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5

PROJECT SCOPE MANAGEMENT

Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. Managing the project scope is primarily concerned with defining and controlling what is and is not included in the project.

Figure 5-1 provides an overview of the Project Scope Management processes, which include the following:

- 5.1 Plan Scope Management**—The process of creating a scope management plan that documents how the project scope will be defined, validated, and controlled.
- 5.2 Collect Requirements**—The process of determining, documenting, and managing stakeholder needs and requirements to meet project objectives.
- 5.3 Define Scope**—The process of developing a detailed description of the project and product.
- 5.4 Create WBS**—The process of subdividing project deliverables and project work into smaller, more manageable components.
- 5.5 Validate Scope**—The process of formalizing acceptance of the completed project deliverables.
- 5.6 Control Scope**—The process of monitoring the status of the project and product scope and managing changes to the scope baseline.

These processes interact with each other and with processes in other Knowledge Areas as described in detail in Section 3 and Annex A1.

In the project context, the term scope can refer to:

- **Product scope.** The features and functions that characterize a product, service, or result; and/or
- **Project scope.** The work performed to deliver a product, service, or result with the specified features and functions. The term project scope is sometimes viewed as including product scope.

The processes used to manage project scope, as well as the supporting tools and techniques, can vary by project. The scope baseline for the project is the approved version of the project scope statement, work breakdown structure (WBS), and its associated WBS dictionary. A baseline can be changed only through formal change control procedures and is used as a basis for comparison while performing Validate Scope and Control Scope processes as well as other controlling processes.

Completion of the project scope is measured against the project management plan (Section 4.2.3.1). Completion of the product scope is measured against the product requirements (Section 5.2). The Project Scope Management processes need to be well integrated with the other Knowledge Area processes, so that the work of the project will result in delivery of the specified product scope.



Figure 5-1. Project Scope Management Overview

5.1 Plan Scope Management

Plan Scope Management is the process of creating a scope management plan that documents how the project scope will be defined, validated, and controlled. The key benefit of this process is that it provides guidance and direction on how scope will be managed throughout the project. The inputs, tools and techniques, and outputs of this process are depicted in Figure 5-2. Figure 5-3 depicts the data flow diagram of the process.

