establish a Team Environment

Project Team members must learn to work together to achieve project goals. They must recognize that there is more to teamwork than simply having team members feel good about each other. High-performing Project Teams are disciplined. Team

members participate in all required meetings, are willing to suppress their egos for the good of the group, take their assigned tasks seriously, and continuously strive to improve their skills. High-performing Project Teams are either empowered to make decisions or are included in decision-making processes. This is the essence of project ownership.

Project Managers must develop sufficient management competencies to be able to create an environment that encourages team members to excel. The Project Manager may consider implementing some of the following:

- **Team-Building Activities** these are actions taken specifically to improve the performance of the entire team. Activities can range from short items on a meeting agenda to extended, off-site professionally facilitated sessions. However implemented, team-building activities provide opportunities for team members to improve their interpersonal and working relationships.
- Team Recognition and Rewards these are actions intended to promote, encourage, and reinforce desired behavior or exceptional performance. Frequently they are initiated by individuals at management level, but they are also very effective when initiated by an individual's peer. In all cases, recognition programs must be documented clearly enough so team members understand what level of performance warrants an award.



Don't underestimate the power of a box of donuts or a celebratory cake when the team reaches a major milestone!

The primary objective for establishing an appropriate team environment is to improve overall project performance. When team members are encouraged to do their best and are motivated about a project, they are more likely to do whatever is necessary to improve their individual skills so they are more efficient and effective in performing their assigned activities. And when team members understand the importance of interacting with each other, they are more willing to identify and proactively deal with conflict. Resolving issues early leaves team members more time for producing actual project work.

Manage Personnel Changes

All organizations change. Personnel may transfer to different assignments or leave their employers, new individuals may be added to a Project Team or Customer organization, or the nature of the project may change, forcing a change in project responsibilities or reporting structure. A successful Project Manager has a plan in place to minimize the effect these types of changes may have on the outcome of the project or the morale of the Project Team. At a minimum, this plan should describe what to do when there are changes to the Project Team, but it should also discuss the actions to take if the Customers change. The process may be formal or very informal, depending on the size and needs of the project. In all cases, changes to the Project Team or Customer will most likely require updates to the Project Schedule.

4.4.7 Manage Project Implementation and Transition

During Project Planning, the Project Manager formulated and documented a plan for implementing or deploying the product of the project, and for transitioning the responsibility for the outcome of the project from the Project Team to the Performing Organization. During Project Execution and Control, this Implementation and Transition Plan will be more fully developed as the product of the project is developed, and as specific activities in the plan are executed.

During Project Execution and Control, the Project Team will gain a better understanding of the impact the resulting product will have on the Performing Organization and Consumers. Activities begin that are required to prepare the Consumers to use the product, along with the tasks to prepare the Performing Organization to support it.

Managing Implementation and Transition includes:

- Monitoring and ensuring timely completion of all facilities issues, such as acquiring the necessary physical space, installing appropriate software, obtaining the appropriate building permits, etc.
- Coordinating Customer Acceptance Testing, including logistics of when and how Customers will test the product to confirm that it meets requirements before it is formally implemented and transitioned. Customer testing is one of the last opportunities for necessary changes to be

- identified and made to the product before rollout. Time for sufficient Customer testing and any resulting rework that will affect the Project Team must be incorporated in the Project Schedule.
- Managing the steps that need to be taken to ensure Consumers will be ready to use the product once it is implemented. These steps must be coordinated with the Organizational Change Management Plan, and will include training and orientation on the use of the product. Any training for Customers or Consumers must be provided according to the plan and coordinated with other aspects of the implementation of the product.
- Managing the detailed implementation. The Project Manager must monitor implementation activities and make any necessary adjustments. The implementation will vary depending upon the needs of the Performing Organization and the product of the project. Some implementations are "done" at the flip of the final switch, such as opening a new highway, or publishing a book. Others are phased into implementation, like installing an inventory management system module-by-module, moving to a new building floor-by-floor, or implementing a new business process location-by-location.
- Managing the steps that need to be taken to ensure the appropriate individuals are ready to support the product once it has been implemented and is in use. This may include negotiating with various internal organizations to determine the appropriate timing of the transition of responsibility, assigning specific organizations and individuals to support the specific products, and providing necessary training. The Project Manager must carefully manage the point in implementation that the Performing Organization takes responsibility for production problems, "help" or trouble calls, and for resolving the problems, and ensure that all pre-requisites for transition have been met for example, performance standards, quality standards, etc.
- Managing production of all necessary documentation. The Project Manager must ensure that all documents or records that will be provided with the product are produced. Examples of documentation include:
 - ▲ User manuals
 - ▲ On-line help
 - ▲ Assembly or usage instructions

Overall, the Project Manager must be sure each required activity is carried out according to the Implementation and Transition Plan and schedule, and to immediately communicate any discrepancies to the Project Sponsor.

Deliverable

◆ Product of the Project – at the end of Project Execution, all required deliverables as documented in the Project Plan have been produced by the Project Team and approved by the Project Sponsor. The product of the project, successfully transitioned from the Project Team to the Performing Organization, is the end result of Project Execution and Control.

4.5 GAIN PROJECT ACCEPTANCE

Purpose

The purpose of **Gain Project Acceptance** is to formally acknowledge that all deliverables produced during Project Execution and Control have been completed, tested, accepted, and approved by the project's Customers and the Project Sponsor, and that the product or service the project developed was successfully transitioned from the Project Team to the

Performing Organization. Formal acceptance and approval also signify that the project is essentially over, and is ready for Project Closeout.

Project Manager Project Sponsor Project Team Members Customer Representatives Customer Decision-Maker

Tasks

4.5.1 Conduct Final Status Meeting

Once the product of the project has been successfully transitioned to the Performing Organization, the Project Manager should prepare the final status report and conduct the final status meeting. The Project Schedule must be up to date for all completed project and project management lifecycle phases. This is the final opportunity for all participants to confirm that the product of the project has been successfully developed and

transitioned. Any outstanding issues or action items must be transitioned from the Project Team to the Performing Organization.

The tasks to Gain Project Acceptance are:

- 4.5.1 Conduct Final Status Meeting
- 4.5.2 Gain Acceptance Signature from Project Sponsor

4.5.2 Gain Acceptance Signature from Project Sponsor

As the deliverables of the project are produced and accepted, approval signatures are gained from the Project Sponsor and Customer Decision-Makers. Following the final status meeting, the Project Manager must obtain the Project Sponsor's signature one final time, indicating acceptance of the project to date, and indicating approval to proceed to Project Closeout. (See Figure 4-7, New York State Project Acceptance Form.) If the Project Sponsor does not accept the project, he/she must indicate the specific reason(s) for rejection. The Project Manager is then responsible for resolving the issues and seeking the Project Sponsor's acceptance again.

Deliverable

◆ **Signed Project Acceptance Form** – a formal document indicating Project Sponsor acceptance of all project deliverables and approval to proceed to Project Closeout.

Figure 4-6 New York State Project Acceptance Form

New York State Project Acceptance Form PROJECT IDENTIFICATION Project Name: _____ Date: _____ Project Sponsor: _____ Project Manager: _____ Enter the **Project Name**. Enter the current **Date**. Enter the name of the Project Sponsor. Enter the name of the assigned Project Manager. PROJECT SPONSOR INFORMATION Project Sponsor Name: ____ Action: Approve: Reject: **Project Sponsor Comments:** Project Sponsor Signature: Date: Provide the above information to the Project Sponsor. The Project Sponsor should either accept or reject the project and include any comments. If the Project Sponsor is rejecting the project, the reason for rejection must be provided. If the project is being approved, the Project Sponsor must sign the form and enter the **Date** approved. PROJECT MANAGER INFORMATION Name (Print) Signature Date Once the project has been approved, the Project Manager should indicate agreement by providing a Signature and Date.

Project Execution and Control End-of-Phase Checklist

How to Use

Use this checklist throughout Project Execution and Control to help ensure all requirements of the phase are met. As each item is completed, indicate its completion date. Use the Comments column to add information that may be helpful to you as you proceed through the project. If you elect NOT to complete an item on the checklist, indicate the reason and describe how the objectives of that item are otherwise being met.

