

Project Management

Implementation Planning

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 includes all necessary software, hardware, data, documentation, training, and required process/organizational changes. Depending on the type of project, one of two implementation approaches may be used.

- *Project that includes implementation* – This approach is often associated with implementing in-house developed products. Implementation efforts are included as part of the overall project effort. 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* – This approach is often associated with implementing commercial off-the-shelf (COTS) products. Implementation efforts make up the entire project. Although, in some cases, a portion of this effort may include customization of the solution, the implementation is planned as a new project beginning with a Project Charter and other necessary project planning and documents that make up a project management plan. At a high level, this approach consists of three phases:
 1. *Planning* involves defining strategies and activities to address implementation items such as:
 - Obtaining executive sponsorship
 - Agreeing upon an implementation approach
 - Identify an plan for how current business processes may be impacted
 - Planning the actual implementation effort
 - Developing an implementation schedule
 - Creating the required supporting project management, and other, documentation
 - Planning the process for managing change
 - Identifying and communicating change
 - Formalizing any new job functions
 - Planning any necessary training
 - Accounting for potential impacts on business operations and planning how to best address

- them so that the impact minimized
- Developing an implementation management plan and all of its sub-components
- Identifying risks and devising mitigation strategies and contingency plans
- 2. *Implementing* the project's product by making it available to the customer and its users
 - Redefining business operations, processes, policies, and procedures
 - Identifying staffing requirements
 - Documenting organization structures and job functions
 - Organizing and executing awareness and training programs
 - Modifying technology infrastructure
 - Installing any new hardware and software required to operate the new system
 - Adjusting network capacity
 - Installing, configuring, and testing
 - Converting/Migrating data from old systems
 - Verifying and validating that the system is performing as expected
 - Transitioning user's to new operations
 - Making the new system available to the users
- 3. *Transitioning* ownership and responsibility of the project's product to the customer
 - Preparing transition plans
 - Training technical and support staff
 - Transitioning technical documentation
 - Transitioning ownership and ongoing support and maintenance responsibilities from the implementation team to the customer

Implementation planning 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 strategy, objectives, business, process, regulations, and policies, while clearly communicating any project constraints and/or assumptions.

Implementation efforts many times impact organizational activities Across the enterprise

and often change existing cultures, structures, policies, processes, procedures, etc. The project team should work with stakeholders to identify, estimate, and plan for such impacts and develop strategies for addressing any prospective resistance. 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
- Planning for changes to business process
- Planning for changes to technology requirements
- 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; testing technology requirements and networks, installing and testing the actual system; performing final 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 necessary processes and procedures.

Proper implementation planning requires documenting these and other items in the form of an Implementation Plan. Documenting project objectives helps clarify for stakeholders what it is that the project will accomplish as well as its priority in relation to competing endeavors. The Implementation Plan should also communicate the potential impacts resulting from the implementation being affected by the needs of other projects. A well defined plan 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.

For more information and tools related to Implementation Planning or the CDC Unified Process, please visit the CDC UP website at <http://www.cdc.gov/cdcup/>. ■

CDC Unified Process Presentations

The CDC UP offers a short overview presentation to any CDC employee and contractor group, upon your request. Presentations are often performed at your facility, on a day of the week convenient for your group, and typically take place over lunch structured as 1-hour brown bag/lunch-and-learn style meeting.

Contact the CDC Unified Process at cdcup@cdc.gov or visit <http://www.cdc.gov/cdcup> to arrange a short overview presentation for your group. ■

Project Management Community of Practice

- *January 29, 2009 – Art of Estimating*
- *February 26, 2009 – Project Management Career Paths*
- *March 26, 2009 – Marrying Project Management & Scrum*
- *April 30, 2009 – Value of Project Management to CDC Goals*
- *May 28, 2009 – Managing Project Scope and Risk*
- *June 25, 2009 – Controlling Project Execution*
- *July 30, 2009 – Microsoft Project (Desktop & Server)*
- *August 27, 2009 – EPLC Tailoring*
- *September 24, 2009 – Effective Stakeholder Communication*
- *October 29, 2009 – Leadership and Mentoring*
- *December 10, 2009 – Managing Projects in a virtual World*

For more information on the Project Management Community of Practice visit the PMCoP website at <http://www2.cdc.gov/cdcup/library/pmcop/> ■

Contact the CDC Unified Process Team

The *CDC Unified Process Project Management Newsletter* is authored by Daniel Vitek MBA, PMP and published by the National Center for Public Health Informatics.

For questions about the CDC UP, comments regarding this newsletter, suggestions for future newsletter topics, or to subscribe to the CDC UP Project Management Newsletter please contact the CDC UP Team at cdcup@cdc.gov

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