## Project Management Supplemental Deck #6

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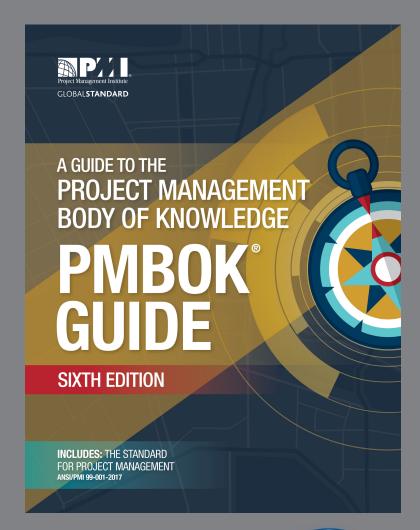
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### Project Management

This is accepted in the Project Management Field as the main guide which is used to training and certify Project management Professionals

All Supplemental Slide decks will be relating to this and the information from them will be included on any possible tests/assignments etc...

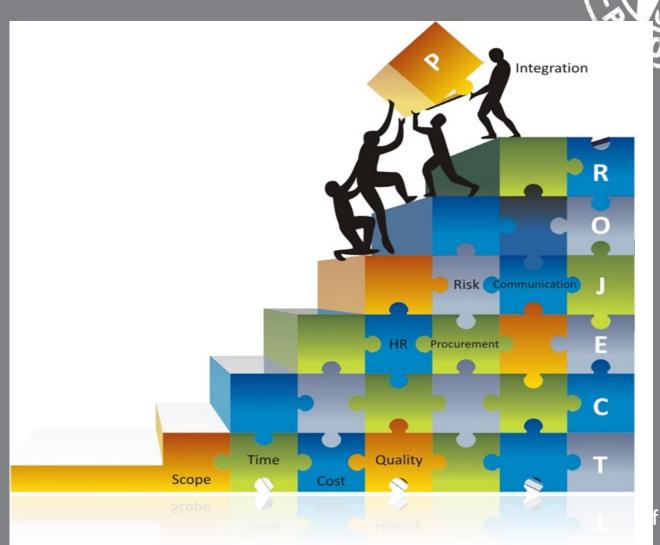






## Chapter 5

**Project Scope Management** 



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### Project Scope Management

• Project Scope Management refers to the set of processes that ensure a project's scope is accurately defined and mapped. Scope Management techniques enable project managers and supervisors to allocate the right amount of work necessary to successfully complete a project—concerned primarily with controlling what is and what is not part of the project's scope.

### SAMPLE QUESTION 1.

The process of determining, documenting and managing stakeholder needs and requirements to meet project objectives is known as

A. Plan Scope Management

C. Control Scope

B. Collect Requirements

D. Validate Scope



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### What is Project Scope

Scope refers to the detailed set of deliverables or features of a project. These
deliverables are derived from a project's requirements. <a href="PMBOK®">PMBOK®</a> defines Project Scope
as the "The work that needs to be accomplished to deliver a product, service, or result
with the specified features and functions."



- Following are the three processes of Project Scope Management:
- Planning
- The planning process is when an attempt is made to capture and define the work that needs to be done.
- Controlling
- The controlling and monitoring processes focus on documenting tracking, scope creep, tracking, and disapproving/approving project changes.
- Closing
- In the final process, the closing includes an audit of the project deliverables and an assessment of the outcomes against the original plan.

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### **SAMPLE QUESTION 2.**

The Scope Management Plan is included in which of the following documents?

- A. Project Management Plan
- C. The Scope Statement
- B. The Work Breakdown Structure
- D. Project Specifications

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### Project Scope Statement

- The scope of a project is the clear identification of the work that is required to complete or deliver a project successfully. One of the project manager's responsibilities is to ensure that only the needed work (the scope) will be performed and that each of the deliverables can be completed in the allotted time and within budget.
- The documentation of the scope of the project will explain the boundaries of the project, establish the responsibilities of each member of the team, and set up procedures for how a work that is completed will be verified and approved. This documentation may be referred to as the scope statement, the statement of work, or the terms of reference.



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### **SAMPLE QUESTION 3.**

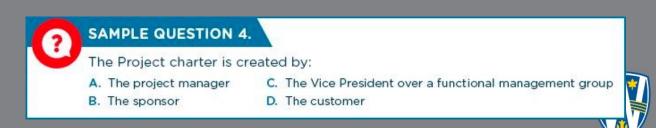
Project Scope:

- A. is of concern only at the start of the project
- B. is mainly a problem to be handled by the change control procedures during the project execution phase.
- C. Should be managed and controlled from the project concept through closing
- is usually not a problem after the contract or other document authorizing the project has been approved.



