UNIVERSITY OF MINNESOTA

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PROJECT MANAGEMENT METHODOLOGY

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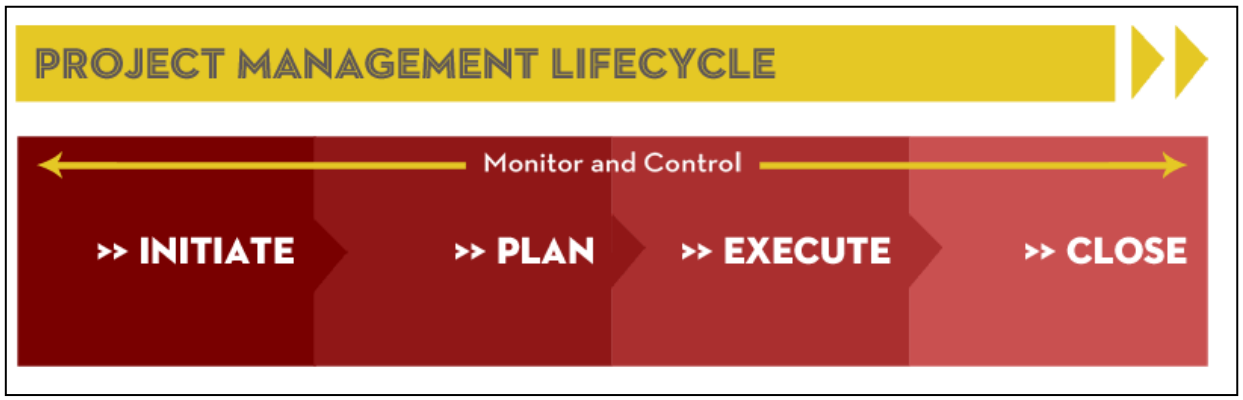
Introduction

INTRODUCTION

Overview

The University of Minnesota has established a documented Project Management Methodology for use in all technology projects. This methodology is designed to meet the needs of all segments of the organization as they engage in technical project work. It serves as a guide to the organization as it selects its projects, to project teams as they plan the work, to management as they supply the required oversight, and to Sponsors and Customers as they collaborate in the design and delivery of new 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®)*. The Project Management Lifecycle, as described in the PMBOK® is shown below.



The Project Management Methodology described in this document should apply equally well to and meet the requirements of projects large and small. Various templates are available to support this methodology; they are referenced throughout this document.

Purpose

This document describes in detail the process to be used during the initiating, planning, managing (controlling and executing), and closing stages of technology projects. The reader 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 University 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 technology projects.
- Increase the awareness and professionalism of good Project Management practice by those charged with the responsibilities defined in the methodology.
- Define the roles of the Executive Committee, Sponsor, Project Manager, Stakeholders, Technical and Business Leads and other team members and obtain consensus within the organization about their importance 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.

Project Sizing Guidelines

Although many factors are involved in determining the relative size of a project, size is an essential element in determining the documentation requirements for a project. Due to the widely diverse nature of projects, it is impossible to provide rules that clearly identify the appropriate sizing of any given project. Instead, the table below represents guidelines to assist with selecting a project size.

Project Size	
Small Project	• Expected cost is less than $50,000. • Expected duration is less than four months. • Risk and complexity are low. • Only a single department or unit is involved.
Medium Project	• Expected cost is $50,000 – $250,000. • Expected duration is less than one year. • Risk and complexity are medium to high. • Multiple people / departments are involved.
Large Project	• Expense, risk, and / or complexity are high. • Anticipated lifecycle is longer than one year. • Large number of people / departments are involved. • Board of Regents approval is required. • Project is listed in six year strategic plan. • Full project management methodology is required. • Enterprise Project Management Office (EPMO) conducts phase gate reviews.

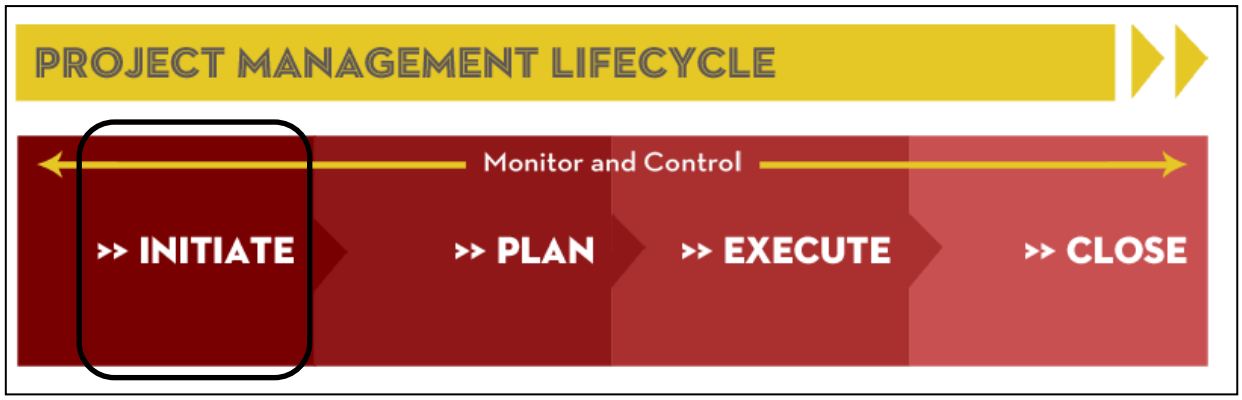
Document Organization

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

- Overview/description
- Critical Success Factors (A Critical Success Factor is defined as any aspect of the project that is essential for project success.)
- Activities
- Action Plan Checklist (table)
- Deliverables

Project Initiating

PROJECT INITIATING



Project proposals can originate from many sources. We are surrounded by people who 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 as potential projects.

Organizations may discover the need or benefit in pursuing a new initiative and the University of Minnesota is no different. This may be due to an opening in the marketplace, the need for operational maintenance or the opportunity to create a strategic advantage. With any of these scenarios, the University may be called upon to leverage the power of technology for the benefit of the organization through the execution of a technology project.

Finally, organizations may be subjected to the demands of outside agencies. For example, a business unit may be on constant watch for new state legislation that can affect the way it does business. Or an academic/administrative unit may find it beneficial to adopt a new program that is sponsored by its corporate partners. In each case, the University may have to shuffle priorities and resources to handle new projects, and 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. Management generally recognizes that great care must be taken in deciding which projects to support, and which to defer. Therefore, most organizations eventually discover that they need an IT governance process that will allow them to choose among the project candidates.

This selection process is carried out during Initiating. The Initiating Process is that time in the lifecycle of a project when the project idea is defined, evaluated and then authorized/or funded. 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 project's potential benefits and costs.

The Initiating Process provides several benefits:

- The Initiating 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 Initiating's key deliverable, the Project Charter, 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 Project Charter also promotes an early collaboration between the Sponsor, the customer(s) and the project team. Early establishment of a good rapport among these players can help ensure a cooperative spirit later in the project.
- A well-written Project Charter 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.
- Formal review and approval of the project lets everyone know the project is of high importance and must be fully supported by everyone involved.