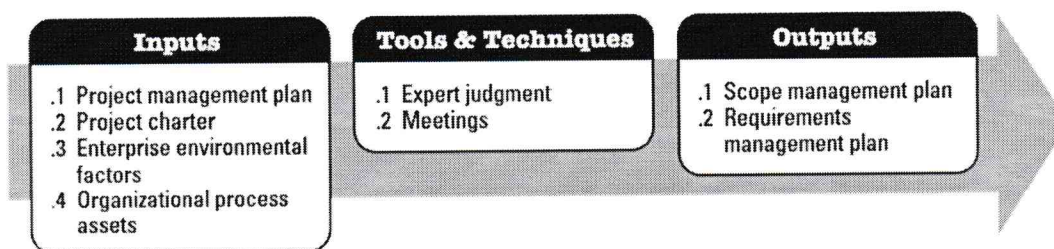


Figure 5-2. Plan Scope Management: Inputs, Tools & Techniques, and Outputs

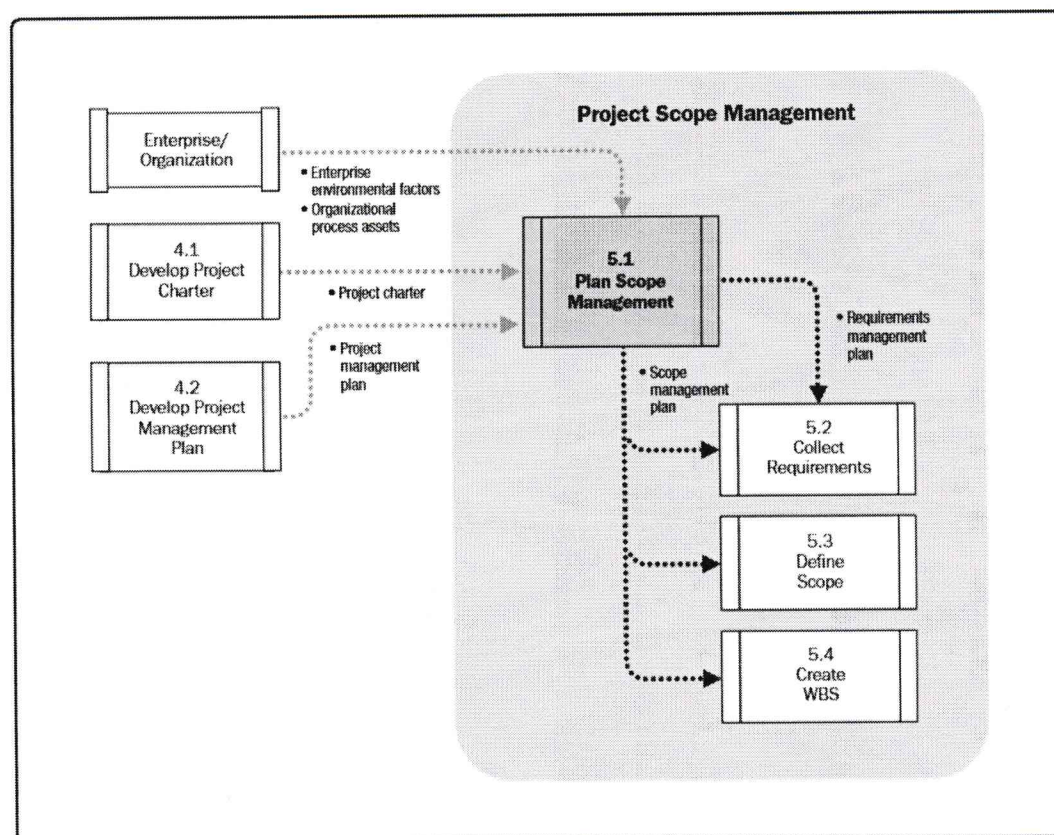


Figure 5-3. Plan Scope Management Data Flow Diagram

The scope management plan is a component of the project or program management plan that describes how the scope will be defined, developed, monitored, controlled, and verified. The development of the scope management plan and the detailing of the project scope begin with the analysis of information contained in the project charter (Section 4.1.3.1), the latest approved subsidiary plans of the project management plan (Section 4.2.3.1), historical information contained in the organizational process assets (Section 2.1.4), and any other relevant enterprise environmental factors (Section 2.1.5). This plan helps reduce the risk of project scope creep.

5.1.1 Plan Scope Management: Inputs

5.1.1.1 Project Management Plan

Described in Section 4.2.3.1. Approved subsidiary plans of the project management plan are used to create the scope management plan and influence the approach taken for planning scope and managing project scope.

5.1.1.2 Project Charter

Described in Section 4.1.3.1. The project charter is used to provide the project context needed to plan the scope management processes. It provides the high-level project description and product characteristics from the project statement of work.

5.1.1.3 Enterprise Environmental Factors

Described in Section 2.1.5. The enterprise environmental factors that can influence the Plan Scope Management process include, but are not limited to:

- Organization's culture,
- Infrastructure,
- Personnel administration, and
- Marketplace conditions.

5.1.1.4 Organizational Process Assets

Described in Section 2.1.4. The organizational process assets that can influence the Plan Scope Management process include, but are not limited to:

- Policies and procedures, and
- Historical information and lessons learned knowledge base.

5.1.2 Plan Scope Management: Tools and Techniques

5.1.2.1 Expert Judgment

Expert judgment refers to input received from knowledgeable and experienced parties. Expertise may be provided by any group or person with specialized education, knowledge, skill, experience, or training in developing scope management plans.

5.1.2.2 Meetings

Project teams may attend project meetings to develop the scope management plan. Attendees at these meetings may include the project manager, the project sponsor, selected project team members, selected stakeholders, anyone with responsibility for any of the scope management processes, and others as needed.

5.1.3 Plan Scope Management: Outputs

5.1.3.1 Scope Management Plan

The scope management plan is a component of the project or program management plan that describes how the scope will be defined, developed, monitored, controlled, and verified. The scope management plan is a major input into the Develop Project Management Plan process, and the other scope management processes. The components of a scope management plan include:

- Process for preparing a detailed project scope statement;
- Process that enables the creation of the WBS from the detailed project scope statement;
- Process that establishes how the WBS will be maintained and approved;
- Process that specifies how formal acceptance of the completed project deliverables will be obtained; and
- Process to control how requests for changes to the detailed project scope statement will be processed. This process is directly linked to the Perform Integrated Change Control process (Section 4.5).

The scope management plan can be formal or informal, broadly framed or highly detailed, based on the needs of the project.

5.1.3.2 Requirements Management Plan

The requirements management plan is a component of the project management plan that describes how requirements will be analyzed, documented, and managed. The phase-to-phase relationship, described in Section 2.4.2.1, strongly influences how requirements are managed. The project manager chooses the most effective relationship for the project and documents this approach in the requirements management plan. Many of the requirements management plan components are based on that relationship.

Components of the requirements management plan can include, but are not limited to:

- How requirements activities will be planned, tracked, and reported;
- Configuration management activities such as: how changes to the product will be initiated, how impacts will be analyzed, how they will be traced, tracked, and reported, as well as the authorization levels required to approve these changes;
- Requirements prioritization process;
- Product metrics that will be used and the rationale for using them; and
- Traceability structure to reflect which requirement attributes will be captured on the traceability matrix.

5.2 Collect Requirements

Collect Requirements is the process of determining, documenting, and managing stakeholder needs and requirements to meet project objectives. The key benefit of this process is that it provides the basis for defining and managing the project scope including product scope. The inputs, tools and techniques, and outputs of this process are depicted in Figure 5-4. Figure 5-5 depicts the data flow diagram of the process.