Figure 4-7

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Conduct Execution and Control Kick-off	204			
Ensure team members have whatever is required to perform their tasks	204			
Meet with each team member to convey roles and responsibilities	204			
Distribute copies of all project materials and deliverables to all team members	205			
Hold orientation sessions for new members	205			
Review previous deliverables and components of Project Plan	205			
Schedule time and location of kick-off meeting	206			
Prepare materials for distribution at meeting	206			
Invite appropriate attendees	206			
Prepare meeting presentation and agenda	206			
Designate meeting scribe	206			
Conduct kick-off meeting	206			

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Distribute meeting notes to all attendees	206			
Update the project repository	206			
Manage CSSQ	209			
Update and analyze the Project Schedule as needed	211			
Conduct peer review of deliverables, if appropriate	215			
Implement quality checklists	216			
Conduct project audits	217			
Manage the budget by monitoring financial performance regularly	222			
Update project repository	222			
Monitor and Control Risks	225			
Review identified risks with Project Team and Project Sponsor	225			
Re-evaluate each risk	226			
Update Risk Management Worksheet regularly	226			
Execute contingency plans or modify them, if necessary	226			
Create new contingency plans to accommodate new risks	227			
Update project repository	227			
Manage Project Execution	228			
Execute change control process when necessary	228			
Gain acceptance and approval of all deliverables	231			
Identify and resolve issues, escalating them if necessary	234			
Provide timely communications according to Communications Plan	236			
Prepare Project Status Report regularly	237			

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Conduct status meeting with Project Sponsor regularly	238			
Ensure status meetings are being held with Project Team regularly	239			
Conduct training for support personnel	242			
Conduct training for Consumers	242			
Communicate rollout information	242			
Conduct training for Project Team members and update Training Plan	243			
Allocate and assign work to Project Team members	244			
Conduct team building activities	245			
Reward team members	245			
Manage Project Team member changes	246			
Manage changes to Customer's organization	246			
Acquire necessary physical space and equipment to support the product	246			
Transition product to Performing Organization	246			
Update the project repository	246			
Gain Project Acceptance	248			
Prepare final Status Report	249			
Prepare formal Project Acceptance Form	249			
Conduct final Status Meeting with Project Sponsor and present Project Acceptance Form	249			
Resolve any issues	249			
Gain final project acceptance signature from Project Sponsor	249			

Measurements of Success

The ultimate measurements of success for Project Execution and Control are the product acceptance by the Customer, and project acceptance by the Project Sponsor.

Meanwhile, the Project Manager can still assess how successfully the project is proceeding through Project Execution and Control by utilizing the measurement criteria outlined below. Because the processes in this phase (between Kick-off and Acceptance) are iterative, continuous and concurrent, the measurements for these processes need to be taken at regular intervals – probably coincidental with project status meetings. More than one "No" answer indicates a serious risk to the eventual success of your project.

Figure 4-8

Process	Measurements of Success	Yes	No
Conduct Project Execution and Control Kick-off	Did you receive confirmation from ALL Project Team members that they agree with their role descriptions, and that they understand and agree with the project objectives, risks and timetables as recorded in the kick-off meeting notes?		
Manage CSSQ	Do your team members agree that the estimates to complete for all open tasks are accurate?		
	Has your team implemented any "lessons learned" from either the peer review or the project audit process?		
	Is the Project Sponsor aware of the latest total current budget for the project?		
	Is your schedule current?		
Monitor and Control Risks	Have you adjusted the risk priority level for any risks on the Risk Management Worksheet?		
Manage Project Execution	Were all changes to the scope, schedule, cost or quality parameters of the project made with a signed Change Control Request?		
	Have all deliverables been presented to decision makers with prior preview of the deliverable in progress?		
	Is the deliverable approval cycle less than or equal to the period of time identified in the Acceptance Management Plan?		
	Are all project issues recorded in the Issue Log in the Project Status Report?		
	Is the Status Meeting being held as often as indicated in the Communications Plan?		
	If any Customer Decision-Makers are consistently absent from the status meetings, have they designated a replacement?		
	Are you confident that the organizational preparedness for the project is proceeding according to the plan you agreed to?		
	Are your team members showing no lost time in their Progress Reports?		
Gain Project Acceptance	Do you have a Project Acceptance Form signed by your Project Sponsor accepting the project?		

Phase Risks/Ways to Avoid Pitfalls

Project Execution and Control is where the rubber meets the road. In the immortal words of Yoda, it's "Do! Or do not! There is no try."

What are some of the key elements of Project Execution and Control that require the most attention? Not surprisingly, this phase has the most pitfalls and the most areas for consideration. The following table identifies processes and tasks which have pitfalls highlighted in this section.

Figure 4-9

Process	Task	Why is it important?
Manage CSSQ	Manage Project Schedule	Schedule slippage is the most visible sign of a project in trouble.
Manage Project Execution	Manage Issues	"That malfunctioning little #@?*!, this is all his fault." Maybe, maybe not. But it's still your responsibility to make sure the actual problem is fixed.
	Manage Acceptance of Deliverables	"Don't be too proud of this technological terror you've constructed." Your product is only as good as your Customer thinks it is.
Manage Organizational Change/Manage Product Implementation and Transition Manage the Project Team	"Don't get technical with me!" Communicate with your Customers as you would have them communicate with you.	
	Change/Manage Product	You may have created the most awesome product in the known universe, but what good is it if the organization is not ready to utilize it?
	Manage the Project Team	"Who's the more foolish the fool or the fool who follows him?" With some teams, it's hard to tell who's leading whom. Don't let that happen to you!

PITFALL #1 – YOUR SLIP IS SHOWING (OR YOU WISH YOU WERE A DAY LATE AND A DOLLAR SHORT!)



OK, the unthinkable has happened. Your project is actually behind schedule. Every week, something seems to happen, something quite outside everyone's control. You analyze, advise, reason, plead – and yet here you are, adjusting your deliverable dates once again. And the worst part of it is, deep down you really don't know why or, more importantly, what you can do about it.

Well, there is no need to panic. After all, you can always turn to the wise old Project Manager in the office across the hall who is ready and willing to help you, right? No? Oh well, then, you can always panic.

But before you do, let's figure out what's wrong. There may be myriad reasons why the schedule slips, but some of them are much more likely to occur than others. Broadly speaking, the fault may lie not in our stars, but in:

- Our customers. They love to change their minds all the time!
- Our teammates. They may not be prepared, or may not have "the right stuff."
- Our environment. We may be camouflaged for desert warfare, but find ourselves fighting through the swamp.
- Our selves. In the final analysis, the buck always stops with the Project Manager. So whatever is going wrong – it's probably your fault (at least for not managing it properly!).

Now let's tackle each problem in turn, starting with the most likely one.

Problem: Management shortcomings.

Solution: C3PO said, "It's against my programming to impersonate a Deity!" But many Project Managers try, or feel they ought to. The tough part is that Project Manager's failures tend to disguise themselves as something else. When the Project Manager does not apply the right methodology to requirements gathering, and does not apply the right discipline to documenting its outcome, the result may appear to implicate Customers. When the Project Manager does not set up the right Project Team structure, and does not apply the right discipline to delivering assignments to all team members, the result may appear

to imply an incompetent Project Team. When the Project Manager does not select the right technology, or does not secure enough support from the Performing Organization, the result may appear to indicate an unfavorable environment.

But the odds are, when something is going wrong, you should "start with the man in the mirror and ask him to change his ways."

Problem: The requirements are not clear, or they are constantly changing.

Solution: Well, it takes no genius to realize that you can't hit a target you can't see or catch. But what can you DO about it? For starters, you need to figure out whether (a) the requirements were not defined clearly from the beginning or (b) the Customers keep changing their minds.

In the first case, you need to hit the brakes hard, and then redirect all resources at your command to re-define the requirements. Go back to the Customers, and re-confirm or figure out what it is they REALLY want. Since the original requirements-gathering process obviously did not work, first you need to analyze the way you went about gathering, defining and documenting the requirements, and try to improve it this time around.

