

The background of the slide is a close-up, high-angle photograph of a brass compass rose. The compass is circular with intricate markings and a central needle. A shadow of the needle is cast across the face of the compass, pointing towards the upper right. The lighting is warm, highlighting the metallic texture of the brass.

Project Scope Management

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Project Scope Management

The background of the slide features a large, semi-transparent globe in the upper right corner and a compass rose in the lower right corner. The globe shows latitude and longitude lines. The compass rose has four cardinal directions marked with arrows. The overall background is a warm, golden-brown color with a subtle texture.

Agenda

- Introduction
- Definitions
- Processes, input, tools, techniques, outputs
- Summary

Process: Scope Planning

Project Stakeholder Relationships

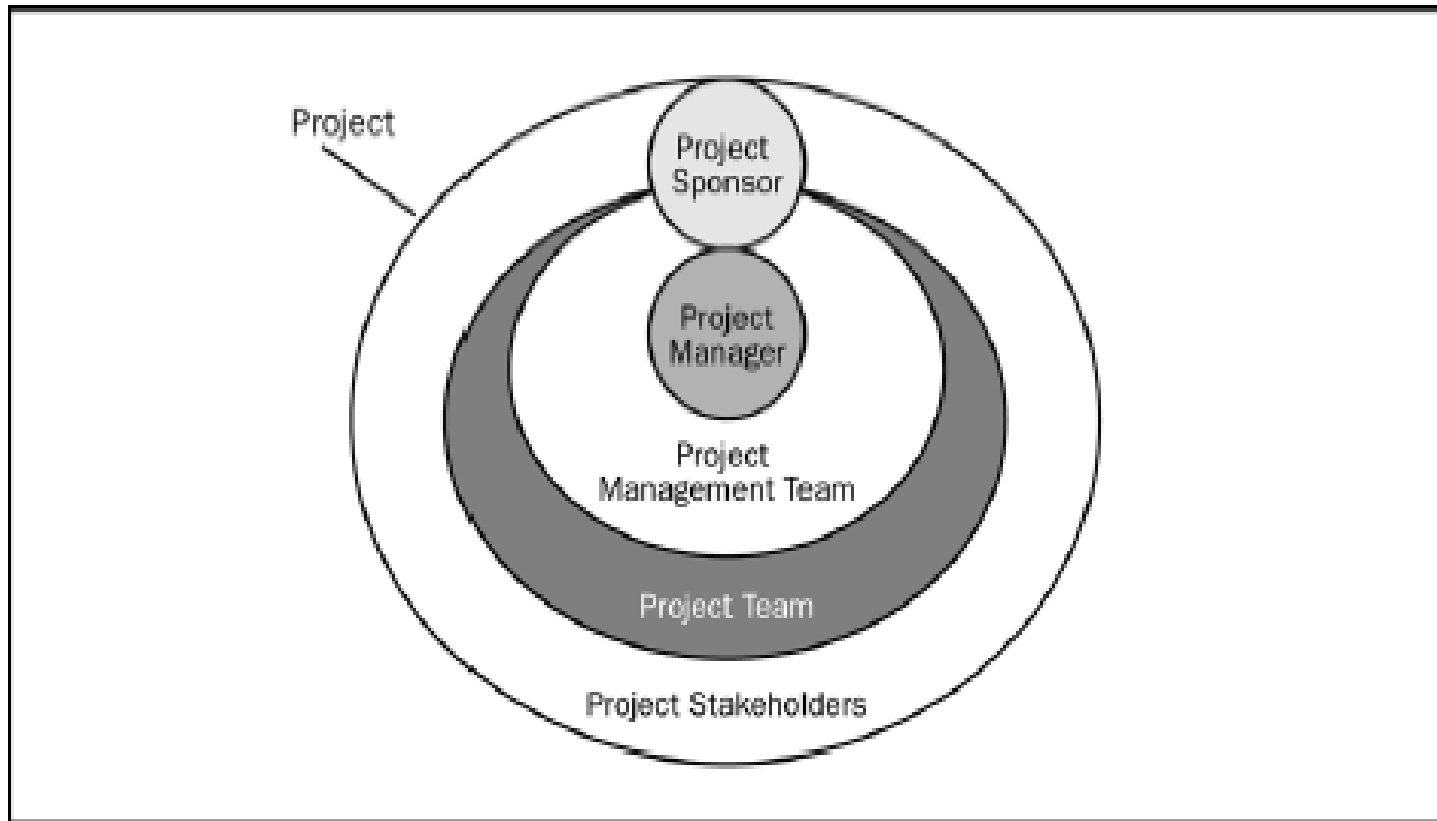


Figure 2-5. The Relationship Between Stakeholders and the Project

Customer Satisfaction

“Successful projects have satisfied customers. Customer satisfaction requires setting clear expectations, managing those expectations, and meeting those expectations.”

-Principles of Project Management

“Unquantifiable expectations, such as customer satisfaction, are subjective, and entail a high risk of being successfully accomplished.”

-PMBOKGuide, Third Edition

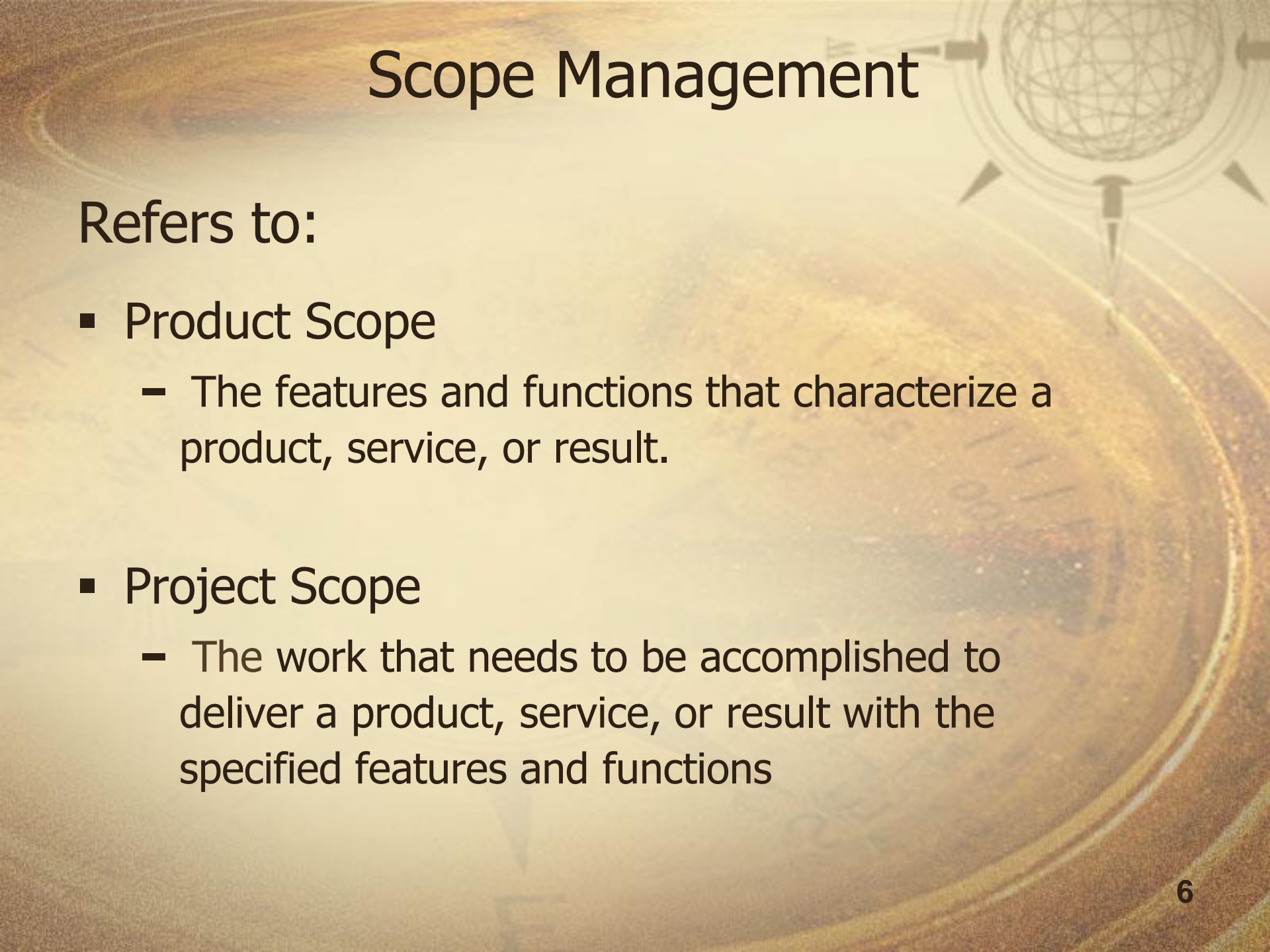
Scope Management

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.

