



CDC UNIFIED PROCESS PRACTICES GUIDE



IMPLEMENTATION PLANNING PRACTICES GUIDE

Purpose

The purpose of this document is to provide guidance on the practice of **Implementation Planning** and to describe the practice overview, requirements, best practices, activities, and key terms related to these requirements. In addition, templates relevant to this practice are provided at the end of this guide.

Practice Overview

Project implementation is the phase within the project life cycle that integrates the project's product or service into the user's organization. An implementation would include all necessary software, hardware, data, documentation, training, and required process/organizational changes. It is important to note that the project team performing the implementation may not always be the same individuals that developed the product. In addition, the resources utilized for the implementation, and the impact upon the organization, may be different than that during the development phase of the product. Depending on the project, one of two implementation approaches might be used.

- **Project that includes implementation** – Often associated with the implementation of in-house developed products. Product implementation is included as part of the overall project effort, following product development. Implementation planning may begin as early as the planning stage of the product development life cycle or may be contained as a sub-project, estimated and planned, as part of the overall project effort.
- **Project that is only implementation** – Often associated with the implementation of COTS/GOTS products. Product implementation makes up the entire project effort. Although, in some cases, a portion of this effort may include customization of the COTS/GOTS solution, the implementation is planned as a new project beginning with a Project Charter and other necessary project planning and documents such as a communication management, scope plan, risk/issue management, change control, project scheduling, project management plan, etc. At the highest level, a project implementation effort consists of three phases:
 1. Planning
 2. Implementing
 3. Transitioning

Planning - Planning the implementation involves defining strategies and activities to address implementation items such as:

Business Items

- Obtaining executive sponsorship
- Agreeing upon an implementation approach
- Assessing current business processes, identifying and planning for how they may be impacted
- Planning the actual work effort for the implementation
- Developing an implementation schedule
- Creating the required supporting project management, and other, documentation
- Planning the process for managing those changes
- Identifying and communicating changes
- Planning for any organizational change and creating a plan for addressing that change
- Formalizing new job functions and planning for any necessary training
- Developing plans to prepare for any additional organizational impacts
- Accounting for potential impacts on business operations and planning how to best address them so the impact upon the customer and user community is minimized
- Developing an implementation management plan and all of its sub-components such as communication planning, risk identification, change management, organizational training plan, etc
- Identifying risks and devising mitigation strategies and contingency plans
- Assessing current business processes, identifying and planning for how they may be impacted



CDC UNIFIED PROCESS PRACTICES GUIDE



IMPLEMENTATION PLANNING PRACTICES GUIDE

Technical Items

- Assessing current technology, identifying and planning for how it may be impacted
- Building out and preparing the user's production environment
- Identifying any required product customizations
- Transferring technical knowledge and train the user's support staff
- Educating the customer's technical and training staff, and their user community
- Developing a transition plan, in conjunction with project and customer stakeholders, to migrate control and support of the system to the customer

Implementing - Implementing the project's product is the act of actually making the project's product available for use by the customer and its user community by addressing items such as:

Business Items

- Redefining organizational business operations, processes, policies, and procedures
- Identify organizational staffing requirements
- Document organizational structures and job functions
- Organizing and executing awareness and training programs

Technical Items

- Modifying organizational technology infrastructure
- Installing any new hardware and software required to operate the new system
- Adjusting network capacity
- Installing, configuring, and testing the pilot system
- Installing, configuring, and testing the full system
- Converting pilot data from the old system to the new system
- Converting all data from the old system to the new system
- Verifying and validating that the system is performing as expected
- Verifying and validating that the system is performing as expected
- Transitioning user's to new operations
- Making the new system available to the users

Transitioning - This final stage of implementation involves officially transitioning the ownership and responsibility of the project's product to the customer. It's worth noting that often the team ultimately responsible for supporting the new system's operations may be different from that which was responsible for the actual implementation of the system. This transition phase includes items such as:

- Preparing a transition plan
- Training technical support staff
- Transitioning technical documentation
- Transitioning ownership of the system and ongoing support and maintenance responsibilities from the implementation team to the customer

