PROJECT MANAGEMENT

METHODOLOGY

**Montclair State University**

**OneMontclair**

**Project Management Office**

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# INTRODUCTION

## Overview

The OneMontclair Team is establishing a Project Management Office (PMO) as a means of achieving a greater degree of success in its projects as part of the initiative to implement a new University-wide suite of policies, procedures and processes, along with an aligned set of technologically advanced business and information systems that will enable the University to become more efficient in its use of resources across financial, human resource management, and student administration business areas, budget management, planning and systems operations.

The PMO is charged with creating and maintaining a documented Project Management Methodology for use in all projects across the OneMontclair Initiative. This methodology is designed to meet the needs of all segments of the organization as we engage in project related work. It serves as a guide to the organization as we select our projects, to project teams as we plan our work, to management as we provide the required oversight, and to sponsors and customers as we collaborate in the design and delivery of business systems.

This methodology is designed to be consistent with the Project Management Institute’s (PMI®) *A Guide to Project Management Body of Knowledge (PMBOK®)* and has also been based on the University of Minessota systems planning methodology. It should apply equally well to and meet the requirements of OneMontclair projects large and small. The templates available to support this methodology are referenced throughout this document.

## Purpose

This document describes in detail the process that the OneMontclair Team intends to use during the initiating, planning, managing (controlling and executing), and closing stages (PMI) of projects. The prospective Project Manager and team members will find a detailed description of the methodology, as well as references to templates and other documents that are used in support of the methodology.

In defining this methodology, the PMO hopes to reach the following goals:

* Provide a common point of reference and a common vocabulary for talking and writing about the practice of project management for projects within scope.
* Increase the awareness and professionalism of good Project Management Practices by those charged with the responsibilities defined in the methodology.
* Define the expectations of the OneMontclair Project Executive Committee, Sponsors, Business Leaders, Project Managers, Stakeholders, Technical Leads and other team members.
* Obtain consensus within the organization about the importance of those expectations as Critical Success Factors (CSF).
* Create the basis for a collaborative environment where everyone engaged in technical project work understands what is required of them and why those requirements are key factors for improving project results.

## Organization

Each Project Phase section of the document is organized as follows:

1. Overview/description
2. Critical Success Factors
3. Activities
4. Action Plan Checklist (table)
5. Deliverables

# PHASE I – PROJECT INITIATION

We are surrounded by people who are highly creative and energized. These individuals deal with issues of varying types and magnitude on a daily basis, and they can be very imaginative in conceiving of solutions to the problems they face. They may present these solutions to OneMontclair Team as potential projects to meet the program goals.

Organizations frequently discover the need or benefit in pursuing additional new initiatives and Montclair State University is no different. This may be due to any unmet needs, the need for operational maintenance or the opportunity to create a strategic advantage. The OneMontclair Team is being called upon to leverage the power of technology for the benefit of the organization through execution of a program of business projects.

Finally, organizations may be subjected to the demands of outside agencies. For example, a business unit may be on constant watch for new legislation that can affect the way it does business. Business units may find it beneficial to adopt a new program that is required for business with our collegiate and business partners. In each case, the organization in question may have to shuffle priorities and resources to handle new projects, and the OneMontclair Team will have to find a way to make it all happen.

As we can see, projects may come about for a variety of reasons and they may present themselves at any time. Generally, we find that there are many more ideas and demands for technology projects than there are people and dollars to support them. Projects differ in the degree of benefit that they can bring to the organization, and the cost can vary widely. Our management generally recognizes that great care must be taken in deciding which projects to support, and which to defer. Therefore, we have defined a process that will allow us to choose among the project candidates.

This selection process is carried out during Initiation. The Project Definition Process describes the time in the lifecycle of a project when the project idea is defined, evaluated and then authorized/or funded by the OneMontclair Board of Trustees (the key strategic advisory team).

The Project Management Profession has learned that this process works best when the mission, justification, significant deliverables, risks, estimated cost and resource requirements and other information about the project are documented and reviewed in a formal manner. This process gives executive management, the Sponsor and other stakeholders an opportunity to validate the projects potential benefits and costs.

The Initiation Process provides several benefits:

* The Initiation process guides the project team as they determine and articulate those key aspects of a proposed project that will help in the decision process.
* Careful development of Initiation’s key deliverable, the Business Case or Project Definition Document (PDD), helps to ensure that the organization chooses the best of its project candidates, and that the technology projects chosen will be successful.
* Development of the PDD also promotes an early collaboration between the Sponsor, the Client(s) and the IT project team members. Early establishment of a good rapport among these players can help ensure a cooperative spirit later in the project.
* A well-written PDD can help everyone involved understand and come to agreement on exactly what is being proposed, the benefits that can be expected, the technical approach to be taken and how the project’s deliverables will fit into ongoing operations.

The Project Request Process is successful when it leads the organization to select the most pressing business issues for resolution, choose effective technological approaches to resolve them, and ensures that the organization makes a good investment that is consistent with its long-term strategies.

The amount of effort that goes into the Initiation Phase of a project will depend in some part on the size, complexity and risk of the proposed project. We generally will need to know more about big projects that represent substantial investment than about small ones. The total effort required to complete the Initiation Phase may range from hours to weeks. So that effort is not wasted, it is essential to keep focus on the purpose of initiation: select those projects that give the biggest bang for the buck. For this reason, it is useful to give formal guidance to project teams as to how much effort makes sense for projects of a given size. This will help to stay focused and provide the necessary information, rather than just create extraneous paperwork.

## Critical Success Factors

1. The project is feasible
2. Identification of the Sponsor
3. Formal acceptance by the Sponsor of responsibility for the project, including achievement of the benefits and costs described in the Business Case
4. Acceptance of the Business Case by the Sponsor
5. Alignment with business and IT strategic plan/direction.

## Activities

The following is a list of key activities necessary for successful development of a Business Case and initiation of a project:

### Assign A Project Champion/Leader

Every aspect of a project requires someone to guide it. Initiation, and specifically development of the Project Definition Document (PDD), is no exception. This project champion or business unit relationship manager (who may or may not be the eventual Project Manager) is responsible for defining the project purpose, establishing the CSFs, gathering strategic and background information, determining high-level planning data and developing estimated budgets and schedules for the life of the project. The Project Champion will coordinate resources and activities to complete the necessary activities in order to develop the PDD and any other materials required for project approval. Since it generally takes more than one person to fully develop a Business Case, a team of individuals may also be required to do the research, generate the estimates and perform other work that may be necessary. This team may not carry over to actual conduct of the project.

| Action Plan Checklist - *Assign A Project Champion/Leader* | |
| --- | --- |
|  | Select a Project Champion or Leader |
|  | Identify a team to assist with Initiation phase activities |
| **CSF** | **Project Champion and Initiation phase team members are identified** |

### Identify A Sponsor

The Sponsor is the individual, generally an executive, who is responsible for the strategic direction and financial support of a project. A Sponsor should have the authority to define project goals, secure resources, and resolve organizational and priority conflicts. It has been shown, but may not be generally recognized, that lack of project sponsorship can be a major contributor to project failure. Conversely, an appropriately place and fully engaged Sponsor can bring a difficult project to successful conclusion. Assumptions that a formal Sponsor is not needed (or for political reasons can be avoided) are misplaced. Steering committees are no substitute. A powerful but uninvolved Sponsor is no help. Even big-budget and highly visible projects require a formal Sponsor.

The Sponsor’s responsibilities are many:

1. Champion the project from initiation to completion
2. Participate in the development and selling of the project business case
3. Present overall vision and business objectives for the project
4. Assist in determining final funding and project direction
5. Serve as executive liaison to key Stakeholders (e.g., Senior Management, department directors and managers)
6. Support the Project Team.

| Action Plan Checklist - *Identify a Sponsor* | |
| --- | --- |
|  | Identify a Sponsor |
|  | Obtain acceptance of project accountability from Sponsor |
|  | Sponsor understands their role |
| **CSF** | **Sponsor is engaged** |

### Define the Business Need/Opportunity

The statement of need/opportunity should explain, in business terms, how the proposed project will address specific needs or opportunities. Typically, satisfaction of a need or opportunity will provide specific benefit to the organization, e.g.:

1. Keep an existing service or operation in good working order
2. Improve the efficiency or effectiveness of a service
3. Provide a new service as mandated by external authority
4. Obtain access to needed information that is not currently available
5. Reduce the cost of operations
6. Generate more revenue
7. Gain a strategic advantage

The discussion of the need/opportunity should be stated in business terms and should provide an understanding of:

1. Origin of the need, or how the opportunity was recognized
2. The magnitude of the need/opportunity
3. Contributing factors, such as increased workload, loss of staff, fiscal constraints, change in market conditions, introduction of new technology, mandate/regulation, etc.
4. Results of an alternatives analysis, i.e. relative merits of alternative approaches
5. The cost of taking no action

This information allows an organization to determine how much of its resources (dollars, people’s time) to put into the project. The decision can be made based on how well the project should meet the business need or take advantage of the opportunity.

| Action Plan Checklist - *Define the Business Problem/Opportunity* | |
| --- | --- |
|  | Identify the Business Need/Opportunity |
|  | Determine the magnitude of the Business Need/Opportunity |
|  | Determine the extent to which the Business Need/Opportunity would be addressed if the project were carried out |
|  | Determine the consequences of making no change |
| **CSF** | **Business Need/Opportunity is documented in the Project Definition Document** |

### Identify Business Objectives and Benefits

Every OneMontclair project is an investment of time and money. We are conducting projects so that Montclair State University can meet its strategic objectives. More specifically, projects help us reach business objectives that are directly related to the Montclair State University business strategy. Business objectives define the results that must be achieved for a proposed solution to effectively respond to the need/opportunity, i.e. the business objectives are the immediate reason for investing in the project. Objectives also serve as the “success factors” against which the organization can measure how well the proposed solution addresses the business need or opportunity.

Each business objective should be:

1. Related to the problem/opportunity statement
2. Stated in business language
3. SMART (i.e. Specific, Measurable, Attainable, Results Oriented and Time Limited)

Having established the business objectives, determine the benefits. For example, determine whether the proposed solution will reduce or avoid costs, enhance revenues, improve timeliness or service quality, etc. If possible, quantify operational improvements by translating them into reduced costs. For example, a business objective might be to “Reduce the average amount of overtime worked by 100 hours per month, thereby saving $X per year while still meeting terms of the Service Level Agreement. Attain this result within 6 months.”

Objectives can also identify:

1. Business process improvement opportunities
2. Opportunities to improve the organization’s reputation or name recognition

| Action Plan Checklist - *Identify Business Objectives and Benefits* | |
| --- | --- |
|  | Determine Business Objectives and ensure that they support the Business Need/Opportunity |
|  | Identify Business Process Improvement opportunities |
|  | Determine benefits of meeting Business Objectives |
|  | Ensure Business Objectives are SMART |
|  | Determine Cost Savings and Quality of Service improvements |
| **CSF** | **Business Objectives and Benefits are documented in the Business Case** |

### Ensure Alignment with Strategic Direction and Architecture

It is important that an organization only engage in projects that effectively support its business strategy. To ensure that this is true, the business strategy needs to be visible and understood by everyone involved in project selection and prioritization. The OneMontclair Project Executive Committee, using the ECA groups’ business strategy and strategic objectives as a baseline during project initiation will save time and effort later. Project Portfolio Management is as a key process in project selection and oversight. This works best when the sponsoring business partners are an integral part of the process.

Review the alignment of the proposed project with supporting documents such as:

1. University wide strategic plan
2. Department strategic plans
3. IT-wide enterprise architecture
4. IT-wide applications portfolio
5. Department applications portfolio
6. Current business and technical environment
7. IT/Business Unit mandates.

| Action Plan Checklist - *Ensure Alignment with Strategic Direction and Architecture* | |
| --- | --- |
|  | Review University-wide strategic plan |
|  | Review Department strategic plan |
|  | Review IT/University-wide enterprise technical architecture |
|  | Review University-wide applications portfolio |
|  | Review Department applications portfolio |
|  | Review current business and technical environment |
|  | Review project to ensure alignment with strategic direction and architecture |
| **CSF** | **Project is aligned with Department and IT-wide strategic direction and architecture** |

### Identify and Engage Key Stakeholders

Stakeholders are individuals and within, adjunct to and external from Montclair State University that have a vested interest in the success or failure of the project. During Initiation, Stakeholders assist the project team to define, clarify, drive, change and contribute to the definition of scope and, ultimately, to the success of the project.

To ensure project success, the project team needs to identify key Stakeholders early in the project. It is essential to determine their needs and expectations, and to manage and influence those expectations over the course of the project. Stakeholders who are not sympathetic to the goals of the project must be either made into supporters or at least brought to a place of neutrality.

If the project will have an impact on the business processes, work habits or culture of the organization, steps should be taken during Initiation to prepare for the process of Organizational Change Management.

| Action Plan Checklist - *Identify Key Stakeholders* | |
| --- | --- |
|  | Identify internal Stakeholders |
|  | Identify external Stakeholders |
|  | Determine Stakeholder needs and expectations |
|  | Manage Stakeholder needs and expectations. Revise project objectives or assist Stakeholders in setting realistic expectations. |
| **CSF** | **Key Stakeholders are identified and documented in the Business Case** |
| **CSF** | **Key Stakeholder needs and expectations are identified and managed** |

### Identify Key Potential Risks

Projects are full of uncertainty. As such, it is advisable to perform and document an initial risk assessment to identify, quantify and establish contingencies and mitigation strategies for high-level risk events that could adversely affect the outcome of the project.