It includes:

- Scope Planning (Collect Reqs in PMBOK 4th Edition)
- Scope Definition
- Create WBS
- Scope Verification
- Scope Control

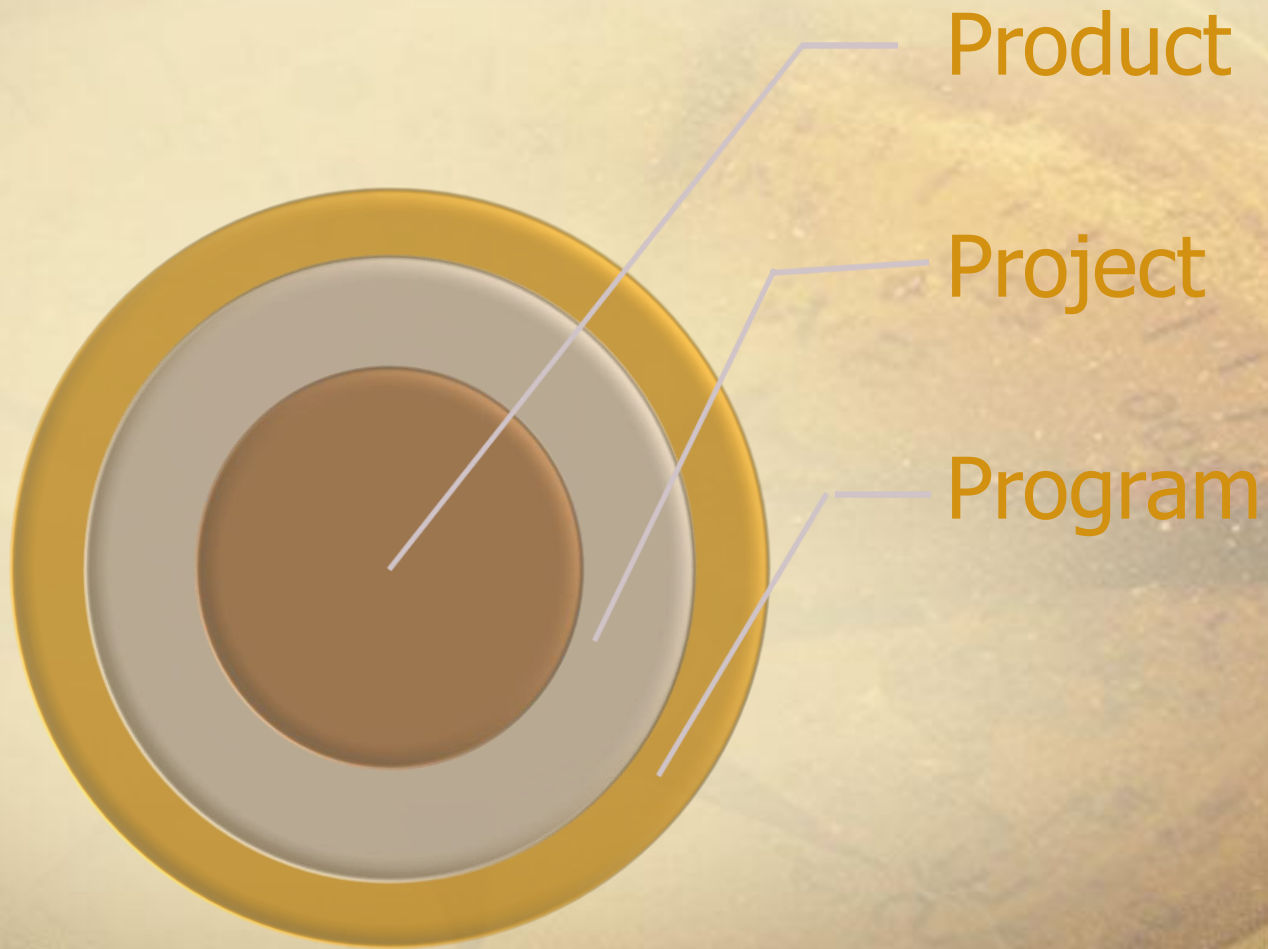
Scope Management



Refers to:

