



# **Project Management Methodology: White Paper**

# Project Management Concepts

---

Projects vary in shape and size, and each project has a unique set of needs and expectations. However, most projects have similar characteristics that enable the use of a single project management framework to manage them.

## Phases and the Project Life Cycle

Generally, projects are divided into three or more phases, each of which is marked by the completion of major deliverables and the achievement of milestones. The project management team determines the logical groupings of deliverables into sequential phases that have well-defined start and end points, based on the completion of deliverables. Together, the phases comprise the project life cycle. The definition of the project life cycle determines the activities that are included at the beginning of a project and those that are separate projects that occur before the start of the project. It also determines when the project ends and whether transitional activities are part of the project.

## Generic Project Life Cycle

Most projects have several common characteristics related to the project life cycle. For example, a project's cost and staffing levels are generally low at the beginning of a project, increase during the project, and decrease as the project draws to a close. In addition, as a project progresses from start to finish, the probability of successful completion increases, while the ability of organizational stakeholders to influence the outcome of the project decreases.

## Iterative Nature of Project Management

Generally, the tasks required to successfully manage a project are iterative. A project management task may need to be revisited one or more times within a phase (or in a subsequent phase) in order to update, revise, or review the task deliverable. For example, a preliminary workplan must be updated throughout the life of the project based on the results of other project processes and tasks. A comprehensive project management methodology must take into consideration the iterative nature of project management processes.

## Our Approach to Project Management

Changing It has developed a complete project management environment that includes a single, adaptable Project Management methodology and tool set to promote effective project management.

Our approach is based on years of experience and established best practices. Subject matter experts created approaches, detailed procedures, and tools to form a cohesive, concise, and effective methodology that

- Makes use of practitioner experience and knowledge
- Can be integrated with our other methodologies as a separate project management thread
- Can be adapted to accommodate the unique requirements of any project
- Considers the iterative nature of project management processes
- Provides the information needed to select a set of project management tools, to mitigate risk, and to identify special considerations for managing multinational project teams

The modules include the tasks required to develop major deliverables. These tasks do not add content to major deliverables but they enable them to be developed on time, within budget, and according to defined specifications.

This approach demonstrates our project management capability, satisfying the criterion that a consulting firm must have the requisite project management knowledge, skills, experience, and tools to effectively conduct projects of any size.

The publication and distribution of makes state-of-the-art project management techniques available to you. It prepares you for project contingencies and supports your project endeavours by

- Providing for the structured application of knowledge, skills, tools, and detailed procedures to project activities
- Helping you develop approaches for effectively managing projects and engagements
- Providing a common language for practitioners and organizations working together on an engagement
- Helping projects meet or exceed the organization's needs and expectations
- Supporting most types of projects (for example, single, multiple, large-scale, and multidisciplinary)
- Providing tools and training to maximize project results
- Mitigating risk exposure
- Managing project scope
- Enhancing relationships between practitioners and organizations

In addition, this methodology facilitates continuous enhancement.

## Methodology Structure and Content

This section explains the structure, organization, and content of the methodology.

### Structure

- The **Deliverables Hierarchy** (DH) lists (in a hierarchical structure) the deliverables produced by executing the activities listed in the Activities by Subject Area. There is a direct correlation between Activities by Subject Area and DH items.
- The **Activities by Subject Area** (ASA) lists the modules and tasks according to the bodies of knowledge.
- The **Activities by Workflow** (AWF) lists tasks in a sequential flow.

## Workflows

The principles are divided into five workflows that organize the project management activities and deliverables in a structured, sequential manner. These workflows represent the foundation for the Project Management thread of an engagement.

Major processes are organized into five workflows: initiate, plan, execute, control, and close. Processes are carried out and repeated as necessary, in each phase.

- **Initiate Phase**—Includes the activities conducted at the beginning of each project phase to determine or reaffirm the management team and to document and approve the business criteria and strategy for the phase.
- **Plan Phase**—Develops and maintains a workable method for accomplishing the business needs and objectives that the project was undertaken to address. This includes the activities conducted throughout every phase of the project that identify and reaffirm the processes, practices, procedures, resources, schedules, and deliverables that are needed or expected for successful completion of the business goals and objectives.
- **Execute Phase**—Includes the activities performed by the resources to prepare and accept the deliverables needed to meet the business objectives according to the plan and the activities to capture and report on the progress of the work planned.
- **Control Phase**—Includes the activities conducted by the management team to monitor the progress of planned and unplanned work and the corrective actions taken to avoid or resolve performance problems that may endanger the business objectives of the phase.
- **Close Phase**—Includes the activities conducted at the end of a phase or project to transition resources from the phase back to their normal duties and the activities required to end the phase or project in an orderly manner.