A *risk* is usually regarded as any unplanned factor that may potentially interfere with successful completion of the project. A risk is not an issue. An *issue* is something you face now; a risk is the recognition that a problem might occur. By recognizing potential problems, the project team can plan in advance on how to deal with these factors.

It is also possible to look at a positive side of risk. A *risk* may be seen as a potentially useful outcome that occurs because of some unplanned event. In this case, the project team can attempt to maximize the potential of these positive risk event should they occur.

An understanding of Risk is essential in the Project Portfolio Management Process. A project with excellent potential for ROI (Return on Investment) may be turned down if the risks are so high that the ROI might never be realized. A preliminary risk assessment will be quite helpful in this regard.

| Action Plan Checklist - *Identify Key Potential Risks* | |
| --- | --- |
|  | Identify high-level risks, both positive and negative |
|  | Assess impact and probability of risks occurring |
|  | Establish contingency plans and mitigation strategies for identified risks |
| **CSF** | **Key potential risks and contingency plans / mitigation strategies are documented in the PDD** |

### Determine Cost/Benefit and Schedule Estimates

Projects are often only one part of a larger product lifecycle. For example, when a new Accounting system is put into place it is understood that the system will require maintenance and occasional upgrades over its lifetime, will involve operational costs, and at some point in the future will be replaced with yet another Accounting system. Therefore the true cost of the product includes both implementation and ongoing operational and maintenance costs.

When comparing alternative approaches during project Initiation, it is useful to compare product lifecycle costs rather than just project implementation costs. This may help the organization identify the alternative that truly provides the greatest value over its lifetime.

#### Cost / Benefit

For the Business Case, estimate the one-time development / acquisition / implementation costs (including contracted staff from ONEMONTCLAIR TEAMshared services, vendors and business units, hardware, middleware, licenses, leases, etc.), and then separately total the costs that will follow the project:

* maintenance
* enhancements
* one-time upgrades
* ongoing operations

Next, determine the anticipated benefits of the project including tangible and intangible operational benefits, cost savings, cost avoidance and other benefits. Use these estimates of cost and benefit to determine the anticipated cost savings / revenue enhancement / other benefit that will result from the project.

With respect to the project itself, it may be necessary to explain how the project will be funded. This process varies greatly from one organization to the next, but it is fairly common to provide a description of funds required by fiscal year, by funding organization, and by phase of project. If the project is to be funded from multiple sources, indicate the percentage from each source. Also indicate whether funds have been budgeted for this purpose. If this project will require funding beyond that already provided to the organization, supply the necessary details.

It is also useful to determine in advance who (which funding source) will underwrite continuing costs once the project is completed. It is not uncommon for a business unit to be unaware of the “true” cost of their proposed initiative.

#### Schedule

The Initiation phase of most projects is a time of great uncertainty. While there may be general agreement on the scope of the project, specifics of implementation may not be available. For this reason, it may not be possible to provide anything more than a high level schedule, and even then only with fairly large confidence limits (e.g. +/- 30% or more). If this is the case, it is important for the project team to make this clear in the Business Case or PDD.

With that in mind, it is nonetheless necessary in most cases to identify at least the high-level tasks of the project and then make a rough estimate of the schedule. For example, tasks could include the typical steps of the project life-cycle (e.g. gather requirements, create specifications, develop a test plan), along with tasks specific to the project at hand (e.g. procurement, conversion, training for end-users, training for technical staff, post-implementation support, etc.).

Schedule information can include the duration of critical tasks, major management decision points (e.g. go / no go decisions) and milestones. Milestones should be products or major events that may be readily identified as completed or not completed on a specified due date. Most projects are done in phases (e.g. Initiation, Planning, etc.). Define the phases in the schedule and make clear the tangible output of each phase. If project phases are not planned, be very clear why this is so.

When planning for staged project implementation (e.g. implement a new general ledger first, then purchase and roll out accounts payable and payroll modules in subsequent stages), use only as many stages as provide improved management control over the program as a whole. There should be identifiable deliverables and success criteria for each stage.

Many late or over-budget projects deemed “failures” are actually only estimating failures. This can happen when estimates based on inadequate data (usually the case during Initiation) are then taken by management as “final”. One useful strategy is to re-estimate at the start of each major project phase when more information is available and confidence in the estimates is better. Cost and time tracking are not as useful when there is not much confidence in cost and time estimates. This is true because when an estimate is expected to be 35 percent off, variances from it seem a minor concern. Any insistence that unreasonable cost and time targets be met only results in a dispirited project team, unhappy customers and another “project failure”.

| Action Plan Checklist - *Determine Cost and Schedule Estimates* | |
| --- | --- |
| ***Cost*** | |
|  | Estimate one-time development, acquisition and implementation costs |
|  | Estimate the cost of maintenance and ongoing operations expected following the project |
|  | Determine the anticipated benefits of the project (including tangible and intangible operational benefits, revenue generation, cost savings, cost avoidance and other benefits) |
|  | Explain how the proposed alternative is to be funded by fiscal year, by funding authority, by project phase. If the project is to be funded from multiple sources, indicate the percentage from each source. |
|  | Specify the degree of confidence in the estimates |
| ***Schedule*** | |
|  | Identify the high-level tasks for the project |
|  | Develop a schedule that includes the duration of critical tasks, major management decision points and milestones |
|  | Describe the phases planned for this project and what each phase will deliver, or explain why phasing is not appropriate |
|  | Specify the degree of confidence in the estimates |
| **CSF** | **Project Cost and Schedule are documented in the PDD** |

## Initiation Phase Deliverables

### Business Case (Project Definition Document - PDD)

The Business Case or PDD is a business proposal. It is a statement by the group who develops it that they have a great idea that will help the organization and here is how we will do it, what it will cost and how long it will take to do. If the project Sponsor and all parties who will be involved in the project (e.g. peer business groups, OneMontclair Team, shared services staff, Dept. Leadership, IT Leadership, Project Executive, Project Manager, etc.) accept it, a summary of the PDD (Business Case) is presented to the OneMontclair Project Executive Committee (or other relevant executive committee) for review and approval.

Business Cases or PDDs can appear in varying levels of detail depending on the size, complexity, importance and level of risk of the project. Indeed, how we define a project will determine if there is any written Business Case at all. Potential project managers can work with the relevant PMO portfolio manager for further information or questions.

1. For small, less complex, less critical projects, a simple Business Case is sufficient.
2. More costly, more complex, and critical (high impact) projects require a detailed Business Case along with supporting documents (e.g. Risk Assessment, Preliminary Budget, Cost/Benefit Analysis).

It should be noted that those projects with more finite detail during the initiation process have a greater likelihood of success than those with less up front discovery efforts. Additionally, with the added understanding of the effect of total cost of ownership on the ROI, it’s more efficient both mentally and in practice to reject a project that hasn’t yet begun, than to reign in large efforts that has already been approved for execution.

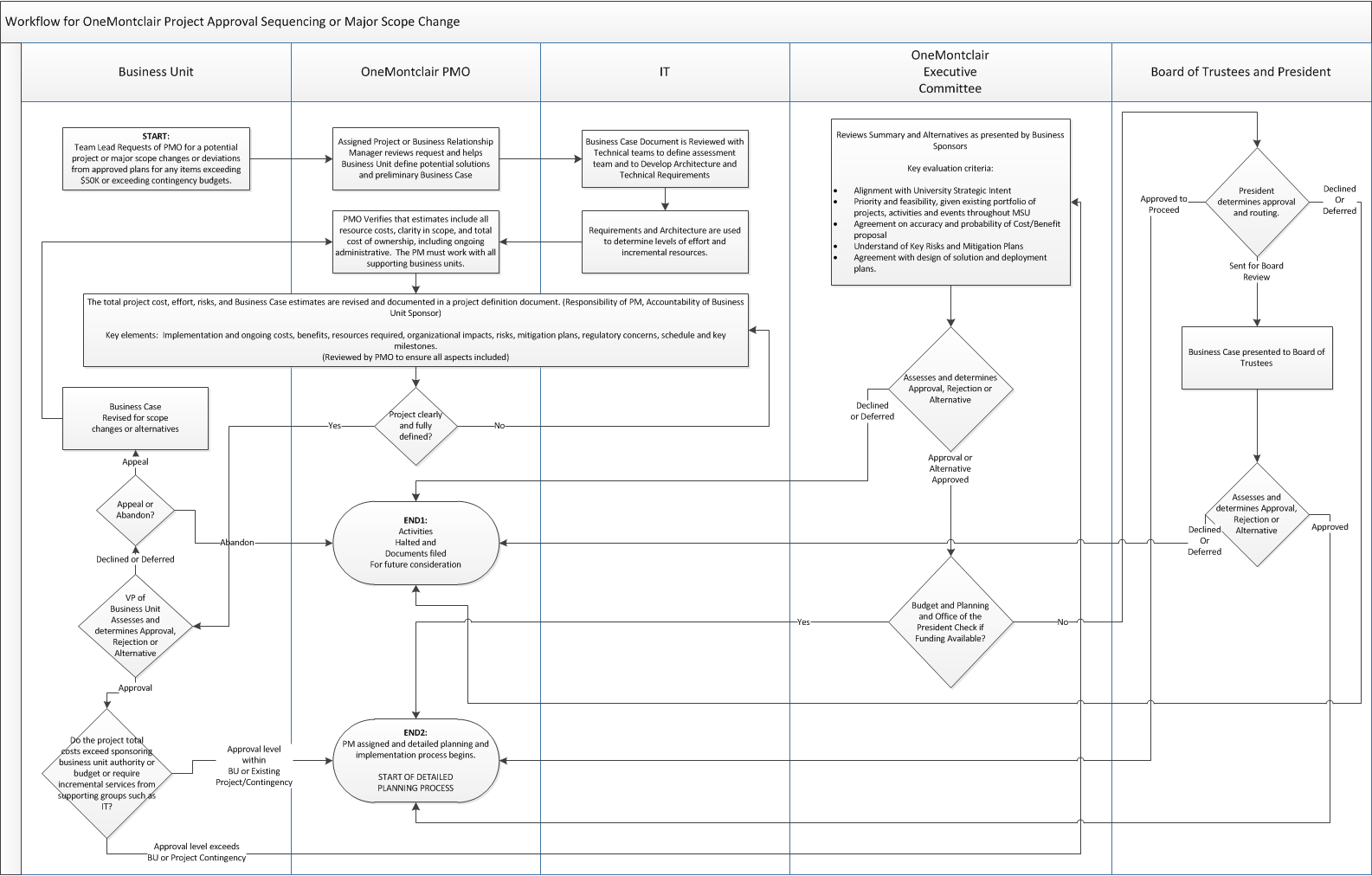
If the project is approved by the OneMontclair Project Executive Committee, the Initiation Phase is ended and Planning begins. During Planning, the project team, along with additional staff, will begin the work of creating the Project Charter and other project planning documents.

## Process Overview for Initiation

In general, the assigned project manager or relationship manager should work with the business units to clearly understand the needs and benefits, work to develop a viable solution within the team and gain approval from the Business Council.

The roles during this process are as follows:

1. The Team heads of each shall assign a Project Manager or Relationship Manager to each project defined in the fiscal budget or any subsequent new project requests
2. The Project Manager or Relationship Manager will be responsible for assessing how each project is currently doing
3. The Project Manager or Relationship Manager will work with Business Owners to reduce risk in each category by:
   1. refining requirements as much as feasible
   2. working with shared services teams to define solution architectures
   3. working with project stakeholders to define schedules and resource requirements
   4. working with business owners to document measures of success and leading sponsors through approval process
4. The Project Manager or Relationship Manager will report progress to the PMO
5. The PMO will track progress across the portfolio and report monthly to the IT Executive Team
6. The OneMontclair Executive team will ensure Project Manager or Relationship Manager are making progress towards reducing risks
7. The OneMontclair Executive team will also define which efforts should be included and excluded from this effort
8. OneMontclair Executive Committee and Board of Trustees provide approval and priority



# PHASE II – PROJECT PLANNING

Project Planning follows the Project Initiation phase and is considered to be the most important stage in project management. Project Planning is not a single activity or task. It is a process that takes time and attention. Project Planning defines the project activities and describes how the activities will be accomplished. Time spent up-front identifying the proper needs and structure for organizing and managing projects saves countless hours of confusion and rework in the Managing (Execution and Controlling) phase of the project.

The purpose of the Planning phase is to:

1. Define the charter
2. More clearly define project scope
3. Establish more precise cost and schedule of the project (including a list of deliverables and delivery dates)
4. Establish the work organization
5. Obtain management approval
6. Provide a framework for management review and control.

Without planning, a project’s success will be difficult, if not impossible. Team members will have limited understanding of expectations; activities may not be properly defined; and resource requirements may not be completely understood. Even if the project is finished, the conditions for success may not have been defined. Project Planning identifies several specialized areas of concentration for determining the needs for a project. Planning will involve identifying and documenting scope, tasks, schedules, risk, quality and staffing needs. The identification process should continue until as many of the areas as possible of the chartered project have been addressed.

Inadequate and incomplete Project Planning is the downfall of many high-profile, important projects. An adequate planning process and Project Plan will ensure that resources and team members will be identified so that the project will be successful.