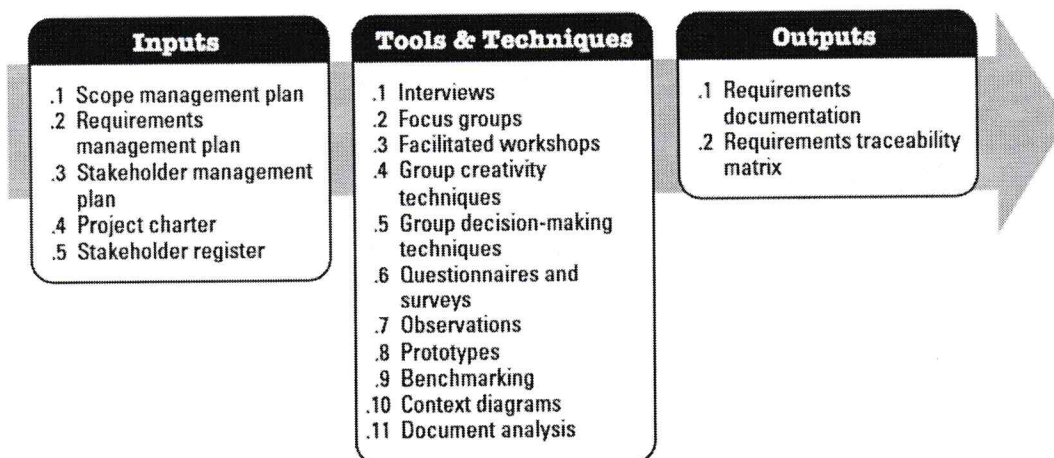


Figure 5-4. Collect Requirements: Inputs, Tools & Techniques, and Outputs

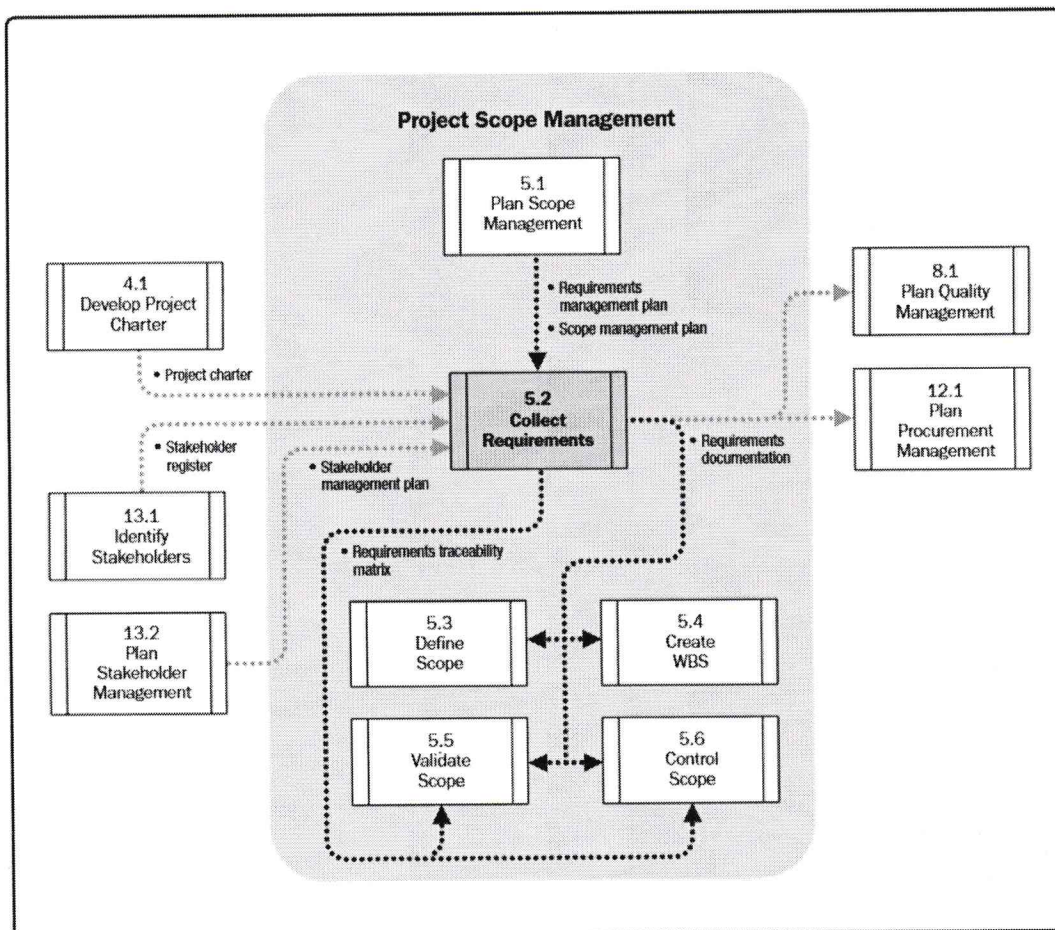


Figure 5-5. Collect Requirements Data Flow Diagram

The project's success is directly influenced by active stakeholder involvement in the discovery and decomposition of needs into requirements and by the care taken in determining, documenting, and managing the requirements of the product, service, or result of the project. Requirements include conditions or capabilities that are to be met by the project or present in the product, service, or result to satisfy an agreement or other formally imposed specification. Requirements include the quantified and documented needs and expectations of the sponsor, customer, and other stakeholders. These requirements need to be elicited, analyzed, and recorded in enough detail to be included in the scope baseline and to be measured once project execution begins. Requirements become the foundation of the WBS. Cost, schedule, quality planning, and sometimes procurement are all based upon these requirements. The development of requirements begins with an analysis of the information contained in the project charter (Section 4.1.3.1), the stakeholder register (Section 13.1.3.1) and the stakeholder management plan (Section 13.2.3.1).

Many organizations categorize requirements into different types, such as business and technical solutions, the former referring to stakeholder needs and the latter as to how those needs will be implemented. Requirements can be grouped into classifications allowing for further refinement and detail as the requirements are elaborated. These classifications include:

- Business requirements, which describe the higher-level needs of the organization as a whole, such as the business issues or opportunities, and reasons why a project has been undertaken.
- Stakeholder requirements, which describe needs of a stakeholder or stakeholder group.
- Solution requirements, which describe features, functions, and characteristics of the product, service, or result that will meet the business and stakeholder requirements. Solution requirements are further grouped into functional and nonfunctional requirements:
 - Functional requirements describe the behaviors of the product. Examples include processes, data, and interactions with the product.
 - Nonfunctional requirements supplement functional requirements and describe the environmental conditions or qualities required for the product to be effective. Examples include: reliability, security, performance, safety, level of service, supportability, retention/purge, etc.
- Transition requirements describe temporary capabilities, such as data conversion and training requirements, needed to transition from the current “as-is” state to the future “to-be” state.
- Project requirements, which describe the actions, processes, or other conditions the project needs to meet.
- Quality requirements, which capture any condition or criteria needed to validate the successful completion of a project deliverable or fulfillment of other project requirements.

5.2.1 Collect Requirements: Inputs

5.2.1.1 Scope Management Plan

Described in Section 5.1.3.1. The scope management plan provides clarity as to how project teams will determine which type of requirements need to be collected for the project.

5.2.1.2 Requirements Management Plan

Described in Section 5.1.3.2. The requirements management plan provides the processes that will be used throughout the Collect Requirements process to define and document the stakeholder needs.

