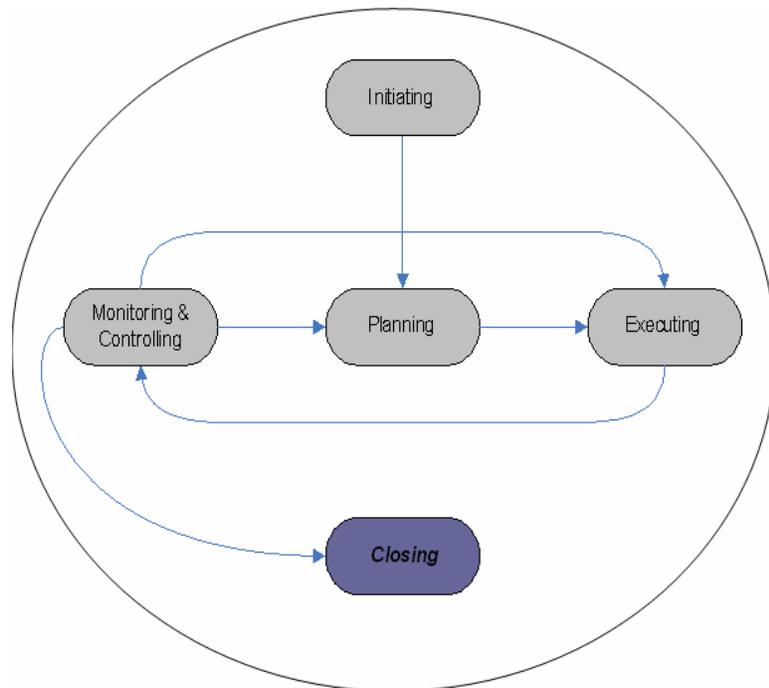


6.1 Project Closeout Overview

Project closeout is the last major phase of a project's lifecycle. This phase is performed once all defined project objectives have been met and the customer has accepted the project's product. Closing a project is a routine task.

Figure 6.1
Project Close-out Phase



Project closeout includes the following tasks:

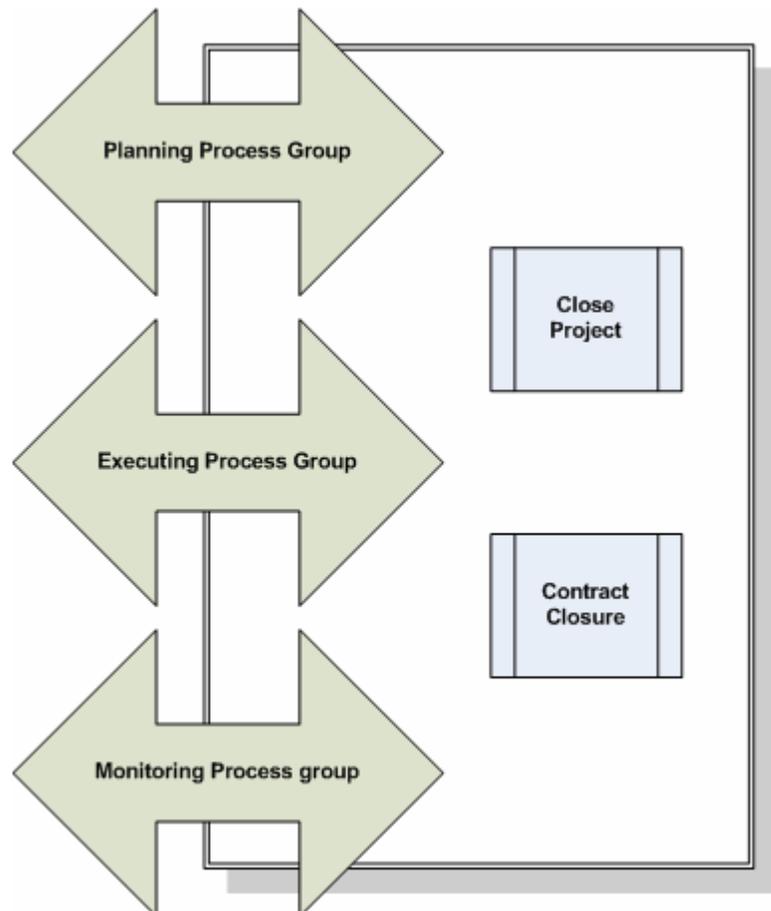
- Redistribution of resources, including staff, facilities, equipment and automated systems
- Closing out any financial issues such as labor charge codes and contract closure
- Collect, complete and archive project records
- Document the success and issues of the project
- Conduct a “lessons learned” session
- Celebrate project success