### Steps Involved in Project Scope Managem

- Define Project Needs
- Defining the needs of the project is the first step to establish a project timeline, allocate project resources, and set project goals. Only with these defined steps, you will be able to understand the work that needs to be done, meaning, the scope of the project needs to be defined. Once that is done, team members can be allocated tasks and provided direction to deliver a project in the given time and budget.
- Understand the Project Objectives
- To define the project scope, it is important first to establish the objectives of the project, which may include a new product, creating a new service within the organization, or developing a new piece of software. There are several objectives that could be central to a project; the project manager ensures the team delivers results according to the specified features or functions.
- Define the Project Scope
- The resources and work that goes into the creation of a product or service are essentially what defines the scope of the project. The scope generally outlines the goals that will be met to achieve a satisfactory result.



## Steps for Defining the Scope of a Project

- Project objectives
- Goals
- Sub-phases
- Tasks
- Resources
- Budget
- Schedule
- To define the scope of the project, identify the above parameters.
- Once these parameters are established, the limitations of the project need to be clarified, and the aspects that are not to be included in the project identified. By doing this, the project scope will make clear to <a href="stakeholders">stakeholders</a>, senior management, and team members what will and will not be included in the final product or service.

### SAMPLE QUESTION 5.

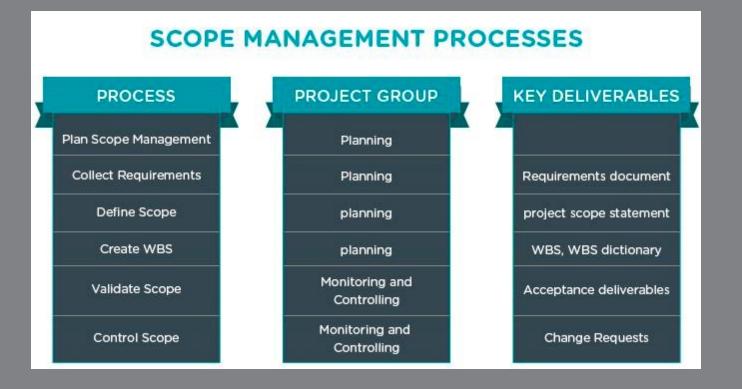
The project scope statement furnishes the basis for:

- A. clearly defined acceptance criteria
- B. Provides links to the clients functional management groups
- C. Allowing the project to move to the next phase
- D. A way to provide updated information to the accounting department





### Project Scope Management Processes







The project scope statement furnishes the basis for:

- A. the original description of the project's end results
- a summary description of the project's original content and end product, including basic budgetary and time constraint data
- C. the original project budget and schedule
- D. a and c





### Plan Scope Management



 The Scope Management plan covers how the scope will be defined, validated, and controlled. It also includes information on preventing or dealing with scope creep, handling change requests, the escalation path for any disagreement on the scope elements between stakeholders, the process for the creation of the scope statement, WBS, and how the deliverables will be accepted.

# PLAN SCOPE MANAGEMENT INPUTS Project management plan Project charter Enterprise environmental factors Organizational process assets TOOLS & TECHNIQUES Expert judgment Meetings Scope management plan Requirements management plan





### Collect Requirements

• This process involves documenting stakeholders' needs with the stated intent of meeting the project's objectives. In this process, managers use several techniques and tools for collecting project requirements from stakeholders. The process attempts to leave no stone unturned, resulting in an in-depth list of project requirements. If this process is performed thoroughly and correctly, it can significantly reduce the possibility of unpleasant surprises as the project moves toward completion.



#### COLLECT REQUIREMENTS PROCESS

COLLECT REQUIREMENTS PROCESS			
INPUTS	TOOLS & TECHNIQUES	OUTPUTS	
Project charter	Interviews	Requirements documentation	
Stakeholder register	Focus groups	Requirements management plan	
	Facilitated workshops	Requirements traceability matrix	
	Group creativity techniques		
	Questionaires and surveys		
	Observations		
	Prototypes		
	Group decision-making techniques		

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#### **SAMPLE QUESTION 8.**

The PM distributed a document to the stakeholders, which described the software to be developed, the functionality, the users it would serve and the installation timeline. The document was an example of:

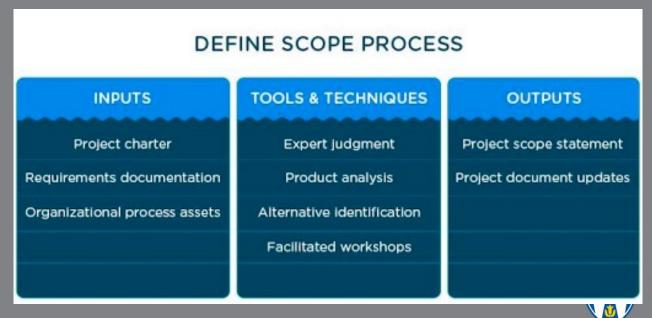
- A. Product scope
- B. Project scope
- C. A combination of project and product scope
- D. It was not complete enough to be either a product or a project scope document



### Define Scope

• This process involves the preparation of a detailed description of the project and its major deliverables. The scope clearly states what the project is supposed to achieve and what it cannot accomplish. The supporting documents are reviewed to ensure that the project will deliver work in line with the stated goals. The scope that results states the stakeholders' needs and communicates expectations for project performance





### Scope Creep

- The PMBOK<sup>®</sup> Guide describes scope creep as "adding features and unctionality (project scope) without addressing the effects on time, costs, and resources, or without customer approval"
- What is Wrong with Scope Creep?
- By working on unapproved features of a product, a project team devotes time to the unauthorized changes. The work to incorporate these changes must usually be done within the original time and budget estimates, leaving less time for approved parts of the scope. That could mean approved features don't get completed, and the end-product is not what was chartered. Or, it can mean that time and cost overruns to finish the authorized parts of the scope will occur.