The Initiating 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 Initiating 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 Initiating Phase may range from hours to weeks. So that effort is not wasted, it is essential to keep focus on the purpose of Initiating: 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 them to stay focused and provide the necessary information, rather than just hand in a lot of extraneous paperwork.

Project Initiating Considerations

This section summarizes topics to consider as a project is being initiated.

General Considerations

- Who is the Project Sponsor(s)?
- Who are the intended users (ex: students, faculty, and staff)?
- How and where will the users access the system?
- Are there specific security requirements / considerations (ex: limits on who should access the data, information that should only be accessed by a certain individual or group)?
- Are there special usability considerations?
- Are there specific reporting requirements / considerations?
- Are there specific performance requirements / considerations (ex: peak processing cycles)?
- Is a disaster recovery plan required or does one already exist?
- What audit trails are needed?
- Are there other implementation timing issues to be considered?

Feasibility

- Are there any time-to-market considerations that need to be accounted for?
- Is there a life expectancy of the product or service?
- Which technology is being considered and why?
- Is technology the best / appropriate solution or would business process reengineering or a hybrid approach be more appropriate?

Dependencies

- Do other initiatives need to be completed before this effort can provide value?
- Is this effort predicated on a yet to be determined product or service offering that may not materialize?
- Is this a time-boxed problem (ex: problem disappears in a year) that will eventually render the product or service useless?
- Will data sources be under development?

Constraints

- Will this effort need additional funding beyond what is available at this time?
- Will this effort require expertise or knowledge not readily available at the University?
- Will a particular solution preclude other technology options later on?
- Does the proposed solution integrate with the University's platforms of choice?
- Will this solution fit into a framework of other systems?
- Are there entities within the University that do not support this initiative?

Assumptions

- What assumptions were made for this project?
- Are those assumptions tenable? How do we know?

Risks

- Is the business process clearly defined and consistently applied?
- What are the potential risks of moving forward with this effort?
- What are the real risks of moving forward with this effort?
- What are the risks of not moving forward with this effort?
- Are there methods available to mitigate any identified risks?
- Are there contractual agreements that must be considered with this solution?
- Does a particular vendor under consideration use third party code or product embedded in their technology offering?
- Does a vendor have SLAs with third party suppliers?
- Is the vendor financially solvent and do they have credible references?

IT Governance at the University of Minnesota

The University of Minnesota's IT governance framework consists of enterprise-level processes and relationships that lead to reasoned decision making in the use of information technology. This framework is used to ensure that IT is aligned with the University strategy, delivers value to the University and manages risk, performance and resources.

The University's vice president and chief information officer (VPCIO) leads the implementation of the IT governance framework and its associated processes, working in tandem with University leaders. The groups involved in the IT governance process are shown in the diagram above.

Business Case

The Initiating Process utilizes the Business Case document to capture the reasoning and need, from a business standpoint, for initiating a project. It includes a statement of the business problem and the proposed solution as well as the impact of doing and of not doing the project. In addition, it describes how the proposed project supports the goals of the University.

The Business Case document is the first step in understanding the goals of the project and how it fits into the University's strategic plan. Information in the Business Case provides the foundation for the Project Charter.

Project Charter

The Project Charter documents the business needs, current understanding of the customer's needs, and the new product, service or result that it is intended to provide. It contains a statement of the scope, objectives, and cost of a project. In addition, it provides a high level listing of project stakeholders and clearly defines the purpose and justification for the project. The purpose of the Project Charter is to document:

- Reasons for undertaking the project
- Objectives and constraints of the project
- Identities of the main stakeholders
- In scope and out-of-scope items
- Major risks
- Target project benefits
- High level budget

Project Initiating - Critical Success Factors

- Business Need/Opportunity is documented in the Business Case and the Project Charter.
- Sponsor is identified and engaged.
- Business Objectives and Benefits are documented in the Business Case and the Project Charter.
- Project alignment with OIT and University-wide strategic direction is documented in the Business Case.
- Initiating Project Manager and Initiating phase team members are identified.
- Project Proposal is created.
- Project Objectives are documented in the Project Charter.
- Project Constraints and Assumptions are documented in the Project Charter.
- Key Stakeholders are identified and documented in the Project Charter.
- Key Stakeholder needs and expectations are identified and managed.
- Key potential risks and contingency plans / mitigation strategies are documented in the Project Charter.
- Project Cost is documented in the Project Charter.

Project Initiating - Activities

The following is a list of key activities necessary for successful initiation of a project.

1. 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.:

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

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

- Origin of the need, or how the opportunity was recognized
- The magnitude of the need/opportunity
- Contributing factors, such as increased workload, loss of staff, fiscal constraints, change in market conditions, introduction of new technology, mandate/regulation, etc.
- Results of an alternatives analysis, i.e. relative merits of alternative approaches
- The consequences 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 Need/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 Business Case and the Project Charter.**

2. Identify the Project Sponsor

The Project Sponsor carries great responsibility. The Sponsor is the individual or group of individuals, generally at an executive level, 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 placed 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:

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

Action Plan Checklist - Identify the Project Sponsor	
	Identify the Sponsor
	Sponsor formally accepts accountability for the project
	Sponsor understands their role
CSF	**Sponsor is identified and engaged.**

3. Identify Business Objectives and Benefits

Every project is an investment of time, money or both. We conduct projects so that the organization can meet its strategic objectives. More specifically, projects help the organization reach business objectives that are directly related to the organization's 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:
- Related to the problem/opportunity statement
- Stated in business language
- 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:
- Business process improvement opportunities
- 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
	Business Objectives are SMART
	Determine Cost Savings and Quality of Service improvements
CSF	**Business Objectives and Benefits are documented in the Business Case and the Project Charter.**

4. Ensure Alignment with Strategic Direction

It is important that an organization only engage in projects that effectively support its business strategy. To ensure that this is true, the organization's business strategy needs to be visible and understood by everyone involved in project selection and prioritization. Using the organization's business strategy and strategic objectives as a baseline during Project Initiating will save time and effort later. This works best when business partners are an integral part of the process.

Review the alignment of the proposed project with strategic goals, including:
- Support for University strategic goals
- Support for OIT strategy
- Linkage to Benefit Categories

Action Plan Checklist - Ensure Alignment with Strategic Direction	
	Review University strategic goals and document project alignment in the Business Case.
	Review OIT strategy and document project alignment in the Business Case.
	Review Benefit Categories and document project alignment in the Business Case.
CSF	**Project alignment with OIT and University-wide strategic direction is documented in the Business Case.**

5. Assign an Initiating Project Manager

Every aspect of a project requires someone to guide it. Initiating, and specifically development of the Project Charter, is no exception. An Initiating Project Manager (who may or may not remain the Project Manager) is responsible for defining the project purpose, establishing the Critical Success Factors (CSFs), gathering strategic and background information, determining high-level planning data and developing estimated budgets and schedules for the life of the project. The Initiating Project Manager will coordinate resources and activities to complete the necessary tasks in order to develop the Project Charter and any other materials required for project approval.