The planning process includes the following steps:

1. Estimate the size of the project
2. Estimate the technical scope of the project
3. Estimate the resources required to complete the project
4. Produce a schedule
5. Identify and assess risks
6. Negotiate commitments
7. Define approvals and benefits

Completion of these steps and others is necessary to develop the Project Plan. Typically, several iterations of the planning process are performed before a plan is actually completed.

Please see the OneMontclair project planning document for the key elements in planning and work with the OneMontclair PMO to reduce risk as much as possible.



## Critical Success Factors

1. Identification of Project Manager with a track record of success on similar projects. Discrepancies between previous experience and the demands of the current project must be explained.
2. Ensure that key resources are available as required by the Resource Plan

## Activities

The following is a list of key activities required to plan a project:

### Assign Project Manager

Selection of a Project Manager is not easy, nor is it something that should be taken lightly. A Project Manager’s skills and actions are a direct reflection of the Department’s commitment and competence in project management. A Project Manager’s daily responsibilities typically include some or all of the following:

1. Provide day-to-day decision-making on critical project issues as they pertain to project scope, schedule, budget, methodology and resources
2. Providing direction, leadership and support to Project Team members in a professional manner at project, functional and task levels
3. Ensure project documentation is complete and communicated (e.g., business case, project charter, scope statement, project schedule/work plan, project budget, requirements, testing and others)
4. Identify funding sources and facilitate the prioritization of project requirements
5. Manage the planning and control of project activities and resources
6. Develop and manage project contracts with vendors
7. Report project components status and issues to the project Sponsor and the Executive Committee
8. Using, developing and improving upon the project management methodology within the department
9. Providing teams with advice and input on tasks throughout the project, including documentation, creation of plans, schedules and reports
10. Resolving conflicts within the project between resources, schedules, etc.
11. Influencing Stakeholders and team members in order to get buy-in on decisions that will lead to the success of department projects
12. Delegating responsibility to team members.

Taking these responsibilities into account, it is easy to see that a Project Manager should not necessarily be selected from a department based strictly on tenure or function, but rather based on a combination of other strengths. A Project Manager should be selected based on the following skills and experience:

1. Project management methods and tools skills
2. Interpersonal and team leadership skills
3. Basic business and management skills
4. Experience within the project’s technical field
5. Respect and recognition among peers within the department

Project Managers who are selected to lead a project but who were not involved in the Initiation phase (for whatever reason) should be reminded that it is critical to review the Project Initiation phase documentation. These documents are the agreed-upon foundation for which the project was created and the catalyst for the creation of the Project Plan.

| Action Plan Checklist - *Assign Project Manager* | |
| --- | --- |
|  | Assign Project Manager |
|  | Project Manager reviews Business Case and other Initiation phase outcomes |
|  | Project Manager establishes a Project Planning team |
| **CSF** | **Project Manager is assigned** |
| **CSF** | **Project Planning team is established** |

### Develop the Project Charter

Once the project is approved and a project manager assigned, a Project Charter should be developed. Much of the information for the Charter will come from the Business Case.

### Define Project Scope

Provide a concise, measurable statement of what the project will accomplish (in scope), and, where appropriate, what it will not try to accomplish (out of scope). There are two kinds of Scope: Product Scope and Project Scope.

* Product Scope is a description of the product or service that would be produced as an outcome of the project.
* Project Scope is a statement of the work required to create and implement the product or service as well as the work required to manage the project.

Project scope is documented at a high level in the Project Charter. It should include a discussion of the proposed solution and the business processes that will be used with the solution, as well as a description of their characteristics. Also describe the general approach that will be taken to produce the proposed solution, and how the work will be planned and managed.

The Scope section of a Project Charter is generally written at a fairly high level. Nonetheless, the level of detail in this section must be sufficient to provide a basis for detailed scope and solution development in the Scope Statement. If Scope in the Charter is done well, Scope as developed in the Scope Statement will more completely describe the product of the project without substantially increasing the estimate of work required to create it.

If it is not possible to establish boundaries on scope during project Initiation, then there must at least be some decision made about how to handle changes to scope later in the project.

***Note*: “Scope creep” – adding work without corresponding updates to cost, schedule and quality – may render original plans unachievable. Therefore, initial clarification of scope, and adherence to the plan throughout the project, are of the utmost importance.**

| Action Plan Checklist - *Define Overall Project Scope* | |
| --- | --- |
|  | Determine what the project will accomplish |
|  | Determine what the project will not accomplish |
|  | Determine benefits of meeting Business Objectives |
|  | Describe the general approach that will be used to create the product of the project |
| **CSF** | **Project Scope is documented in the Project Charter** |

### Define Project Objectives

Project Objectives are the specific goals of the project. Project objectives, if properly defined and met, will lead directly to accomplishment of the Business Objectives. While Business Objectives relate to the goals and objectives of the organization, Project Objectives relate specifically to the immediate goals of the project. For example, the project goal “implement a new time tracking system” has no value in and of itself. That goal only brings value to the organization when it leads to accomplishment of the Business objective (e.g. “Reduce costs and improve productivity through improved resource management”).

Project objectives are used to establish project performance goals – planned levels of accomplishment stated as measurable objectives that can be compared to actual results. Performance measures should be derived for each goal. These measures can be quantified to see if the project is meeting its objectives.

Note that it may not be possible to determine that the project actually provided the intended business value until sometime (days, months or even years) after project Close. By this time the project team will no longer exist. For this reason, it is essential that the organization carefully define at the start of every project how it will measure those impacts and who will be responsible for doing this and reporting on it. Organizations must conduct these measures if they are ever to know if their investments in project work have actually paid off.

Project objectives can be described in two ways:

1. *Hard Objectives*– Relate to the time, cost and operational objectives (Scope) of the product or service. Was the project on time? Within budget? Did it deliver its full Scope?
2. *Soft Objectives*– Relate more to how the objectives are achieved. These may include attitude, behavior, expectations and communications. Is the Customer happy? Is the project team proud of its work? Is management proud of the project team?

Focus on the full set of project objectives, hard and soft, can lead to a more complete project success. Focus only on hard objectives can lead to a situation where the project is delivered on time and within budget, but the customer never used the product.

As with Business objectives, Project objectives are defined best if they are SMART (i.e. Specific, Measurable, Attainable, Results Oriented and Time Limited).

Project objectives fully define success for the given project. They are communicated in the Project Charter so that all Stakeholders understand what project success will be.

| Action Plan Checklist - *Define Project Objectives* | |
| --- | --- |
|  | Define project objectives (hard and soft) as they relate to business objectives |
|  | Project objectives are SMART |
|  | All stakeholders understand up front what success will be for this project |
| **CSF** | **Project Objectives are documented in the Project Charter** |

### Identify Project Constraints and Assumptions

All projects have constraints, and these need to be defined from the outset. Projects have resource limits in terms of people, money, time, and equipment. While these may be adjusted up or down, they are considered fixed resources by the Project Manager. These constraints form the basis for managing the project. Similarly, certain criteria relevant to a project are assumed to be essential. For instance, it is assumed that the organization will have the foresight to make the necessary budget appropriations to fund its projects. Project assumptions need to be defined before any project activities take place so that time is not wasted on conceptualizing and initiating a project that has no basis for funding, or inadequate personnel to carry it out.

Include a description of the major assumptions and constraints on which this project is based in the Project Charter.

| Action Plan Checklist - *Identify Project Constraints and Assumptions* | |
| --- | --- |
|  | Identify resource limits (people, money, time and equipment) |
|  | Describe major project constraints |
|  | Describe major project assumptions |
| **CSF** | **Project Constraints and Assumptions are documented in the Project Charter** |

### Determine Procurement and Sourcing Strategy

It is very uncommon for an organization to be able to create or supply all the resources, materials, etc., necessary to complete a project internally. In those circumstances where it is necessary to go outside the department, the response is to purchase the product or service from an external source or enter into a contract with an outside vendor to perform a service or develop the product for the department.

Develop a Procurement and Sourcing Strategy that identifies those needs of the project that can be met by purchasing products or services from outside the department. Details of this strategy are entered into the Procurement Plan document. The Procurement and Sourcing Strategy deals with the following:

#### What to Procure

1. How does this product serve the needs of the project and the department as a whole?
2. Does the product or something similar already exist somewhere else within the department?
3. Is there a service provider available in the marketplace for this product?
4. Does the department have the means (staff, money, contract, etc.) to produce or to acquire the product?

#### When to Procure

1. *Make-or-Buy Analysis:*This is a simple method to determine the cost-effectiveness of creating a product in-house as compared to the cost of buying the product or having it produced outside the department. All costs, both direct and indirect, should be considered when performing a make or buy analysis. The costs should then be compared with each other with consideration given to any compelling argument on either side by the Project Team. Consideration should also be given to the potential of leasing vs. purchasing items. This could save money for the department if cost is applied correctly against the useful life of the product or service supplied. Many of the decisions will be based on the length of need for the item or service, as well as the overall cost**.**
2. *Expert Judgment:* This process uses the expertise of people from within and outside the department who have knowledge or training in the area in question to determine what steps should be taken. These people review the needs and the costs and deliver their opinion for consideration in the procurement decision.

#### How to Procure (contract types)

1. *Fixed-Price/Lump-Sum Contract:* This is a contract that involves paying a fixed, agreed-upon price for a well-defined product or service. Special consideration must be given to these contracts to ensure that the product is well defined to reduce risk to both the IT and the contractor.
2. *Cost Reimbursement Contract:* This contract type refers to a reimbursement to the contractor for actual cost of producing the product or service. Costs within the contract are classified as direct (e.g., salaries to staff of the contractor) and indirect (e.g., salaries of corporate executives for the contractor). Indirect costs are normally based on a percentage of direct costs.
3. *Unit Price Contract:* The contractor is paid a preset amount for each unit (e.g., $10 per widget produced) or unit of service (e.g., $50 per hour of service) produced. The contract equals the total value of all the units produced.

#### How Much to Procure

1. Will there be need beyond the immediate project for this product?
2. How much of the budget has been allocated for this product?
3. Is the need for the product clearly defined enough for the department to know exactly how much of the product will be needed?
4. Develop framework for contract/vendor administration.

| Action Plan Checklist - *Determine Procurement and Sourcing Strategy* | |
| --- | --- |
|  | Determine what to procure |
|  | Determine when to procure |
|  | Determine how to procure |
|  | Determine how much to procure |
| **CSF** | **The Procurement and Sourcing Strategy is a component of the Project Plan. Details can be found in the Procurement Plan document.** |

### Refine Project Schedule/Work Plan

#### Determine Project Phasing

When planning for phased project implementation, specific phases should have an independent and substantial benefit, even if no additional components are acquired. Describe the phases planned for this project and what each phase will deliver, or explain why phase-ing is not appropriate.

#### Develop a Work Breakdown Structure (WBS)

The WBS provides the capability to break the scope into manageable activities, assign responsibility to deliver the project scope, and establish methods to structure the project scope into a form that improves visibility for management. The WBS also requires that the scope of the overall project be documented.

A WBS is a hierarchical representation of the products and services to be delivered on a project. Elements of scope are decomposed to a level that provides a clear understanding of what is to be delivered for purposes of planning, controlling and managing project scope. In its entirety, a WBS represents the total scope of a project.

A WBS is neither a schedule nor an organizational representation of the project; instead, it is a definition of what is to be delivered. Once the scope is clearly understood, the Project Manager must determine who will deliver it and how it will be delivered. This is the one planning tool that must be used to ensure project success on any size project.

#### Identify Activities and Activity Sequences Based On Project Scope and Deliverables

The WBS reflects activities associated with overall project management, requirements, design, implementation, transition management, testing, training, installation and maintenance. The Project Manager is responsible for defining all top-level tasks associated with a project and then further decomposing them as planning continues.

WBS tasks are developed by determining what tasks need to be done to accomplish the project objective. The choice of WBS is subjective and reflects the preferences and judgment of the Project Manager. As levels of the WBS become lower, the scope, complexity and cost of each subtask become smaller and more accurate. The lowest-level tasks, or work packages, are independent, manageable units that are planned, budgeted, scheduled and controlled individually.

One of the most important parts of the Project Planning process is the definition of activities that will be undertaken as part of the project. Activity sequencing involves dividing the project into smaller, more-manageable components (activities) and then specifying the order of completion. Much of this has already been done within the process of creating the WBS. No matter how the WBS has been broken down, by the time the Project Manager gets to the activity level, the activities should represent the same level of effort or duration.

#### Estimate Activity Duration, Work Effort, and Resource Requirements

There is no simple formula to define how detailed a work breakdown needs to be. There are, however, some helpful guidelines for completion:

1. Break down the work until accurate estimates of cost and resources needed to perform the task are provided.
2. Ensure that clearly defined starting and ending events are identified for the task. These may be the production of a deliverable or the occurrence of an event.
3. Verify that the lowest-level tasks can be performed within a reasonable period of time. Each project must define “reasonable.” If the time period to complete a task is too long, an accurate project status in the Managing (Execution and Controlling) phase may not be possible. An industry-standard rule of thumb is to make work packages that can be completed within time frames of two weeks (80 effort hours).
4. Verify that people assigned to the project are all assigned a WBS task.

#### Determine Activity Dependencies

The WBS denotes a hierarchy of task relationships. Subtask completion eventually rolls up into task completion, which ultimately results in project completion. There can, however, also be relationships between tasks that are not within the outlined hierarchy (perhaps from other projects). These relationships need to be noted. If the tasks are not organized efficiently, it becomes difficult to schedule and allocate resources to the tasks.