- Product Scope
 - The features and functions that characterize a product, service, or result.
- Project Scope
 - The work that needs to be accomplished to deliver a product, service, or result with the specified features and functions

Scope



Scope Boundaries

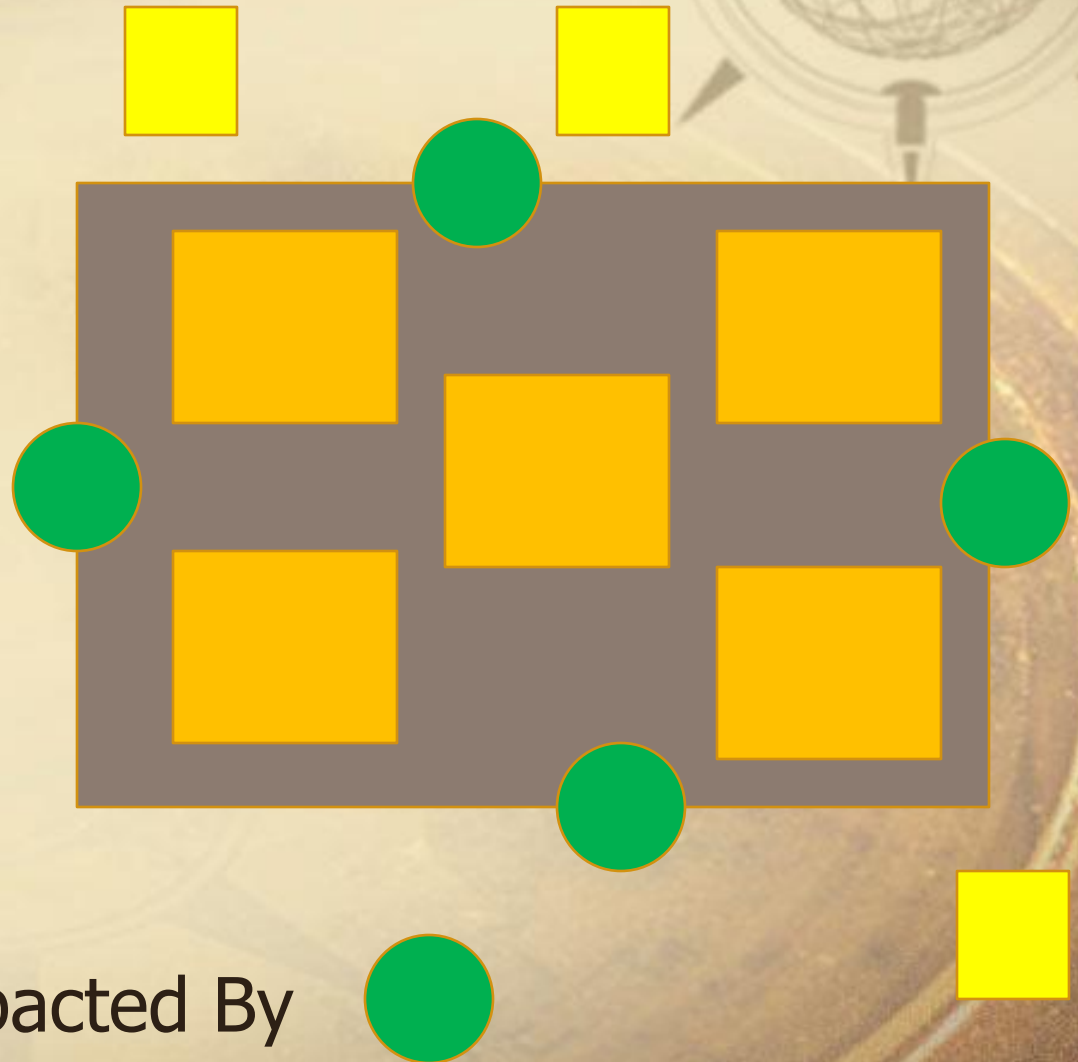
- In Scope