In the second case, you need to have a chat with your Project Sponsor. Explain that by not sticking to their agreement (you do have their signature accepting the requirements, right?) the Customers are jeopardizing the project in all its parameters (Cost, Scope, Schedule and Quality), and, as a result, the Project Sponsor has essentially three options: (1) stop the requirements dithering, (2) expand the Project Budget to accommodate the process (warning: you will still need option 1 eventually!) or (3) cancel the project now (with small overruns) or later (with major overruns).

In either case, change control is key. As soon as you detect an increase in scope, even if you still don't know the full extent of it, you need to start the change control process. Remember that change control is not a bad thing; it's just a process to manage enhancements as well as risks and mistakes. Changes are often unavoidable, as in the case of legislative initiatives or technological advances, and change control serves as a mechanism to assure everyone is aware of and agrees to all deviations from the plan.

Problem: Project Team members don't produce.

Solution: First, check to make sure that the fault is not with the environment and/or management. It most probably is. But it just may be possible that your folks do not have the right skills, knowledge or tools to get the job done. Of course, that should be no surprise to you, and you should have had your team training plan going full swing, right? Well, nobody's perfect. The important thing to do is to separate what you can fix from what you can't. For example, if the folks do not have the right tools to do the job – that can be fixed, even if you have to go to the ends of the Earth to get them. Likewise, if the team members do not have the right knowledge - well, that can be fixed too, although by now it may be too late. But if you find that you are stuck with a turkey who just can't do the job. you have a bigger problem. The first thing to do is to try a variety of managerial approaches with the person. Everyone is different, and some people react to certain management styles better than others. But if after deploying your whole managerial repertoire the person still comes up short, the best thing to do is to consult with your manager, or another "seasoned" Project Manager, and understand how such situations have been handled in your organization in the past.

Problem: The project environment is not what you expected. **Solution:** This problem can take one of two flavors. One, the Performing Organization may not be ready for your project, and is not providing you with the support infrastructure you require. Two, the technology you are trying to utilize is wrong, immature, or not properly implemented.

For the first eventuality, sound the alarms! This is when you need that Organizational Change Management Plan, and your Implementation and Transition Plan. You will need to have another one of those chats with your Project Sponsor. Explain how the team is doing all it can to deliver the product, but the support structure is failing you all around. Make specific suggestions as to what you need, and how it could be accomplished.

For the second eventuality, you must make a quick decision whether the technology can be fixed, or needs to be replaced. Some technological advances sound great in concept, but are just not ready for prime time. Try to avoid "bleeding edge" technologies altogether, but if you do get entangled in one, be ruthless – going back and retracing your steps using an older, less sexy but more stable technology may pay off in productivity gains for the rest of the project, compared with slugging through the immature mire of somebody's half-baked product.

PITFALL #2 – YOU DROP THE ISSUE BALL



In the course of the project, many issues come up. By definition, issues have a potentially adverse impact on the project's CSSQ. Most of them are solved internally, within the Project Team, but some require actions or decisions on the part of other players with whom you may have little influence.

The important fact to remember is that project issues are the Project Manager's responsibility. No matter how clear you are in communicating the issue, no matter how little say you have in its resolution – it remains your responsibility. Identifying another person as a party who can resolve the issue does not abdicate your responsibility to follow it through. Even obtaining consensus that another agency unit should, or a promise that they would, resolve it does not remove your obligation to track the issue to a successful conclusion.

One of the most natural pitfalls is to assume that once you have successfully convinced everyone that someone else has to solve the issue, you are done. On the contrary! Because it is now out of your control, you must be all the more dogged in the pursuit of its resolution. Tell the responsible parties that you're not going away. Keep asking them what you can do to help get the issue resolved, but keep tracking their progress – or lack there-of – on your status reports. Use all the tools in the project Communications Plan to continuously shine light on the issue.

PITFALL #3 – YOU FALL INTO THE PROJECT BLACK BOX



Scene 1 – You employ the latest facilitation techniques to extract all possible requirements from your Customers, even requirements they did not know they had.

Scene 2 – Your team performs wonders to design the perfect product, exactly as the Customers requested, and works like the dickens to develop it exactly as envisioned.

Scene 3 – You beam with pride as you deliver your masterpiece to an eager Customer.

Scene 4 – You slink away in shame as the Customer continues to rant and rave about all the features that the product does not have even though they told you about them all along.

What happened? You "black-boxed" your project. The Customers saw you when you were gathering the requirements. Then you and your team went away into the project black box, and only came out in time to show the Customer the finished product. The problem is, things changed in the interim! The Customer cast of characters may have changed. The business conditions may have changed. The expectations may have changed. And you did not keep in synch. Worse, you did not keep your Customers in synch with your project. You just assumed that because you are giving your Customers exactly what they originally asked for, they would like it. But you know what happens when you assume.

The simple remedy for the black box phenomenon is keeping the Customers involved every step of the way. You should constantly show select Customers project deliverables as they are being developed. Not so they can change their minds but so they know what to expect on delivery. You certainly want to minimize the number of decision-makers who will accept and sign off on your deliverables (chasing signatures of more than a couple of people is a pain) but you want to maximize the number of people who review, or even preview your stuff.

PITFALL #4 – YOU REMAIN INCOMMUNICADO



Once the project really gets going in Project Execution, it is very easy to focus internally – on Project Team dynamics, on technical challenges, on deliverables and schedules – to the exclusion of everything else; yet it is also important to pay attention to the externals. After all, as Project Manager, you are the main link between the project cocoon and the big world outside.

Executing all aspects of your Communications Plan is your responsibility, and nothing is more important than accurate and frequent status reporting. A Project Status Report is the most effective way for all Stakeholders to remain closely connected to and aware of the project's progress – and potential problems.

The two most important questions the Project Status Report must answer are:

1. What is the latest, best available estimate for the remaining work, and how does it compare with the schedule?

2. What issues have come up that may affect the project Cost, Scope, Schedule, or Quality, and what is being done about them?

These questions are far more important to the eventual success of the project, and to minimizing surprises along the way, than the usual dissertations on project status and enumerations of immediate tasks at various levels – not that the status report should not include them. But after collecting, analyzing and evaluating the status information, the Project Manager's job is to make decisions or suggestions regarding changes to be made – if necessary – to keep the project on track.

Of course, the best status report in the world will make no impact if there is no one there to hear it. A regularly scheduled status meeting, attended by as many members of the Project Team as practical, dedicated to a thorough review of the status report, is irreplaceable.

PITFALL #5 – YOU CONFUSE DESIRE WITH ABILITY



Your customers sincerely want what your project is developing. They demonstrated their desire for it by committing funds to the project; by allocating resources to the Project Team; and by devoting time to meetings, reviews, and other project-related activities. And yet they may be totally unprepared to actually make use of it, or even to implement it at all.

But whose fault do you think it will be when they realize their inability to utilize it? That's right, yours. So it is up to you to make sure that someone determines organizational readiness for the product or service, and that someone prepares for a smooth transition of the product from the Project Team to the Performing Organization. Notice that it does not say you have to do it – just that you have to make sure it gets done. And that requires including in the Project Plan that organizational readiness assessment and transition planning need to be done.

PITFALL #6 – THEY BLINDED YOU WITH SCIENCE (OR TECHNOLOGY)



There is no law that says that a Project Manager must be a master of whatever technology the project employs. Nevertheless, you will be called upon to manage numerous technical decisions on the project.

A frequent pitfall in those circumstances is over-delegating those decisions to the more technical members of the team, or accepting the recommendations of your technical experts on blind faith, both of which result in unacceptable loss of control. Instead, make the team explain the issue and alternative solutions to you. As a reasonably intelligent person, you should be able to understand the concepts by listening and asking questions. If, however, the technical folks can't explain to your satisfaction why they are advocating a certain position – watch out! It is indicative of a position dictated more by desire than by reason, or of poor understanding on the part of the supposed experts. Get a second opinion, and trust your own instincts.