#### Develop Project Schedule/Work Plan

Following the definition of project activities, the activities are associated with time to create a project schedule/work plan. The project schedule/work plan provides a graphical representation of predicted tasks, milestones, dependencies, resource requirements, task duration and deadlines. The project’s master schedule links all tasks on a common time scale. The project schedule/work plan should be detailed enough to show each work breakdown structure task to be performed, name of the person responsible for completing the task, start and end date of each task, and expected duration of the task.

| Action Plan Checklist - *Refine Project schedule/work plan* | |
| --- | --- |
|  | Determine Project Phasing |
|  | Develop a Work Breakdown Structure (WBS) |
|  | Identify activities and activity sequences based on project scope and deliverables |
|  | Estimate activity duration, work effort and resource requirements |
|  | Determine activity dependencies |
|  | Develop Project Schedule/Work plan |
| **CSF** | **Detailed Project Schedule/Work plan is completed** |

### Define Project Organization and Governance

Every department has a limited number of resources to perform tasks. A Project Manager’s primary role is to find a way to successfully execute a project within these resource constraints. Resource planning is comprised of establishing a team possessing the skills required to perform the work (labor resources), as well as scheduling the tools, equipment and processes (non-labor resources) that enable completion of the project.

#### Identify the Project Sponsor

The Sponsor acts as the principal decision-making authority regarding the strategic direction of the entire project. The Sponsor also provides executive project oversight and conduct regular decision-making on critical project issues as they pertain to project scope, schedule, budget, methodology, resources, etc.

#### Identify Required Skill Sets by Role

It is helpful in the planning process to develop a list of skills required, first for execution of the project and then for execution of each task. This skills list may then be used to determine the type of personnel required for the task.

#### Develop Project Organization

Project organization is used to coordinate the activity of the team and to define the roles and responsibilities of team members. Project organization is needed for every project, and the Project Manager must always be identified.

The optimal size of the Project Team is driven by three principal factors; the total number of tasks to be performed, the effort needed to perform the tasks, and time frame for the project’s completion.

The larger the project, the more critical the organizational structure becomes. In a small project, a single team member may be responsible for several functions, whereas in a large project, each function might require full-time attention. A very large project, for instance, often requires a deputy Project Manager. A small project might have the senior technical staff member serving as a Project Manager. Definition of the project organization is a critical part of the planning process.

Confusion and lack of productivity are the result of poor project organization. This is where many projects run into trouble. A good organization facilitates communication and clearly defines roles and responsibilities.

#### Assign/Acquire Project Team Members

A project needs to establish its pool of available resources. The resource pool typically specifies the type, level (e.g., skill and experience), and time period that the resource is available.

The Project Manager pragmatically assesses the skills of the available people on the project. The Project Manager’s job is to determine the risks associated with the available skills and to build a plan that realistically accounts for those skills. Unfortunately, skill level is not a yes/no factor. People have varying degrees of skill, and the Project Manager needs to determine the level of schedule adjustment that should be made based on the staff skill level.

Where staff with the necessary skills is largely unavailable for assignment on the project, the Project Manager has an option to hire the necessary talent or contract services to perform the work.

#### Backfill Roles for Assigned Team Members (depending on resource requirements)

#### Update Project schedule/work plan (e.g., load resources)

#### Create a Resource Plan Document (have it reviewed and gain acceptance)

| Action Plan Checklist - *Define Project Organizations and Governance* | |
| --- | --- |
|  | Identify the Project Sponsor |
|  | Identify required skill sets by role |
|  | Develop project organization |
|  | Assign/acquire Project Team members |
|  | Backfill roles for assigned team members (depending on resource requirements) |
|  | Update project schedule/work plan (e.g., load resources) |
|  | Create the Resource Plan document |
| **CSF** | **Project Sponsor is committed to project** |
| **CSF** | **Project Organization and Reporting Structure are documented** |
| **CSF** | **Project Roles and Responsibilities are documented** |
| **CSF** | **Resource Plan is documented** |
| **CSF** | **Project Team members are assigned and committed to the project** |
| **CSF** | **Project schedule/work plan is loaded with actual resources** |
| **CSF** | **Resource Plan is accepted** |

### Identify Other Resource Requirements

All Project Teams require the tools to successfully perform the tasks assigned. In scheduling resources, the Project Manager must ensure that both people and the equipment necessary to support those people are available simultaneously. The Project Manager will:

#### Determine Facility Needs

The need for adequate workspace is often overlooked when planning a project. If a 15‑member Project Team is going to start work, there must be a facility to house the team. Ideally, the team should be placed in contiguous space (co-located) to facilitate interaction and communication. Team spirit and synergy is enhanced and chances for project success are increased when everyone is close together. While this may not always be feasible, it is a goal worth striving toward.

#### Determine infrastructure, equipment and material needs

In addition to workspace, equipment for the team should be included in the Resource Plan. Ensuring the availability of equipment at critical points in the project is key in planning a successful project. Efficiency and morale are negatively affected by unavailability of equipment needed to perform a task. When considering equipment, it is also important to remember to give each team member the right tools (for example computer software) they need to do the job. Also, it is essential that information exchange and communications tools are provided for Project Team members and project Stakeholders.

#### Update the Resource Plan Document

|  |  |
| --- | --- |
| Action Plan Checklist - *Identify Other Resource Requirements* | |
|  | Determine facility needs |
|  | Determine infrastructure, equipment and material needs |
|  | Update the Resource Plan document |
| **CSF** | **Resource Plan is updated** |
| **CSF** | **All resource requirements are identified** |

### Establish Project Life-Cycle Phase Checkpoints

To ensure that the project progresses satisfactorily, management checkpoints or milestones should be clearly defined with planned dates to measure progress. Checkpoints are high-level milestones. Senior management uses them to approve the completion of a phase or milestone and as go/no-go decision points to proceed with the project. The checkpoints ensure that the products and services delivered meet the project objectives in the time frame established by senior management. Project milestones are recorded in the Project Milestones document.

1. *Phase Exit Criteria* are deliverables, approvals or events that must have occurred in each phase before the Project Team is allowed to declare that phase complete.
2. *Phase Entrance Criteria* are materials, personnel, approvals or other matters that must be available before the Project Team can begin the next Phase. The Phase Exit Plan document records this information.

| Action Plan Checklist - *Establish Project Life-Cycle Phase Checkpoints* | |
| --- | --- |
|  | Establish management checkpoints or milestones with clearly defined planned dates to measure progress |
|  | Establish entrance criteria for each phase |
|  | Establish exit criteria and associated deliverables for each phase |
|  | Determine funding requirements for each phase |
|  | Prepare the Phase Exit Plan document, have it reviewed and gain acceptance |
| **CSF** | **Project Life-Cycle Phase Checkpoints are established (including entrance and exit criteria)** |
| **CSF** | **Phase Exit Plan is accepted** |
| **CSF** | **Phased Funding Requirements are determined** |

### Refine Project Cost Estimate and Budget

Budget planning is done in parallel with project schedule/work plan development. Budgeting, performed at the initial stages of Project Planning, is the determination of costs associated with the defined activities. The steps associated with budgeting are highly dependent on both the estimated lengths of tasks and the resources assigned to the project.

Initial budgetary estimates are often based on availability of funds or may be dictated by legislation or grant size. These parameters may or may not coincide with the actual funds needed to perform the project. For this reason, budget estimates are refined in the Planning phase until they are baselined at the beginning of the Managing phase.

Budgeting serves as a control mechanism where actual costs can be compared with and measured against the budget. The budget is often a firmly set parameter in the execution of the project. When a schedule begins to slip, cost is proportionally affected. When project costs begin to escalate, the Project Manager should revisit the Project Plan to determine whether scope, budget or schedule needs adjusting.

To develop the budget, the applicable cost factors associated with project tasks are identified. The development of costs for each task should be simple and direct and consist of labor, material and other direct costs. Cost of performing a task is directly related to the personnel assigned to the task, the duration of the task, and the cost of any non-labor items required by the task.

Budget estimates are obtained from the people responsible for managing the work efforts. They provide the expertise required to make the estimate and provide buy-in and accountability during the actual performance of the task. These team members identify people or labor categories required to perform the work and multiply the cost of the labor by the number of hours required to complete the task. Determining how long the task performance takes is the single most difficult part of deriving a cost estimate. The labor costs should factor in vacation time, sick leave, breaks, meetings and other day-to-day activities. Not including these factors jeopardizes both scheduling and cost estimates.

Non-labor charges include such items as material costs, reproduction, travel, cost of capital (if leasing equipment), computer center charges and equipment costs.

All of this information is captured in the Project Budget document.

| Action Plan Checklist - *Refine Project Cost Estimate and Budget* | |
| --- | --- |
|  | Identify the applicable cost factors associated with project tasks. The development of costs for each task should be simple and direct and consist of labor, material and other direct costs. |
|  | Identify people or labor categories required to perform the work and multiply the cost of the labor by the number of hours required to complete the task |
|  | Include non-labor charges such as material costs, reproduction, travel, cost of capital (if leasing equipment), computer center charges, and equipment costs |
| **CSF** | **Budget includes costs for all one-time and recurring costs** |
| **CSF** | **Budget includes labor costs for all resources (e.g., contractors and IT employees)** |
| **CSF** | **The Project schedule/work plan has been updated with cost factors** |
| **CSF** | **The Project Budget document is accepted and baselined** |

### Identify Potential Project Risks

A risk is any factor that may potentially interfere with successful completion of the project.

A risk is not a problem: *a problem* is a situation that has already occurred; *a risk* is the recognition that a problem might occur. By recognizing potential problems, the Project Manager can attempt to avoid or minimize a problem through proper actions.

It is important to plan for the risk management process to ensure that the level, type and visibility of risk management are commensurate with both the risk and importance of the project to the organization.

This activity should define the approach, tools, and data sources used to perform risk management on this project. Different types of assessments may be appropriate, depending upon the project stage, amount of information available, and flexibility remaining in risk management.

The Project Team should identify potential project risks in addition to key risks identified during the initiation phase. For each identified risk, the team should:

1. Assess impact and probability of risk occurring
2. Assign a risk priority
3. For high-priority risks, determine a risk response approach including any contingency plans.

The Project Team’s approach to risk is documented in the:

1. Risk Management Schedule – A detailed schedule for risk-related activities
2. Risk Management Plan – How the team will manage risk throughout the project.

Actual data regarding identified risks can be found in the Risk Response Plan document (details all identified risks, risk priorities, contingency plans, etc.).

| Action Plan Checklist - *Identify Potential Risks* | |
| --- | --- |
|  | Define the approach, tools and data sources used to perform risk management on this project. Record this in the Risk Management Plan. Have it reviewed and gain acceptance. |
|  | Develop a Risk Management Schedule document |
|  | Identify potential project risks |
|  | Assess impact and probability of risks occurring |
|  | Assign a risk priority |
|  | Determine a risk response approach, including any contingency plans |
|  | Record risk data in the Risk Response Plan document |
| **CSF** | **Risk Management Approach is a component of the Project Plan (including ongoing risk assessments)** |
| **CSF** | **Project Risks and Mitigation Strategies are components of the Project Plan** |

### Determine Process for Issue Identification and Resolution

The purpose of the issue management process is to provide a mechanism for organizing, maintaining and tracking the resolution of issues that cannot be resolved at the individual level. The approach consists of issue control mechanisms and a well-defined process that enables the Project Team to identify, address and prioritize problems and issues.

1. The Project Team records all details related to issues and issue resolution in the Issue Document.
2. The Issue Log serves as a reference to all Project Issues.

|  |  |
| --- | --- |
| Action Plan Checklist - *Determine Process for Issue Identification and Resolution* | |
|  | Determine Issue Management approach. |
|  | Define Issue Documentation procedures (e.g., Issue Document and Issue Log) |
|  | Define Issue Accountability and Resolution procedures |
|  | Define Issue Escalation procedures |
| **CSF** | **Issue Management Approach is a component of the Project Plan** |

### Determine Process for Managing Scope Change

Project scope management can be just as important to scope planning as the Scope Statement itself. This effort describes how the project scope will be managed and how scope changes will be integrated into the project.

The scope change management process:

1. Defines a process for identifying and documenting potential changes to scope
2. Defines a process for review and approval of scope change
3. Describes which planning documents need to be revised due to scope change.

| Action Plan Checklist - *Determine Process for Managing Scope Change* | |
| --- | --- |
|  | Define process for identifying and documenting (e.g., Change Request and Change Request Log) potential changes to scope |
|  | Define process for review and approval of scope change |
|  | Describe which planning documents need to be revised due to scope change |
| **CSF** | **Scope Change Management Approach is a component of the Project Plan** |

### Develop Organization Change Management Plan

Some of the details related to organizational change management will not become apparent until the completion of detailed design of the solution. The expectation during the Planning phase is to develop a high-level understanding of the impact of the project on the organization.