- Out of Scope

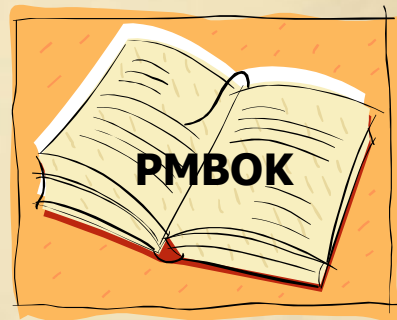


- Influenced or Impacted By



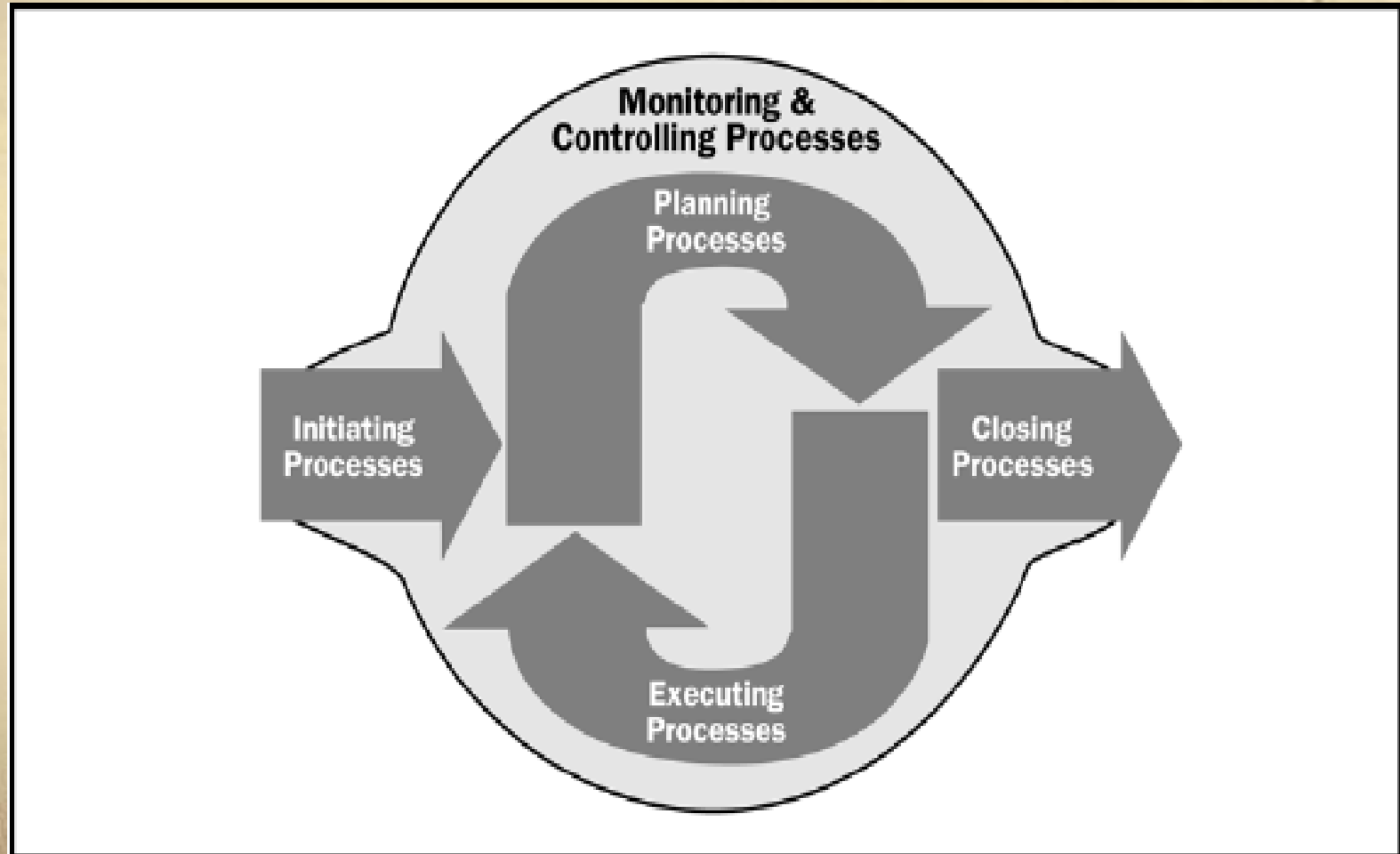
Project Scope Management

Let's look at how other processes provide input to Project Scope Management and in turn, how Project Scope Management provides inputs to other processes.



