
CHAPTER FIVE: PROJECT IMPLEMENTATION, TERMINATION AND EVALUATION

1.1. Implementation Phase

1.1.1. Process of Implementation

1.1.2. Project Control

1.1.3. Change and Control Management

1.2. Project Termination

1.2.1. Closeout Task: Activities

1.2.2. Turnover to Operation

1.2.3. Administrative Closure

1.2.4. The Final Report

1.3. Project Evaluation and Types of Evaluation

1.3.1. What is Project Evaluation?

1.3.2. Relationship of Monitoring to Evaluation

1.3.3. The Purpose and Use of Evaluation

1.3.4. Different Kinds of Evaluation

1.3.5. Evaluation Criteria

1.3.6. The Steps in Doing an Evaluation

◆ Summary

◆ Check in Progress 5

Objectives

After completing this chapter you should be able to:

- ◆ Understand the reasons for implementing controls over a project;
- ◆ Determine the appropriate corrective actions to restore a project to its planned schedule;
- ◆ Understand the steps needed to effectively close a project;
- ◆ Identify a component of project documentation;

- ◇ Outline the components of the final project report.
- ◇ Measure and analyze variance from the project plan;
- ◇ Distinguish between monitoring and control; and
- ◇ Describe the purpose of project evaluation;
- ◇ Conduct an on going or a terminal project evaluation studies; and
- ◇ Distinguish between evaluation and monitoring.
- ◇ Identify the steps involved in evaluation as well as some relevant tools and techniques;

Introduction

The project implementation phase, which is the heart of project success, is going to be seen in detail as follow. This is where the project manager organizes the project's activities and resources with in specified time frame and prepares the project for successful implementation. Thorough planning allows the community and the Volunteer to feel that they have given their project an excellent chance of being successful. The next important step in the process is monitoring the progress of the project to identify unanticipated problems and plan effective action steps to solve them. During this session, the participants will examine the tasks involved in monitoring projects, and identify items to monitor.

Project termination (sometimes called project closeout) is the last phase in the project lifecycle. Closeout begins when the user accepts the project deliverables and the project oversight authority concludes that the project has met the goals established. The report provides a historical summary of the projects deliverables and baseline activities over the course of the project. Additionally, the project closeout report identifies variances from the baseline plan, lessons learned, and disposition of project resources.

5.1 Implementation Phase

The project implementation phase is the part of the project lifecycle where the tasks that build the deliverables are executed. The project implementation phase begins when the project plan is approved and the resources necessary for executing the starting task are assembled. Project execution should be in accordance with the approved project plan.

Project implementation consists of the following list of processes:

- Execution,
- Measuring project progress,
- Reporting project status, and
- Exercising management controls.
- User Acceptance

The project team executes the tasks as mapped out in the project plan. Controlling project execution requires the measurement of project performance, monitoring project risk, and controlling change to the project baseline. The manager is focused on observing and analyzing the work underway. Controls outlined in the project plan keep the project on schedule, in scope, and within budget. During this phase, the processes of executing, controlling, and planning are continuous interactive activities.

Figure 5.1 depicts these activities. This phase ends when the product, good, or service developed has met the user acceptance criteria established in the performance.

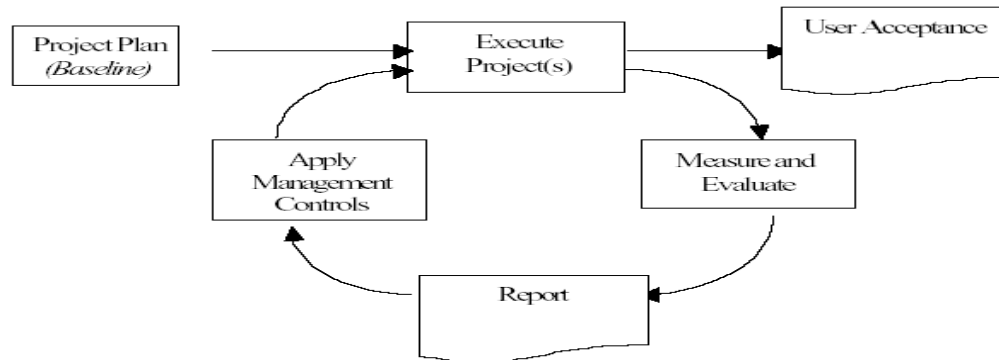


Figure 5.1: Project Implementation Phase Processes

1.a.1 Process of Implementation

I. Executing the Project

Execution is the act of carrying out planned activities. The execution of the project plan is simply the act of performing task and activities that result in the production of the project deliverables. Task and activities performed must be completed effectively and efficiently.

The project plan serves as a road map and a common frame of reference for all members of the project team. The project plan is therefore, the foundation for successful delivery of projects. In a perfect world, plans are executed precisely as written. In reality, no plan is ever performed with such precision. Plans are forward looking documents that cannot anticipate all eventualities.

During execution, the project team must continuously monitor its performance in relation to the baseline project plan. By measuring

and evaluating the actual execution of project activities against the baseline plan, the project team and stakeholders can gauge the progress of the project.

Moving from planning into execution can be a major obstacle in successful project delivery. A project kick-off meeting can facilitate the transition from planning activities and tasks to executing them. A kick-off meeting enhances execution by focusing the team on the project and by defining a starting point for beginning project execution. Additionally, it is a mile-stone when all resources needed to begin execution are assembled and available to the team.

The kick-off meeting provides an opportunity for communication and establishing the commitment of the team and stakeholders to the success of the project. The focus of the meeting is communications, identification of team members and stakeholders, reviewing the project scope and business objectives, identifying the challenges, and identifying the next step in getting the project underway.

Generally, a project kick-off meeting will enable the Project Manager to:

- Confirm key resources are ready to start to deliver project tasks;
- Ensure ground rules are established for the team;
- Review project statements and objectives with those who will work on the project and test their understanding and agreement on the goals of the project; and
- Review the project plan to clarify initial assignments, performance expectations and completion dates.

II. Measuring the Project

Performance Measuring can provide assurance that the project is progressing as planned or reveal the need to intervene and take action to ensure the achievement of the desired business objectives.

The execution of project task and activities occur in a cycle where:

- The task is executed;
- Execution is measured;
- The results are reported; and
- Management controls needed are applied.