Since it generally takes more than one person to fully develop a Project Charter, 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. The Project Manager eventually will join the Project Sponsor in presenting the project to the Executive Committee for approval.

Action Plan Checklist - Assign an Initiating Project Manager	
	Select an Initiating Project Manager
	Identify a team to assist with Initiating phase activities
CSF	**Initiating Project Manager and Initiating phase team members are identified.**

6. Create the Project Proposal

To provide visibility for projects that are being evaluated, a project proposal must be created in the project and portfolio management tool. The proposal is typically created by the Initiating Project Manager.

Action Plan Checklist – Create the Project Proposal	
CSF	**Project Proposal is created.**

7. 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 some time (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:

- *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?
- *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.**

8. 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.**

9. Identify and Engage Key Stakeholders

Stakeholders are individuals and organizations that have a vested interest in the success or failure of the project. During Initiating, 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 University, steps should be taken during Initiating to prepare for the process of Organizational Change Management.

Action Plan Checklist - Identify and Engage 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 Project Charter.**
CSF	**Key Stakeholder needs and expectations are identified and managed.**

10. 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 may be turned down if the risks are so high that the ROI might never be realized.

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 Project Charter.**

11. Determine Cost/Benefit

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 Initiating, 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.

Use the Cost Benefit Analysis document to estimate the one-time development / acquisition / implementation costs (including contracted staff, 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, 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, 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.

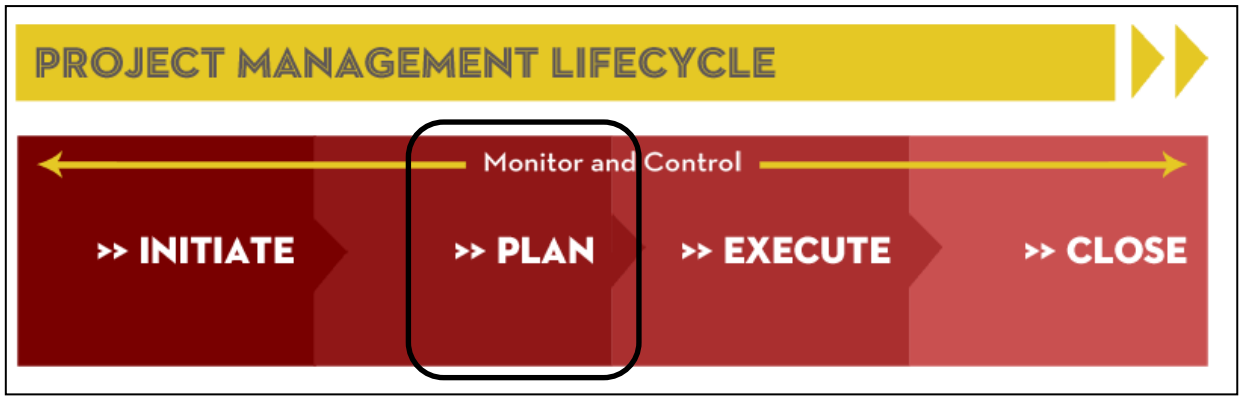
Action Plan Checklist - Determine Cost/Benefit	
	Estimate one-time development, acquisition and implementation costs
	Estimate the cost of maintenance and ongoing operations expected following the project
	Determine the anticipated benefits of the project (including tangible and intangible operational 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
CSF	**Project Cost is documented in the Project Charter.**

Project Initiating Deliverables

Deliverable Requirements for Project Initiating				
Deliverable	**Small Project**	**Medium Project**	**Large Project**	**Program**
Business Case	Optional	Optional	Required	Optional
Cost Benefit Analysis	Optional	Optional	Optional	N/A
Project Charter	Optional	Required	Required	Optional

Project Planning

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:

- Clearly define project scope
- Establish more precise cost and schedule of the project (including a list of deliverables and delivery dates)
- Establish the work organization
- Obtain management approval
- 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 Management Plan will ensure that resources and team members will be identified so that the project will be successful.

Project Management Plan

The Project Management Plan is much more than a project schedule. The Project Management Plan contains a compilation of deliverables created during the Initiation and Planning stages. Those deliverables define how the project is planned, executed, monitored and controlled, and closed. The level of detail should be appropriate for the scope, complexity and risk of the project.

The Project Management Plan may include, but is not limited to:

- The life cycle selected for the project and the processes that will be applied to each phase
- The project management processes that will be used on the project and how they will be accomplished
- Communications Management Plan
- Issue Management Plan
- Risk Management Plan
- Change Management Plan
- Additional management plans as needed to effectively manage the project. These plans could include: Requirements Management Plan, Schedule Management Plan, Cost Management Plan, Quality Management Plan, Process Improvement Plan, Human Resource Management Plan, and Procurement Management Plan.
- Performance Measurement Baseline, which includes:
    - Scope Baseline
    - Schedule Baseline
    - Cost Baseline

Once the Project Manager completes the Project Management Plan, it should be reviewed and approved by department management and the Executive 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 Management Plan is approved and signed, the Project Manager is given the authority to complete the current project efforts and enter into the Execution phase.

Project Planning - Critical Success Factors

- Project Manager is assigned.
- Project Planning team is established.
- Project Scope is documented in the Scope Statement.
- The Procurement and Sourcing Strategy has been determined.
- WBS is completed and Activities are documented.
- Project schedule/work plan is loaded with actual resources.
- Project Organization and Reporting Structure are documented.
- Project Roles and Responsibilities are documented.
- Project Team members are assigned and committed to the project.
- Detailed Project Schedule/Work plan is completed.
- All resource requirements are identified.
- Budget includes costs for all one-time and recurring expenses.
- Budget includes labor costs for all resources (e.g., contractors and University employees).
- The Project schedule/work plan has been updated with cost factors.
- The Cost Estimate and Budget document is accepted and baselined.
- The Risk Management Plan describes how the team will manage risk throughout the project.
- The Issue Management Plan describes how the project team will manage issues throughout the project.
- Change Management Plan identifies the process for managing scope changes.
- The Communication Plan and Detailed Communication Plan documents describe communication processes to be used during the project.

Project Planning - Activities

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

1. Assign Project Manager

A Project Manager's daily responsibilities typically include some or all of the following:

- Provide day-to-day decision-making on critical project issues as they pertain to project scope, schedule, budget, methodology and resources.
- Provide direction, leadership and support to Project Team members in a professional manner at project, functional and task levels.
- 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).
- Identify funding sources and facilitate the prioritization of project requirements.
- Manage the planning and control of project activities and resources.
- Develop and manage project contracts with vendors.
- Report project components status and issues to the project Sponsor and the Executive Committee.
- Use, develop and improve upon the project management methodology within the department.
- Provide teams with advice and input on tasks throughout the project, including documentation, creation of plans, schedules and reports.
- Resolve conflicts within the project between resources, schedules, etc.
- Influence Stakeholders and team members in order to get buy-in on decisions that will lead to the success of department projects.
- Delegate responsibility to team members.