Each phase ends with closing workflow tasks, which lead into the initiating workflow tasks for the following phase.

## Content

The approach yields one project management deliverable for each task. These deliverables are specific to the progress of the project and are not product-oriented deliverables.

The following figure depicts the application of project management principles, or bodies of knowledge, in discrete and modular activities.

### Synthesis of the Processes and Principles

Subject Area	Phase				
	Initiate	Plan	Execute	Control	Close
<b>Logistics Management</b>					
Task 1	x				
Task 2		x			
Task 3			x		
Task 4				x	
Task 5					x
<b>Workplan Management</b>					
Task 1		x			
Task 2			x		
Task 3				x	
<b>Scope/Change Management</b>					
Task 1	x				
Task 2		x			
Task 3			x		
Task 4				x	

## Subject Areas

The following list of high-level descriptions of the areas that our approach addresses:

- **Manage Organization**—Verifies the effective use of the resources involved in the project, including project stakeholders. It employs organizational strategy development, planning, staff acquisition, and team development activities.
- **Manage Logistics**—Verifies that a comprehensive strategy and plan are implemented to prepare and maintain the technical and physical project environment, including identification of both physical and technical requirements. These activities verify effective integration and maximum productivity of resources.
- **Manage Communications**—Verifies the timely and appropriate generation, collection, dissemination, and nature of project information. It employs communications planning, information distribution, performance reporting, monitoring, and administrative closure activities.
- **Manage Procurement**—Employs the processes necessary to acquire goods and services from outside the organization. The processes include procurement planning, solicitation planning, solicitation, source selection, contract administration, and contract closeout.
- **Manage Workplan**—Verifies the timely completion of the project through activity definition, activity sequencing, activity duration estimating, schedule development, and schedule control.
- **Manage Financials**—Verifies that the project is completed within the approved budget through resource planning, cost estimating, cost budgeting, and cost control processes. Verifies that billing and collection periods and activities are monitored and controlled.
- **Manage Risk/Issues**—Identifies, analyzes, and responds to project risks. It includes maximizing the results of positive events and minimizing the consequences of adverse events through risk identification, risk quantification, risk response development, and risk response control. Also verifies that issues that develop during the project are identified, addressed, and resolved in an expedient and diplomatic manner.
- **Manage Scope/Change**—Verifies that the project includes the required work to successfully complete the project and that critical changes are managed and properly communicated to affected stakeholders. This module is primarily concerned with defining and controlling the project, tracking, modifying, and controlling the steps for realizing the anticipated project benefits, and providing a structure to manage change.
- **Manage Quality**—Verifies that the project satisfies the needs for which it was undertaken, including identifying quality standards, evaluating overall project performance, and monitoring specific project results to eliminate the causes of unsatisfactory performance.

- **Manage Implementation**—Defines strategy for implementing new technology, new business processes, a new organization, or a new product. The processes involve developing a strategy, plan, execution, and post-implementation review.
- **Manage Integration**—Verifies that the various elements of a project are coordinated so that deadlines are met, duplicative work is eliminated, resources are maximized, and deliverables are of high quality. It requires negotiating tradeoffs between competing objectives and alternatives in order to meet or exceed stakeholders' needs and expectations

## Accelerators

We provide accelerators to help practitioner prepare project management deliverables. The following types of accelerators minimize the time and effort required from project managers.

- A **tool** is an aid that accelerates the production of task deliverables. Tools are associated with tasks. Standard tool types include development aids, reference materials, repositories, training materials, and software.
- A **detailed procedure** documents details related to performing an activity. Often, they are generic in nature and can be applied to more than one task. Detailed procedures are associated with tasks.
- A **template** is a preformatted electronic file that practitioners use as a suggested format for producing a task deliverable. Practitioners can easily create deliverables by inserting data directly into a template without having to start from scratch. Templates are associated with task deliverables.
- A **sample deliverable** is a real-world example of a specific task deliverable. Samples are obtained from actual engagements and are selected as best-in-class examples for each methodology. The intent of sample deliverables is to provide practitioners with examples of content, not a specific deliverable format. Samples are associated with task deliverables.

We have also developed a set of project management tools to meet a range of requirements, including long-term project planning, initial startup, and detailed daily project activities. The tool set consists of specialized in-house and commercially available applications developed by leading software vendors.

Project teams select the tools that are most appropriate for their projects and, where applicable, customize them for a project's unique requirements. The client organization's capability is a key criterion of tool selection. For example, based on a client's existing software environment, a project team may select a Microsoft Windows-based tool rather than a Lotus Notes-based tool.

### **External Tools**

The following third-party tools are typically used on our projects to facilitate project management:

- **Microsoft Project** is used for scheduling, tracking, and managing project activities; it also facilitates communication with project participants. It can be customized and it is easy to use.