5.2.1.3 Stakeholder Management Plan

Described in Section 13.2.3.1. The stakeholder management plan is used to understand stakeholder communication requirements and the level of stakeholder engagement in order to assess and adapt to the level of stakeholder participation in requirements activities.

5.2.1.4 Project Charter

Described in Section 4.1.3.1. The project charter is used to provide the high-level description of the product, service, or result of the project so that detailed requirements can be developed.

5.2.1.5 Stakeholder Register

Described in Section 13.1.3.1. The stakeholder register is used to identify stakeholders who can provide information on the requirements. The stakeholder register also captures major requirements and main expectations stakeholders may have for the project.

5.2.2 Collect Requirements: Tools and Techniques

5.2.2.1 Interviews

An interview is a formal or informal approach to elicit information from stakeholders by talking to them directly. It is typically performed by asking prepared and spontaneous questions and recording the responses. Interviews are often conducted on an individual basis between an interviewer and an interviewee, but may involve multiple interviewers and/or multiple interviewees. Interviewing experienced project participants, sponsors and other executives, and subject matter experts can aid in identifying and defining the features and functions of the desired product deliverables. Interviews are also useful for obtaining confidential information.

5.2.2.2 Focus Groups

Focus groups bring together prequalified stakeholders and subject matter experts to learn about their expectations and attitudes about a proposed product, service, or result. A trained moderator guides the group through an interactive discussion, designed to be more conversational than a one-on-one interview.

5.2.2.3 Facilitated Workshops

Facilitated workshops are focused sessions that bring key stakeholders together to define product requirements. Workshops are considered a primary technique for quickly defining cross-functional requirements and reconciling stakeholder differences. Because of their interactive group nature, well-facilitated sessions can build trust, foster relationships, and improve communication among the participants, which can lead to increased stakeholder consensus. In addition, issues can be discovered earlier and resolved more quickly than in individual sessions.

For example, facilitated workshops called joint application design/development (JAD) sessions are used in the software development industry. These facilitated sessions focus on bringing business subject matter experts and the development team together to improve the software development process. In the manufacturing industry, quality function deployment (QFD) is another example of a facilitated workshop technique that helps determine critical characteristics for new product development. QFD starts by collecting customer needs, also known as voice of the customer (VOC). These needs are then objectively sorted and prioritized, and goals are set for achieving them. User stories, which are short, textual descriptions of required functionality, are often developed during a requirements workshop. User stories describe the stakeholder who benefits from the feature (role), what the stakeholder needs to accomplish (goal), and the benefit to the stakeholder (motivation). User stories are widely used with agile methods.