Performance measuring involves the collecting, analyzing, and reporting project performance information to provide the project team and stakeholders with information on the status of project execution.

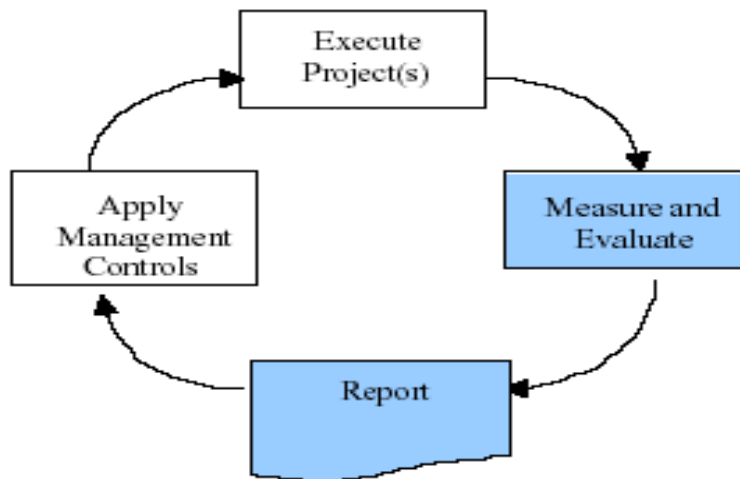


Figure 5.2: Project Monitoring Cycle

Various metrics can be gathered to monitor project progress. Common areas to monitor typically include:

- Project schedule;
- Work effort;
- Costs;

- Issues resolution; and
- Changes to the project.

Other metrics may be requested and defined by project or organizational management. Some common metrics, which may be utilized during project execution, are provided below.

- **Project Schedule Deviation**

Project schedule may include all tasks and estimated work hours for the entire project or it may represent a “phased” or “iterative” approach to the project. In the latter case, the schedule will reflect the tasks and efforts of only a portion of the entire project. Reporting for the purposes of management should be against the detailed portion of the project schedule. Monitoring the critical path is essential.

All schedule changes must therefore be analyzed for impact to the project’s critical path since such changes will result in deviation from the project schedule. Monitoring of the planned versus actual starts and completions provides a gap analysis and leads to identification of overall trends. Status of tasks is reported as:

Not Started - 0 %

Started/In Process - 1-99 %

Completed - 100%

Metrics To Capture – For the reporting period and for plan to date:

- Number of “Planned Starts”
- Number of “Planned Completed”
- Number of “Actual Starts”
- Number of “Actual Completed”
- Number of tasks reporting > 84% completed

- Total number of project tasks
- Number and percent of mile-stones tasks outstanding

Total number of project milestones - Completed = Total Outstanding

$$\frac{\text{Total}}{\text{Total number of}} \times 100\% = \% \frac{\text{Outstanding}}{\text{tasks}}$$

- **Work Effort**

Monitoring work effort is essential for evaluating whether the project is executing within budget or not. This information is used to project the cost of labor for the project. The number of hours, preferably at the task level, needs to be captured and tracked.

Metrics To Capture - For the reporting period and for planned to date:

- Number of "Planned Hours"
- Number of "Actual Hours"

Metric Calculations - For the reporting period and for planned to date:

- Deviation from plan
(Planned - Actual = Deviation from Planned Hours)
- Percent Deviation from plan

(Deviation from Plan/Planned Hours x 100 = % of Effort Deviation)

- **Cost**

The budget plan developed during planning represents the basis for measurement of deviation during execution. Measuring cost requires the support of the financial and procurement support business units.

Metrics to Capture - Costs for the reporting period and for planned to date for all labour, materials and other cost items:

Metric Calculations - For the reporting period and for planned to date:

- Difference between actual expenditures and planned budget for each metric;
- Increase or decrease to total project budget cost;
- Percentage deviation from spending plan for the period measured; and
- $(\text{Spending Plan} - \text{Actual Cost}) / \text{Actual Cost} \times 100 = \% \text{ Deviation from Spending Plan.}$

- **Project Issues**

One indicator of project health is the number of open issues and their impact on the project. Proactive issue management aims to track and analyze all issues, specifically focusing on those that have remained unresolved.

Metrics To Capture - For the reporting period and for planned to date:

- ◇ Number of new issues;
- ◇ Number of closed issues; and
- ◇ Number of outstanding issues.

Metric Calculations - For the reporting period and for planned to date:

- ◇ Total Number of issues = Number of outstanding issues + Number of closed issues.
- ◇ Percentage of issues closed = $\frac{\text{Issues Closed}}{\text{Total Issues}}$.

Project Change Requests - There will always be changes to a project. The challenge is to identify and manage them.

The Change and Configuration Management Plan provide a process and guidance for managing change during project execution. A change management log and change request documents are used as tools to monitor, track and approve request to change items under change control or configuration management.

III. Project Reporting

A standard requirement of all projects is to provide information to both executive management and the project team members on the status of the project. Although the frequency of the reports may sometimes vary, the frequency should correspond with information requirements identified in the project Communications Plan. Often status reports are prepared for executive or team meetings.

The project status report is a means of communicating regularly the ongoing progress and status of a project. The overall project status is communicated to all team members using the project status report.

The information shared in the Status Report should be in a consistent format throughout the project. The types of reports a particular project uses may vary in detail and metrics required but the basic format remains consistent across all projects.

IV. Modify Project (Apply Management Control)

No matter how well defined projects are, situations will arise that require changes to be made to the project plans. They may be imposed by senior management, by changes in the business environment, or the changing preferences of a client.

Any change in the project's objectives may require a fine-tuning of the project's work breakdown structure, the resource requirements, responsibility assignment matrix, or project plan. Many of these changes are caught in the planning phase, where the team seeks out problems and opportunities. Modifying the project can range in complexity from shifts in the bars of a Gantt chart through reformulation of the WBS, responsibility assignment matrix and project plan. In each modification, project managers must balance the time expenditure against the need to revise whatever thinking underlies the project. The project manager's decision making skills are critical when modifying the project.

Change Control is a critical element of the Implementation Phase. Despite efforts to ensure the plan is implemented with minimum difficulties or deviations from scheduled.