The Project Team will:

1. Identify potential organizational changes and impact
2. Refine business process improvement opportunities
3. Identify training needs (e.g., magnitude)
4. Determine knowledge transfer resources and processes
5. Document all of this in the Organizational Change Management Plan.

|  |  |
| --- | --- |
| Action Plan Checklist - *Develop Organization Change Management Plan* | |
|  | Identify potential organizational changes and impact |
|  | Refine Business Process Improvement opportunities |
|  | Identify training needs (e.g., magnitude) |
|  | Determine Knowledge Transfer resources and processes |
| **CSF** | **Organization Change Management Plan is a component of the Project Plan** |

### Develop A Project Communication Plan

Communications planning involves defining the information needs of project Stakeholders and team members, as well as identifying which people need what information, when it will be needed, and how they will get it. Communication is the cornerstone of how work gets done among different parties within a project. Communications planning is a process that overlays all other parts of Project Planning as well as the other project management phases. It addresses the way in which we transfer/share information about what needs to be done, how it will be done, when it needs to be done, who will do it, status reporting, issues management, problem resolution, etc. This information is documented in the Communication Plan.

|  |  |
| --- | --- |
| Action Plan Checklist - *Develop Project Communication Plan* | |
|  | Determine who needs what information |
|  | Determine when information is needed |
|  | Determine how to communicate information (memo, e-mail, weekly/monthly meetings, etc.) |
|  | Document the above in the Communication Plan document |
| **CSF** | **Project Communication Approach is a component of the Project Plan** |

### Develop A Project Plan

The Project Planis completed in the Planning phase of a project. For large projects, this stage may be run as a mini-project with a team of people dedicated to performing the effort. For very small projects, the plan may be developed by a group of people as a part-time job. Because various skill sets are required to complete a successful Project Plan, it is a difficult task for one person to develop the entire plan. During this project phase, details of the plan are determined and an approach is defined. The full Project Plan is then developed.

Even during the Planning phase, the development of the Project Plan is an iterative process. Each element of the plan is regularly revisited for changes and refinements, based on further analysis and decisions made in developing other plan elements. This refinement also develops buy-in from the Project Team and Stakeholders. Note, however, that project baselines (i.e. Schedule, Budget, Scope and Quality) should only be changed through a formal Change Control process.

It is critical to get buy-in to the Project Plan from the involved parties prior to actually starting the project. Approval of the plan commits the resources needed to perform the work.

|  |  |
| --- | --- |
| Action Plan Checklist - *Develop Project Plan* | |
|  | Consolidate outcomes from Planning phase activities |
|  | Develop the Project Plan document. Have it reviewed and gain approval. |
|  | Distribute the Project Plan according to the Communication Plan |
| **CSF** | **Project Plan completed and approved** |

## Deliverables

### Project Plan

The Project Plan is a formal, approved document used to manage and control project execution. The Project Plan is a compilation of text and stand-alone deliverables created during the Initiation and Planning stages. The level of detail should be appropriate for the scope, complexity and risk of the project.

The following is a list of key components usually included in a Project Plan:

1. Project Charter
2. Project Overview
3. Scope Statement
4. Business Objectives
5. Project Objectives
6. Assumptions and Constraints
7. Project Deliverables and Milestones
8. Work Breakdown Structure (WBS)
9. Project Procurement and Sourcing Strategy
10. Project schedule/work plan
11. Project Organization and Governance
12. External Interfaces
13. Internal Structure
14. Roles and Responsibilities (RASI Matrix)
15. Resource Plan
16. Staffing Plan
17. Phase Exit Criteria (Systems Development Life-Cycle Phase Checkpoints)
18. Project Cost Estimate and Budget
19. Risk Management Plan
20. Issue Management Plan
21. Scope Management Plan
22. Organizational Change Management Plan
23. Quality Management Plan
24. Stakeholder and Team Communication Plan

While each of these areas should be discussed within the Project Plan, it is still imperative to develop documents and processes that describe each of these in detail.

Once the Project Manager completes the Project Plan, it should be reviewed (i.e., using the Project Planning Review Checklist) and approved by department management, the PMO and the Project Steering Committee. The level and extent to which the plan will be reviewed is based on the size of the project as stated in dollars or period of time. Ultimately, the review process allows for executive management buy-in and approval of the plan. Once the Project Plan is approved and signed, the Project Manager is given the authority to complete the current project efforts and enter into the Execution phase.

# PHASE III & IV – PROJECT EXECUTION, MONITORING AND CONTROLLING

A Project Manager’s responsibilities do not stop once the planning of the project is done. Because a Project Manager is responsible to internal and external Stakeholders, the Project Team, vendors, executive management and others, the visibility of the position is intensified because many of these people will now expect to see and discuss the resulting deliverables that were detailed in the Planning phase. As a Project Manager, it is important to keep oneself from getting “down in the weeds,” especially on large projects. This will allow him/her to focus attention on enabling the Project Plans and processes and managing the expectations of customers and Stakeholders.

Once a project moves into the Project Execution, Monitoring & Controlling Phases, the Project Team and the necessary resources to carry out the project should be in place and ready to perform project activities. The Project Plan should have been completed and baselined by this time as well. The Project Team, and specifically the Project Manager’s focus, now shifts from planning the project efforts to participating in, observing and analyzing the work being done.

The Project Plan Execution, Monitoring & Controlling process ensures that planned project activities are carried out in an effective and efficient way while ensuring that measurements against Project Plans, specifications, and the original project feasibility concept continue to be collected, analyzed and acted upon throughout the project life-cycle. Without a defined project Execution, Monitoring & Controlling process, each Project Team would execute projects using its own best practices, experience, and methods, while certain control, tracking and corrective action activities would be missed.

It is important to note that project execution and control relies heavily on the plans developed in the Planning stage. There is already enough work to do within the Execution, Monitoring & Controlling phases of the project; therefore, having to reinvent ways of dealing with risk, change requests, training and resource issues, and other such obstacles to progress is impractical and undesirable at this point.

Particular attention must be paid to keeping interested parties up-to-date with project status, dealing with procurement and contract administration issues, helping manage quality control, and monitoring project risk.

It is also critical during the Execution, Monitoring & Controlling phases that the Project Manager support and monitor the implementation of other important aspects of the project such as the Communications Approach, Risk Management Approach, and Procurement Plan via periodic interaction with the Project Team and Stakeholders.

The Execution, Monitoring & Controlling phases also include project control activities. Project control involves the regular review of metrics and status reports in order to identify variances from the planned project baseline. The variances are determined by comparing the actual performance metrics from the Execution, Monitoring & Controlling phase against the baseline metrics assigned during the Planning phase. These variances are fed into department control processes to evaluate their meaning. If significant variances are observed (i.e., variances that jeopardize the completion of the project objectives), adjustments to the plan are made by repeating and adjusting the appropriate Project Planning strategies and documents. A significant variance from the plan does not explicitly require a change, but should be reviewed to see if preventive action is warranted. For example, a missed activity finish date may require adjustments to the current staffing plan, reliance on overtime, or trade-off between budget and schedule objectives. Project control also includes taking preventative action in anticipation of possible problems.

## Critical Success Factors

1. Major functional deliverables arrive in six- to 12-month intervals (e.g., immediate business value achieved)
2. Stakeholder communication
3. Proactive project governance process
4. Stakeholder buy-in of key deliverables and milestones – they are committed
5. Regular checkpoints for continuous validation of the Business Case
6. Clear project definition:
7. Project is *specific*
8. Project is *attainable*
9. Project is *measurable*
10. Management support
11. Specific requirements
12. Detailed Project Plan
13. Quality designed into the Product
14. The Right People (Project Team!)
15. Good Communication
16. Well-defined processes for:
17. Change Management
18. Risk Management
19. Client Participation.

## Activities

The following is a list of key activities required to execute and control a project:

### Manage Risk

Risk identification, monitoring and resolution are key tools for successfully completing a project. Part of controlling a project during the Execution, Monitoring & Controlling phase is to have an established risk management process. This process is a primary part of Project Planning and is kept current until project closeout.

Risk management is of much greater concern to the technology Project Manager than to the non-technology Project Manager. Technology Project Managers may be responsible for projects that are working with undeveloped, or unproven, technologies. In the race to keep the IT ahead of the technology curve, Project Managers will have to engage their teams in projects that may have limited budgets, tight schedules and high customer expectations.

The other risk issue is the development and implementation of technology equipment and software that might become obsolete very quickly. Technology is moving at an alarming rate with its increases in speed and capabilities. Accordingly, risk is increased when implementing high-dollar or homegrown technology systems. To alleviate this issue, the Project Manager must make sure that the efforts of the Project Team are aligned with the technology and business strategy of the department. Researching future needs, capabilities, and integration requirements of the products will be helpful.

| Action Plan Checklist - *Manage Risk* | |
| --- | --- |
|  | Create a central repository for risk information and associated documentation of risk items and resolution strategies |
|  | Summarize information on a risk form – the Risk Response Plan |
|  | Assign a risk manager, who should be either the Project Manager or a member of the status tracking/reviewing team (this assignment should have been done at project baseline, but definitely by the early days of the Execution, Monitoring & Controlling phase) |
|  | Include a risk summary in the regular status meetings – Monthly Status Report |
|  | Providing a consistent and ongoing evaluation of risk items and development of risk strategies |
|  | Identify new risks (e.g. Risk Assessment) |
|  | Evaluate new and existing risks (e.g., Potential Project Risks) |
|  | Define/refine risk response strategies |
|  | Select and obtain approval (from Executive Committee) for selected risk response strategies |
|  | Implement approved risk response strategy |
|  | Revise any related or impacted planning documents |
|  | Conduct regular follow-up risk assessments based on magnitude of the project |
| **CSF** | **Project Risks are documented (e.g., according to the Risk Management Plan) and addressed** |

### Communicate Information

The project Communications Plan is an important factor in the Execution, Monitoring & Controlling phase. A large part of a Project Manager’s responsibility during this stage of the project is keeping the Stakeholders informed of project status. There are many facets to project communications. Some examples follow:

1. *Joint project reviews*are a good way to bring visibility to all areas of the project. They provide an opportunity to discuss important issues and make management decisions on the project with input from several sources. Joint project reviews can involve the Project Manager, Project Team members, project Stakeholders and department management, depending on the issues being discussed. The frequency and topics covered at these meetings should be outlined in the Communications Plan.
2. The Project Manager may be requested to make monthly reports to the Executive Committee or other management group
3. The Project Plan should be accessible to all Stakeholders. This may be accomplished by placing an electronic copy of the plan in shared storage, publication on a project web site or other means. The Communication Plan may specify that particular Stakeholders receive portions of the Project Plan in varying format, depending on their communication needs.
4. Meeting minutes should be made available to Stakeholders along with any “to-do” lists that may have been generated during the meetings.
5. The Project Manager should stay in constant communication with the Project Team, both formally and informally. Informal discussion is sometimes the best way to determine team morale, true project status, looming difficulties, etc.

| Action Plan Checklist - *Communicate Information* | |
| --- | --- |
|  | Ensure that the Communication Plan is being executed as planned |
|  | Review and approve external project messages |
|  | Revise the Communication Plan based on feedback received from Stakeholders and Project Team members |
| **CSF** | **Stakeholders and Project Team members are informed and aware of project activities and status** |

### Manage Schedule

It is important for the Project Team to understand at all times exactly where the project stands with respect to project schedule/work plan (i.e., Is the project ahead of, or behind, schedule?). The procedures used to determine status and then update schedules to depict current work efforts are key to ensuring that accurate schedules are maintained. Without these procedures, invalid data may cause inaccurate schedule performance reporting.

Data collection and validation involves the following steps:

1. Validate schedule status; ensure that task *start* and *end* dates, and task relationships, still reflect the reality of the project.
2. Validate data attributes and associations used to report schedule information; for example, ensure that relationships are correct between tasks and the work breakdown structure, functional organization or integrated master schedule.
3. Validate work effort to ensure that the schedules accurately depict the way work is being accomplished and reported. For example, obtain accurate start and finish dates of completed tasks or estimates to complete work for ongoing tasks.

The validation technique will improve management control by improving the quality of the information reported. The implementation of specific techniques should provide this benefit without burdening those responsible for project delivery.

Schedule control is one of the most difficult but important activities within project control. The project schedule/work plan can be affected by any number of issues from resources to funding, vendors, weather, and anything in between. The ability of a Project Manager to manage the schedule of a project and deliver it on time is a high-visibility concern for project success from a customer point of view.

Attributes of Schedule Control include:

1. Influencing the factors that create schedule changes to ensure that changes are beneficial
2. Determining that the schedule has changed
3. Managing the actual changes when and as they occur.

Schedule issues come from a variety of sources but there should be a single, focused method for dealing with schedule changes. If a potential schedule problem is discovered, the problem must be investigated and the cause uncovered as soon as possible. Once the problem is discovered, a plan should be created for correcting the problem in the shortest allowable time with the least impact. It is also advisable to bring forward alternatives and associated costs.

Schedule control is something that typically is managed at the project level by the Project Manager. However, it is very important to make the customer aware that a schedule change has occurred. Furthermore, the customer needs to be made aware of what is being done to fix the issue and the impact it will have on the project’s performance and deliverables.

It is standard practice to baseline the schedule at the start of the project. This allows all schedule changes to be displayed against the original project schedule/work plan. If schedule slippage becomes severe it may be advisable to re-baseline the project. As this involved change to one of the project baselines, it should only be done through a formal Change Control Process.

Schedule control is an important aspect of project management that is often overlooked during technology projects. Technology projects may have several different dependencies or factors that can influence product delivery dates, and ultimately, customer satisfaction. These factors and dependencies may include, but may not be limited to, the following:

1. Availability of staff or resources
2. Delivery of equipment or software
3. Unexpected events
4. Deliverables from other projects or personnel.