5.2.2.4 Group Creativity Techniques

Several group activities can be organized to identify project and product requirements. Some of the group creativity techniques that can be used are:

- **Brainstorming.** A technique used to generate and collect multiple ideas related to project and product requirements. Although brainstorming by itself does not include voting or prioritization, it is often used with other group creativity techniques that do.
- **Nominal group technique.** A technique that enhances brainstorming with a voting process used to rank the most useful ideas for further brainstorming or for prioritization.
- **Idea/mind mapping.** A technique in which ideas created through individual brainstorming sessions are consolidated into a single map to reflect commonality and differences in understanding, and generate new ideas.
- **Affinity diagram.** A technique that allows large numbers of ideas to be classified into groups for review and analysis.
- **Multicriteria decision analysis.** A technique that utilizes a decision matrix to provide a systematic analytical approach for establishing criteria, such as risk levels, uncertainty, and valuation, to evaluate and rank many ideas.

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5.2.2.5 Group Decision-Making Techniques

A group decision-making technique is an assessment process having multiple alternatives with an expected outcome in the form of future actions. These techniques can be used to generate, classify, and prioritize product requirements.

There are various methods of reaching a group decision, such as:

- **Unanimity.** A decision that is reached whereby everyone agrees on a single course of action. One way to reach unanimity is the Delphi technique, in which a selected group of experts answers questionnaires and provides feedback regarding the responses from each round of requirements gathering. The responses are only available to the facilitator to maintain anonymity.
- **Majority.** A decision that is reached with support obtained from more than 50 % of the members of the group. Having a group size with an uneven number of participants can ensure that a decision will be reached, rather than resulting in a tie.
- **Plurality.** A decision that is reached whereby the largest block in a group decides, even if a majority is not achieved. This method is generally used when the number of options nominated is more than two.
- **Dictatorship.** In this method, one individual makes the decision for the group.

All of these group decision-making techniques can be applied to the group creativity techniques used in the Collect Requirements process.

5.2.2.6 Questionnaires and Surveys

Questionnaires and surveys are written sets of questions designed to quickly accumulate information from a large number of respondents. Questionnaires and/or surveys are most appropriate with varied audiences, when a quick turnaround is needed, when respondents are geographically dispersed, and where statistical analysis is appropriate.

5.2.2.7 Observations

Observations provide a direct way of viewing individuals in their environment and how they perform their jobs or tasks and carry out processes. It is particularly helpful for detailed processes when the people that use the product have difficulty or are reluctant to articulate their requirements. Observation is also known as “job shadowing.” It is usually done externally by an observer viewing a business expert performing a job. It can also be done by a “participant observer” who actually performs a process or procedure to experience how it is done to uncover hidden requirements.

5.2.2.8 Prototypes

Prototyping is a method of obtaining early feedback on requirements by providing a working model of the expected product before actually building it. Since a prototype is tangible, it allows stakeholders to experiment with a model of the final product rather than being limited to discussing abstract representations of their requirements. Prototypes support the concept of progressive elaboration in iterative cycles of mock-up creation, user experimentation, feedback generation, and prototype revision. When enough feedback cycles have been performed, the requirements obtained from the prototype are sufficiently complete to move to a design or build phase. Storyboarding is a prototyping technique showing sequence or navigation through a series of images or illustrations. Storyboards are used on a variety of projects in a variety of industries, such as film, advertising, instructional design, and on agile and other software development projects. In software development, storyboards use mock-ups to show navigation paths through webpages, screens, or other user interfaces.

5.2.2.9 Benchmarking

Benchmarking involves comparing actual or planned practices, such as processes and operations, to those of comparable organizations to identify best practices, generate ideas for improvement, and provide a basis for measuring performance. The organizations compared during benchmarking can be internal or external.

5.2.2.10 Context Diagrams

The context diagram is an example of a scope model. Context diagrams visually depict the product scope by showing a business system (process, equipment, computer system, etc.), and how people and other systems (actors) interact with it. Context diagrams show inputs to the business system, the actor(s) providing the input, the outputs from the business system, and the actor(s) receiving the output.

5.2.2.11 Document Analysis

Document analysis is used to elicit requirements by analyzing existing documentation and identifying information relevant to the requirements. There are a wide range of documents that may be analyzed to help elicit relevant requirements. Examples of documents that may be analyzed include, but are not limited to: business plans, marketing literature, agreements, requests for proposal, current process flows, logical data models, business rules repositories, application software documentation, business process or interface documentation, use cases, other requirements documentation, problem/issue logs, policies, procedures, and regulatory documentation such as laws, codes, or ordinances, etc.