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 Management Plan.

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

2. Define Project Scope

Provide a concise, measurable statement of what the project will accomplish (in scope), and 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.

The Project scope, as documented at a high level in the Project Charter, provides the basis for detailed scope and solution development in the Scope Statement. If Scope in the Charter was 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.

***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 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 Scope Statement.**

3. 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 circumstances where it is necessary to go outside the unit or the University, 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 unit.
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 unit or the University. The Procurement and Sourcing Strategy deals with the following:

What to Procure

- How does this product serve the needs of the project and the unit or the University as a whole?
- Does the product or something similar already exist somewhere else within the unit or the University?
- Is there a service provider available in the marketplace for this product?
- Does the unit or the University have the means (staff, money, contract, etc.) to produce or to acquire the product?
- *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. Consideration should also be given to the potential of leasing vs. purchasing items. This could save money for the unit 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**.**

How to Procure (Contract Types)

- *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 University and the contractor.

- *Cost Reimbursable 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.

- *Time and Material/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

- Will there be need beyond the immediate project for this product?
- How much of the budget has been allocated for this product?
- Is the need for the product clearly defined enough for the department to know exactly how much of the product will be needed?
- 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 has been determined.**

4. Create Work Breakdown Structure and Identify Activities

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 phasing is not appropriate.

Develop a Work Breakdown Structure (WBS)

A WBS is a hierarchical representation of the products and services to be delivered on a project. Elements of scope are broken down 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.

The WBS reflects tasks 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 breaking them down as planning continues.

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.

Identify Activities and Activity Sequences Based On Project Scope and Deliverables

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. Activities are identified by breaking down the work packages in the WBS into units that are small enough to manage. No matter how the WBS has been broken down, by the time the Project Manager gets to the activity level, the activities should represent similar levels of effort or duration.

Activity sequencing involves identifying the relationships between project activities and specifying the appropriate order of completion.

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:

- Break down the work until accurate estimates of cost and resources needed to perform the task can be provided.
- 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.
- 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).
- 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.

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.
CSF	**WBS is completed and Activities are documented.**

5. Define Project Organization and Project Team

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.

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. 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 may have an option to hire the necessary talent or contract services to perform the work.

Action Plan Checklist - Define Project Organization and Governance	
	Identify required skill sets by role.
	Develop project organization.
	Assign/acquire Project Team members.
	Backfill roles for assigned team members (depending on resource requirements).
	Create and share the Contact List for the project.
	Complete the RASCI Matrix that clearly identifies responsibilities by role.
CSF	**Project Organization and Reporting Structure are documented.**
CSF	**Project Roles and Responsibilities are documented.**
CSF	**Project Team members are assigned and committed to the project.**

6. Develop the Project Schedule/Work Plan

Following the definition of project activities and the identification of the project team, the activities are associated with time to create a project schedule/work plan. The project schedule/work plan provides a 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	
	Develop Project Schedule/Work plan.
	Update project schedule/work plan (e.g., load resources).
CSF	**Detailed Project Schedule/Work plan is completed.**

7. 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.

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 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.

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

8. Define 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 and Controlling 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 Management 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, copying, travel, cost of capital (if leasing equipment), computer center charges and equipment costs.

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 expenses.**
CSF	**Budget includes labor costs for all resources (e.g., contractors and University employees).**
CSF	**The Project schedule/work plan has been updated with cost factors.**
CSF	**The Cost Estimate and Budget document is accepted and baselined.**

9. Identify Potential Project Risks

A risk is an event that may occur and, if it does occur, may have a positive or negative effect on the project. Risks with potential negative impact to the project are called threats. Opportunities are risks with potential positive effect and it is important to recognize and capitalize on them whenever possible.

A risk is not an issue: *an issue* is a situation that has already occurred; *a risk* is the recognition that an issue might occur. By recognizing potential risks, the Project Manager can attempt to avoid or minimize a problem through proper actions or can take advantage of opportunities to improve the project schedule or outcome.

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 process of risk identification began in the Initiation Phase. During Planning, the Project Team should continue to evaluate those risks and log additional risks as they become apparent. For each identified risk, the team should:

- Assess the impact and probability of the risk occurring
- Assign a risk priority
- For high-priority risks, assign a risk owner and determine a risk response approach including any contingency plans.

Action Plan Checklist - Identify Potential Project 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.
	Continue to identify and log potential project risks.
	Assess impact and probability of risks occurring.
	Assign a risk priority.
	Assign a risk owner to high priority risks.
	Determine a risk response approach, including any contingency plans.
CSF	**The Risk Management Plan describes how the team will manage risk throughout the project.**

10. 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.

Action Plan Checklist - Determine Process for Issue Identification and Resolution	
	Define the approach, tools and data sources used to perform issue management on this project. Record this in the Issue Management Plan. Have it reviewed and gain acceptance.
	Identify and log issues.
CSF	**The Issue Management Plan describes how the project team will manage issues throughout the project.**

11. 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:

- Defines a process for identifying and documenting potential changes to scope
- Defines a process for review and approval of scope change
- 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 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	**Change Management Plan identifies the process for managing scope changes.**