Work/resources during the Definition Phase and the Planning Phase, changes will inevitably occur. The Project Manager has to deal with

these and still ensure that the objectives of the project are met to achieve success. Changes can be internal (to the organization) or external (in the business and economic environment) and may range in complexity from a change to a schedule to a change in technology, equipment or resources. These more extensive changes have to be analyzed carefully, and rational decisions made based on available information. Changes to scope must be progressed through a formal Project Change Control.

V. User Acceptance

Acceptance criteria for project deliverables establishes in advance an agreed upon standard of performance or capability that the user will accept in a specific deliverable. The Performance Plan developed in the Project Planning Phase articulates the project deliverables and acceptance criteria. Acceptance criteria then become the fundamental guideline for the design team to build a solution that the user will find acceptable.

The execution phase ends when the user has agreed to accept the deliverable(s) in the state that they exist. The acceptance criterion is the standard that the user uses to judge if each deliverable is satisfactory. In some cases, the deliverable may not meet all acceptance criteria but, from an overall view, the deliverable will meet the requirements of the user. The user must authenticate acceptance of each deliverable. The user will also identify any issues that remain outstanding and the agreed to plan for resolution of any outstanding issues.

1.a.2 Project Control

Control of the project is exercised through formal and informal processes exercised by the project manager, project team, and stakeholders. The process of conducting reviews and monitoring reports exert a degree of control over the project. This discussion will, however, focus on the formal processes of control established by the project plan.

- **Project Plan**

The main part of project control documentation is the project plan. The project plan fixes the project schedule, tasks, and resources. The plan also establishes the procedures to manage quality, risk, communications, and change. Use of the plan to guide execution of project task exerts a great degree of control in the process of developing the deliverables.

As mentioned previously, change is inevitable. Issues and unforeseen risk events must be addressed and resulting changes must be managed. Control over unplanned events is exerted through issue management and formal change management processes.

- **Issues Management Process**

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 defined process that enables the project team to identify, address, and prioritize problems and issues.

The Issue Log and Issue Management Document are used to track, document and resolve issues that are identified during project

execution. Initially, issues may be identified in a project status report or in an Issue Management Document.

The Issue Log is a master record of issues that are identified and is used to track progress toward resolution.

The Issue Management Document is a means of reporting issues and is used by the project team to document the issue, assess the impact of the issue, make recommendations, and identify the resources needed to resolve the issues. Managers use the Issue Management Document to assign responsibility and to document decisions on actions directed to resolve the issue.

Any project team member, customer, stakeholder, or contractor can submit an issue. This must be done in writing, either in a Project Status Report or in an **Issue Management Document**. If the issue is identified in a Project Status Report, the person making the report prepares an Issue Management Document.

➤ **Issue management** is divided into three phases.

- **The first phase** occurs when a person identifying an issue reports the issue and completes the first section of the Issue Management Document. The Issue Management Document provides a format to identify the issue document, the date the issue is submitted, and identify the person reporting the issue.

It also requires the submitter to provide:

- Date to which resolution is required;
- A proposed assignee to resolve the issue;
- An issue description; and

- An impact statement.
- The identifier of the issue should attach any supporting documentation that will clarify the issue, such as reports, correspondence, test results, error messages, or other pertinent data. When completed the Issue Management Document is submitted to the project manager. The project manager must then assign someone to investigate the issue and develop a recommendation for resolving the issue. The issue resolution task is an action item reported in the project status reports. The project manager completes:
- **The second phase** of issue management is determining a resolution for the issue. Identifying alternatives for resolving the issue and making recommendations on what actions should be taken. The person assigned to investigate alternatives and make a recommendation.

Completes the following information:

- Discussion of alternatives;
- Recommendation; and
- Estimate of additional resources.
- **The third and final phase** is the management decision. Management reviews the recommendation provided and decides to accept the recommendation made, modify the recommendation, reject the recommendations, defer a decision, or return the document for additional information.

Management decisions can lead to change management actions, which are then handled through the change and control management process.

1.a.3 Change and Control Management

Any change to the configuration of a deliverable or to the baseline elements of the project plan must be managed with deliberate precision. The Change and control Management Plan establishes the processes used to manage and control change. Additionally, the specific items that will be controlled through the change and control management process are listed in the Change and Control Management Plan.

Activities involved in change and configuration management include controlling changes to the scope and the schedule.

- ***Scope Change Control*** - Uncontrolled expansion of the project scope often results in project failure. A scope change usually requires additional project funds, resources, and time. The project manager and team must monitor changes to the scope baseline and recognize when a formal scope change should be made.
- ***Schedule Control*** - Schedule issues come from a variety of sources. Variation from the project schedule must be investigated and the cause determined as soon as possible.

When the reason for a schedule problem is discovered, a plan must be developed to correct the problem, as quickly as possible, with the least impact to the project.

- ***Cost Control*** - Projects fail to control cost, or go over budget, for many reasons. Failure to control cost is often a result of

- Incremental changes,
- Unplanned risk mitigation, or
- Inaccurate budget planning.

The Project Management Body of Knowledge describes cost control as being concerned with the following:

- Influencing the factors that create changes to the Project Budget Estimate to ensure that the changes are beneficial
- Determining that the project budget estimates have changed
- Managing the actual changes when and as they occur

Cost control includes the following:

- Monitoring expenditures to detect variances from the project spend plan
 - Executing the change control plan to prevent incorrect, inappropriate, or unauthorized changes from being made to the Project Budget
 - Recording authorized changes accurately in the Project Budget Plan
- **Quality Control** - Quality control involves monitoring project deliverables and performance goals to ensure that the project delivers the required results established in the project performance plan. Quality control is performed throughout project planning, execution, and closure.

Project performance measures include both product results such as deliverables and management results such as cost and schedule performance. This will be discussed in the next section.

5.2 Project Termination

As it is a must to all things, termination comes to every project. In this Section, we will discuss the major activities performed in terminating a project. Project termination (sometimes called project closeout) is the last phase in the project lifecycle. Closeout begins when the user accepts the project deliverables and the project oversight authority concludes that the project has met the goals established.

5.2.1 Closeout Task: Activities

Closeout begins when the user accepts the project deliverables and the project oversight authority concludes that the project has meet the goals established. The major focus of project closeout is administrative closure and logistics as well as undertaking post implementation evaluation/review.