Because customers sometimes see meeting the schedule as the most important part of a project, it is a good idea for Project Managers to hold regular project schedule/work plan reviews. Large or complex technology projects may have several schedules being managed at a deliverable or functional level. Therefore, having the “owners” of these schedules meeting at regular intervals is of great benefit to the Project Manager. The Project Manager is responsible for integrating these project schedule/work plans and making them understandable for all of the project’s Stakeholders.

| Action Plan Checklist - *Manage Schedule* | |
| --- | --- |
|  | Collect and validate schedule status; for example, data that reflects start, finish and estimates to complete work |
|  | Validate data attributes and associations used to report schedule information; for example, task relationship to the WBS, project life-cycle phase, functional organization or integrated master schedule |
|  | Validating work effort to ensure that the schedules accurately depict the way work is being accomplished and reported |
|  | Conduct regular project schedule/work plan review meetings. Large or complex projects may require more frequent meetings |
|  | Identify potential schedule problems; consider common scheduling factors such as availability of staff or resources (e.g., ability to meet Resource Plan**)**, delivery of equipment or software, unexpected events, deliverables from other projects or personnel |
|  | Investigate potential schedule problems and uncover the cause as soon as possible |
|  | Develop a plan for correcting the problem in the shortest allowable time with the least impact. Provide alternatives and associated costs |
|  | Make the customer aware that a schedule change has occurred. The customer needs to be made aware of what is being done to fix the issue and the impact it will have on the project’s performance and deliverable |
|  | In the event of severe schedule slippage, re-baseline the project schedule/work plan if all project Stakeholders agree that there is benefit to the project to do so |
| **CSF** | **Schedule tasks are closely tracked for timely completion** |
| **CSF** | **Schedule problems are identified and addressed** |

### Document the Work Results

Results are the outcomes of the activities performed to accomplish the project. Information on work results consists of input on:

1. Which deliverables have been completed and which have not
2. To what extent quality standards are being met
3. To what extent contractual obligations are being met
4. What costs have been incurred or committed.

These valuable data need to be collected and fed into a project performance reporting process.

| Action Plan Checklist - *Document Work Results* | |
| --- | --- |
|  | Create a central repository for all project deliverables and work products |
|  | Maintain an inventory for all project deliverables and work products |
|  | Update inventory with deliverable and status and quality comments |
| **CSF** | **Project deliverables are produced and work products are tracked** |

### Manage Organizational Change

All departments that develop and execute projects have formal and informal policies that may affect Project Plan execution. Project execution may also lead to the realization of the need for new polices or alteration of existing policies. Any consideration for new department policies and procedures should be documented during the Execution, Monitoring & Controlling phase and reviewed for implementation.

| Action Plan Checklist - *Manage Organizational Change* | |
| --- | --- |
|  | Ensure that Organizational Change Plan is being executed as planned |
|  | Participate and endorse Organizational Change activities |
|  | Revise Organizational Change Plan based on feedback received from Stakeholders and Project Team members |
| **CSF** | **The organization is ready to accept the new system** |

### Manage Scope

Scope control is a straightforward concept. The intent of implementing a scope control process is to identify and manage all elements (e.g., people and requirements) inside and outside of the project that increase or decrease the project scope beyond the required or defined need of the original, agreed-upon project Scope Statement.

Attributes of scope control include:

1. Influencing the factors that create scope changes to ensure that the changes are beneficial
2. Determining that a scope change has occurred
3. Managing the actual changes when and if they occur.

Scope changes will come from the perceived need for a change in a project deliverable that may affect its functionality and in most cases the amount of work needed to perform the project. A scope change is a very crucial occurrence.

A scope change most likely will require a change in project funding, resources and/or time. All scope change requests should be submitted in writing. A committee that consists of Stakeholders from all areas of the project should be willing to convene and discuss the potential change and its anticipated impact on the project and the department. This group of Stakeholders should be a predefined cross section of people that will have the ability to commit their interests at a strategic management level. Once a decision is made to increase or reduce scope, the change must be authorized by all members of the committee. Any changes that are agreed upon must be documented and signed as a matter of formal scope control.

In addition, the impact of the scope change will be felt throughout the Planning phase processes and documents. Documents such as the WBS and Project Schedule/Work Plan will have to be re-evaluated and updated to include the scope change impacts. Scope changes need to be communicated clearly and effectively to the Project Team by the Project Manager. Team members will want, and need, to understand how the scope change affects their area of responsibility.

Scope control is extremely important within technology projects. It is not uncommon when team members are doing their development testing or implementation work for them to try to get creative or give the customer something other than, or in addition to, the original stated requirements. Doing any work that is outside or beyond the stated work, as called out in the original requirements, is considered “scope creep” or “expansion of scope”. Expansion of scope is much more subtle within technology projects because adding additional features (e.g., adding an extra icon or function to an application) does not appear to be as significant as adding something to a normal project (e.g., adding an extra mile of road to a highway construction project).

In both cases, the additional scope of work has a tremendous impact on other control mechanisms within the project. The scope creep (unnoticed additions or changes to the project from the agreed-upon requirements or specifications that increase the scope of the project) will most likely not be budgeted or scheduled, which means that any small scope change could have a large cost and schedule effect.

| Action Plan Checklist - *Manage Scope* | |
| --- | --- |
|  | Identify potential scope change (e.g., Formal Change Request and Change Request Log) |
|  | Evaluate impact of potential scope change |
|  | Determine if additional project funds, resources and time will be required |
|  | Ensure that the scope change is beneficial |
|  | Convene a committee that consists of Stakeholders from all areas of the project to discuss the potential change and its anticipated impact on the project and the department (this group of Stakeholders should be a pre-defined cross-section of people that will have the ability to commit their interests at a strategic management level) |
|  | Once a decision is made to increase or reduce scope, the change must be authorized by all members of the committee; any changes that are agreed upon must be documented and signed as a matter of formal scope control |
|  | Update planning documents with scope change impacts: documents such as the WBS and Project Schedule/Work Plan will have to be re-evaluated and updated to include the scope change impacts |
|  | Scope changes need to be communicated clearly and effectively to the Project Team by the Project Manager |
|  | Educate Project Team on the impacts of “Scope Creep” |
| **CSF** | **Scope Changes are identified and addressed** |
| **CSF** | **Planning documents are updated with impact of improved Scope Changes** |
| **CSF** | **“Scope Creep” is minimized** |

### Manage Quality

Quality assurance incorporates a process of evaluating overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards. Accordingly, while it is important that each team member be responsible for the quality execution of tasks, a quality team is typically included in the Project Team and plays an integral role in the execution of quality throughout the project. This team ensures that the quality plan is executed as planned. As an organization’s quality processes mature, the need for the external quality unit decreases. This quality team reports functionally to the Project Manager, but must also have a reporting chain outside the project to facilitate problem escalation. Problem escalation is the process of moving a problem to a higher management level if sufficient attention is not given by the Project Manager. The independent reporting chain provides a check and balance on the project.

Quality control involves monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory results. Quality control should be performed throughout the project. Project results include both product results, such as deliverables, and management results, such as cost and schedule performance. Quality control is often performed by a quality control unit, or a similarly titled organization unit, although this is not a requirement.

The project management team should be aware of the following concepts:

1. *Prevention* (keeping errors out of the process) and *inspection* (keeping errors out of the hands of the customers)
2. *Attribute sampling* (the result conforms or it does not) and *variables sampling* (the result is rated on a continuous scale that measures degrees of conformity)
3. *Special cases* (unusual events) and *random causes* (normal process variation).

Unfortunately, whenever any of the other control mechanisms (e.g., schedule or cost) get off their baseline, it is normally the quality control of a technology project that suffers. As noted previously, technology projects require a lot of attention to schedule and cost. Likewise, instituting quality control within a project is a very important variable. Setting up quality control audits and management processes that are carried out continually during the development and testing phases of the project’s life-cycle is absolutely critical for delivering acceptable technology projects.

Quality is a valuable commodity in all projects, but even more so with technology projects. Today’s customers have high expectations for the availability and reliability of the systems they use. Expectations for dynamic, high-quality systems have become commonplace. Therefore, it is essential for projects to provide quality products to their end users by using a demanding quality program.

| Action Plan Checklist - *Manage Quality* | |
| --- | --- |
|  | Establish a quality team that plays an integral role in the execution of quality throughout the project. This team ensures that the Quality Plan (e.g., Quality Management Approach) is executed as planned. |
|  | Establish a problem escalation process to move a problem to a higher management level if sufficient attention is not given by the Project Manager (e.g., Sponsor or Steering Committee). This independent reporting chain provides a check and balance on the project. |
|  | Monitor specific project results to determine if they comply with relevant quality standards and to identify ways to eliminate causes of unsatisfactory results. Project results include both product results, such as deliverables, and management results, such as cost and schedule performance. |
|  | Establish a Quality Management awareness and training program |
| **CSF** | **Project Team members accept responsibility for quality** |
| **CSF** | **Quality products are developed** |

### Manage Costs

Projects may fail to control costs, or go over budget, for many reasons. Often it is not a single problem but a series of small problems that combined, permit cost control to be sacrificed and prevent the project from being completed successfully.

Cost control contains the following attributes:

1. Influencing the factors that create changes to the Project Budget to ensure that the changes are beneficial
2. Determining that the Project Budget has changed
3. Managing the actual changes when and as they occur.

Cost control includes the following:

1. Monitoring cost performance to detect variances from the Project Plan
2. Ensuring that all appropriate changes are recorded accurately in the Project Budget
3. Preventing incorrect, inappropriate or unauthorized changes from being included in the Project Budget
4. Informing appropriate Stakeholders of authorized changes.

Cost control is not simply a reporting process. It includes the searching out of the “why” for both positive and negative variances between the scheduled and actual costs. It must be thoroughly integrated with the other control processes (scope change control, schedule control, quality control and others). For example, inappropriate responses to cost variances can cause quality or schedule problems or produce an unacceptable level of risk later in the project.

Cost control is a process highly valued by technology project Stakeholders. This is also an area where the unpredictability of technology can wreak havoc on the plans laid out within a project. A Project Manager must be able to monitor the actual budgets of labor and resources against the baselines as laid out in the Project Budget Estimate. This is especially true of new technology areas in which the cost of labor or resources is especially high. Furthermore, the length and complexity of a project will have a direct impact on its potential to go over budget.

Setting budget limits and monitoring variances on budgets must be done early and often. Budget problems tend to compound themselves if left unattended. On a technology project, more money could be spent trying to fix budget, scope or schedule issues near the end of a project than should have been spent on the entire project. In many cases the budget is a fixed amount. In those cases, if other actions fail to bring the project’s costs into budget alignment, the scope must be reduced.

| Action Plan Checklist - *Manage Costs* | |
| --- | --- |
|  | Monitoring cost performance to detect variances from the Project Plan |
|  | Explain both positive and negative variances between the scheduled and actual costs |
|  | Ensure that all appropriate changes are recorded accurately in the Project Budget |
|  | Prevent incorrect, inappropriate or unauthorized changes from being included in the Project Budget |
|  | Inform appropriate Stakeholders about authorized changes |
| **CSF** | **Project costs are understood and controlled** |

### Manage Issues

The purpose of the issues management process is to provide a mechanism for organizing, maintaining and tracking the resolution of issues that cannot be resolved at the individual level. The approach consists of issue control mechanisms and a well-defined process that enables the Project Team to identify, address and prioritize issues.

The Issue Management process should give everyone involved with, or affected by, the project a way to report issues or problems. The Issue Document format provides fields for documenting the problem, assessing the impact of the problem, making recommendations and determining the cost (people and assets) and time required for resolving the problem.

To have the process work requires individuals to submit information on the issues to be considered. Any of the Project Team members, customers, or Stakeholders can submit an issue. This must be done in writing through use of the Issue Document. All issues are recorded in an Issues Log.

All issues need to be reviewed on a regular basis (e.g., the project status meetings, since this group will typically meet on a weekly or biweekly basis).

Typically, when the issue or problem has been resolved and verified, recording the actual date the problem was resolved and the approval authority closes the issue. Some issues may need executive management approval. The appropriate processes will be followed to update contracts and baseline documents.

|  |  |
| --- | --- |
| Action Plan Checklist - *Manage Issues* | |
|  | Create a central repository of project issues and use an Issue Document template (e.g., Issue Document and Issue Log) |
|  | Project Team members, customers, or Stakeholders submit issues in writing in electronic format |
|  | Review issues on a regular basis (e.g., at the project status meetings since this group will typically meet on a weekly or biweekly basis) |
|  | Track all issues until they are resolved. |
|  | Update issue with resolution and status |
|  | Depending on the issue, obtain executive management approval |
|  | Update the appropriate processes and documents impacted by issue resolution |
| **CSF** | **Issues are identified and resolved** |

### Conduct Status Review Meetings

While the Project Manager is responsible for relaying project status to parties outside the Project Team, the Project Team is, in turn, expected to report status to the Project Manager. This includes communicating information on both a formal and informal basis. Formal mechanisms such as status reports, status meetings, and action item reviews can be very specific. Informal processes, such as hallway conversations, can be very helpful as well.

A standard requirement of all projects is to provide reports to both executive management and the Project Team. Although the frequency of the reports may sometimes vary, they should correspond with the executive meetings or when the Project Manager deems necessary. For executive management reports, this is typically on a monthly basis and major project life-cycle phase or milestone completion. Another key in status reporting is to keep the report due date consistent (e.g., every Monday by 1:00 p.m.). This makes it easier for the team members to complete their reporting.