PITFALL #7 – THE ENDLESS APPROVAL CYCLE LEADS YOU BY THE NOSE



You thought you were smart. You thought you were ready. You knew how finicky your Customer was, so you built into your schedule not one, not two, but three approval cycles – one for an informal pre-screen, one for a formal review, and the last one for formal approval. You built in time for re-work based on the review. You even indicated in your acceptance parameters that you were only willing to wait so many days for the approval. Yet here you are, a month and a half past the first scheduled deliverable – which your team presented right on time – and you still don't have the proper signatures on the approval form. What happened?

Any of a number of things. You may be stuck in a never-ending fine-tuning cycle (that's like hanging a picture for your mother-in-law: "A little more to the left. No, that's too far! Back a bit to the right. Hmm... How about a little higher? No, that's too high!" etc., etc.) Or you may be chasing signatures in a circle, with every person telling you that he can't sign until the other person does (that's like trying to solve a problem with your PC: "Install an updated driver before we swap the modem" – "No, flash the chip set before we upgrade the driver" – "No, update the operating system first!" – "Looks like you need to replace the motherboard.") Or the exalted Grand Poobah of the

Customer tribe may just be too busy to pay any attention to your puny little project.

But the common thread among all the possibilities is that you are just being too darned nice. You may have said that you would only allow five business days for deliverable approval, but what do you do after the five days expire? You may have asked for particular signatures on the approval form, but what do you do if the signatures do not appear?

You fight the approval war on two levels: tactical, and operational. Tactically, you should use two weapons: status report and change control. Highlight the acceptance cycle in your Status Report, and start the change control process when your criteria are not met. Be tough, and insist on the rules being followed. And finally, from the operational perspective, you should just make such a nuisance of yourself that the approvers would sign anything rather than be pestered by you again.



Frequently Asked Questions

How can a Project Manager manage the Project Schedule if team members don't accurately report when they are behind?

The key to accurate forecasting and precise reporting is the "Estimate to Complete" column on the Progress Report. The team members don't have to report that they are behind; you (and most likely, your team leaders) need to make sure that they come up with an accurate estimate to complete, and the math will tell you the rest. How do you know if their estimate is accurate? Unless you (or your team leader) are involved in the details of the task, and understand the technology used to perform it, you won't – the first time.

By next time, you will know the team member's bias – unbridled optimism (forecasting too little), gloomy pessimism (forecasting way too much) or random don't-have-a-clueism (forecasting erratically), so you can "guide" them to a better estimate and then hold them accountable for it.

The thing to remember is, you can't just take what you're given. You have to question the estimate to complete, you have to compare it with other tasks, and you have to get it to the point where all of you are comfortable with it.

PROJECT CLOSEOUT

Purpose

The purpose of Project Closeout is to assess the project and derive any lessons learned and best practices to be applied to future projects.

Project Closeout begins with a Post-Implementation Review. The review may start with a survey designed to solicit feedback on the project from the Project Team, Customers, Consumers and other stakeholders. Once feedback has been collected and evaluated, an assessment meeting is conducted to derive best practices and formulate lessons learned to inform future efforts. Ideally, the best practices and lessons learned should be stored in a centralized organizational repository, facilitating access and retrieval by managers of future projects.

Project Closeout ends with administrative closeout – providing feedback on Project Team members, updating the skills inventory, capturing key project metrics, and filing all pertinent project materials into the project repository.

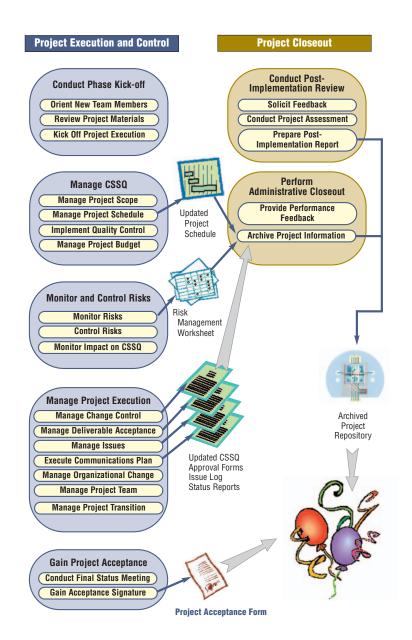
List of Processes

This phase consists of the following processes:

- ◆ Conduct Post-Implementation Review, where the Project Manager assesses the results of the project by soliciting feedback from team members, customers and other stakeholders through the use of a survey to gather lessons learned, best practices and performance patterns or trends, and communicate those results in the form of a Post-Implementation Report.
- Perform Administrative Closeout, where the Project Manager formally closes the project by providing performance feedback to team members, and archiving all project information.

The following chart illustrates all of the processes and deliverables of this phase in the context of the project management lifecycle.

Figure 5-1



List of Roles

The following roles are involved in carrying out the processes of this phase. The detailed descriptions of these roles can be found in the Section I Introduction.

- Project Manager
- ◆ Project Sponsor
- Project Team Member
- Customer
- Consumer
- Internal Stakeholders
- External Stakeholders
- Performing Organization Management

List of Deliverables

The major outcome of this phase is the Post-Implementation Report, which formalizes the feedback received from all involved parties, and identifies best practices and lessons learned. The output from the tasks performed as part of conducting a Post-Implementation Review serves as the building blocks for the report.

Of even more importance is the transfer of lessons learned and best practices from the Post-Implementation Report to an organizational repository of project management data.

The final deliverable of this phase is the Archived Project Repository.

The following table lists all Project Closeout processes, tasks and their deliverables.

Figure 5-2

Processes	Tasks	Task Deliverables (Outcomes)
Conduct	Solicit Feedback	Post-Implementation Survey
Post-Implementation Review	Conduct Project Assessment	Project Assessment Meeting
	Prepare Post-Implementation Report	Post-Implementation Report
Perform Administrative Closeout	Update Skills Inventory and Provide Performance Feedback	Updated Skills Inventory Performance Feedback
	Archive Project Information	Archived Project Repository

5.1

CONDUCT POST-IMPLEMENTATION REVIEW

Purpose

A project is considered complete when it has been successfully implemented and transitioned to the Performing Organization and approved by the Project Sponsor. At this point in the project management lifecycle, the responsibilities of the

Project Manager are to assess how closely the project met Customer needs, highlight what worked well, learn from mistakes made during the project, identify patterns and trends, derive ways to improve upon processes executed throughout the project, and, most

Roles

- Project Manager
- Project Team Members
- Project Sponsor
- Customers
- Consumers

importantly, communicate results. The purpose of **Conduct Post-Implementation Review** is to gather the information required to meet those responsibilities, and to present the information in a Post-Implementation Report.

Tasks

5.1.1 Solicit Feedback

The most important measures of the success of a project are whether the product was developed and delivered successfully

The tasks executed in support of Conduct Post-Implementation Review are:

- 5.1.1 Solicit Feedback
- 5.1.2 Conduct Project Assessment
- 5.1.3 Prepare Post-Implementation Report

and how well the needs of the Customers have been met. The most effective way to determine these measures is to Solicit Feedback.

The Project Manager should gather feedback using a survey appropriate to the project. Depending on the size and type of the project and the structure of the Performing Organization, different surveys may be required for different stakeholder groups, and surveys

will need to be distributed to the appropriate individuals. At a minimum, feedback should be solicited from the Project Sponsor and Project Team members who performed the tasks in the Project Schedule. The Project Manager should determine if surveys should also be given to Customer Representatives,

Consumers, or other stakeholders in order to collect sufficient information for assessing the success of the project in meeting its goals and their needs. The survey must also assess the outcome of the project and the performance of the Project Team and Performing Organization. The Project Manager must stress to all survey participants the importance of their honest feedback as one of the primary mechanisms for assessing the project's performance.

It is very important to solicit feedback from the Project Team. Because they have a different point of view from that of Customers and Consumers, Project Team members provide an "inside look" at the way the project was executed. They are also an important resource for communicating lessons learned and best practices.

The written survey should be distributed, in either electronic or hard copy form, with a specific due date for its completion. The Project Manager should follow up if the survey is not returned on time. If distribution is extensive, it may be helpful to keep a list of to whom and when the survey was sent and returned.