Project closeout includes the following key elements:

- Turn over of project deliverables to operations;
- Redistributing resources—staff, facilities, equipment, and automated systems;
- Closing out financial accounts;
- Completing, collecting, and archiving project records;
- Documenting the successes of the project;
- Documenting lessons learned; and
- Conduct Post Implementation Review.

Next, we will see the major activities performed in closing out a project. For your convenience all activities listed above are grouped into three sections. Even though post project evaluation is one of the

activities performed, because of its importance, I put it in a separate section (see Section 1 in the coming Unit).

5.2.2 Turnover to Operation

The most important aspect of project closeout is the physical turnover of control of the product, good, or service delivered by the project. All project deliverables will need to be maintained and supported after the project team disbands. An operational unit of the organization (for which the deliverable is developed) assumes responsibility for the support of the deliverable. Procedures for this turnover and acceptance by the operational unit must be determined. Turnover and acceptance activities include but are not limited to knowledge transfer, documentation transfer, and physical transfer of the deliverable. A formal acknowledgement of receipt (acceptance) of the project deliverable is executed by the operations and project managers.

5.2.3 Administrative Closure

Administrative closure involves the preparation of administrative documentation, collection of project documentation, disposition of project documents, and logistics activities that ensure that the project resources are redistributed. Administrative closure includes, but is not limited to, tasks such as:

- Archiving project information,
- Personnel reassignment;
- Facilities turnover (or closure),
- Financial account closure, and
- Contract closure.

The purpose of Administrative Closeout is to perform all administrative tasks required to bring the project to an official close.

a) Archiving project information

Throughout the course of the project, the Project Manager maintains a project repository. As the project progressed, the purpose of the repository was to create a central point of reference for all project materials to be used by anyone involved in the project. Once the project comes to an official close, the repository provides an audit trail documenting the history and evolution of the project.

During Project Closeout, the Project Manager should examine the repository to ensure that all relevant project-related material, documents produced, decisions made, issues raised and correspondence exchanged have been captured. In addition, the Post-Implementation Report and the final project closeout report should be included.

Archived Project Repository is a collection of all project related materials, documents produced, decisions made, issues raised and correspondence exchanged, providing the history and evolution of the project.

There are at least five reasons why we need to do documentation or maintain repository:

- 1) Reference for future changes in deliverables. Even though the project work is complete, there will be further changes that warrant follow up projects. By using the deliverables, the customer will identify improvement opportunities, further to be added, and functions to be modified. The documentation of the project just completed is foundation for the follow-up projects.
- 2) Historical record for estimating duration and cost in the future projects, activities and tasks. Completed projects are a

terrific source of information for future projects, but only if data and other documentation from them is archived so that it can be retrieved and used. Estimated and actual duration and cost for each activity on completed projects are particularly valuable for estimating these variables of future project.

- 3) Training resource for new project managers. History is a great teacher, and nowhere is that more significant than on completed projects. Such items as how the work breakdown structure architecture was determined, how change requests were analyzed and reached on decisions, problem identification, analysis and resolution situations, and a variety of other experiences are in valuable lessons for a newly appointed manager.
- 4) Input for further training and development of the project team. As a reference, project documentation can help the project team deal with situations that arise in the current project. How a similar problem or change request was handled in the past is an excellent example.
- 5) Input for performance evaluation by the functional managers of the project team members. In many organizations, project documentation can be used as an input to the performance evaluations of the project managers and team members. Care must be exercised in the use of such information, however. There will be cases where a project was doomed to fail even though the team members' performance may have been exemplary. The reverse is also likely. The project was destined to be a success even though the team members' performance may have been less than expected.

b) Personnel Reassignment

If personnel have been committed to the project full-time, it is important to get the people back into the available resource pool as quickly as possible. This will ensure that the staff stays busy and that other projects within the organization do not fall short of resources. In some cases, employee performance reports or other documentation must be prepared for personnel assigned to the project manager. In matrix organizations, the project manager should communicate to the functional manager information about the performance of the employee. The project manager should also make recommendations for recognition of performance as the case may warrant. Before any employee is officially transferred, the project manager or his representative must ensure that all project materials and properties are turned over by the employee. The project manager must also ensure that each employee's project hours have been accounted for and charged to the project.

c) Facilities Turnover (or closure)

If the project team has occupied agency facilities for a long period of time during the project, it is a good idea to let the controlling facilities personnel know that the space used for the project will become available again. Be sure to check facilities guidance documentation to determine whether changes made to the project team area (structure, equipment, or technical modifications) are the responsibility of the project team after the project is complete. Returning the facility and equipment to its original state could add unanticipated cost and manpower to a project.

d) Financial Account Closure

Financial closure is the process of completing and terminating the financial and budgetary aspects of the project. Financial closure includes both (external) contract closure and (internal) project

account closure. All expenditures must be accounted for and reconciled with the project account. When financial closure is completed, all expenditures made during the project have been paid as agreed to in purchase orders, contracts, or inter-agency agreements.

e) Contract Closure

Contract closure is the process of terminating contracts with external organizations or businesses. 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 with internal resources. 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 agency.

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 there are no unrealized contract issues that could result in legal liability. A thorough review of the procurement and contracting documents must include contract milestones, services provided or deliverables and documentation delivered.

To formally close a contract, the agency provides the contracted company or organization with a formal written notice stating the completion of the contract and reason for termination. Standard verbiage for acceptance and closure is usually found in the original contract itself.

It is also a good idea to keep a complete set of contractual records for the project in a safe and accessible place in case they need to be referenced at any point in the future.

5.2.4 The Final Report

The final report (sometimes called a project closeout report) documents the completion of closeout tasks and project performance. The report provides a historical summary of the projects deliverables and baseline activities over the course of the project. Additionally, the project closeout report identifies variances from the baseline plan, lessons learned, and disposition of project resources. The project closeout report is intended to provide a concise evaluation of the project. The final project report acts as the memory or history of the Project. It is the file that others can check to study the progress and impediments of the project.

Many formats can be used for a final report, but the content should include comments relative to the following points.