12. Develop the 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.

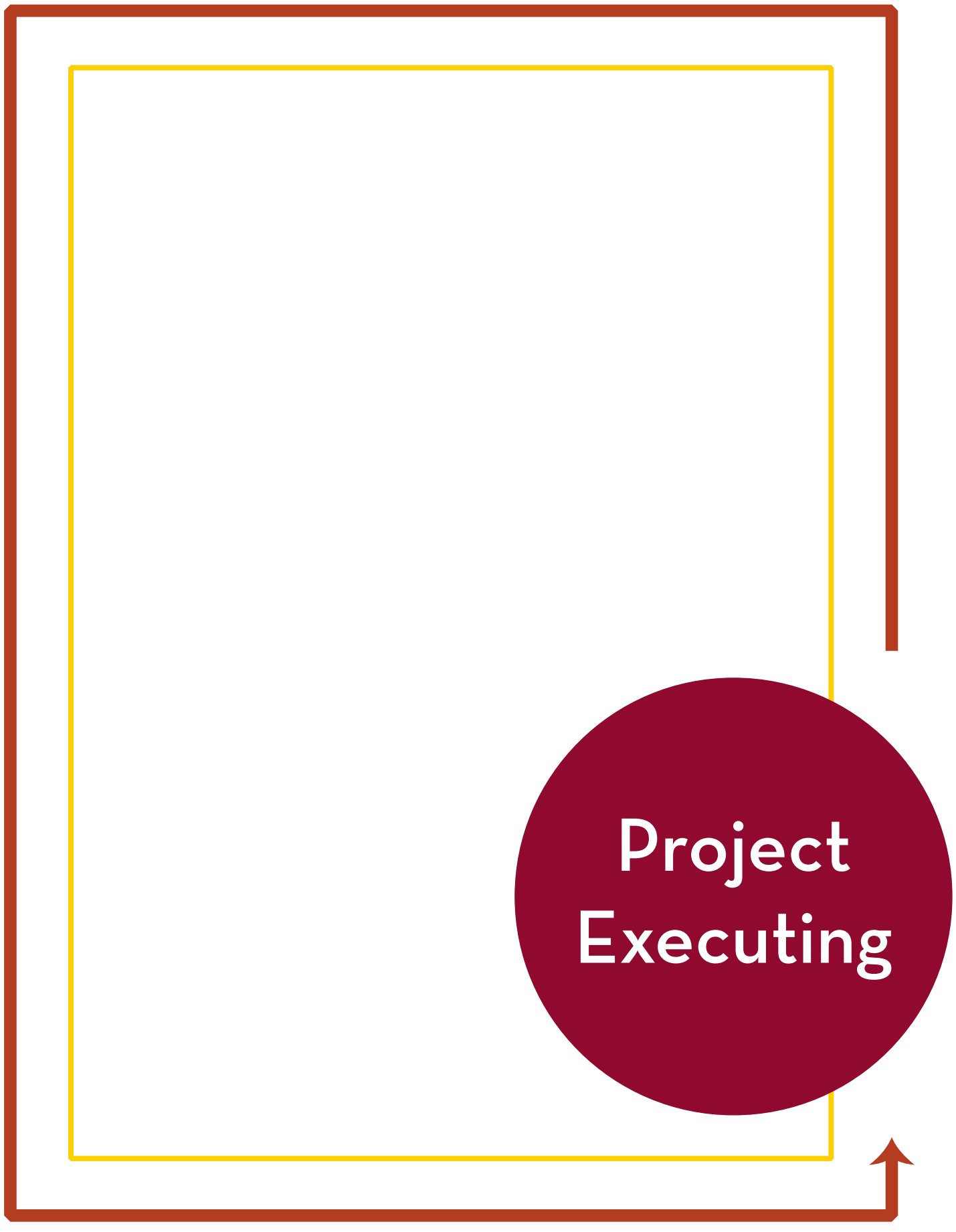
Action Plan Checklist - Develop the Project Communication Plan	
	Determine who needs what information.
	Determine when information is needed.
	Determine how to communicate information (memo, e-mail, weekly/monthly meetings, etc.).
CSF	**The Communication Plan and Detailed Communication Plan documents describe communication processes to be used during the project.**

13. Hold the Project Kickoff Meeting

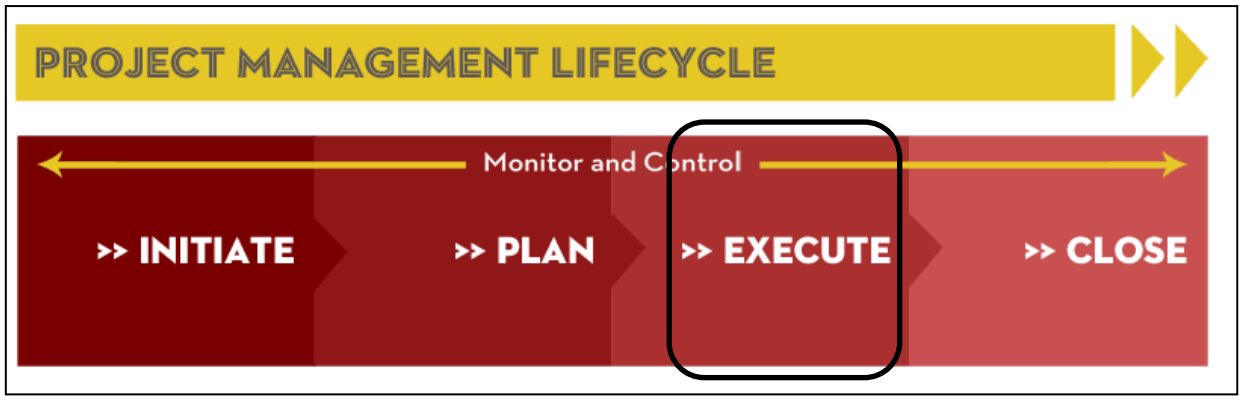
The Project Kickoff Meeting must be held when Project Planning is complete and before Project Executing can begin. The purpose of the meeting is to announce the start of the project, introduce team members, and to ensure that all involved parties are familiar with project objectives and processes. It provides an opportunity to energize the group and establish a common purpose and expectations.

Project Planning Deliverables

Deliverable Requirements for Project Planning				
Deliverable	**Small Project**	**Medium Project**	**Large Project**	**Program**
Kickoff Meeting Agenda and Minutes	Optional	Required	Required	Optional
Contact List	Optional	Required	Required	Optional
Assumptions Log	Optional	Optional	Optional	Optional
Roles and Responsibilities	Optional	Optional	Required	Optional
RASCI Matrix	Optional	Optional	Optional	Optional
Scope Statement	Optional	Required	Required	Required
Work Breakdown Structure	Optional	Optional	Optional	N/A
Cost Estimate and Budget	Optional	Optional	Required	Optional
Plan/Schedule	Required	Required	Required	Optional
Communication Plan	Optional	Required	Required	Required
Issue Log	Optional	Optional	Required	Required
Risk Log	Optional	Optional	Required	Required
Change Request	Optional	Optional	Optional	Optional
Change Log	Optional	Optional	Required	Required


Project
Executing

PROJECT EXECUTING



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, senior 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.

Once a project moves into Project Execution, the Project Team and the necessary resources to carry out the project should be in place and ready to perform project activities. The Project Management 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 developing the product or service that the project was created to deliver. It is important to note that Project Executing relies heavily on the plans developed in the Planning phase.

Project Executing - Critical Success Factors

- Project deliverables are produced and work products are tracked.
- Project services and/or resources have been procured.
- Project team works together towards the project goals.
- Communications are clear, meaningful, and distributed effectively.
- Stakeholder expectations are known and managed.
- Project progress and status are known and are inputs to the project status report.

Project Executing - Activities

The following is a list of key activities required to execute a project.

1. Produce Project Deliverables

Deliverables are the outcomes of the activities performed to accomplish the project. Information on the status of deliverables consists of input on:

- Which deliverables have been completed and which have not
- To what extent contractual obligations are being met
- What costs have been incurred or committed.

Action Plan Checklist – Produce Project Deliverables	
	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.**

2. Conduct Procurements

As indicated in the Planning phase of this methodology, there will be times within the Monitoring & Controlling phases when a department may have to go outside its resource pool to purchase products or services needed to deliver the project. The University and each of its departments has a defined set of guidelines and policies that 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.

Action Plan Checklist – Conduct Procurements	
	Develop proposal documents.
	Conduct proposal evaluation and selection.
	Conduct contract negotiations.
CSF	**Project services and/or resources have been procured.**

3. Manage Project Team

Manage Project Team is the process of tracking team member performance, providing feedback, resolving issues and managing changes to optimize project performance. Team management involves a combination of skills with special emphasis on communication, conflict management, negotiation and leadership. To encourage superior performance, project managers should provide recognitions and rewards to the project team throughout the project lifecycle.