The Project Manager also has the option of conducting a survey in person or over the telephone. An interview survey can often be more effective than a written one. While those responding to a written survey are limited to answering the questions as they are written, an intuitive Project Manager will be able to expand upon the verbal responses of the survey participant, gathering information that might otherwise not be uncovered. In some cases, however, participants may be reluctant to disclose information as honestly in person. The Project Manager may not be the appropriate person to administer the survey interview to some Stakeholder groups.

t is also important to obtain feedback on the performance of the Project Manager!
The Project Manager's immediate supervisor, or an individual in a similar capacity, needs to take responsibility for obtaining honest feedback from the Project Sponsor, Customer, and Project Team.

Figure 5-3, New York State Project Post-Implementation Survey, provides an example of a feedback survey. Each project is unique and questions should be tailored to address the specific project and the intended audience.

Figure 5-3 New York State Project Post-Implementation Survey

New York State **Project Post-Implementation Survey**

Since every group involved in the project experiences it from a different perspective, survey questions should be tailored to the particular expectations of key groups identified in Project Roles and Responsibilities. These evaluations should apply not only to the execution of the project, but also to satisfaction with the project's product (or service), and with the support the Performing Organization provided to the Project Team.

The following survey is intended as a guideline, and provides sample questions that may be asked as part of soliciting feedback. The Project Manager should review the questions to determine which to include for the selected target audience. The respondents should be encouraged to provide not only a numerical rating (with 1=Not at All, or Poor, 2=Adequate, or Satisfactory, 3=To a great extent, or Excellent), but also their comments as to what worked well, what could have been done better, and recommendations for conducting future projects.

GENERAL INFORMATION Project Name: _____ Date: ____ _____ Your Performing Your Name: Organization: Your Role on _____ Dates of Your the Project: Involvement: Questions Rating (1-3) Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) **PRODUCT EFFECTIVENESS** How well does the product or service of the project meet the stated needs of the Performing Organization? How well does the product or service of the project meet your needs? When initially implemented, how well did the product or service of the project meet the stated needs of the Performing Organization? To what extent were the objectives and goals outlined in the Business Case met? What is your overall assessment of the outcome of this project?

Questions	Rating (1-3)	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)	
CSSQ M	ANAGEMEN [*]	г	
How well did the scope of the project match what was defined in the Project Proposal?			
How satisfied are you with your involvement in the development and/or review of the Project Scope during Project Initiation and Planning?			
Was the Change Control process properly invoked to manage changes to Cost, Scope, Schedule, or Quality?			
Were changes to Cost, Scope, Schedule, or Quality, effectively managed?			
Was the established change budget adequate?			
As project performance validated or challenged estimates, were the estimates effectively revised and the current and future tasks re-scheduled?			
How closely does the initial Project Schedule compare with the actual schedule?			
How did the estimated Project Budget compare with the total actual expenditure?			
How effectively was the Quality Management Plan applied during Project Execution?			
How effective was the quality assurance process?			
How effective were project audits?			
How effective was the utilization of Best Practices from prior projects in the Performing Organization?			
RISK MANAGEMENT			
How well were team members involved in the risk identification and mitigation planning process?			

Questions	Rating (1-3)	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
RISK MANAGI	EMENT (Cont	, , ,
To what extent was the evolution of risks communicated?		
How accurate were the risk probabilities on the Risk Management Worksheet?		
How effectively was the Risk Management Worksheet updated or reviewed?		
How comprehensive was the Risk Management Worksheet? (i.e. did many events occur that were never identified?)		
COMMUNICATI	ONS MANAG	EMENT
How effective were the informational materials available to orient team members?		
How satisfied were you with the kick-off meetings you participated in?		
How effectively were the project team meetings conducted?		
How effectively and timely were Progress Reports provided by Team Members to the Project Manager?		
How effectively were stakeholders involved in the project?		
Was communication with stakeholders adequate?		
How well were your expectations met regarding the frequency and content of information conveyed to you by the Project Manager?		
How well was project status communicated throughout your involvement in the project?		
How well were project issues communicated throughout your involvement in the project?		
How well did the Project Manager respond to your questions or comments related to the project?		

Questions	Rating (1-3)	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)	
COMMUNICATIONS I	MANAGEMEN [®]	T (Continued)	
How useful was the format and content of the Project Status Report to you?			
How useful and complete was the project repository?			
ACCEPTANO	CE MANAGEN	IENT	
How effective was the acceptance management process?			
How well prepared were you to receive project deliverables?			
How well defined was the acceptance criteria for project deliverables?			
Was sufficient time allocated to review project deliverables?			
How closely did deliverables match what was defined within Project Scope?			
How complete/effective were the materials you were provided in order to make a decision to proceed from one project lifecycle phase to the next? If materials were lacking, please elaborate.			
ORGANIZATIONAL CHANGE MANAGEMENT			
How effectively and timely was the organizational change impact identified and planned for?			
How pro-active was the Organizational Change Management Plan?			
Was sufficient advance training conducted/ information provided to enable those affected by the changes to adjust to and accommodate them?			

Figure 5-3 (Continued)

Questions	Rating (1-3)	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
ORGANIZATIONAL CHAN	GE MANAGE	MENT (Continued)
Overall, how effective were the efforts to prepare you and your organization for the impact of the product/service of the project?		
How effective were the techniques used to prepare you and your organization for the impact of the changes brought about by the product or service of the project?		
ISSUES I	MANAGEMEN	т
How effectively were issues managed on the project?		
How effectively were issues resolved before escalation was necessary?		
If issue escalation was required, how effectively were issues resolved?		
How effectively were issues able to be resolved without impacting the Project Schedule or Budget?		
PROJECT IMPLEM	IENTATION &	SUPPORT
How effective was the documentation that you received with the project product/service?		
How effective was the training you received in preparation for the use of the product/service?		
How useful was the content of the training you received in preparation for the use of the product/service?		
How timely was the training you received in preparation for the use of the product/service?		

Questions	Rating (1-3)	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
PROJECT IMPLEMENTA	TION & SUPP	ORT (Continued)
How effective was the support you received during implementation of the product/service?		
PERFORMANCE OF THE	PERFORMING	G ORGANIZATION
How effectively and consistently was sponsorship for the project conveyed?		
How smooth was the transition of support from the Project Team to the Performing Organization?		
Was there a qualitative difference in the level of support provided by the Project Team during implementation and by the Performing Organization after transition?		
Did the Project Team adequately plan for and prepare the Performing Organization for its ongoing responsibilities for the product or service of the project?		
PERFORMANCE O	OF THE PROJ	ECTTEAM
Overall, how effective was the performance of the Project Manager?		
How well did the Project Team understand the expectations of their specific roles and responsibilities?		
How well were your expectations met regarding the extent of your involvement in the project (effort time commitments etc.)?		
How effective was each Project Team member in fulfilling his/her role?		
How effective was team member training?		

New York State Project Post-Implementation Survey

GENERAL QUESTIONS

Question	Response
What were the most significant issues on this project?	
What were the lessons learned on this project?	
What on the project worked well and was effective in the delivery of the product?	
What other questions should we have asked? What other information would you like to provide to us about this project?	

Once survey feedback has been collected, the Project Manager must review, analyze, and summarize the results for presentation at the Project Assessment Meeting.

The following is a suggested list of categories to use when compiling survey information:

- Product Effectiveness
- CSSQ Management
- Risk Management
- Communications Management
- Acceptance Management
- Organizational Change Management
- Issues Management
- Project Implementation and Transition
- Performance of Performing Organization
- Performance of Project Team

Summarized feedback will be used during the Project Assessment Meeting as a starting point for identifying lessons learned and best practices to use in future projects. It will also be included in the Post-Implementation Report created at the end of Project Closeout.

A project may come in on time, under budget, and meeting all defined quality standards. Every deliverable may have been 100% error free and perfectly consistent with the Project Scope. BUT, if the Customer is not satisfied with the outcome, the project cannot be considered a success!

5.1.2 Conduct Project Assessment

The goal of this task is for the Project Manager to meet with select members of the Project Team and stakeholder community to present the summarized results of the feedback surveys, discuss all other aspects of the completed project, gain consensus on what was successful and what was not, and derive best practices and lessons learned.