1. **Overall success of the project.** Taking into account all the measures of success that we considered, can we consider this project to have been success?
2. **Organization of the project.** Hindsight is always perfect, but now that we are finished with the project did we organize it in the best way possible? If not, what might that organization have looked like?
3. **Technique used to get the result.** By way of summary list, what specific things did you do that helped to get the results?
4. **Project strengths and weaknesses.** Again by way of a summary list, what features, practices, and processes did we

use that provided to be strengths and / or weaknesses? Do you have any advice to pass on to future project teams regarding these strengths/ weaknesses?

5. **Project team recommendations.** Through out the life of the project there will have been a number of insights and suggestions. This is the place to record them for posterity.

Project Closeout may be perceived as the least important of all of the project phases, but its value to future projects cannot be underestimated. The knowledge gathered, the expertise developed, the lessons learned, the practices perfected will remain locked temporarily in a few people's heads unless the Post-Implementation Review is conducted promptly, documented thoroughly, and (most importantly) its results are disseminated appropriately throughout the Performing Organization

You have now completed all five phases of the project management life cycle. We can only hope that the practical tools and techniques we have shared will provide a lasting and a valuable store of resources for you to use as you grow in this exciting profession.

1.3 Project Evaluation and Types of Evaluation

This Part is intended to help you to understand the underlying principles of evaluation, in order to be clearer about its uses and limitations. The purpose of this chapter is to provide grounding in evaluation and to discuss the kinds of information evaluation can provide. We start with the assumption that the term “evaluation” describes different models or data collection strategies to gather information at different stages in the life of a project.

1.3.1 What is Project Evaluation?

The notion of evaluation has been around a long time-in fact, the Chinese had a large functional evaluation system in place for their civil servants as long ago as 2000 B.C. Not only does the idea of evaluation have a long history, but it also has varied definitions.

Evaluation means different things to different people and takes place in different contexts. Thus, evaluation can be synonymous with tests, descriptions, documentation, or management. Many definitions have been developed, but a comprehensive definition for evaluation is presented as follows:

This definition centers on the goal of using evaluation for a purpose. Evaluations should be conducted for action-related reasons, and the information provided should facilitate deciding a course of action.

Evaluation is a learning and management tool: an assessment of what has taken place in order to improve future work. Measuring, analyzing and interpreting change helps people to determine how far objectives have been achieved and whether the initial assumptions about what would happen were right; and to make judgments about the effectiveness, efficiency, impact and sustainability of the work.

Evaluation is judging, appraising, or determining the worth, value, or quality of a project, whether it is proposed, on going, or completed. This is done in terms of its relevance, effectiveness, efficiency, and impact. (*Relevance* refers to the appropriateness and importance of goals and objectives in relation to assessed needs. *Effectiveness* refers to the degree to which goals have been achieved. *Efficiency* refers to the cost-effectiveness of activities. And *impact* refers to the broad, long-term effects of project.)

1.3.2 Relationship of Monitoring to Evaluation

Monitoring is different from evaluation. Monitoring measures whether the project is on track; evaluation questions whether it is on the right track. Monitoring is concerned mostly with project activities, and concentrates on the short-term performance compared with the project plans. Evaluation looks more at the overall project purpose/objectives, and examines longer-term effects of the project. Monitoring is a continuous process, while evaluation is a periodic event.

A distinction is usually made between monitoring and evaluation.

- **Monitoring** is a continuous, methodical process of data collection and information gathering throughout the life of a project. The information collected can be used for regular evaluation of progress, so that adjustments can be made while the work is going on. Monitoring is also used to mean the systematic 'tracking' of a particular condition, or set of conditions to identify trends.
- **Evaluation** is a learning and management tool: an assessment of what has taken place in order to improve future work. Measuring, analyzing and interpreting change helps people to determine how far objectives have been achieved and whether the initial assumptions about what would happen were right; and to make judgments about the effectiveness, efficiency, impact and sustainability of the work.
- In monitoring, information for 'tracking' progress against previously agreed plans and 'milestones' is routinely gathered.

The changes that are resulting from project activities can be identified: both the effects and the impact. If there are discrepancies between actual and planned progress, corrective action can be taken. This can include changing the overall purpose and plan of the activity. Monitoring can also mean keeping a check on the use of resources. Questions for later evaluation can be identified during monitoring.

- Evaluation uses information gathered during regular monitoring, but may need other information as well. It often uses 'baseline information': information collected at the very beginning of a project, against which progress can be measured. Evaluation happens at set times in the life of a project. Evaluation looks at the relevance, effectiveness and impact of a project, with the aim of improving an existing project or influencing future projects.

The relationship of monitoring to evaluation can be illustrated in the chart below.