Action Plan Checklist – Manage Project Team	
	Conduct team building activities to foster a cohesive group working in the best interests of the project.
	Provide training, as needed, for project team members.
	Create ground rules for team meetings.
	Provide recognitions and rewards for a job well done.
CSF	**Project team works together towards the project goals.**

4. Distribute Information

While the project is being executed, many stakeholders will need to receive information about the project. The project manager is responsible for providing this information. Different stakeholders may need different information in various formats. All of the stakeholder groups, information needs, and communication channels should have been documented in the Detailed Communication Plan created during Project Planning. During Project Executing, utilize the plan to distribute information.

Action Plan Checklist – Distribute Information	
	Use the Detailed Communication Plan to tailor message content and delivery method to stakeholder groups.
	Send communications at regular intervals to the stakeholder groups.
	Verify that communications are received, effective, and efficient.
CSF	**Communications are clear, meaningful, and distributed effectively.**

5. Manage Stakeholder Expectations

Each project stakeholder has a set of expectations, or what they expect will happen, for the project. Some of their expectations may be the same, some may overlap, others may be independent and a few may actually be conflicting. Since expectations that are not met can lead to conflicts, rework, or changes, it is important to be proactive and ask the stakeholders what they expect and to work to clarify those expectations. Managing expectations requires attention to the stakeholders' needs while the work is being done and making sure trust is built, conflicts are resolved and problems are prevented.

Action Plan Checklist – Manage Stakeholder Expectations	
	Review the stakeholder list in the Roles and Responsibilities document and keep it updated.
	Engage stakeholders by inviting them to project meetings, as appropriate, and by sharing regular status reports and communications.
CSF	**Stakeholder expectations are known and managed.**

6. Collect Project Status Information

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.

Action Plan Checklist – Collect Project Status Information	
	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 status meetings with team leaders.
	The Project Manager conducts meetings with all Project Team members.
	The Project Manager collects informal status information and acts on it as needed.
CSF	**Project progress and status are known and are inputs to the project status report.**

Project Executing Deliverables

Deliverable Requirements for Project Executing				
Deliverable	**Small Project**	**Medium Project**	**Large Project**	**Program**
Project-specific deliverables*	Required	Required	Required	Optional

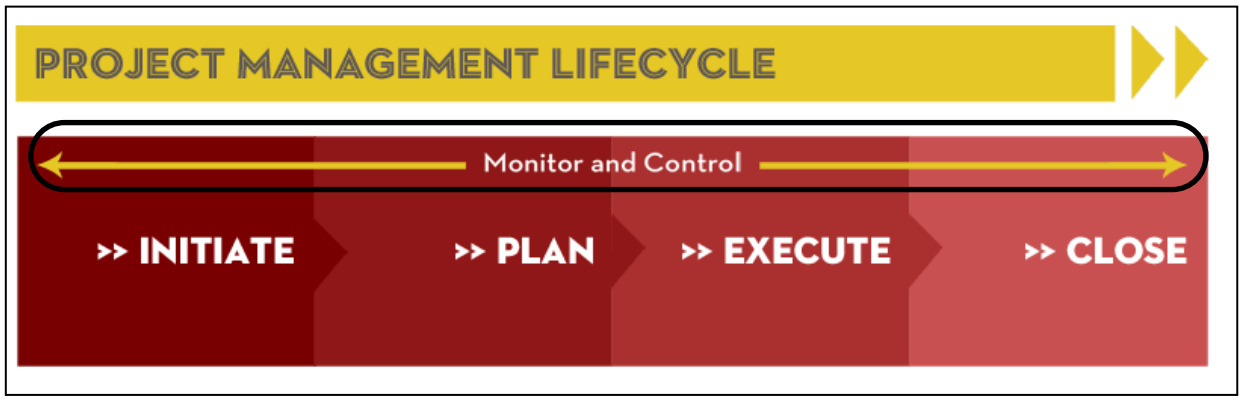
**Project-Specific Deliverables*

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

Examples of project-specific deliverables might include design documents, build documentation, test plans and test results, or a training plan.

Project Monitoring and Controlling

PROJECT MONITORING AND CONTROLLING



Unlike the other phases in the Project Management lifecycle, the Monitoring and Controlling processes are active over the full lifecycle of the project. The purpose of this phase is to have a clear understanding of the project's progress, to communicate that progress, and to take corrective and preventive actions when needed to keep the project on track. The Project Monitoring and Controlling phase involves:

- Measuring the ongoing project activities
- Monitoring project performance against the Project Management plans
- Assessing variances
- Identifying preventive and corrective actions to address issues and risks
- Influencing the factors that cause project change
- Reviewing and making decisions about change requests
- Reporting on project status

The Project Management Plans, as created in the Project Planning phase, form the basis for monitoring project progress. They contain the baselines for schedule, cost, and scope against which the project progress is measured. If significant variances are observed (i.e., variances that jeopardize the completion of the project objectives), adjustments to the affected Project Management Plans must be made.

Project issues and risks are documented beginning in Project Initiating and continuing throughout the lifecycle of the project. Watching for, documenting, and managing Issues and Risks is an important element in Monitoring and Controlling. Monitoring risks and taking preventive action may keep a possible threat (negative risk) from impacting the project. Corrective action is taken to bring future project work in line with the Project Management Plans.

No matter how well the project was planned, requests for change are inevitable. However, just because a change is requested does not mean that it must be, or even should be, implemented. Changes are reviewed and accepted or rejected as part of the Integrated Change Control process in Monitoring and Controlling. The process is called "integrated" because the impact of each change on all Project Management Plans is considered as change requests are evaluated. When change requests are approved, specific Project Management Plans may need to be updated.

Project Monitoring and Controlling - Critical Success Factors

- Project Risks are documented (e.g., according to the Risk Management Plan) and addressed.
- Scope Changes are identified and addressed.
- Scheduled tasks are closely tracked for timely completion.
- Schedule problems are identified and addressed.
- Planning documents are updated with impact of improved Scope Changes.
- Scope Creep is minimized.
- Project costs are understood and controlled.
- Issues are identified and resolved.
- At each Phase Gate, the project is evaluated for phase completeness and readiness to progress to the next phase.
- Contractual obligations are met.
- A sense of partnership with the vendor is created and maintained.
- Project Planning documents are revised to reflect the current status of the project.
- Stakeholders and Project Team members are informed and aware of project activities and status.
- Sponsor is informed of project status and key issues.
- Sponsor provides direction and support for resolving key issues.

Project Monitoring and Controlling - Activities

The following is a list of key activities required to monitor and control a project.

1. Manage Risk

Risk identification, monitoring and resolution are key tools for successfully completing a project. Through risk management, the project manager works to increase the probability and impact of opportunities (positive impacts) while decreasing the probability and impact of threats (negative impacts). Part of controlling a project during the Monitoring and Controlling phase is to have an established risk management process. This process is a primary part of the Project Management Plan and is kept current until project closeout.