In addition to the Project Team, the Project Manager should consider inviting Project Managers from the Performing Organization with experience on similar projects. Based on experience and prior knowledge, other Project Managers can provide information and insight on the assessment process. It is a good idea for the Project Manager to distribute the summarized survey results to each participant in advance of the Project Assessment Meeting, to allow them to come prepared to address the contents.

In order to provide the best possible products and services to Customers, Performing Organization Management must strive to continuously improve the way New York State projects are managed and products are delivered. During the course of the assessment meeting, participants will consider the summarized feedback results and the experience of the Project Managers in attendance to discuss and assess the performance of the project. Based upon these discussions, the group will identify and agree upon lessons learned. These lessons will not only benefit the current Project Team, they will also help managers and team members of similar projects. The lessons may be positive or negative. Lessons learned must not simply be identified during the meeting. It is also important to document each one and develop an action plan describing when and how they might be implemented within the Performing Organization.

During the course of the project, the Project Manager, Customer, and Project Team members most likely recognized certain procedures that, when exercised, improved the production of a deliverable, streamlined a process, or suggested ways to improve standardized templates. Best practices are documented as part of the Project Assessment Meeting and later shared with other Project Managers so they can be repeated. In some cases, the outstanding "successes" might be translated into new procedures to be followed by future projects.

5.1.3 Prepare Post-Implementation Report

After the Project Assessment Meeting, the Project Manager prepares a Post-Implementation Report. In the report, the Project Manager distills information gleaned from the discussion and organizes it according to the feedback categories described above, adding information on key project metrics. The report documents the effectiveness of the product in meeting the needs of the Customer, the effectiveness of project management and the Project Team, how well the Performing Organization supported the project, lessons learned, best practices to be used in future projects, and the key project metrics that will enable the Performing Organization to compare success measures across projects. It also contains recommendations for improvement to be used by other projects of similar size and scope. (see Figure 5-4, the New York State Project Post-Implementation Report) During Perform Administrative Closeout, the report is archived in the project repository.

The Project Manager must present or distribute the Post-Implementation Report to members of the Performing Organization. In Performing Organizations that undertake many projects, it is most effective to assign an individual or agency unit to take ownership of collecting and organizing the information, teaching the lessons learned, and implementing the best practices throughout the organization.

C A central repository, owned and maintained by someone within your Performing Organization, provides a place where lessons learned and best practices can be archived for use by all Project Managers in the organization. Over time, as more and more information is added, it will become part of an invaluable knowledge base that, when leveraged, will translate into tremendous improvements on all New York State projects!

The New York State Office for Technology would appreciate receiving a copy of the Post-Implementation Report for any project guided by this methodology. Lessons learned and best practices from a variety of New York State projects will contribute to the continuous improvement of this *Guidebook*.

Figure 5-4 New York State Project Post-Implementation Report

New York State Project Post-Implementation Report

PROJECT IDENTIFICATION		
Project Name:	Date:	
Project Sponsor:	Project Manager:	
Report Prepared By:		
Enter the Project Name . Enter the current Date . Enter the name of the assigned Project Sponsor and Pr Enter the name of the individual who prepared the report.		
CATEGORIES: Categories of the report correspond Post-Implementation Survey.	to the categories in the Project	
For each category, the Overall Rating is the average of th vey forms for that category (1=Not at All, or Poor, 2=Adec extent, or Excellent)		
A. PROJECT EFFECTIVENESS		
Summarize how effectively the product or service met the and the Performing Organization.	needs of the Customer, Consumer,	
Highlight specific product performance metrics.		
Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the project outcome, or those wildly enthusiastic about it.		
Identify and discuss specific issues.		
Overall Survey Rating:		

Figure 5-4 (Continued)

New York State Project Post-Implementation Report

B. CSSQ MANAGEMENT

Summarize effectiveness of CSSQ Management throughout the project.

Highlight significance of approved changes to the original project scope, and how they were managed.

Compare the baseline versions of the **Project Schedule** and **Budget** to the final versions. Describe discrepancies.

Summarize deliverables compliance with defined quality standards.

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the CSSQ management process, or those wildly enthusiastic about it.

Identify and discuss specific issues.

Overall Survey Rating:

C. RISK MANAGEMENT

Summarize effectiveness of Risk Management throughout the project.

Highlight significant identified risks that actually occurred, and the effectiveness of the mitigation plan.

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the Risk Management process, or those wildly enthusiastic about it.

Identify and discuss specific issues.

Overall Survey Rating:

D. COMMUNICATIONS

Summarize the effectiveness of the Communications Plan developed for the project.

Highlight significant communication activities that were particularly effective.

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the Project Communications process, or those wildly enthusiastic about it.

Identify and discuss specific issues.

Overall Survey Rating:

Figure 5-4 (Continued)

New York State Project Post-Implementation Report

E. ACCEPTANCE MANAGEMENT

Summarize effectiveness of Acceptance Management throughout the project.

Highlight significant deliverables and the effectiveness of the Acceptance Plan for those deliverables.

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the Acceptance Management process, or those wildly enthusiastic about it.

Identify and discuss specific issues.

Overall Survey Rating:

F. ORGANIZATIONAL CHANGE MANAGEMENT

Summarize effectiveness of Organizational Change Management throughout the project.

Highlight significant Change Management impacts and the effectiveness of the Organizational Change Management activities planned and executed for those impacts

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the Organizational Change Management process, or those wildly enthusiastic about it.

Identify and discuss specific issues.

Overall Survey Rating:

G. ISSUES MANAGEMENT

Summarize effectiveness of Issues Management throughout the project.

Highlight significant issues and the effectiveness of the Issues Management process for those issues

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the Issues Management process, or those wildly enthusiastic about it.

Were issues resolved before change control was needed?

Overall Survey Rating:

New York State Project Post-Implementation Report

H. PROJECT IMPLEMENTATION AND TRANSITION

Summarize effectiveness of the Project Implementation and Transition.

Highlight significant milestones of the implementation and transition, and the effectiveness of the activities planned and executed for those milestones.

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the Implementation and Transition process, or those wildly enthusiastic about it. Identify and discuss specific issues.

O #0 D !!

Overall Survey Rating:

I. PERFORMANCE OF PERFORMING ORGANIZATION

Summarize effectiveness of the **Performing Organization** within the context of this project. Highlight significant responsibilities of the Performing Organization, and the effectiveness of the Performing Organization in accomplishing them.

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the performance of the Performing Organization, or those wildly enthusiastic about it.

Identify and discuss specific issues.

Overall Survey Rating:

J. PERFORMANCE OF PROJECT TEAM

Summarize effectiveness of the Project Team within the context of this project.

Highlight significant responsibilities of the Project Team, and the effectiveness of the Team in accomplishing them.

Identify and discuss "outliers" – specific Stakeholder groups dissatisfied with the performance of the Project Team, or those wildly enthusiastic about it.

Identify and discuss specific issues.

Overall Survey Rating:

Figure 5-4 (Continued)

New York State Project Post-Implementation Report

K. KEY PROJECT METRICS

COST

Percent difference between the final cost, final approved baseline cost estimate, and the original cost estimate.

Number of approved changes made to the original budget.

Number of "re-baselined" budget estimates performed .

SCHEDULE

Number of milestones in baseline schedule.

Number of baseline milestones delivered on time (according to last baselined schedule).

Difference in elapsed time of original schedule and final actual schedule.

Difference in elapsed time of final baseline and final actual schedule.

SCOPE

Number of baseline deliverables.

Number of deliverables delivered at project completion.

Number of scope changes in the post-planning phases.

QUALITY

Number of defects/quality issues identified after delivery.

Number of success measures identified in the Business Case that were satisfied or achieved at project completion.

5.2

PERFORM ADMINISTRATIVE CLOSEOUT

Purpose

The purpose of **Perform Administrative Closeout** is to per-

form all administrative tasks required to bring the project to an official close.