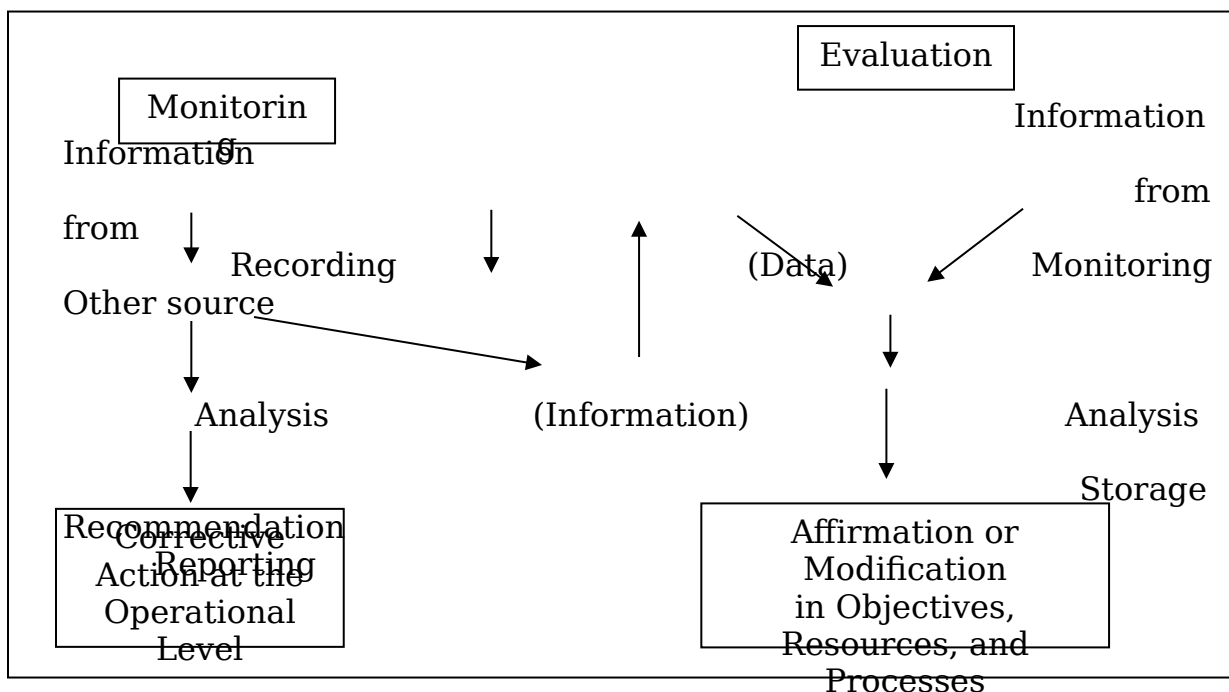


Figure 5.3: Relationship of Monitoring to Evaluation

Using the above chart, it is easy to see the relationship of monitoring to evaluation.

- **Monitoring** is the recording, analysis, and reporting which transforms data into information. This must then be communicated in a timely way to managers. The information must also be stored and retrievable for evaluation later on.
- **Evaluation** analyzes the information from monitoring and other sources and formulates conclusions and recommendations. These recommendations can be used at different levels of management to affirm or modify objectives (relevance), resources (performance), and processes (quality).
- Monitoring is done during implementation and is somewhat continuous. Evaluations occur periodically, before or after projects are completed. Evaluation of projects is done at the end of the project cycle, as terminal evaluation is done just before the end of the project or as ex-post evaluation when the project has been terminated some time ago.

1.3.3 The Purpose and Use of Evaluation

There are many different reasons why evaluations are carried out. Some good reasons are:

- To measure progress and effectiveness;
- To look at costs and efficient use of resources;

- To find out if it is necessary to change the way things are being done; and
- To learn from what has happened in order to make plans for the future.

These are all constructive reasons, within the control of those organizing their work. There are other, less good, reasons why evaluations are carried out. An evaluation might be demanded by a funding agency, who are wondering whether to go on supporting a project; or there might be a statutory requirement for evaluation from a government department. Evaluations are sometimes done as part of a research project as a way of testing out new techniques for gathering information; or sometimes because people who raise funds for an organization need something to put in their publicity material

From the above group of reasons for doing evaluation, four main uses can be identified:

i. To improve performance

This is 'formative' evaluation, helping to 'form' or shape work while it is still going on. This kind of evaluation is useful for those directly involved in, or in charge of work. It can identify problems, and things that are working well and can be built on. It can also check whether or not objectives have evolved, and be a way of keeping the different people involved in the project informed about progress or the need for change.

ii. To make choices and decisions

This is 'summative' evaluation, a summing-up of a project to make a judgment of how effective it has been in achieving results. Information from such evaluations can be used to compare different ways of doing

things, to help people make choices between types of development action. This kind of evaluation can be used by funders to decide on whether to continue support or not.

iii. To learn lessons

The prime purpose of an evaluation may be learning, so that the results can be shared within a project, between projects, between organizations and so on.

iv. To increase accountability

Evaluation can improve accountability at the management level by reporting on the management of inputs, results, etc, and by reporting to stakeholders in the form of impact assessment. Evaluations may be a condition of receiving funds, as donors want to be sure that their funds are being used effectively. They may also want to find out if there are alternative ways of doing the work. Evaluations to promote accountability of donors and implementing agencies to the women and men they are supporting are rare. Improving the way evaluations are set up can encourage greater two-way accountability.

1.3.4 Different Kinds of Evaluation

There are five different types of project evaluation. These are:

i. Appraisal or ex-ante evaluation

Information collected before a project starts, or in the very early stages, helps to define what is to be done, and provides a baseline from which to measure change.

ii. On-going evaluation

Monitoring indicates whether activities are being carried out as planned and what changes are happening as a result. Monitoring

should be accompanied by on-going evaluation, which analyses the information in order to improve performance during a project. If a project has been conducting regular on-going evaluation, and this is well documented, more formal evaluations may be unnecessary.

iii. Mid-term evaluation

Midterm evaluation is carried out while the project is under way; in order to check whether the project is functioning properly. The mid-term review will verify the relevance, sustainability and efficiency of the project and will recommend relevant adjustments.

iv. Termination evaluation (Post Implementation Evaluation)

Is conducted at the formal end of the project with emphasis on documenting what the project has achieved in comparison with the stated objectives and targets.

This will happen at the end of a project, in order to learn lessons about how the project has been implemented and the results. A final report of a project written by a project manager can be evaluative, comparing objectives with what was achieved. The aim of the end-of-project evaluation is to assess what lasting impact the project is likely to have. The focus of the end-of-project evaluation is on the effectiveness of the project and the impact of the project. Furthermore, the end-of-project evaluation will assess the sustainability of the project.

v. Ex-post evaluations

These happen some time after a project has finished. They look at impact and sustainability. They also consider broader 'policy' issues. This kind of evaluation is rare.

1.3.5 Evaluation Criteria

Three sets of questions should be built into any evaluation:

- What changes have taken place, and are these changes the ones, which the original plan hoped for? Evaluations should give an account of what the project has achieved, or not achieved, and compare this with expectations.
- What were the reasons for the success or failure? It is important to know why things happened as they did, and analyze the factors, which influenced the way the project progressed.
- What actions should now be taken? Evaluators should suggest courses of action, in the light of answers to the first two questions.

Therefore, evaluation should be based on predefined criteria in order to obtain a precise analysis. The criteria that are commonly used as a focus for shaping evaluation questions are:

I. Effectiveness: how far is the project achieving objectives?

For example, the project might be concerned with the training of primary health care workers to improve their technical skills, or disseminating information about sustainable agricultural practices. Achievements at this level are project outputs, or what was done. The inputs are the human, financial and material resources that were provided, to achieve the objectives.

II. Efficiency: what is the cost of achieving the objectives?

A project may be very 'effective' in working towards its objectives, but it may be doing so at very high cost (both socially and economically), which is neither or sustainable. There may be ways of achieving the same things more cheaply. This may involve looking at how things are organized, what type of technology is being employed, as well as financial management.