These activities are very important on large projects with extensive records and resources. Specific information technology processes that deal with the transition of the technical support into maintenance support is not discussed in this section. These tasks are diverse and specific to each project's environment.

6.2 Administrative Closure

Administrative closure is the process of preparing closure documentation of the product or process deliverables to the customer as well as taking other administrative actions to ensure that the project and its assets are redistributed. Delivering closure documentation does not mean getting approval and acceptance signature on the deliverable. It involves a series of steps to ensure the product meets the customer's requirements that were defined in the Project Requirements document and approved by the customer. The Post Implementation Evaluation Report (PIER) is produced in the Administrative Closure. Other areas included in administrative closure are archiving, facilities and personnel reassignment. Figure 6.2.1 shows a diagram of the Closeout processes is shown below:

*Figure 6.2.1
Closeout Processes*



Just because project closure appears at the end of the project, does not mean that all project closure activities need to be delayed until then. As each project phase is completed, it is important to conduct milestone reviews to ensure that phase activities have been completed to the satisfaction of all involved parties. This frees the project manager and team from dealing with old action items and outdated information.

Post Implementation Evaluation Report (PIER)

A Post Implementation Evaluation Report (PIER) documents the successes and failures of the project. It also provides valuable historical information of the planned and actual budget and schedule. Other selected metrics on the project may be collected using documented procedures. The report also contains recommendations for future projects of similar size and scope. Information within the PIER should include, but not be limited to, the following items:

- Project sign-off
- Staffing and skills
- Project organizational structure
- Schedule management
- Cost management
- Quality management
- Configuration management
- Disaster Recovery
- Customer expectations management
- Lessons learned

Defining Lessons Learned

In addition to communicating the closure of a project in writing, it is also advisable to have a mechanism for group review. A lesson learned session is a valuable closure and

release mechanism for team members, regardless of the success of the project. Some typical questions to answer in a lessons learned session are listed below:

- Did the delivered product meet the specified requirements and goals of the project?
- Was the customer satisfied with the end product?
- Were cost budgets met?
- Was the schedule met?
- Were risks identified and mitigated?
- Did the project management methodology work?
- What could be done to improve the process?

The lessons learned session is typically a large meeting that includes the following groups:

- Project team
- Stakeholder representation - including external project oversight
- Executive management
- Maintenance and operation staff

Such sessions provide official closure to a project, as well as a forum for public recognition. These sessions offer an opportunity to discuss ways to improve future processes and procedures.

Documenting Lessons Learned

One purpose of the PIER is to document lessons learned. This means that problems encountered by the project team are openly presented. Problem identification on completed projects provides a method to discuss project issues encountered in hopes of eliminating their occurrence in future projects. It is important that these discussions remain objective and professional and do not "point a finger" at a target other than the project team.

Responsibility and ownership for problem identification and resolution by the team is critical for developing recommendations for future projects.

The individual problems that occurred throughout the course of the project should have been presented and documented when they happened and subsequently addressed at that time. The lessons learned documented in Project Closeout is for upper management's review and action as well as to provide a valuable tool for future projects. This will help to prevent future project managers and teams from making avoidable mistakes and also lay the framework for success in other projects.

Problems encountered should be prioritized with focus on the top five to ten problems. It is not necessary to document every small event during the lifecycle of the project; however, all legitimate problems and issues should be discussed that are requested by customers or management. Due to the sensitive nature of information in the PIER, the content of the document should be reviewed by all parties included in the document prior to submitting it to the project team. It is useful to conduct the review in an interactive forum where all parties can discuss their recommendations for improvement. This enables the PIER to present a complete view of the system.