Roles

- Project Manager
- Team Leader

Tasks

5.2.1 Update Skills Inventory and Provide Performance Feedback

During the course of the project, Project Team members most likely enhanced their current skills or obtained new ones. The

investment made in improving an individual's skills should not be lost. In order to leverage skills on future projects, and to facilitate and encourage individual growth,

The tasks executed in support of Perform Administrative Closeout are:

- 5.2.1 Update Skills Inventory and Provide Performance Feedback
- 5.2.2 Archive Project Information

the Project Manager should maintain a record of the skills developed and used on the project. If a skills inventory exists within the Performing Organization, the Project Manager or Team Leader must be sure each Project Team member takes the time to update it with any skills newly developed and any new project roles that were assumed. An up-to-date inventory will become invaluable to future Project Managers when attempting to appropriately staff their projects. It can also be used as input for an individual's immediate supervisor when providing performance feedback.

If no skills inventory exists within a Performing Organization, the Project Manager should encourage the Performing Organization to implement one. The inventory can be as simple as a hardcopy list, or as sophisticated as an electronic skills database, depending upon the needs and desires of the organization.

The Project Manager and/or Team Leader must also take the time to document their feedback on the accomplishments and performance of each Project Team member. As the person most aware of the day-to-day activities performed by the Project Team, the Team Leader or Project Manager is the most appropriate person to provide honest and accurate feedback. Feedback documentation should be prepared and reviewed with the individual team members first. Following this performance discussion, the documentation is submitted promptly to each Project Team member's immediate supervisor to be used as input to performance appraisals. The performance feedback mechanisms (appraisal forms, project exit interviews, etc.) specific to the Performing Organization should be used.

5.2.2 Archive Project Information

Throughout the course of the project, the Project Manager maintained a project repository. As the project progressed, the purpose of the repository was to create a central point of reference for all project materials to be used by anyone involved in the project. Once the project comes to an official close, the repository provides an audit trail documenting the history and evolution of the project.

During Project Closeout, the Project Manager should examine the repository to ensure that all relevant project-related material, documents produced, decisions made, issues raised and correspondence exchanged have been captured. In addition, the Post-Implementation Report should be included.

When the project is officially closed, the project repository should include the following materials:

- Project supporting documentation, including the Business Case and Project Proposal
- Project description/definition documents such as the Project Charter and Project Plan
- Any working documents or informal documents defining Cost, Scope, Schedule and Quality of the project
- Project Schedules retain all copies electronically, but only include the baseline and final schedule in the hardcopy repository
- Project financials

- Project Scope changes and requests log
- Project Status Reports
- Team member progress reports and timesheets
- Issues log and details (open and resolved)
- Project acceptance log by deliverable
- Project Deliverable Approval Forms, with original signatures
- Risk Management Worksheets
- Audit results, if encountered
- Correspondence, including any pivotal or decision-making memos, letters, email, etc.
- Meeting notes
- Final Project Acceptance Form, with original signatures
- Post-Implementation Report

A hard copy repository should be archived in a designated documentation area. It may be made available electronically at the discretion of the Project Sponsor in accordance with organizational records management policies. See Figure 5-5 Project Repository Table of Contents.

Deliverable

◆ Archived Project Repository – A collection of all project-related materials, documents produced, decisions made, issues raised and correspondence exchanged, providing the history and evolution of the project.

Figure 5-5 New York State Project Repository Table of Contents

New York State Project Repository Table of Contents

PROJECT IDENTIFICATION	
Project Name: Project Sponsor:	Date:Project Manager:
Enter the Project Name . Enter the current Date . Enter the name of the assigned Project Sponso	r and Project Manager .

TABLE OF CONTENTS

The following is a suggested **Table of Contents** for your project repository. The organization and content of your actual repository may differ, depending on the scope and type of project and your personal preference.

- Project Proposal
- Business Case
- Project Charter
- Project Scope Statement
- Project Schedule
- Quality Management Plan
- Budget Estimate
- List of Risks/Risk Management Worksheet
- Description of Stakeholder Involvement
- Communications Plan
- Post-Implementation Survey(s)
- Post-Implementation Report
- Change Control Forms
- Signed Approval Forms
- Meeting Notes/Minutes/Correspondence
- Project Status Reports
- Progress Reports
- Project Work Products/Deliverables
- End of Phase Checklists

Project Closeout End-of-Phase Checklist

How To Use

Use this checklist throughout Project Closeout to help ensure that all requirements of the phase are met. As each item is completed, indicate its completion date. Use the Comments column to add information that may be helpful to you as you proceed through the project. If you elect NOT to complete an item on the checklist, indicate the reason and describe how the objectives of that item are otherwise being met.

Figure 5-6

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Solicit Feedback:	268			
Prepare surveys	268			
Distribute or review surveys with appropriate participants	269			
Gather survey results	277			
Review and analyze survey results	277			
Summarize feedback for presentation at Project Assessment Meeting	277			
Conduct Project Assessment:	278			
Schedule Project Assessment Meeting	278			
Select and invite appropriate meeting participants	278			
Review and distribute survey summary results	278			
Gather notes and meeting results for inclusion in Post- Implementation Report	278			
Use survey feedback and meeting results to identify lessons learned and best practices	278			

Item Description	Page	Completion Date	Comments	Reason for NOT Completing
Document each lesson learned	278			
Document best practices	278			
Develop action plans to implement lessons learned and best practices	278			
Prepare Post- Implementation Report:	279			
Gather summarized survey feedback, notes from Project Assessment Meeting, lessons learned and best practices	279			
Present or distribute report to Performing Organization Management	279			
Send copy of report to OFT	279			
Update Skills Inventory and Provide Performance Feedback:	285			
Establish skills inventory system, if one does not exist	285			
Update skills or add skills to inventory system for each Project Team member	285			
Write performance feedback on each Project Team member	286			
Discuss performance feedback with each Team member	286			
Forward feedback to team member's immediate supervisor	286			
Archive Project Information:	286			
Gather all project information	286			
Archive information in project repository	286			
Locate hardcopy repository in designated documentation area	287			
CELEBRATE! Your project is complete!				

Measurements of Success

The ultimate measurement of success for Project Closeout will probably never be known. That's because it is impossible to assess now how much future projects will benefit from best practices and lessons learned derived from this project; the only thing certain is that no one will benefit at all if the best practices and lessons learned are not documented and communicated.

Meanwhile, the Project Manager can still assess how successfully the project is proceeding through Closeout by utilizing the measurement criteria outlined below. More than one "No" answer indicates a lesser probability that your experiences will help with the eventual success of other projects.

Figure 5-7

Process	Measurements of Success	Yes	No
Conduct Post- Implementation Review	Was the survey presented in a way to encourage active participation?		
	Were feedback results meaningful?		
	Were best practices and lessons learned appropriately identified and documented in such a way as to facilitate their application to all types of projects?		
	Did people read and provide feedback on the Post- Implementation Report?		
Perform Administrative Closeout	Was all project information readily available and easy to consolidate in the project repository?		
	Were you able to easily provide performance feedback on team members?		
	Did you take the initiative to establish/recommend a skills inventory, if one did not exist within your organization?		

Phase Risks/Ways to Avoid Pitfalls

Project Closeout may be perceived as the least important of all of the project phases, but its value to future projects cannot be underestimated. The knowledge gathered, the expertise developed, the lessons learned, the practices perfected – will remain locked temporarily in a few people's heads unless the Post-Implementation Review is conducted promptly, documented thoroughly, and (most importantly) its results are disseminated appropriately throughout the Performing Organization.

What are some of the key elements of Project Closeout that require the most attention? The Post-Implementation Review definitely stands out, and receives the most attention in the following table that identifies processes and tasks which have pitfalls highlighted in this section.

Figure 5-8

Process	Task	Why is it important?
Conduct Post- Implementation Review	Solicit Feedback	Do you have to ask? Yes, if you want answers. Your opinion, no matter how lofty, is not enough.
	Conduct Project Assessment	"Honesty is such a lonely word." But that is what your project – and all future projects – need from you!
	Derive Lessons Learned	"Truthfulnessalways seems so hard to give." But you owe it to yourself, and all other Project Managers that will follow in your footsteps. Learn from the bad things and leverage the good.
	Identify Best Practices	Here's your chance to highlight for posterity all the things you and your team did right!