Action Plan Checklist - Manage Risk	
	Establish a central repository for risk information and associated documentation of risk items and resolution strategies.
	For high priority risks, assign a risk owner to monitor it for occurrence.
	Include a risk summary in the regular status meetings.
	Provide a consistent and ongoing evaluation of risk items and development of risk strategies.
	Identify new risks.
	Evaluate new and existing risks.
	Define/refine risk response strategies.
	Implement risk response strategies.
	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.**

2. Manage Schedule

Schedule control is an important aspect of project management that is often overlooked during technology projects. 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.

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:

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

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.

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:

- Availability of staff or resources
- Delivery of equipment or software
- Unexpected events
- Deliverables from other projects or personnel.

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 involves change to one of the project baselines, it should only be done through a formal Change Control Process.

Action Plan Checklist - Manage Schedule	
	Collect and validate schedule status; for example, data that reflects start, finish and estimates to complete work.
	Validate 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, 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.

Action Plan Checklist - Manage Schedule	
	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 the Project Sponsor agrees that there is benefit to the project to do so.
CSF	**Scheduled tasks are closely tracked for timely completion.**
CSF	**Schedule problems are identified and addressed.**

3. Manage Scope

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. A scope change is a very crucial occurrence that may require a change in project funding, resources and/or time.

Attributes of scope control include:

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

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).

All scope change requests should be submitted in writing and must follow the process described in the Change Management Plan. A scope change may impact many of the Project Management Plan documents. Documents such as the WBS and Project Schedule/Work Plan may 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.

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.
	The Project Sponsor must approve all scope changes.
	Update planning documents with scope change impacts: documents such as the WBS and Project Schedule/Work Plan may have to be re-evaluated and updated to include the scope change impacts.

Action Plan Checklist - Manage Scope	
	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.**

4. 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, when combined, permit cost control to be sacrificed and prevent the project from being completed successfully.

Cost control contains the following attributes:

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

Cost control includes the following:

- Monitoring cost performance to detect variances from the Project Management Plan
- Ensuring that all appropriate changes are recorded accurately in the Project Budget
- Preventing incorrect, inappropriate or unauthorized changes from being included in the Project Budget
- 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.

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	
	Monitor cost performance to detect variances from the Project Management 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.**

5. 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. All Issues are recorded in the Issue Log which 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.
All issues need to be reviewed on a regular basis (e.g., the project status meetings, since this group will usually meet on a weekly or biweekly basis).

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.

Action Plan Checklist - Manage Issues	
	Create a central repository of project issues.
	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.
	Update the appropriate processes and documents impacted by issue resolution.
CSF	**Issues are identified and resolved.**

6. Review Project at Phase Gates

Phase gates, which are dependent upon project size and complexity, occur when the project is positioned to transition into a new phase. The phase gate review is a formal process in which the project is evaluated by a member of the Enterprise Project Management Office (EPMO). The emphasis during the gate reviews is on:

- Completion of deliverables
- Assessment of project risks and issues
- Readiness for the next phase

Action Plan Checklist – Review Project at Phase Gates	
	Review the deliverables of the concluded phase.
	Review risk assessments and issue logs.
	Evaluate project progress and ability to meet objectives.
CSF	**At each Phase Gate, the project is evaluated for phase completeness and readiness to progress to the next phase.**

7. Administer Contract/Vendor

The Project Manager is responsible for ensuring that the vendors, once contracted to do the work, meet the contractual agreements specified within their contracts. Project Managers are also 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 play an important role in oversight and review of any contract changes that will affect the project.

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 needs to ensure that the vendors follow appropriate application development and project management methodologies.

Action Plan Checklist - Administer Contract/Vendor	
	Ensure that the vendors, once contracted to do the work, meet the contractual agreements specified within their contracts.
	Track, review and analyze the performance of contractors on a project.
	Approve and monitor the vendor's Project Management 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 with the vendor is created and maintained.**

8. Update Project Planning Documents

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

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

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

Action Plan Checklist - Update Project Planning Documents	
	Revise Project Management Plan baselines (through formal Change Control process).
	Revise other Project Management 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.**

9. Communicate Information

The project Communications Plan is an important factor in the Monitoring and 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:

- The Project Manager may be requested to make regular reports to the Project Sponsor or other management group.
- The Project Management 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 Management Plan in varying format, depending on their communication needs.
- Meeting minutes should be made available to Stakeholders along with any "to-do" lists that may have been generated during the meetings.
- 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.
	Meet regularly with the Project Sponsor to provide status and discuss key issues and successes.
CSF	**Stakeholders and Project Team members are informed and aware of project activities and status.**

10. Prepare and Distribute Status Reports

Status reporting is an integral part of the project management process. It is the means by which the Project Team and Project Sponsor 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.

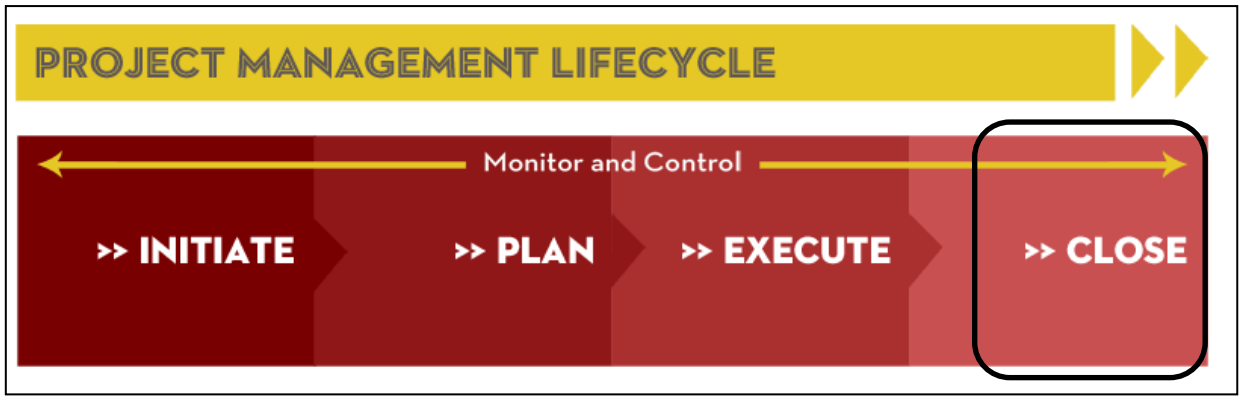
Action Plan Checklist – Prepare and Distribute Status Reports	
	Provide a copy of the Project Status Reports to the Sponsor.
	Identify key issues that impact the organization and require action on the part of the Sponsor.
	Implement issue resolution plans as discussed with Sponsor.
	Revise any related or impacted planning documents.
CSF	**Sponsor is informed of project status and key issues.**
CSF	**Sponsor provides direction and support for resolving key issues.**

Project Monitoring and Controlling Deliverables

Deliverable Requirements for Project Planning				
Deliverable	**Small Project**	**Medium Project**	**Large Project**	**Program**
Status Report	Optional	Optional	Required	Required
Meeting Agenda and Minutes	Optional	Optional	Optional	Optional
Lessons Learned Log	Optional	Optional	Optional	Optional