5.2.3 Collect Requirements: Outputs

5.2.3.1 Requirements Documentation

Requirements documentation describes how individual requirements meet the business need for the project. Requirements may start out at a high level and become progressively more detailed as more about the requirements is known. Before being baselined, requirements need to be unambiguous (measurable and testable), traceable, complete, consistent, and acceptable to key stakeholders. The format of a requirements document may range from a simple document listing all the requirements categorized by stakeholder and priority, to more elaborate forms containing an executive summary, detailed descriptions, and attachments.

Components of requirements documentation can include, but, are not limited to:

- Business requirements, including:
 - Business and project objectives for traceability;
 - Business rules for the performing organization; and
 - Guiding principles of the organization.

- Stakeholder requirements, including:
 - Impacts to other organizational areas;
 - Impacts to other entities inside or outside the performing organization; and
 - Stakeholder communication and reporting requirements.
- Solution requirements, including:
 - Functional and nonfunctional requirements;
 - Technology and standard compliance requirements;
 - Support and training requirements;
 - Quality requirements; and
 - Reporting requirements, etc. (solution requirements can be documented textually, in models, or both).
- Project requirements, such as:
 - Levels of service, performance, safety, compliance, etc.; and
 - Acceptance criteria.
- Transition requirements.
- Requirements assumptions, dependencies, and constraints.

5.2.3.2 Requirements Traceability Matrix

The requirements traceability matrix is a grid that links product requirements from their origin to the deliverables that satisfy them. The implementation of a requirements traceability matrix helps ensure that each requirement adds business value by linking it to the business and project objectives. It provides a means to track requirements throughout the project life cycle, helping to ensure that requirements approved in the requirements documentation are delivered at the end of the project. Finally, it provides a structure for managing changes to the product scope.

Tracing includes, but is not limited to, tracing requirements for the following:

- Business needs, opportunities, goals, and objectives;
- Project objectives;
- Project scope/WBS deliverables;
- Product design;
- Product development;
- Test strategy and test scenarios; and
- High-level requirements to more detailed requirements.

Attributes associated with each requirement can be recorded in the requirements traceability matrix. These attributes help to define key information about the requirement. Typical attributes used in the requirements traceability matrix may include: a unique identifier, a textual description of the requirement, the rationale for inclusion, owner, source, priority, version, current status (such as active, cancelled, deferred, added, approved, assigned, completed), and status date. Additional attributes to ensure that the requirement has met stakeholders' satisfaction may include stability, complexity, and acceptance criteria. Figure 5-6 provides an example of a requirements traceability matrix with its associated attributes.

Requirements Traceability Matrix								
Project Name:								
Cost Center:								
Project Description:								
ID	Associate ID	Requirements Description	Business Needs, Opportunities, Goals, Objectives	Project Objectives	WBS Deliverables	Product Design	Product Development	Test Cases
001	1.0							
	1.1							
	1.2							
	1.2.1							
002	2.0							
	2.1							
	2.1.1							
003	3.0							
	3.1							
	3.2							
004	4.0							
005	5.0							

Figure 5-6. Example of a Requirements Traceability Matrix

5.3 Define Scope

Define Scope is the process of developing a detailed description of the project and product. The key benefit of this process is that it describes the product, service, or result boundaries by defining which of the requirements collected will be included in and excluded from the project scope. The inputs, tools and techniques, and outputs of this process are depicted in Figure 5-7. Figure 5-8 depicts the data flow diagram of the process.

