Purpose
The purpose of this document is to provide guidance on the practice of Project Scope 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
Each project's product and/or service is unique and requires its own careful balance of practices, processes, tools and techniques, etc. to ensure the required work is completed as agreed upon by key project stakeholders. The sum of these along with the product and/or service to be delivered by the project is known as the project's scope. Getting key parties to agree upon what is the scope of the project’s work is known as project scope planning.

The practice of project scope planning is a key management practice for planning and delivering projects successfully. Project scope includes high level features or capabilities that the business team has committed to delivering to a customer as well as those they have not committed to delivering. Project scope is often defined by executive sponsor, steering committee, project sponsor, and the project’s customer with input from other appropriate stakeholders.

Understanding and analyzing who project stakeholders are is an important early step in the scope planning process. Project stakeholders are persons and/or organizations such as customers, sponsors, the public, etc. that are actively involved in the project, whose interests may be affected by the project, or who exert influence over the project and/or its deliverables.

Diligent scope planning works toward ensuring that key project stakeholders agree upon the project work to be accomplished. Achieving this agreement is facilitated through a process of progressively elaborating and documenting project work and communicating with project stakeholders. This process forms the basis for an agreement between the project team and the customer by relating the work of the project to the project's objectives and ensuring that the project includes all of the work required, and only the work required to meet the agreed upon project objectives. At a minimum the scope planning process should consider:

- **Project justification** – Defining the business need that the project was undertaken to address. Such as, a customer request, market demand, etc.
- **Product description** – Documenting the relationship between the created product and/or service and the business need the project was undertaken to address.
- **Project objective** – Outlining criteria the project needs to meet for it to be considered a success. This includes measures of cost, quality, schedule, etc. to meet the business needs behind why the project was chartered.

Four primary actions are conducted throughout the scope planning process:

1. **Scope Planning** – Creating a project scope management plan that documents how the project scope will be defined, verified, controlled, and how the work breakdown structure (WBS) will be created and defined.
2. **Scope Definition** – Developing a detailed project scope statement as the basis for future project decisions.
3. **Scope Verification** – Formalizing a plan for acceptance of the completed project deliverables.
4. **Scope Control** – Establishing a mechanism for controlling changes to the project scope.

Scope Planning
The foundation for scope planning is a detailed project scope statement derived from the preliminary scope statement documented within the project charter and business case documents. Using a detailed scope statement as a foundation, the scope management planning process outlines the
processes that will govern how the project’s scope will be defined, verified, and controlled. Some of the activities conducted to accomplish this include:

- Conducting planning workshops
- Researching previous project experiences
- Developing strategies and plans
- Etc.

A scope management plan is the end result of the scope planning process and is used by the project team to document scope management decisions. The scope management plan provides guidance to stakeholders on how project scope will be managed and controlled throughout the life of the project. The scope management plan is often created as part of the project management plan, but may also be a separate subsidiary plan if necessary to meet the needs of the project.

**Scope Definition**

Defining project scope involves subdividing major project deliverables, as identified in the project scope statement, into smaller, more manageable components. This effort results in the development of the WBS and eventually the identification of resources and milestones that will provide perspective on the project as a whole. The practice of scope definition accomplishes things such as:

- Identifying major project work components, deliverables, and requirements
- More accurately estimating time, cost, and resource requirements
- Easier management of project components and performance measures
- Etc.

**Scope Verification**

A formal plan for verifying scope defines how project work will be confirmed and ultimately accepted by the client. Scope verification activities include measuring, examining, and testing project deliverables to ensure that they comply with agreed upon requirements. A plan for how this will be accomplished needs to be documented and agreed upon by key stakeholders.

The ultimate objective of this process is a documented plan for formally accepting completed project deliverables. The project team will need to comply with all agreed-upon acceptance procedures as outlined within the scope management plan and ensure that all accepted deliverables have been documented and signed-off on by the appropriate stakeholder(s).

**Scope Control**

Project scope sometimes needs to be adjusted to adapt to a dynamic project environment. Changes may include fluctuations in resources, schedule, cost, client requirements, etc. Scope change itself is not necessarily bad assuming that it is recognized early, addressed quickly, and that project stakeholders are in agreement as to the impact of the change on project activities and objectives. However, uncontrolled changes can become an issue quickly. Uncontrolled change is often referred to as scope creep.

Establishing a mechanism for controlling project scope change is critical to project success. This process is concerned with influencing the factors that create scope creep and controlling the impact of those changes. Planning and documenting within the scope management plan how changes to scope will be controlled ensures that all requested changes and recommended corrective actions will be managed through an agreed upon change control process. Scope change control involves activities such as:

- Influencing factors that create scope changes
- Identifying when scope change has occurred
- Helping to ensure that changes are beneficial to project objectives
- Managing the actual changes when and if they do occur
Best Practices

The following best practices are recommended for the practice of Project Scope Planning:

- **Review** - Have the scope statement reviewed and approved by both the project sponsors and the customer.
- **Confidential Information** - Do not include confidential information such as budgets, costs, etc.
- **Communication** – Involve many different project stakeholders during the planning of project scope and creation of the scope management plan.
- **Process** – As part of the change management planning process, establish a formal process to manage scope change requests.
- **Ensure/Verify** – Ensure that all interested parties are in agreement as to what the scope of the project is, how it will be managed, controlled, and verified.

Practice Activities

For software development projects the following practice activities are appropriate:

- **Gather Information** – Gather information such as analysis of information contained in the project charter, the preliminary project scope statement, the latest approved version of the project management plan, historical information contained in the organizational process assets, and any relevant enterprise environmental factors.
- **Understand Stakeholders** – Understand stakeholder needs, wants, and expectations.
- **Detailed Scope Statement** – Define and describe the project scope statement with greater specificity as more information about the project is known.
- **Analyze** – Analyze stakeholder needs, wants, and expectations.
- **Convert** – Convert stakeholder needs, wants, and expectations into project requirements.
- **Review** – Review scope management plan with project stakeholder to ensure agreement as to how project scope will be defined, verified, and controlled.
- **WBS** – Create the project’s WBS.
- **Verify** – Verify project scope with project stakeholders.

Practice Attributes

This section provides a list of practice attributes to help project teams determine when and how the practice of Project Scope Planning impacts a project.

<table>
<thead>
<tr>
<th>Practice Owner</th>
<th>CDC UP Project Office</th>
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<tbody>
<tr>
<td>Criteria</td>
<td>All projects regardless of type or size need to define the scope of the project’s effort. Depending on project requirements, documenting how scope will be managed may be done as part of the project management plan or as a separate supporting document.</td>
</tr>
<tr>
<td>Estimated Level of Effort</td>
<td>Moderate</td>
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<tr>
<td>Prerequisites</td>
<td>Approved Project Charter</td>
</tr>
<tr>
<td>Practice Dependencies</td>
<td>N/A</td>
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<tr>
<td>Practice Timing in Project Life Cycle</td>
<td>Developing a scope management plan is an activity that takes place during the early planning phase of the project life cycle.</td>
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Key Terms
Follow the link below 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
   • Work Breakdown Structure Practices Guide
   • Work Breakdown Structure Template
   • Work Breakdown Dictionary Template
   • Work Breakdown Structure Checklist
   • Stakeholder Analysis Template