Implementation planning (IP) is the practice of outlining activities necessary to ensure that the project's product is available for use by its end-users as originally planned. Implementation planning should present a clear alignment between regulations, policies, business and processes, and implementation objectives while clearly outlining any project constraints and/or assumptions. Implementation efforts often impact organizational activities and change existing cultures, structures, policies, processes, procedures, etc. The project team should work with stakeholders to identify, estimate, and plan for such impacts to minimize any resistance to change resulting from the implementation effort. Project stakeholders should anticipate this and develop strategies for dealing with these challenges. Some items to consider when developing such strategies may include:

- Planning for changes to current roles and job responsibilities/functions
- Planning for changes to workforce relocations, increases, reductions, etc
- Planning for changes to employee morale, training, retention, etc



CDC UNIFIED PROCESS PRACTICES GUIDE



IMPLEMENTATION PLANNING PRACTICES GUIDE

- Planning for changes to business process
- Planning for changes to technology requirements
- Setting clear expectations and encouraging open dialog
- Identifying and communicating changes and the process for managing those changes
- Ensuring that policies, processes, procedures, etc are consistent across the organization

Implementation planning will also include finalizing items such as the selection of hardware, software, and vendors; building testing technology requirements and networks, installing and testing the actual system; performing final system and user acceptance testing; preparing and implementing data conversion/migration plans; training the users; and ultimately converting existing processes and operations over to the new system. Assessing current organizational/business processes related to the implementation. Identifying how existing processes will be impacted and planning for the creation, improvement, or replacement of processes and procedures necessary for implementation success.

Proper implementation planning requires documenting these and other items in the form of an Implementation Plan (IP). Documenting project objectives within an IP helps clarify for stakeholders what it is that the project will accomplish as well as its priority in relation to competing endeavors. The IP should also communicate the potential impacts resulting from the implementation being affected by the needs of other projects. A well defined IP should include approaches for addressing implementation items such as those mentioned within this document. Scheduling time and resources to accomplish this should be done using a realistic implementation schedule that also takes into consideration federal/organizational mandates, policies, and processes as well as CPIC, C&A, MTDC, etc.

Best Practices

The following best practices are recommended for **Implementation Planning**:

- **Customer Requirements** - Confirm customer requirements for scope and their priority.
- **Review and Approve** - Defined management plans should be reviewed and approved by the project manager and any other required stakeholders.
- **Read It** - Make sure that the IP is read. Share it with those impacted by, or contributing to, the implementation project.
- **Make Updates** - As the project environment changes updates in the form of appended change requests should reflect any changes to the IP and/or its subsidiary plans.

Practice Activities

For software development projects the following practice activities are appropriate:

- **Plan** - Define strategies and plan activities to address implementation related items.
- **Implement** - Actually make the project's product available for use by the customer.
- **Transition** - Officially transition the ownership and responsibility of the project's product to the customer.

Practice Attributes

This section provides a list of practice attributes to help project teams determine the extent to which **Implementation Planning** impacts their project.

Practice Owner	CDC UP Project Office – NCPHI
Criteria	All projects, regardless of type or size, should document implementation and planning efforts and how they are performed and managed through the implementation process.
Estimated Level of Effort	Moderate



CDC UNIFIED PROCESS PRACTICES GUIDE



IMPLEMENTATION PLANNING PRACTICES GUIDE

Prerequisites	N/A
Practice Dependencies	N/A
Practice Timing in Project Life Cycle	Depending on the type of project, implementation planning may begin as early as the planning stage of the project development life cycle or as its own separate project after product development has completed. If the later is the case, it is often best to view the implementation as a new project and plan it as such.
Templates/Tools	N/A
Additional Information	N/A

Key Terms

Follow the link below to for definitions of project management terms and acronyms used in this document.
<http://www2.cdc.gov/cdcup/library/other/help.htm>

Related Templates/Tools

Below is a list of template(s) related to this practice. Follow the link below to download the document(s).
<http://www2.cdc.gov/cdcup/library/matrix/default.htm>

- None