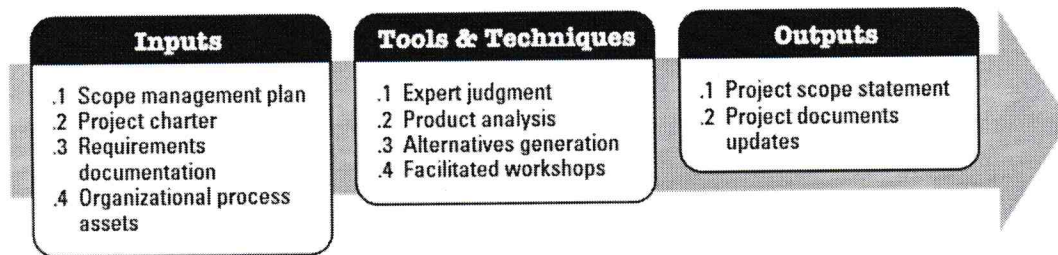


Figure 5-7. Define Scope: Inputs, Tools & Techniques, and Outputs

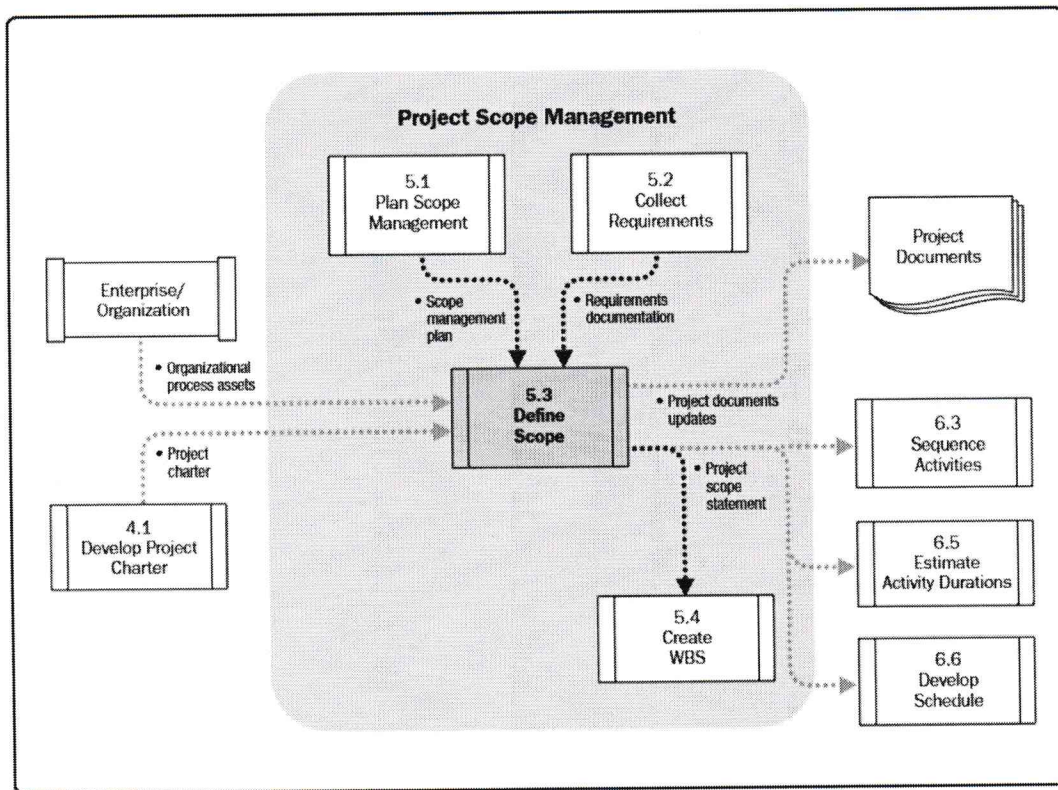


Figure 5-8. Define Scope Data Flow Diagram

Since all of the requirements identified in Collect Requirements may not be included in the project, the Define Scope process selects the final project requirements from the requirements documentation delivered during the Collect Requirements process. It then develops a detailed description of the project and product, service, or result.

The preparation of a detailed project scope statement is critical to project success and builds upon the major deliverables, assumptions, and constraints that are documented during project initiation. During project planning, the project scope is defined and described with greater specificity as more information about the project is known. Existing risks, assumptions, and constraints are analyzed for completeness and added or updated as necessary. The Define Scope process can be highly iterative. In iterative life cycle projects, a high-level vision will be developed for the overall project, but the detailed scope is determined one iteration at a time and the detailed planning for the next iteration is carried out as work progresses on the current project scope and deliverables.

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5.3.1 Define Scope: Inputs

5.3.1.1 Scope Management Plan

Described in Section 5.1.3.1. The scope management plan is a component of the project management plan that establishes the activities for developing, monitoring, and controlling the project scope.

5.3.1.2 Project Charter

Described in Section 4.1.3.1. The project charter provides the high-level project description and product characteristics. It also contains project approval requirements. If a project charter is not used in the performing organization, then comparable information needs to be acquired or developed, and used as a basis for the detailed project scope statement. Organizations that do not produce a formal project charter will usually perform an informal analysis to identify the content necessary for further scope planning.

5.3.1.3 Requirements Documentation

Described in Section 5.2.3.1. This documentation will be used to select the requirements that will be included in the project.

5.3.1.4 Organizational Process Assets

Described in Section 2.1.4. Organizational process assets can influence how scope is defined. Examples include, but are not limited to:

- Policies, procedures, and templates for a project scope statement;
- Project files from previous projects; and
- Lessons learned from previous phases or projects.

5.3.2 Define Scope: Tools and Techniques

5.3.2.1 Expert Judgment

Expert judgment is often used to analyze the information needed to develop the project scope statement. Such judgment and expertise is applied to any technical detail. Such expertise is provided by any group or individual with specialized knowledge or training, and is available from many sources, including but not limited to:

- Other units within the organization;
- Consultants;
- Stakeholders, including customers or sponsors;
- Professional and technical associations;
- Industry groups; and
- Subject matter experts.

5.3.2.2 Product Analysis

For projects that have a product as a deliverable, as opposed to a service or result, product analysis can be an effective tool. Each application area has one or more generally accepted methods for translating high-level product descriptions into tangible deliverables. Product analysis includes techniques such as product breakdown, systems analysis, requirements analysis, systems engineering, value engineering, and value analysis.