Project Closing

PROJECT CLOSING



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

Project closing includes the following key elements:

- Verification of formal acceptance by Stakeholders and the Sponsor
- Re-distributing resources (staff, facilities, equipment and automated systems)
- Closing out any financial issues such as labor charge codes and contract closure
- Documenting the successes, problems and issues of the project
- Documenting Lessons Learned
- Celebrating project success
- Completing, collecting and archiving project records.
- Producing a Project Closeout Report

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

Project Closing - Critical Success Factors

- The Project Assessment Survey provides information for the Project Closeout Report.
- All contractual obligations have been met or formally waived.
- Lessons Learned are identified and used to improve processes for future projects.
- Lessons Learned are documented in the Project Closeout Report.
- Project Closeout Report summarizes the project.
- Project Closeout Report is approved by the Sponsor.
- Resource managers have been provided with information on the performance of their team members.
- Project documentation is complete has been archived.
- Project celebration is held and team members are recognized publicly for their efforts.

Project Closing - Activities

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

1. Conduct Project Assessment Survey

In conducting the Project Assessment Survey, the Project Manager provides an opportunity for rating various aspects of the project. Typical questions to include in the survey are:

- Did the delivered product meet the specified requirements and goals of the project?
- Was the customer satisfied with the end product?
- Were cost budgets managed effectively?
- Was the schedule planned well?
- Were risks identified and mitigated?
- Did the project management methodology work?

The Project Assessment Survey is usually distributed to the following groups:

- Project Team
- Stakeholder representatives
- Project Sponsor

Rating results from the survey are compiled and presented in the Project Closeout Report.

Action Plan Checklist - Conduct Project Assessment Survey	
	Distribute the survey and compile results.
	Include Project Assessment Survey results in the Project Closeout Report.
CSF	**The Project Assessment Survey provides information for the Project Closeout Report.**

2. Conduct Final Contract Review

Contract closure is the process of terminating contracts that outside organizations or businesses have with the University 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.

Action Plan Checklist - Conduct Final Contract Review	
	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.**

3. Finalize Lessons Learned

Project Lessons Learned include what was done right, what was done wrong, and what would be done differently if the project could be redone. To provide the most value, Lessons Learned should be collected beginning in the Project Initiating phase and collection should continue throughout the project lifecycle. The goal of collecting Project Lessons Learned is to utilize them to work more effectively and efficiently on future projects.

In addition to Lessons Learned that have been collected during the project phases, the Project Manager may conduct a Lessons Learned Meeting or may create a survey for soliciting input. Questions that may be included in the meeting or survey include:

- What worked well during the project?
- What could have been done better during the project?
- How well were project team member roles and responsibilities defined?
- How well was the project scope defined?
- Were the business requirements well defined?
- Were the technical requirements well defined?
- How well was project planning and scheduling done?
- How well was the communication process defined and managed?
- How well were issues managed?
- How well were risks identified and managed?
- How well were changes managed?
- Did the testing go well?
- Was the training adequate?
- Was the project documentation adequate?
- How well was ITG Center used during this project?
- How effective were project team meetings? Were they scheduled frequently enough or too frequently?
- Did we have adequate resources and staffing?
- Was the team productive?
- How were the team dynamics?
- Were vendors well managed?
- How well were the overall objectives and success criteria of the project met?
- Did the project meet business expectations?

Compiled and summarized Lessons Learned are included in the Project Closeout Report.

Action Plan Checklist – Finalize Lessons Learned	
	Collect Lessons Learned throughout the project.
	Conduct a Lessons Learned Meeting or distribute a survey for collecting input.
	Compile Lessons Learned.
	Revise project management procedures based on Lessons Learned.
CSF	**Lessons Learned are identified and used to improve processes for future projects.**
CSF	**Lessons Learned are documented in the Project Closeout Report.**

4. Complete the Project Closeout Report

The project is not complete until the Project Closeout Report has been created, distributed and approved by the Sponsor. The usual distribution of the report includes the project team, management, Stakeholders, and the Project Sponsor. The report summarizes the project and evaluates the effectiveness of many project processes.

In addition, the report includes:

- Key project metrics which may include Cost, Schedule, Scope, and Quality measurements
- Project Assessment Survey results
- Lessons Learned summary

Action Plan Checklist – Complete the Project Closeout Report	
	Project Closeout Report is prepared and distributed.
	Project Closeout Report is approved.
CSF	**Project Closeout Report summarizes the project.**
CSF	**Project Closeout Report is approved by the Sponsor.**

5. Provide Performance Feedback for Project Team Members

As the project closes, project team members are released from the project for new assignments. Since a significant amount of their work time may have been spent on the project, the project manager needs to provide feedback on their performance to their resource manager. This feedback may be provided in a formal document or may be conveyed informally.

Action Plan Checklist – Provide Performance Feedback for Project Team Members	
	Ask resource managers for their preference for the format of the performance feedback.
	Provide performance feedback.
CSF	**Resource managers have been provided with information on the performance of their team members.**

6. Archive Project Documentation

All documentation that has anything to do with the product itself (including design documents, schematics, technical manuals) must be completed and turned over to the Project Manager for archiving. Historical project data is an important source of information to help improve future projects. The approved location for archived documents related to Enterprise technical projects is the pmo directory in NetFiles (https://netfiles.umn.edu/oit/pmo).

The specific information archived for a project will vary between types of projects. Typically, the following project data and documents are archived:

- Project Charter
- Project Management Plan, including the Project Scope Statement, Risk Management Plan, etc.
- Financial Records
- Correspondence
- Meeting notes
- Status reports
- Contract file
- Design documents
- Technical documents
- Files, programs, tools, etc.,
- Other documents/information

Action Plan Checklist – Archive Project Documentation	
	Ensure that all project documentation has been updated and is complete.
	Create an archive for project documentation.
	Ensure that project documentation has been moved to the archive.
CSF	**Project documentation is complete has been archived.**

7. Hold Project Celebration

Celebrating project completion can be extremely rewarding for project teams who have worked long and hard to produce the project deliverables. To reward the effort expended by the project team, work with the Project Sponsor to plan and hold a project celebration. The type of event should be proportionate to the project size and scope

Action Plan Checklist – Hold Project Celebration	
	Engage Project Sponsor to plan the celebration.
	Invite past and present team members.
CSF	**Project celebration is held and team members are recognized publicly for their efforts.**

Project Closing Deliverables

Deliverable Requirements for Project Planning				
Deliverable	**Small Project**	**Medium Project**	**Large Project**	**Program**
Project Closeout Checklist	Optional	Optional	Optional	Optional
Project Assessment Survey	Optional	Optional	Optional	N/A
Project Assessment Survey Results	Optional	Optional	Optional	N/A
Lessons Learned Meeting Agenda and Minutes	Optional	Optional	Required	Optional
Project Closeout Report	Optional	Optional	Required	N/A