III. Relevance: is the project relevant?

A project may or may not prove to be appropriate to the needs of the people it is designed to help. There might be other problems that should take priority. The overall approach and strategy of the project should be consistent with the problem and intended effects.

IV. Impact: what are the effects of the project?

The impact of a project is the social, economic, technical, environmental and other effects on individual and communities directly or indirectly involved in the project.

The impact on individuals may be different. Part of the impact may have been changes in the institutions involved. The number of people affected should be estimated.

Impacts can be intended and unintended, positive and negative, immediate or long-term. They can operate at the micro level (for

example, at household level) or macro level (they may affect a whole sector).

Sometimes a distinction is made between shorter-term results (outcomes) and longer-term results (impacts). For example, outcomes could be; a change in the way people do things as a result of the project, e.g. domestic servants may no longer be prepared to work for less than minimum wages. However, if the overall impact hoped for is an improvement in standard of living, and basic health, through improved income and conditions, it could be very difficult to prove the causality between the intervention of a small project and what actually happens. So many other external influences can have an effect.

V. Sustainability: will project activities and benefits continue after external support is withdrawn?

Many types of work cannot financially be well sustaining. The issue is how far the people directly involved can take charge them selves of finding the resources necessary. There are two key aspects of sustainability for social development projects: social/institutional and economic.

Another aspect of sustainability is the effect the project has on the environment and natural resources.

VI. Progress: is the project achieving the original objectives, or have these changed?

An evaluation can also question the objectives and design of the project itself. It may be concluded that a project is progressing very well, even though it is far from meeting the original objectives. These may have been too ambitious, or irrelevant. The evaluation may also

look at who was involved in setting objectives: was it only project leaders or were staff and beneficiaries also involved?

1.3.6 The Steps in Doing an Evaluation

Whatever the purpose of an evaluation, or the methodology chosen, there are seven distinct stapes in the process. All the seven phases are critical for provision of useful information. If the information gathered is not perceived as valuable or useful (the wrong questions were asked) or the information is not credible or feasible (the wrong techniques were used), or the report is presented too late or is written inappropriately, then the evaluation will not contribute to the decision making process.

Step 1: What/Who is it for?

Detailed planning should start well in advance. Check that the plans for evaluation made at the assessment stage of the project are still valid; it may be that the passage of time and the development of the project, or the quality of monitoring, make the original plans redundant.

Many different people will use the findings of the evaluation exercises. It is therefore necessary to determine at the beginning how the results will be used. This will help to determine the objectives of the exercise, what information is needed, what approach should be used, how the information should be gathered, what degree of accuracy is needed, and how and to whom the results will be presented.

An evaluation is necessary to:

- Assess the objectives and their relevance

- Assess the progress in achieving the objectives
- Evaluate the impact of the project
- Assess the long-term sustainability of the project
- Provide a basis for further decision-making
- Influence donors, governments, and other actors
- Look at external factors that may affect the project

An **internal** evaluation is used within the organization to bring about improvements in project implementation. An **external** evaluation is undertaken by outside evaluators, often at the request of donor agencies, because they are usually considered to be reliable, objective, and unbiased.

Step 2: Who will do it?

As noted above in Step 1, **internal** evaluation is used within the organization to bring about improvements in project implementation and thus **project staff** can conduct it while **external an outside consultant** may conduct evaluations.

Step 3: Preparation

In this step, the ground preparations are made for the monitoring or evaluation exercise. This includes finalizing the objectives of the exercise, looking at information already gathered, and deciding on data collection and analysis methods.

• Objectives

For any monitoring or evaluation exercise, objectives should be set depending on the overall purpose of the exercise, and for whom it is being conducted. The objectives should always be SMART.

Objectives for an evaluation include assessments of the following:

- Is the project progressing toward its objectives?
- What has the impact been?
- Who has benefited, and how?
- Are the objectives of the project still relevant?
- Is the project cost-effective?
- Is the project sustainable?

Objectives also include recommendations, such as:

- How the project can be improved
- How the goal and objectives can be changed

♦ Key questions

Next, key questions to be answered during the exercise should be developed. Key questions should focus the exercise on the objectives of the project or the part of the project being analyzed.

Key questions must always be realistic. Therefore, when formulating the questions for the exercise, it is important to take into account the resources available to answer the question, the importance to the project of answering the question, and what is already known about the issue.

Indicators are integral to the formulation of key questions and how they will be answered. Indicators, which should be developed during the project planning stage, are very useful for the evaluation of the project. These indicators can measure project processes, progress made in achieving the objectives and the project's impact.

- **Background information**

Background information about the project is useful when planning evaluation exercise. Worthwhile information to examine includes: a) details about the issue, such as information about the local context, services and resources that already exist, and how the issue affects the target group; and b) details about the project, such as its history, its progress and process, and its impact thus far.

Developing means for obtaining information should include brainstorming about:

- What information is needed?
 - Where can the information be found?
 - What methods should be used for collection?
 - What information is available from previous monitoring or evaluation?
 - What information can be gathered from a field visit?
 - How will the information be analyzed?
 - What skills and technical expertise are needed to gather and analyze the information?
 - What sort of communication skills and language abilities are needed for interviewing people?
 - What equipment will be needed, and how will it be obtained?
- **Drawing up the terms of reference (TOR)**

Many evaluations suffer from the over-wide scope of the exercise. The terms of reference (TOR) become a shopping list, rather than a guide to focus the work.

The TOR set out the formal agreements about the evaluation, its scope, purpose, and the methods to be used, and outline the specific tasks of the evaluation team leader. Those managing the evaluation process are responsible for drawing up the TOR.

Good TOR pave the way for a good evaluation, acting as a point of reference throughout. They should be drawn up well in advance of the date of the evaluation, in order to allow adequate time for planning, selecting and employing evaluators, sorting out the logistics, and briefing everyone involved. The TOR should reflect both the needs of staff and others involved to learn from their experience, and the need of the organizations to improve performance and accountability. Evaluators may help to draw up the TOR and should be asked to review and comment on them before beginning the evaluation. A good evaluator is likely to raise questions about the initial TOR.

Sample Contents of the TOR

Terms of reference should cover:

1. **Background:** purpose and objectives of activity, work, project or program to be evaluated.
2. **Objectives:** major issues to be addressed, what the evaluation is expected to find out, the questions to be answered.
3. **Methods:** visits, review of documentary material, data collection, interviews, workshops.