Identifying and Addressing Success

Successes are just as important as problems and need to be documented on the PIER. It is also important to include new ideas that were successful in the project for future use. Make recommendations on how these success reports might be adapted for other projects.

Share project successes with other organizations. In the same way problem identification can lead to improvements, successes should be translated to procedures that can be followed in future projects.

Preparing the Report

Typically, the Project Manager has the responsibility to prepare the PIER report. The Project Manager obtains input from the entire team, customers, and other major stakeholders. People performing different functions on the project will have a different outlook on the successes and

failures and on possible solutions. If every project member cannot be consulted, at least solicit input from all major areas of contribution. The customer's overall view of the project and its final product is also a major focus of the project. It is this view, along with the view of the major stakeholders that lives on after closure of the project.

There are other documents and processes that also need to be brought to closure as the project nears completion. They are described in the Project Documentation, subsection 6.3.

Customer Project Sign-off

As stated earlier, the issue of primary importance with project closure is the acceptance of the product or project deliverable by the customer for which they were created. The best way to resolve this is to convene a final meeting with all necessary stakeholders to review the product delivered against the baseline requirements and specifications. By this time, any deviations from the established baseline will have been documented and approved but it is still good policy to make all parties aware of the baseline deviations and justifications. By conducting the meeting of all the stakeholders together in one meeting, the Project Manager avoids clearing up open issues on an individual basis.

The final deliverable of this meeting should be a statement created by the Project Manager describing the project's final deliverables in comparison to the authorized project baseline documents. Approval is verified via the signature of a project closure statement by all stakeholders who signed the original project baseline document (e.g. Project Plan). This document may be customized to fit the needs of specific projects that include pertinent deliverables, key features and other important information about final project delivery.

Project Documentation

All documentation that has information about the project (including design documents, schematics, technical manuals) that have not already been turned over to the operations and maintenance organizations must be completed and forwarded to the Project Manager.

**Collecting Project
Archive Data**

After the PIER document has been prepared, the project information is archived. Historic project data is an important source of information to help improve future projects. The information that is archived will vary from project to project. Typically, the following project data is archived:

- Project Notebook
- Project Plan - including the Project Charter, Project Scope Statement, Risk Management Plan, and Quality Plan
- Correspondence
- Meeting notes
- Status reports
- Contract file
- Technical documents
- Files, programs, tools, etc. placed under the use of Configuration Management
- Any other pertinent information to the project

All hard copy records should be stored following the State of Arkansas record retention guidelines. Many of the technical documents and automated versions will be turned over to agency personnel responsible for maintenance and operation of the system. Summaries of technical information should be stored electronically for historical reference to facilitate later review. The project archive should include an inventory sheet and description of the files being submitted the application (including version) used to create the archived materials and a point of contact for the archived data.

The project management information summary should also include a description of the project, a project organization chart, budgeted versus actual cost and budgeted versus actual schedule. Any assumptions associated with the project are also included.

Maintaining the Archive

DIS project information is archived by the Project Manager on the network server agency and can be reviewed as needed.

Using the Archives

Building a repository of past projects serves as a reference source for estimating future efforts and as a training tool for Project Managers.

Project archives can be used when estimating projects and in developing metrics on productivity of the project teams. Use of past performance metrics for estimating future work provides the best source for future estimates. When sufficient project data is collected over time, DIS may develop an experienced database that could be used to make strong estimates of expenses, resources and time for realistic projects.

Personnel and Facilities

Personnel

If personnel have been applied against the project on a full time basis and the project is nearing the end, it is important to return the people back into the available resource pool quickly. This will ensure that the people stay busy and that other projects within the agency do not fall short of resources. This will also ensure closeout of the labor charge code (if necessary) used for the project.

Facilities

If the project team has occupied agency facilities for a long period of time, it is a good idea to notify the controlling facilities personnel that the space is no longer needed. The Post Implementation Evaluation Review (PIER) template can be found in the Appendix.

6.3 Financial Closure

Financial closure is the process of completing and terminating the financial and budgetary aspects of the project being performed. Financial closure includes both (external) contract closure and (internal) project account closure. The following sections describe some of the actions that must be taken to ensure financial closeout.