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### How does scope creep occur



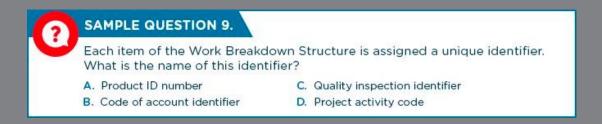
- There are many ways scope creep can occur on projects. Executives at the sponsor level frequently don't want to be involved in every decision. So, project teams make them. Some change requests are or appear to be small, so again, project teams act on them instead of following a formal change management process. An inflexible or cumbersome change control process may also contribute to unauthorized scope additions.
- For various reasons, the project team may want to exceed expectations and deliver "more value" by adding unrequested functionality. IT managers often fail to negotiate more time and budget when requests for additional functionality are made, and the scope creeps.
- Cited reasons for scope creep that include:
- Lack of clarity and depth to the original specification document.
- Allowing direct [unmanaged] contact between client and team participants.
- Customers trying to get extra work "on the cheap."
- Beginning design and development of something before a thorough requirements analysis and cost-benefit analysis has been done.
- Scope creep "where you do it to yourself" because of lack of foresight and planning.
- Poorly defined initial requirements.
- "Management promises the sun and the moon, and breaks the backs of the developers to give them just that in impossibly tight time frames."
- It is impossible to control scope creep, so always work on the highest-priority features

## Create a Work Breakdown Structure (WBS)

- The WBS is an important element of the Scope Management process, and the PMI® places great emphasis on this aspect—many project managers often skip this step, which leads to inaccurate planning. The WBS provides the project manager and the team with the opportunity to break down a high-level scope statement into smaller, manageable units of work, called work packages. The resulting WBS should provide a complete list of all work packages required to complete the project
- The table below shows the Inputs, Tools and Techniques, and Outputs of the Create Work Breakdown Structure process.



## INPUTS Project Scope Statement Requirements documentation Organizational process assets CREATE WBS PROCESS TOOLS & TECHNIQUES Decomposition WBS WBS dictionary Scope baseline Project document updates





### Validate Scope

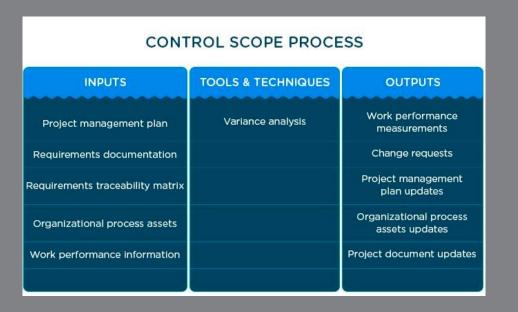
• The Validate Scope process focuses mainly on customer acceptance. It is when the project customer formally accepts all the project deliverables. This process occurs at the end of each phase. During the process, the customer gives feedback on the work that was performed.



VALIDATE SCOPE PROCESS			
INPUTS	TOOLS & TECHNIQUES	OUTPUTS	
Project management plan	Inspection	Accepted Deliverables	
Requirements documentation		Change requests	
Requirements traceability matrix		Project document updates	
Validated deliverables			



### Control Scope





- Control Scope is the last process group of project Scope Management. The Control Scope process involves monitoring the status of the project and managing changes to the scope.
- This process involves assessing additional requirements from the customer or proactively overlooking the project scope. Managers measure the work product against the scope baseline to ensure that the project stays on track, and all requested changes & recommended corrective or preventive actions are processed through the integrated change control process.

### Project Scope Management Tips

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- Ambiguity
- Ambiguity in scope often leads to unnecessary work and confusion. To avoid this, the scope needs to be clearly defined and precise.
- Incomplete Definition
- Incomplete scopes lead to schedule slips, which lead to cost overruns. To avoid this, the scope needs to be complete and accurate.
- Transience
- Transient scopes lead to scope creep—the primary cause of late deliveries and "never-ending" projects. To avoid this, the scope document needs to be finalized and remain unaltered for the duration of the project.
- Uncollaborative Scope
- A scope that is not collaboratively prepared causes misinterpretations in requirements and designs. To avoid this, the scope document should be shared with all stakeholders at every step of the scope definition process.

### SAMPLE QUESTION 10.

What is the term for the 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?

A. Idea/mind mapping

- C. Affinity Diagram
- B. Multicriteria Decision Analysis
- D. Both B& C