5.3.2.3 Alternatives Generation

Alternatives generation is a technique used to develop as many potential options as possible in order to identify different approaches to execute and perform the work of the project. A variety of general management techniques can be used, such as brainstorming, lateral thinking, analysis of alternatives, etc.

5.3.2.4 Facilitated Workshops

Described in Section 5.2.2.3. The participation of key players with a variety of expectations and/or fields of expertise in these intensive working sessions helps to reach a cross-functional and common understanding of the project objectives and its limits.

5.3.3 Define Scope: Outputs

5.3.3.1 Project Scope Statement

The project scope statement is the description of the project scope, major deliverables, assumptions, and constraints. The project scope statement documents the entire scope, including project and product scope. It describes, in detail, the project's deliverables and the work required to create those deliverables. It also provides a common understanding of the project scope among project stakeholders. It may contain explicit scope exclusions that can assist in managing stakeholder expectations. It enables the project team to perform more detailed planning, guides the project team's work during execution, and provides the baseline for evaluating whether requests for changes or additional work are contained within or outside the project's boundaries.

The degree and level of detail to which the project scope statement defines the work that will be performed and the work that is excluded can help determine how well the project management team can control the overall project scope. The detailed project scope statement, either directly, or by reference to other documents, includes the following:

- **Product scope description.** Progressively elaborates the characteristics of the product, service, or result described in the project charter and requirements documentation.
- **Acceptance criteria.** A set of conditions that is required to be met before deliverables are accepted.
- **Deliverable.** Any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project. Deliverables also include ancillary results, such as project management reports and documentation. These deliverables may be described at a summary level or in great detail.

- **Project exclusion.** Generally identifies what is excluded from the project. Explicitly stating what is out of scope for the project helps to manage stakeholders' expectations.
- **Constraints.** A limiting factor that affects the execution of a project or process. Constraints identified with the project scope statement list and describe the specific internal or external restrictions or limitations associated with the project scope that affect the execution of the project, for example, a predefined budget or any imposed dates or schedule milestones that are issued by the customer or performing organization. When a project is performed under an agreement, contractual provisions will generally be constraints. Information on constraints may be listed in the project scope statement or in a separate log.
- **Assumptions.** A factor in the planning process that is considered to be true, real, or certain, without proof or demonstration. Also describes the potential impact of those factors if they prove to be false. Project teams frequently identify, document, and validate assumptions as part of their planning process. Information on assumptions may be listed in the project scope statement or in a separate log.

Although the project charter and the project scope statement are sometimes perceived as containing a certain degree of redundancy, they are different in the level of detail contained in each. The project charter contains high-level information, while the project scope statement contains a detailed description of the scope elements. These elements are progressively elaborated throughout the project. Table 5-1 describes some of the key elements for each document.

Table 5-1. Elements of the Project Charter and Project Scope Statement

Project Charter	Project Scope Statement
Project purpose or justification	Project scope description (progressively elaborated)
Measurable project objectives and related success criteria	Acceptance criteria
High-level requirements	Project deliverables
High-level project description	Project exclusions
High-level risks	Project constraints
Summary milestone schedule	Project assumptions
Summary budget	
Stakeholder list	
Project approval requirements (what constitutes success, who decides it, who signs off)	
Assigned project manager, responsibility, and authority level	
Name and authority of the sponsor or other person(s) authorizing the project charter	

5.3.3.2 Project Documents Updates

Project documents that may be updated include, but are not limited to:

- Stakeholder register,
- Requirements documentation, and
- Requirements traceability matrix.

5.4 Create WBS

Create WBS is the process of subdividing project deliverables and project work into smaller, more manageable components. The key benefit of this process is that it provides a structured vision of what has to be delivered. The inputs, tools and techniques, and outputs of this process are depicted in Figure 5-9. Figure 5-10 depicts the data flow diagram of the process.

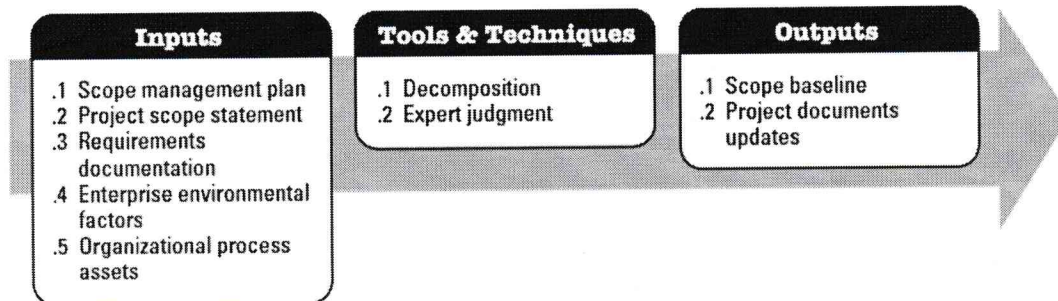


Figure 5-9. Create WBS: Inputs, Tools & Techniques, and Outputs