PITFALL #1 – YOU WAITED TOO LONG TO GET FEEDBACK



Your project is a success! Everyone is walking on air! In your joy and celebration, you neglect to solicit immediate feedback from the Project Team and other stakeholders....

Every project has its challenges, and everyone can learn from them. But people tend to forget the challenges they faced during the course of a project when the final outcome is a success. It is very important to solicit feedback as soon as Project Closeout begins so you get immediate, honest, and complete information regarding not only the project successes, but the failures. Then, the celebration can begin!

PITFALL #2 – YOU AREN'T SURE YOU ARE READY TO HEAR WHAT THEY REALLY THINK OF THE PROJECT



Scenario 1. Your project was a miserable failure. Your team mutinied; your Customers hate you; and you are in big trouble with your boss because the project came in months late and way over budget. You want to put this wretched experience behind you. The last thing you want to do is dredge up all the misery again. Why give everyone yet another opportunity to kick you?

Scenario 2. Your project went OK. You had a pretty good team (with just a few nuts and bolts); you are still on speaking terms with your Customers; and the project was just a bit over, mostly because of someone who insisted on "just one more thing." You can probably even use this project as a resume-builder for future opportunities. So why jeopardize it by giving everybody a chance to bring up all the things that could have been done better? Let sleeping dogs lie!

Scenario 3. You are on top of the world. Your project was a success. The Customers love the product. Your boss nominated you for an award because you delivered the project on time and under budget. So why are you still afraid to find out what everybody thinks about the experience?

As you can see, whatever the outcome, the bias is always to "close the chapter" and move on. And yet, for your personal growth, for the benefit of your organization, and for all the

other Project Managers to come, you need to spend the time to review the project. You need to understand what you did right – and what you did wrong. You need to know how your behavior, your approach, and your techniques, really worked – not from your own skewed perspective, but from the objective standpoint of your team, your Customers, and your management; if you think about it, from the only perspective that really matters, at least vis-à-vis your career.

PITFALL #3 – YOU DECIDE TO PLAY FACILITATOR (OR SCRIBE)



Since you are the one inviting the folks to your Project Assessment Meeting, and it is your project they are reviewing, the temptation is to try to facilitate the meeting yourself.

Bad idea for two reasons. First of all, you probably don't know how to do it right. A few Project Managers do happen to be talented facilitators; a lot more think they are, but in reality don't have a clue as to what's involved in getting meaningful output from a large group of disparate personalities. Remember, if you want a professional job, secure a professional. Many agencies have trained facilitators that are available for such meetings. Alternatively, you may consider hiring an outside consultant if it can be done expediently.

Secondly, even if you are a great facilitator, what do you want to concentrate on during this meeting: analyzing what people say, or worrying about Loud Luther dominating the rest of the group with his diatribes? Remember what they say in the legal profession, "a lawyer representing himself has a fool for a client."

Likewise, it's a bad idea to play scribe, for the same reasons: you probably can't type as fast as people talk, and you should be worrying about the meaning of what people are saying, and not keeping up with Rapid Rita as she's rattling off sixteen reasons why you are such a rotten rascal.

PITFALL #4 – YOU GET LOST IN THE FEEDBACK AND LEARN THE WRONG LESSONS



If you overcome your fears and invite a good cross-section of the Project Team to the Project Assessment Meeting, and get a good facilitator to lead the session, you are going to get a lot of feedback – especially if, in preparation for the meeting, your facilitator asks the participants to list all the things that could have been handled better.

Making sense of all the feedback will be tough. Here are some guidelines:

First, concentrate on what's important. During the meeting, your facilitator should ask the group to prioritize their feedback, both positive and negative. What were the things that impeded the project the most? If there was a problem (corrected or not) with Cost, Scope, Schedule, or Quality – what contributed the most to it? The group should come to consensus on the top three or four or five things that affected the project the most. (How? That's why you get a professional facilitator!)

Second, select items that may be of use to other projects. If your locality had a flood for the first time in fifty years during the crucial phase of your project, and as a result your schedule got thrown off kilter, well, too bad for you – but nobody else really cares.

Third, "genericize" your experience so it can be applicable to multiple projects. If one of your key team members developed a rare tropical disease and as a result you had to scramble to identify and secure another resource who could do the work while the expert recuperated, the lesson learned is not how to treat the rare tropical disease, but how to anticipate and prepare for the risk of a key member of the team being unavailable – for whatever reason.

PITFALL #5 – YOU ARE TOO MODEST



No matter how rotten everyone thinks you are at managing projects, you are guaranteed to have done at least something right (like reading this *Guidebook*, for example). So along with getting all the negative feedback at the Project Assessment Meeting, you also need to accentuate the positive. That is not difficult if your facilitator, in preparation for the meeting, asks the participants to list all the things that went right with the project.

Again, making sense of the feedback is possible if you follow the same guidelines: prioritize the comments, select those that are applicable to other projects, and make them generic and useful.

Don't be bashful about throwing things in that only you thought of. After all, who knows this project better than you? And be specific. If you came up with a better format for a progress report that suits your organization or your project circumstances to a "T" – include it, both as a template, and as a filled-in example. If you followed an unorthodox issue escalation procedure, but it worked better than the tried-and-true chain-of-command one, by all means, let the other folks have the benefit of your ingenuity and good fortune.

PITFALL #6 - YOU LET IT ALL GO TO WASTE



You complete a magnificent project, one that will be a feather in your cap for years to come. You survey half the world for their feedback. You hold a great Project Assessment Meeting, and come up with a host of brilliant strategies for other Project Managers to emulate, and a multitude of obstacles for them to avoid. You triumphantly record them all into your project repository, and file it away.

Never to be seen again.

That's because your organization does not have a way to disseminate this hard-won knowledge throughout the workplace. There is no central repository of historical project data. There is no agency unit charged with taking ownership to collect, organize and make available information about other projects. There is nobody assigned to actively teach lessons learned, or faithfully implement best practices.

There is no way to share organizational knowledge, other than by personal contact.

But it doesn't have to be that way. You can change that, and you can benefit greatly by doing it. First, start accumulating the knowledge from your own projects and from others you are aware of. Second, publicize what you are doing, and create a track record of successful utilization. Third, present the organizational knowledge repository idea to your management, and encourage them to take action. Someone at a management level needs to assign ownership to the appropriate individuals for implementing best practices and lessons learned throughout the Performing Organization. By then, the organization will have been exposed to the idea, will think it is fabulous, and will think you're fabulous for coming up with it.

And don't forget to share your knowledge with the OFT Project Management Office. Let others learn from your experiences while you benefit by learning from theirs. THEY WANT TO KNOW!!

PITFALL #7 – COMPLETION IS ANTI-CLIMACTIC



Your project ends successfully. People go their separate ways. You feel like the whole experience is now nothing more than a vague memory. Why? Maybe you didn't take the time to appropriately celebrate your success.

Don't be afraid to approach your Project Sponsor to inquire about funds that may exist for hosting a celebration function. The function may be as simple as a cake and coffee meeting, or may be an agency-sponsored party or event. In any case, you want your Project Team to have good memories of their experiences on projects you manage, so they will be excited about having the opportunity to work with you again.

Good luck, and have fun!



Frequently Asked Questions

Why should I write a Post-Implementation Report? Who's going to read it, anyway?

Three reasons: because it's good for you, because it's good for your agency, and because it's good for project management everywhere!

Let's say the project did not go well. Do you want to repeat this sorry experience again, or would you rather avoid the same mistakes the next time? The only chance you have is by learning from experience, and allowing your organization to do the same.

Now let's say the project went OK. Don't you want to do better the next time? Enhance your career, earn the respect of your peers, etc., etc.? Repeating what you did right this time will give you more opportunity the next time to concentrate on things you could do better.

Finally, let's say the project was a great success. Aren't you proud of your accomplishment? Don't you want everybody to know about it, and benefit from it?

For more information, see 5.1.2 Conduct Project Assessment.