Status reporting is an integral part of the project management process. It is the means by which the Project Team and executive management stay informed about the progress and key activities required to successfully complete the project. The purpose of the Status Report is to provide a standard format for the formal exchange of information on the progress of the project.

The information shared in the Status Report should be in a consistent format throughout the project. The Project Team should prepare Status Reports detailing activities, accomplishments, milestones, identified issues and problems. Some level of recovery plans should be prepared for activities that are not on schedule, and mitigation strategies should be prepared for anticipated problems.

Status meetings are conducted to discuss project status and to set direction and priorities for the project. The level of detail and objective of status reports and status meetings vary based upon the audience, project size and impact, and the risk associated with a project.

The three primary status audiences are:

1. *Project* – The Project Status Report and Status Meeting includes the lowest level of detail. This is a forum for the Project Manager to discuss project progress and status with the team and to implement project direction and priorities as set by the Sponsor (and possibly the Executive Committee). Larger projects, which are divided into teams, will also develop team status reports and conduct team status meetings. Project Status Meetings are typically conducted every week.
2. *Sponsor* – The Sponsor Status Meeting is a venue for the Project Manager to discuss key project issues. The Sponsor will assist the Project Manager in resolving key issues and help set project direction and priorities. The Project Status Report is also provided to the Sponsor. At a minimum, Sponsor Status Meetings should be conducted once a month. Typically, these meetings will occur more frequently for large complex projects with high risks.
3. *Executive Committee (Strategic Technical Advisory Team)* – The Executive Committee Meeting is intended to be a forum for the committee to evaluate the overall progress of the project. In addition, the Executive Committee sets strategic direction and project priorities. An Executive Status Report, which discusses high-level status, issues and risks, is provided to the Executive Committee and serves as the basis for the meeting discussion. Executive Committee Meetings are typically conducted once a month.

| Action Plan Checklist – *Conduct Project Team Status Meetings* | |
| --- | --- |
|  | Individual team members submit a status report to their team leader |
|  | Each Project Team leader produces a weekly status report for his/her team |
|  | Each Project Team leader conducts a weekly status meeting with his/her team |
|  | Team status reports should be used as input into a Project Status Report |
|  | The Project Manager conducts weekly status meetings with team leaders |
|  | The Project Manager conducts monthly meetings with all Project Team members |
| **CSF** | **Project progress and status are documented and communicated to the Project Team** |

| Action Plan Checklist – *Conduct Monthly Sponsor Meetings* | |
| --- | --- |
|  | Conduct biweekly or weekly meetings for high-visibility and high-risk projects |
|  | Provide a copy of the weekly Project Status Reports to the Sponsor |
|  | Identify key issues that impact the organization and require action on the part of the Sponsor |
|  | Provide status and discuss key issues with Sponsor |
|  | Implement issue resolution plans as discussed with Sponsor |
|  | Revise any related or impacted planning documents |
| **CSF** | **Sponsor is informed of project status and key issues** |
| **CSF** | **Sponsor provides direction and support for resolving key issues** |

| Action Plan Checklist - *Report at Monthly Executive Committee Meetings* | |
| --- | --- |
|  | Identify key issues, which impact the organization and require action on the part of the Executive Committee |
|  | Provide a copy of the Executive Status Report to the Executive Committee on a monthly basis |
|  | Provide status and discuss key issues with the Executive Committee |
|  | Implement issue resolution plans as discussed with Executive Committee |
|  | Revise any related or impacted planning documents |
| **CSF** | **Executive Committee is informed of project status and key issues** |
| **CSF** | **Executive Committee sets project direction and supports the issue resolution process** |
| **CSF** | **Executive Committee sets project priorities** |

### Review Project Life-Cycle Phases Checkpoints

Senior management ensures that the project is progressing satisfactorily by reviewing management checkpoints or project milestones. Senior management uses them to approve the completion of a phase or milestone and as go/no-go decision points to proceed with the project. Depending on the size and complexity of the project, the checkpoint review will be linked to project funding. The checkpoints ensure that the products and services delivered meet the project objectives in the time frame established by senior management.

| Action Plan Checklist - *Review Project Life-Cycle Phases Checkpoints* | |
| --- | --- |
|  | Review exit criteria and associated deliverables of concluded phase as described in the Phase Exit Plan |
|  | Review entrance criteria for subsequent phase (Phase Exit Plan) |
|  | Review risk assessments and issue logs |
|  | Evaluate project progress and ability to meet objectives |
|  | Determine funding status (e.g., approve or shutdown project) |
| **CSF** | **Project checkpoints are evaluated** |
| **CSF** | **“Failing” projects are stopped or corrective action is taken** |
| **CSF** | **“On track” projects are authorized to continue** |

### Execute the Procurement Plan

As indicated in the Planning phase of this methodology, there will be times within the Execution, Monitoring & Controlling phases when a department may have to go outside its resource pool to purchase products or services needed to deliver the project. In these cases, the project Procurement Plan will be put into action. The IT and each of its departments will have a defined set of guidelines and policies that provide the infrastructure for project purchasing that should be integrated within the Procurement Plan. These guidelines will outline the policy for solicitation, source selection and contract administration. Although the solicitation and contracting responsibilities may not always be managed by the Project Manager, it is still important that the Project Manager have a fundamental understanding of the department’s contracting and procurement policies.

The Project Manager’s responsibility in the Execution, Monitoring & Controlling phases is to provide input into new product requirements for the services or products that were not planned for in the Planning phase.

| Action Plan Checklist - *Execute the Procurement Plan* | |
| --- | --- |
|  | Develop solicitation documents |
|  | Conduct proposal evaluation and selection |
|  | Conduct contract negotiations |
| **CSF** | **Project services and/or resources have been procured** |

### Administer Contract/Vendor

The Project Manager will be responsible for ensuring that the vendors, once contracted to do the work, meet the contractual agreements specified within their contracts. Project Managers will also be responsible for tracking, reviewing and analyzing the performance of contractors on a project. This performance reporting will be the basis for any contractual changes that need to be made during the life of the contract. Finally, Project Managers will play an important role in oversight and review of any contract changes that will affect the project.

Contract administration is the process of ensuring that the vendor’s performance meets contractual requirements. This is accomplished through the use, and monitoring, of a Project Plan from the vendor, periodic progress reports and the completion of deliverables as delineated in a project statement of work.

Project Managers within technology projects tend to manage more contracts than non-technology projects. This is primarily because of the need to bring in contractors who have expertise in particular technology areas. Therefore, monitoring status and metrics set for the different contractors can become a greater responsibility. The Project Manager is to ensure that the vendors follow appropriate application development and project management methodologies.

Setting up procedures for contract control and contract change is vital to dealing with unexpected situations during project, development, testing and implementation. Without procedures in place, contract issues could go unresolved or result in project delays. It is important to have on-going, two way communications with the vendors (partnership).

| Action Plan Checklist - *Administer Contract/Vendor* | |
| --- | --- |
|  | Ensure that the vendors, once contracted to do the work, meet the contractual agreements specified within their contracts |
|  | Project Managers will also be responsible for tracking, reviewing and analyzing the performance of contractors on a project (e.g., Deliverable Review) |
|  | Approve and monitor the vendor’s: Project Plan, periodic progress reports and the completion of deliverables as delineated in a project statement of work |
|  | Participate in oversight and review of any contract changes that will affect the project |
|  | Ensure vendor adherence to application development and project management methodologies |
|  | Ensure that the department is fulfilling its contractual obligations |
| **CSF** | **Contractual obligations are met** |
| **CSF** | **A sense of partnership is created and maintained** |

### Update Project Planning Documents

During the Execution, Monitoring & Controlling phases, the Project Plan is implemented and modified as necessary. Project Plan modifications may result from such things as the following:

1. New estimates of work still to be done (generated as more detailed information is known about outstanding work)
2. Changes in scope/functionality of end product(s)
3. Resource changes
4. Unforeseen circumstances.

Changes to Project Baselines (i.e. Budget, Schedule, Quality and Scope) must be done through use of a formal Change Management Process. The Project Manager may change other Project Plan components (e.g., Risk Response, Communication Plan) as needed.

| Action Plan Checklist - *Update Project Planning Documents* | |
| --- | --- |
|  | Revise Project Plan baselines (through formal Change Control process) |
|  | Revise other Project Plan components as needed |
|  | Revise other planning documents impacted by change |
| **CSF** | **Project Planning documents are revised to reflect the current status of the project** |

## Deliverables

### Project Status Reports

Monthly Status Reports are used to communicate the following key information:

1. Current activity status (schedule)
2. Significant accomplishments for the current reporting period
3. Planned activities for the next reporting period
4. Financial status
5. Present Issues, Concerns/Risks.

Along with the status report form, the following may be attached:

1. Updated Gantt charts
2. Recovery plans for activities not on schedule—defined by the Project Team as being late (e.g., slippage in the critical path activities)
3. Corrective action plans for expected problems
4. Resolution to assigned action items (including the issues and action process)
5. Issues Log
6. Others, as appropriate.

The team may choose to create Executive Status Reports as well if they will enhance communication with management.

### Updated Planning Documents

Deliverables in this stage include consistent and updated planning documents such as the project schedule/work plan, communication approach, etc. There should be a formal review and approval process for updated planning documents.

### Project-Specific Deliverables

These deliverables depend on the nature of the project and the selected systems development life-cycle (e.g., waterfall, rapid application development, RUP, etc.). Most of these deliverables should have been identified during the Planning phase.

Examples of these project-specific deliverables might include functional design documents, test plans, a training plan, and a requirements traceability matrix.

# PHASE V – PROJECT CLOSEOUT

The last major stage of a project’s life-cycle is project closeout. Project closeout is completed once all defined project tasks and milestones have been completed and the customer has accepted the project’s deliverables.

Project closeout includes the following key elements:

1. Verification of formal acceptance by Stakeholders and the Executive Committee
2. Re-distributing resources (staff, facilities, equipment and automated systems)
3. Closing out any financial issues such as labor charge codes and contract closure
4. Documenting the successes, problems and issues of the project
5. Documenting “lessons learned”
6. Celebrating project success
7. Producing an Outcomes Assessment Report
8. Completing, collecting and archiving project records.

These activities are particularly important on large projects with extensive records and resources.

## Critical Success Factors

1. Pre-defined User Acceptance criteria
2. Pre-defined Final Acceptance Process
3. End-user acceptance
4. Business objectives and anticipated benefits are achieved
5. Project objectives are achieved
6. Knowledge transfer is achieved
7. Project materials are archived.

## Activities

The following is a list of key activities required to close-out a project:

### Conduct Final Systems Acceptance Meeting

The issue of primary importance with project closure is the acceptance of the product or project deliverables by the customer for which they were created. The best way to ensure this is to convene a final meeting with all necessary Stakeholders to review the product delivered against the baseline requirements and specifications. By this time, any deviations from the established baseline will have been documented and approved, but it is still good policy to make the Stakeholders aware of the baseline deviations, justifications, and future action plans. Furthermore, any open action items or program level issues can be officially closed or reassigned to the support organization.

By drawing all of the Stakeholders together in a single meeting, the Project Manager avoids clearing up open issues on an individual basis. The final deliverable of this meeting should be a statement created by the Project Manager describing the project’s final deliverables in comparison with the authorized project baseline documents. Approval is verified via the signature of a project closure document by all of the Stakeholders who signed the original project baseline documentation (i.e., the Project Plan). This document will be customized to the particular project to include pertinent deliverables, key features and important information about final product delivery.

|  |  |
| --- | --- |
| Action Plan Checklist - *Conduct Final System Acceptance Meeting* | |
|  | Establish a Final Acceptance Process (this should be started during the Execution, Monitoring & Controlling phase) |
|  | Develop a Requirements Traceability Matrix (this should be started during the Planning phase) that will be used later to validate that all requirements were delivered |
|  | Participate in User Acceptance Testing (UAT) |
|  | Ensure that Stakeholders responsible for accepting the system have high-level participation during UAT. Stakeholder representatives and end users should have hands-on participation during UAT |
|  | After the system is deployed and fully functional in a production environment for a specified period of time (the specific amount of time should be identified in the Final Acceptance Process), requirements should be validated |
|  | Review results with Stakeholders and Executive Committee |
|  | Obtain formal acceptance from Stakeholders and Executive Committee |
| **CSF** | **The project is evaluated to determine if business and project objectives and benefits were achieved** |
| **CSF** | **New system is formally accepted by the organization** |

### Conduct Final Contract Review

Contract closure is the process of terminating contracts that outside organizations or businesses have with the IT department as part of the project being performed. These contracts may be vehicles for providing technical support, consulting, or any number of services supplied during the project that the department decided not to perform itself.

Contracts can be brought to closure for a variety of reasons, including contract completion, early termination or failure to perform. Contract closure is a typical but important part of project management. It is a simple process, but close attention should be paid so that no room is left for liability of the department.

| Action Plan Checklist - *Conduct Final Contract Review* | |
| --- | --- |
|  | Review contract and related documents |
|  | Validate that the contractor has met all of its contractual requirements |
|  | Document any contractor variances |
|  | Resolve contractor variances and issues |
|  | Validate that the department has met all of its contractual requirements |
|  | Document any department variances and issues |
|  | Resolve department variances |
|  | Ensure that all vendor responsibilities have been transferred to the department or another vendor |
|  | Terminate current contract |
| **CSF** | **All contractual obligations have been met or formally waived** |

### Conduct Outcomes Assessment Meeting

In conducting the outcomes assessment meeting, the Project Manager provides a forum to discuss the various aspects of the project focusing on project successes, problems, issues, “lessons learned”, and future process improvement recommendations. Using the information and documentation from the Final System Acceptance Meeting as a basis for discussion, some typical questions to answer in this meeting include the following:

1. To what extent did the delivered product meet the specified requirements and goals of the project?
2. Was the customer satisfied with the end product?
3. Were cost budgets met?
4. Was the schedule met?
5. Were risks identified and mitigated?
6. Did the project management methodology work?
7. What could be done to improve the process?