Project Account Closure

Project account closure is an internal process that formalizes the termination of a project for the staff within the agency. Without setting definitive dates and providing a formal process for closure, projects have a tendency to live past their scheduled completion date. For instance, if a termination date is not set for a project, it is possible that the project might continue indefinitely, allowing personnel to apply resources and labor against it. If this were to happen, a project would not be a project any longer, but could potentially turn into a program without a defined end date. Projects by definition have limited budgets and life-spans, so it is necessary to terminate them at some point.

Setting a Completion Date

Often projects have a completion date imposed upon them at their inception, which by nature makes that date the termination date for the project. The completion date for a project is the date that all project-related activities needed to produce the product should be completed. Beyond this date, there should be no need to apply labor or resources against the project because it will have delivered or turned over to operations. Any further work done on the product beyond this date should be considered an operations and maintenance cost.

Closing Account Charge Codes

Most projects have account numbers associated with them that allow the financial departments to track labor hours and resource procurement. These labor charge codes will need to be deactivated so that no personnel may continue to charge time against the project or use the project charge codes to purchase materials, etc.

Closure of the charge accounts should be formalized via written request that the Project Manager turns over to the managing financial organization.

Spreading the Word

Agency staff and management need to be told as far ahead of time as possible when the project will be coming to completion. There are a few reasons for this:

- The staff applied to the project will know the date beyond which they will not be able to charge their time against and purchase resources for the project.
- Management will be able to plan where their resources applied next after the current project is complete.
- Setting a date provides a sense of urgency to resolve issues and complete activities that have been dragging on without resolution.

The termination date of the project should be included in the project schedule as well as any ongoing project documentation. Staff members should be reminded ahead of time that charge codes will become inactive on a certain date. This can be done via e-mail or whatever means is convenient to insure that the word is passed.

Process for Contract Closure

Contract closure is the process of terminating contracts that outside organizations or businesses have with the agency 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 agency decided not to perform itself. Contracts can be brought to closure for 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 agency.

Collect Documentation

In order to close a contract, it is important to collect all of the pertinent documentation for review. This will include all of the original contracts and supporting documentation such as schedules, contract changes, and performance reports. This documentation needs to be reviewed thoroughly to ensure that there are no unrealized contract issues that could open up legal liability. For specific methods on contract closure please refer questions to the Contract Management Division.

The Financial Audit

The project audit is intended to determine where, in measurable terms, the actual costs on the project may have overrun or under-run and determine the cause of the variation. It is also an investigation into the ethical and financial responsibility of the staff involved with the project. Because many state projects are funded through state taxes and appropriations, it is imperative that all of the project members be held accountable to the highest degree of fiscal responsibility. Furthermore, the financial evaluation also provides an opportunity for project managers and agencies to learn where they can improve financially on the implementation of similar future projects.

Purpose of an Audit

A financial audit is the thorough examination of a project by an evaluation team and includes a detailed overview of the project's financial procedures, budgets, records, etc. It may deal with a project as a whole or separate part of a project. An audit may take a few hours to several months depending on the size, visibility, and the detailed information available on the project. Although financial audits can occur anytime throughout the project, the emphasis of this section is on the Closeout Phase.

Requirements

Financial project audits require quite a bit of information to make accurate assessments. This information may include, but not be limited to the following:

- Budget plans (staff and resource baselines)
- Staff timesheets
- Contracts with external organizations

- Procurement guidelines
- Purchase orders
- Budget status reports
- Change control results

This information is evaluated by an audit team to determine if the time and resources spent on the project measurably reflect the product produced as a result of the effort.

The Audit Team

The financial audit may be performed by teams either internal or external to the organization. External teams may be selected because of their experience and impartiality. Internal teams may be selected as a result of the size of the project or the team members' knowledge of the financial guidelines of the agency. Internal teams, if used, may include members from the project team, the agency accounting department, executive management, human resources, contracts/procurement, and the legal department.