4. **Timetable:** schedule for the major activities (e.g. pre-visits, field work, writing, feedback) of the evaluation and its completion date.
5. **Products:** the products required from the evaluation exercise, (e.g. report, workshop), who is responsible for producing them, who will present them, who the reports are for. The length, format and language of the main report and executive summary should be indicated. The team leader is usually the person responsible for the completion of the formal report. The process of follow-up should be noted.
6. **The evaluation team:** the person specifications (mandatory and desired) of each team member, the number of team members, the ideal combination of skills and experience at team level (including language requirements, gender balance, and understanding of gender issues).
7. **Budget and logistics:** details of the main expenses (e.g. salaries, expenses, travel, lodging, communications). Financial reporting requirements (e.g. reimbursement for actual, or per diems). Logistical support being offered (e.g. vehicles, office space, computer facilities, secretarial help), and how, where and by whom this will be made available.
8. **Use of information:** extent of confidentiality, ownership of the report.
9. **Terms of reference:** for evaluation leader the team leader of the evaluation must be given an individual TOR outlining his/her specific tasks and responsibilities, particularly any writing and managerial tasks.

Step 4: Collecting information

Collecting information is central to the monitoring and evaluation processes. It includes analyzing existing information, conducting field visits, interviewing people, organizing meetings, and ensuring all key stakeholders are included.

It should be noted that there is no single correct way of conducting evaluation exercise. Ideally, use more than one method for collecting data. Two or three methods that complement each other can provide the most complete picture possible.

Step 5: Analyzing the information

It is very important that the collected data is accurately analyzed. Analysis may include entering data, use of computer projects, recording information, summarizing findings, and translating documents. The analysis should be unbiased, and should take into consideration different points of view. The project planning must be done correctly, as the indicators and tools used during the planning phase will be used again for evaluation.

Step 6: Report preparation, presentation and feedback

I. Drawing conclusions and recommendations

Conclusions can be drawn as a result of the monitoring and evaluation exercises. These conclusions, which are always based on the exercise results, will reflect the information gathered and the course of future directions to take. Conclusions can also reflect differing opinions, if applicable. It is often useful to use case studies or quotes to illustrate points.

Recommendations are then made based on the conclusions.

Recommendations should:

- Propose a course of action
- Demonstrate how, when, and by whom the actions should be taken
- Mention the inputs and resources required for the action
- Discuss obstacles that may be faced in implementation
- Propose follow-up and monitoring systems necessary for ensuring that action is taken

II. Report preparation and presentation

It is best to decide on your report format as early as possible. A mixture of print and visual reports can clarify your messages. The type of report depends on whom it is for. That is the report should be written with the main users in mind: who needs what information in what form?

There is no set rule about the length of a report, but it should not be so long that nobody would read it! Supporting information should be in the form of accompanying documents, or appendices, rather than overloading the main report.

Sample evaluation report format

Here is an outline of what a report should cover:

Front cover

- Name of organization, name of project, location

Summary page

- Name of organization, project, and location
- Who carried out the evaluation
- Purpose of the exercise
- Dates it was undertaken

- Date of report completion
- Acknowledgments of those who contributed

Table of contents

Executive summary

- A brief summary of the report, including the goal and objectives of the exercise, who it was for, and how it was undertaken. In addition, conclusions and recommendations should be listed.

Background information

- Information about the local context (political, economic, social) as well as project history, objectives, etc.

Purpose and methodology of the evaluation

- Objectives and key questions
- Data collection methods chosen
- Data collection process, including who was interviewed, where, the duration, etc.
- Any data collection constraints and how they were overcome

Results

- What the findings were (categorized into subheadings)
- Utilization of case studies and quotes

Conclusions

- Based on the results, draw main conclusions which reflect the original objectives and key questions

Recommendations

- What should be done and how it should be undertaken

Appendices (if applicable)

- Data collection methodologies used (e.g. questionnaire, interview format, etc.)
- Actual data collected
- Terms of reference for evaluators

III. Dissemination and feedback

After the report is complete, it should be disseminated to the people for whom it was written (depending on if it is internal or external) and also to all who participated in the process. It is usually best to write a draft report, receive feedback, and then finalize it. The report should then be stored so that it will be available to people currently working on the project, as well as for future projects and evaluation exercises.

Step 7: Follow-up

Follow-ups to recommendations are integral to any evaluation exercise. Thus, when planning an exercise, it is crucial to allow time and resources to be spent on following up the recommended changes and actions to be taken. These actions are extremely important for project improvement. Furthermore, the information must be shared with all concerned parties, so that they are kept informed on your project's process and impact, and can make any necessary adjustments to their own projects. Results should be shared with all stakeholders.

Summary

The Execution Phase of the project is when the benefits of the investment of time spent on feasibility and detailed planning become apparent and the true value of the plan is seen. During this phase, the Project Manager and Project Team monitor progress against time,

cost and quality targets in an efficient way. By having the key information available, the ability to respond quickly to changes or problems should become evident. Information sharing is improved by use of a common process. Based on sound planning, additional benefits will include more effective monitoring and control, improved change control and better risk management.

The Closeout Phase of the project marks the actual completion of the project. The benefits and results are systematically evaluated. The time and effort invested by the Project Manager and team are recognized and rewarded. The learning gained by completing the project is captured for reference to help with the planning of future projects.

There are several phases of conducting and implementing an evaluation. No one stage is more important than the rest. And, as can be seen from the discussion of the role of the stakeholders in both the first step—developing questions—and the last—provision of information—the groundwork laid at the earliest stages can have important implications for the success of the evaluation in the long run.

Evaluation isn't easy, but there also is very little mystery about the steps that need to be taken and the activities that need to be carried out. While there certainly are technical skills needed to do an evaluation that is helpful and credible—and that is why trained evaluators are important—there is also a lot of “common sense” involved. Sound advice is to blend these two factors—technical skills and common sense. In the best evaluations, both of these inevitably exist.

The next chapter considers practical considerations when planning a specific evaluation exercise. There is advice on drawing up terms of reference, and ensuring better feedback and follow up, including suggestions on presenting evaluation reports. The final part of the chapter covers particular points that evaluators need to consider.