The Outcomes Assessment Meeting typically includes the following people:

1. Project Team
2. Stakeholder representation—including external project oversight
3. Executive management
4. Maintenance and operations staff.

The Outcomes Assessment Report documents the successes and failures of the project. It provides an historical record of the planned and actual budget and schedule. It is important to include in this report, new ideas that were successful in the project and make recommendations on how these processes might be adapted for other projects. Parts of this report may be used to share project successes with other organizations, both within the department and with other IT departments. In the same way that problem identification can lead to improvements, successes must be shared so they can be repeated. Where possible, successes should be translated into procedures that can be followed by future projects. Other selected metrics on the project can also be collected, based on documented procedures. The report may also contain recommendations for future projects of similar size and scope.

| Action Plan Checklist - *Conduct Outcomes-Assessment Meeting* | |
| --- | --- |
|  | Evaluate the project |
|  | Document project successes and failures |
|  | Determine the extent that business and project objectives, and benefits were achieved |
|  | Compile “lessons learned” |
|  | Complete the Outcomes-Assessment Report |
|  | Revise project management procedures and templates based on “lessons learned” |
| **CSF** | **The Outcomes-Assessment Report is candid and balanced** |
| **CSF** | **“Lessons learned” are identified and used to improve processes for future projects** |

### Conduct Knowledge Transfer

All documentation that has anything to do with the product itself (including design documents, schematics, technical manuals) that have not already been turned over to the operations and maintenance organizations must be completed and turned over to the Project Manager.

Following preparation of the Outcomes Assessment Report, the project information is archived. Historical project data is an important source of information to help improve future projects.

The specific information archived for a project will vary between IT departments. Typically, the following project data are archived:

1. Project Charter
2. Project Plan, including the Project Scope Statement, Risk Management Plan, etc.
3. Financial Records
4. Correspondence
5. Meeting notes
6. Status reports
7. Contract file
8. Technical documents
9. Files, programs, tools, etc., placed under configuration management
10. Other documents/information.

All hard-copy records should be stored following standard IT record-retention guidelines. Many of the technical records and automated versions will be turned over to IT personnel responsible for maintenance and operation of the system. Summary technical information should be electronically stored for historical reference to facilitate later review. The project archive includes a description of the files being submitted, the application (including version) used to create the archived materials, and a point of contact if further information is needed.

The summary project management information includes information such as a description of the project, a project organization chart, budgeted and actual cost, and schedule baseline(s) and actual schedule. Assumptions associated with the project budget amounts and budget changes documented throughout the project are included in the archive.

| Action Plan Checklist - *Conduct Knowledge Transfer* | |
| --- | --- |
|  | Ensure that all documentation that has anything to do with the product itself (including design documents, schematics, technical manuals) has been turned over to the operations and maintenance organizations |
|  | Ensure that all project documentation has been updated and is complete |
|  | Ensure that all end users have been adequately trained and that the organization is capable of training new end users |
|  | Ensure that operations and maintenance organizations have been sufficiently trained to support, administer and maintain the new system |
|  | Create an archive for project documentation. Include a project summary document. |
|  | Ensure that record retention conforms to standard IT and Department record retention guidelines |
| **CSF** | **Project documentation is complete and has been transferred to the operations and maintenance organizations and/or has been archived** |
| **CSF** | **End-users and the operations and maintenance organizations have been adequately trained** |

## Deliverables

### Project Closure Document

The Project Closure document summarizes the Final System Acceptance meeting. This includes, but is not limited to:

1. The results of the review of the product delivered against the baseline requirements and specifications
2. List of deviations, documented, and approved; with justifications and future action plans
3. Action items closed or reassigned to the support organization
4. References to other deliverables, key features and pertinent information about final product delivery
5. Approval of project closure via signatures of the Sponsor and key Stakeholders.

### Outcomes Assessment Report

The Outcomes Assessment Report documents the successes and failures of the project. It provides an historical record of the planned and actual budget and schedule. Other selected metrics on the project can also be collected, based on documented procedures. The report also contains recommendations for future projects of similar size and scope. Information within the report should include, but not be limited to, the following:

1. Project sign-off
2. Staffing and skills
3. Project organizational structure
4. Experience with and recommendations for:
5. Schedule management
6. Cost management
7. Risk management
8. Quality management
9. Configuration management
10. Customer expectations management
11. Lessons learned
12. Recommendations for process improvement and/or template modifications.

# KEY PROJECT ROLES AND RESPONSIBILITIES

A successful project requires the Project Team to participate (at some level) in the planning process, buy-in to the Project Plan, and be responsible for completion of assignments. It is important to have a defined formal structure for the project and for the project staff. This provides each individual with a clear understanding of the authority given and responsibility necessary for the successful accomplishment of project activities.

Project Team members need to be accountable for the effective performance of their assignments. Project organizations come in many forms. On a large project, individual role assignments may require full-time attention to the function. On smaller projects, role assignments may be performed part-time, with staff sharing in the execution of multiple functions.

## Sponsor

The project Sponsor is usually a senior member of the department’s management team, which will ultimately be the recipient of the project’s end result. The Sponsor is an important Stakeholder, usually head of a program area and not a day-to-day staff person. This is the person who makes the business argument for the project to exist and usually controls the overall funding of the project.

### General Functions

1. Articulates program or IT department requirements.
2. Provides business direction to the Project Team.
3. Ensures that requirements are met.
4. Provides necessary funding and resources as appropriate.
5. Champions the project to provide exposure and buy-in from IT executives.
6. Communicates views on project progress and success factors to the Project Team and other Stakeholders.

### Initiation Phase

1. Provides strategic plans and guidance to correctly identify the relevance and value of the project both today and in the future.
2. Defines Sponsor needs.
3. Obtains funding for project when necessary.
4. Assigns sponsorship personnel as points of contact.
5. Approves Project and champion it before the Executive Committee.

### Planning Phase

1. Assigns Project Manager
2. Attends kick-off meeting.
3. Participates in planning sessions.
4. Assigns personnel through the Project Manager.
5. Approves funding along with Executive Committee.
6. Reviews and approves Scope Statement and Project Plan.

### Execution, Monitoring & Controlling Phases

1. Attends executive requirement reviews.
2. Provides written agreement to requirements and qualifying criteria.
3. Helps resolve requirements problems.
4. Helps resolve issues, as appropriate
5. Attends and participates as needed at Project Status Reviews and Executive Committee meetings.

### Closeout Phase

1. Attends Final System Acceptance meeting
2. Provides representatives to attend Outcomes Assessment meeting.
3. Attends Outcomes Assessment meeting.
4. Signs-off on project completion.

## Project Manager

The Project Manager has total responsibility for the overall project and its successful completion. To succeed in this responsibility, the Project Manager must work closely with the Sponsor to ensure that adequate resources are applied. The Project Manager also has responsibility for planning and ensuring that the project is successfully completed on time, within budget, and at an acceptable level of quality. The Project Manager must be assigned early in the Planning phase so the plan will be owned by the person responsible for its execution.

### General Functions

1. Implements project policies and procedures.
2. Acquires resources required to perform work.
3. Manages the Project Team
4. Maintains staff technical proficiency and productivity, and provides training where required.
5. Maintains excellent communication with all Stakeholders
6. Establishes and maintains quality in the project.
7. Identifies and procures tools to be used on the project.

### Initiation Phase

1. Defines project success criteria.
2. Documents project constraints.
3. Documents project assumptions.
4. Conducts cost-benefit analyses.
5. Develops Project Charter

### Planning Phase

The Project Manager assigned during the Planning phase may be someone other than the Project Champion/ Leader who carried the project through the Initiation phase. In these cases the Project Manager must thoroughly review all of the materials previously created or assembled.

1. Develops detailed Project Plan with the assistance of the Project Team, tailoring methodology to reflect project needs.
2. Creates a WBS and an Organizational Breakdown Structure with the assistance of the Project Team.
3. Develops, or assists in the development of, a Scope Statement, Project Schedule/Work Plan, Communications Plan, Risk Management Plan (which includes a Contingency Approach), Cost Benefit Analysis, Procurement Plan, Project Budget, and a Project Transition Checklist.
4. Ensures that management, users, affected IT departments, and contractors agree to project commitments.
5. Ensures that the Project Plan is approved and baselined.
6. Assigns resources to project and assign work packages (Resource Plan).
7. Approves Project Quality Management Approaches.

### Execution, Monitoring & Controlling Phases

1. Manages day-to-day tasks and provide direction to team members performing work on the project.
2. Reviews regularly the project status, comparing budgeted to actual values.
3. Reviews regularly the project schedule/work plan, comparing baseline schedules to actual work completed.
4. Ensures that the Project Plan is updated and signed-off as needed.
5. Updates budgets and schedules and makes recommendations as needed.
6. Reviews the results of quality assurance reviews.
7. Participates in Change Control Board to approve product/project changes.
8. Reviews project risks and establishes mitigation procedures.

### Closeout Phase

1. Develops an action plan for any product deficiencies, open issues, etc.
2. Obtains customer and management approval of completed project.
3. Closes-out open action items.
4. Conducts Final System Acceptance meeting.
5. Creates Project Closure document
6. Closes-out any financial accounts or charge codes.
7. Conducts Outcomes Assessment meeting
8. Creates Outcomes Assessment Report
9. Assists as needed with any post-project delivery audits.
10. Assists purchasing contract administrator(s) in contract closeout.
11. Archives all project data.
12. Celebrates success with Stakeholders and the Project Team.

## OneMontclair Project Executive Committee (Strategic Advisory Team)

The OneMontclair Project Executive Committee – together with its subcommittees identifies the need for projects, assesses project risk, and approves project commitments. It is responsible for establishing the strategic technology plans and for ensuring that projects are consistent with IT organization and overall IT technology plans. It is also responsible for developing the procedures to ensure that IT policies are followed.

### General Functions

1. Prioritizes technology needs and includes them in IT strategic plans on recommendation of the Project Management Office.
2. Ensures that sufficient resources are available to conduct projects.
3. Reviews/approves commitments to external entities (e.g., vendors, other agencies).
4. Ensures that staff is properly trained.

### Initiation Phase

1. Assists in staffing effort in cooperation with the Sponsor.
2. Reviews/approves Projects
3. Reviews/validates Risk Analysis.
4. Ensures that funding is available.

### Planning Phase

1. Reviews/approves the Project Plan
2. Reviews/validates and approve risk analysis.
3. Budgets and establishes financial reserves based on Risk Analysis Worksheet.
4. Ensures project staff availability.
5. Ensures that funding is available.

### Execution, Monitoring & Controlling Phases

1. Reviews projects at regular Executive Committee Meetings.
2. Approves changes to the Project Plan baselines.
3. Reviews risk-mitigation plans and acts on Project Manager’s recommendations.
4. Reviews/approves changes in contract commitments.
5. Reviews/approves project deliverables.
6. Approves project/phase completion.

### Closeout Phase

1. Ensures customer and Sponsor acceptance.
2. Participates in Final System Acceptance meeting.
3. Signs-off on Project Closure document, if key Stakeholder
4. Ensures closing of accounting/financial files.
5. Sends representatives to participate in the Outcomes Assessment meeting.

## Project Team

The Project Team has responsibility for conducting project activities. Project Team members, as necessary, assist the Project Manager in planning the development effort and help construct commitments to complete the project within established schedule and budget constraints. The Project Team may include the subject matter experts responsible for implementing the project solution. Customers and/or Stakeholders should interact with the Project Team to ensure that requirements are properly understood and implemented.

### General Functions

1. Identifies technical solution alternatives.
2. Implements solution within budgeted cost and schedule.
3. Coordinates with quality assurance organization.
4. Supports Project Planning and tracking.

### Initiation Phase

1. Provides estimates for developing products.
2. Ensures that requirements are feasible and appropriate for available resources.
3. Analyzes requirements for completeness, consistency, and clarity.

### Planning Phase

1. Develops technical approach.
2. Partitions and assigns development tasks.
3. Assists in development of estimates and schedules.
4. Assists in development of a Quality Assurance Plan.
5. Identifies tools needed for the project.
6. Ensures that all members of the Project Team understand the Project Plan.
7. Identifies staff training needs.
8. Ensures that project execution staff fully understands requirements.

### Execution, Monitoring & Controlling Phases

1. Creates product and process solutions.
2. Tracks the project execution effort and submit status reports.
3. Conducts internal and external reviews and walkthroughs.
4. Creates configuration control and baseline documents.
5. Creates testing plan and coordinates test activities.
6. Executes assigned project tasks.
7. Identifies problems and schedule fixes.
8. Coordinates with quality assurance, review quality assurance results, and corrects any deviations.
9. Identifies and reacts to risks as they are found.
10. Participates in change reviews.

### Closeout Phase

1. Participates in Final System Acceptance meeting, as appropriate.
2. Participates in Outcomes Assessment meeting, as appropriate
3. Identifies ways to improve project processes.
4. Turns over all project-related documentation to the Project Manager for archiving.