The audit team must have full accessibility to the project records and project staff to make an informed and unbiased assessment of the financial health of the project. Although accessibility to the staff may be difficult, and at times intrusive, it is important that the staff take the time to discuss the project with auditors. Care must be taken to avoid misunderstandings, and auditors must avoid comments that may be construed as critical. The auditors have a responsibility to be as fair as possible and occasionally may need to rely on their own interpretations of the data.

Project Audit Sections

A financial audit is a formal report that needs to be organized in an understandable and systematic format. It may be necessary for the audit team to develop a method for separating useful information pertinent to the project from irrelevant or distracting information.

If a financial audit is done internally, the time spent should be commensurate with the amount of time actually spent on the project. Some audits will be much more detailed than others.

Once completed, the financial audit should be delivered to the project product owner or their designee. Copies may also be made available to the project manager, executive management, and as necessary in order to verify any assumptions made by the audit team or clarify any unresolved issues.

6.4 Celebration of Success

Celebrate the success of completing a project! There is fairly universal recognition that positive reinforcement, or rewarding behavior, is an effective management tool. Because it is a goal within the state to increase the number of successfully executed projects, it is important to recognize teams that have met this goal. When success in a project is achieved, be certain to provide some recognition to the team. If individuals are singled out for significant achievements, don't forget to recognize the entire team as well.

One step of the Closeout Phase is the customer's acceptance of the system. This is a critical and important step, as the customer decides when the project is completed. Acceptance is based upon the success criteria defined in the very early concept and planning stages of the project. This acceptance may be very informal or it may be very formal, depending on the defined criteria.

What is Success?

Success is defined at the early stages of planning the project. In this project management methodology, success factors are developed as part of the Initiation Phase. Success is not tied to only budget and schedule. Many projects can be considered a tremendous success even though the project ultimately cost more than had been anticipated. Some key questions that determine success include the following:

- Were the success objectives achieved?
- Do the stakeholders and customers view the project/product in a positive manner?
- Was the project well managed?
- Did the team work well together and know what was going right and wrong?

Informal Recognition

There are many ways to reward people for a job well done. The reward might be an informal after work gathering or a lunchtime pizza celebration.

Formal Recognition

Organization management may also want to express recognition of a successful team effort by praising the team at a key meeting or a large gathering of staff. Team members are proud to have executive management state appreciation, and such recognition sets the stage for future successful work.

Formal recognition can also be achieved through coordination with the organization for articles in industry periodicals and updating project data that is circulated to the legislature. Other options include plaques or gift certificates, should management and budget allow for such expenditures.

6.5 Project Close-out Checklist

In order to close this phase of the project it is important to make sure that all of the necessary documents that are pertinent to the particular project in question have been completed. This sub-section discusses the process of insuring that the activities have been finished, reviewed, and signed off

Usefulness of Project Checklists

Close-out Checklist becomes a way for the Project Manager to organize and communicate tasks that should be completed prior to closing the project.

Beyond serving as a communication document, use of the Close-out Checklist can also trigger completion of tasks that the project team might overlook. The checklist is a combination of an action list and a tool to verify that necessary steps have been completed. The Close-out Checklist should be organized according to the major areas of concern that will determine the project's success. The development and use of a Close-out Checklist also provides the project team with the tools to ensure that all information has been reviewed and approved.

Project Close-out Checklist Creation

The Project Manager owns the Project Close-out Checklist, although in most projects, the full team provides input.

Format of a Project Close-out Transition Checklist

The format of the Project Close-out Checklist can be whatever the project team defines, but it usually resembles more of an outline than a dissertation. It could be a single line item with space provided for the person to list the current status of an item. Sample answers might be:

- Y = Item has been addressed and is completed.
- N = Item has not been addressed, and needs to be in order to complete the process.

- N/A = Item has not been addressed and is not related to this project.
- P = Item has been addressed and some issue resolution is needed to complete the item or annotate is as “N/A”.

If the item status information is modified, then the person responsible for the Close-out Checklist should ensure that the information is given to the full project team for use. Each item on the Close-out Checklist should also have an area for comments and should note plans to resolve “N” or “P” entries.

The project team can choose to put this checklist under configuration management or in the Project File Folder so that it may be shared. The format can be modified to the requirements of a particular project. A sample checklist can be found on the following pages.