Project Process Flow

Project Management Process Groups



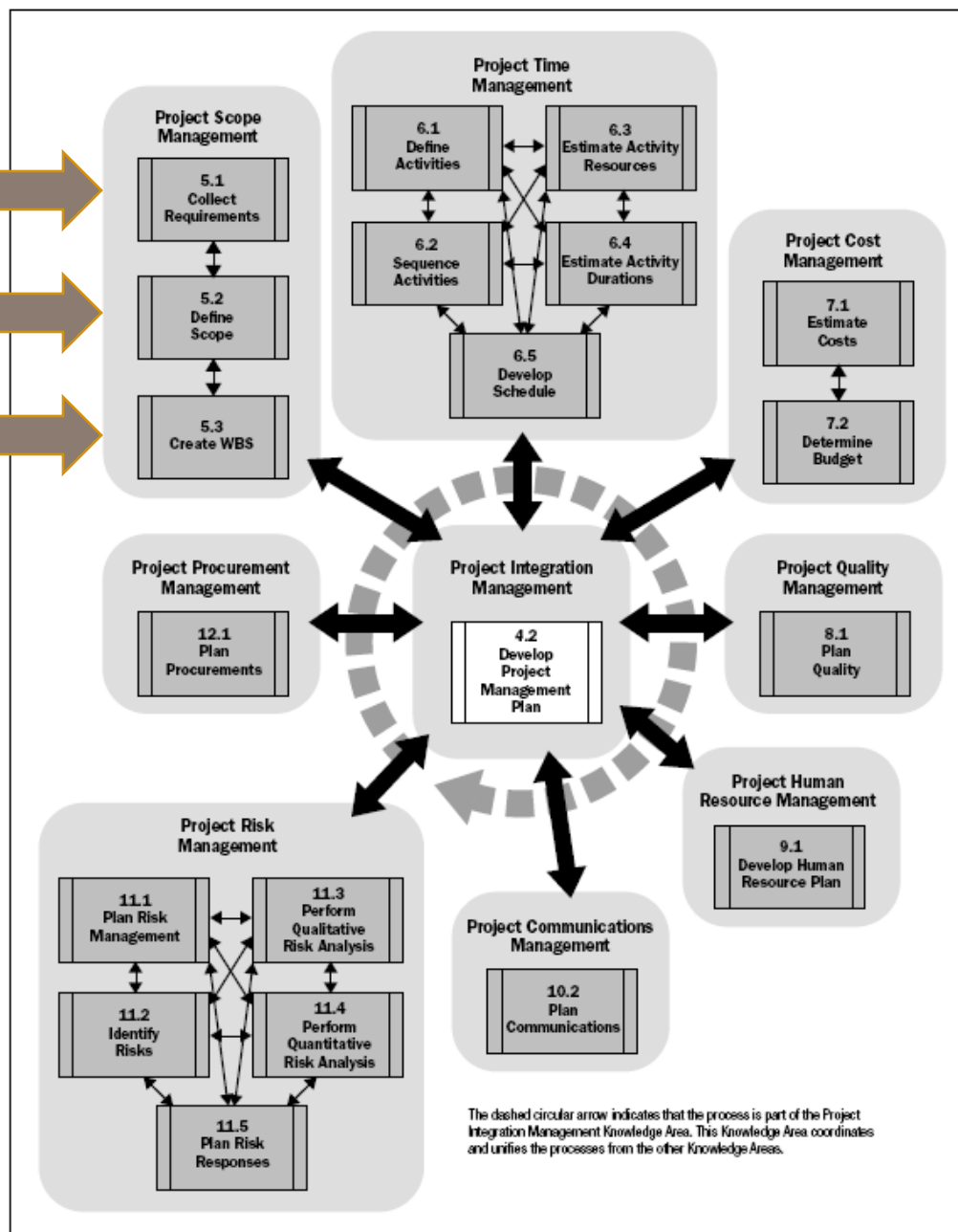


Figure 3-8. Planning Process Group

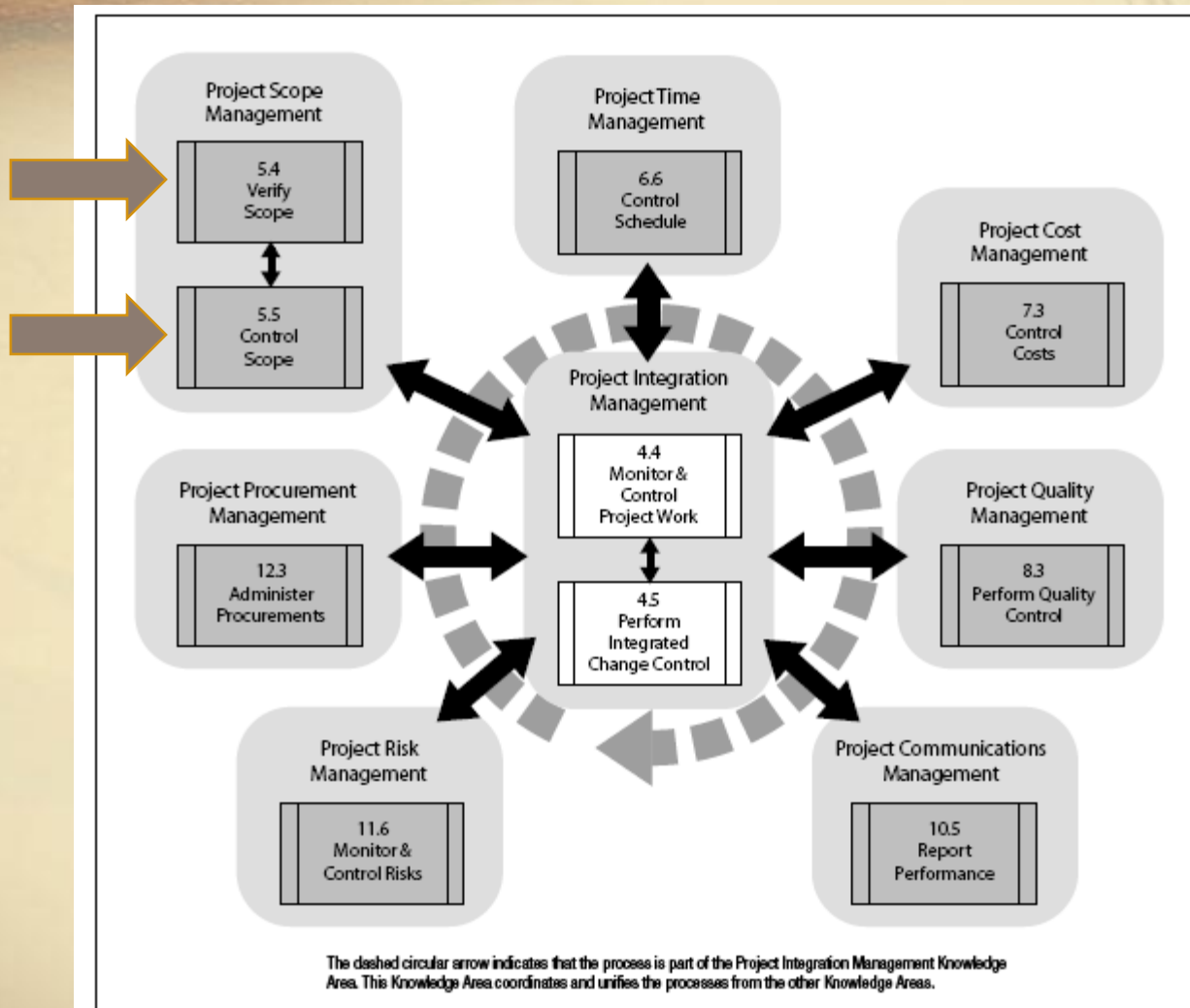
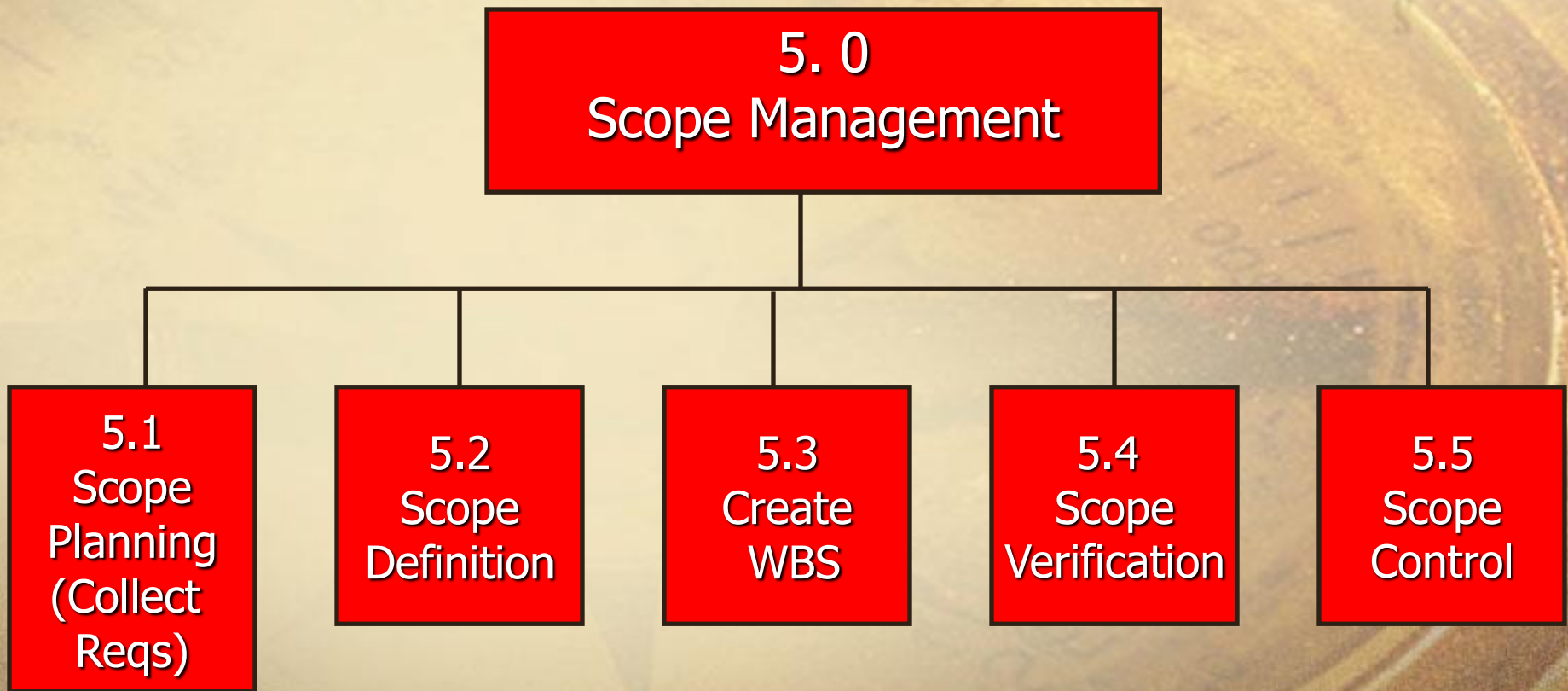


Figure 3-38. Monitoring & Controlling Process Group

Scope Management ...

the Whole Process



Old Scope Planning Process (Now Part of Proj Mgmt Plan)

Inputs

- .1 Enterprise environmental factors
- .2 Organizational process assets
- .3 Project charter
- .4 Preliminary project scope statement
- .5 Project management plan

Tools & Techniques

- .1 Expert judgment
- .2 Templates, forms, standards

Outputs

- .1 Project scope management plan

PMBOK® Processes and Outputs

- Every knowledge area has defined processes
- A process is defined by its inputs, tools and techniques, and outputs
- This presentation focuses on processes

Inputs + Tools and Techniques = Outputs

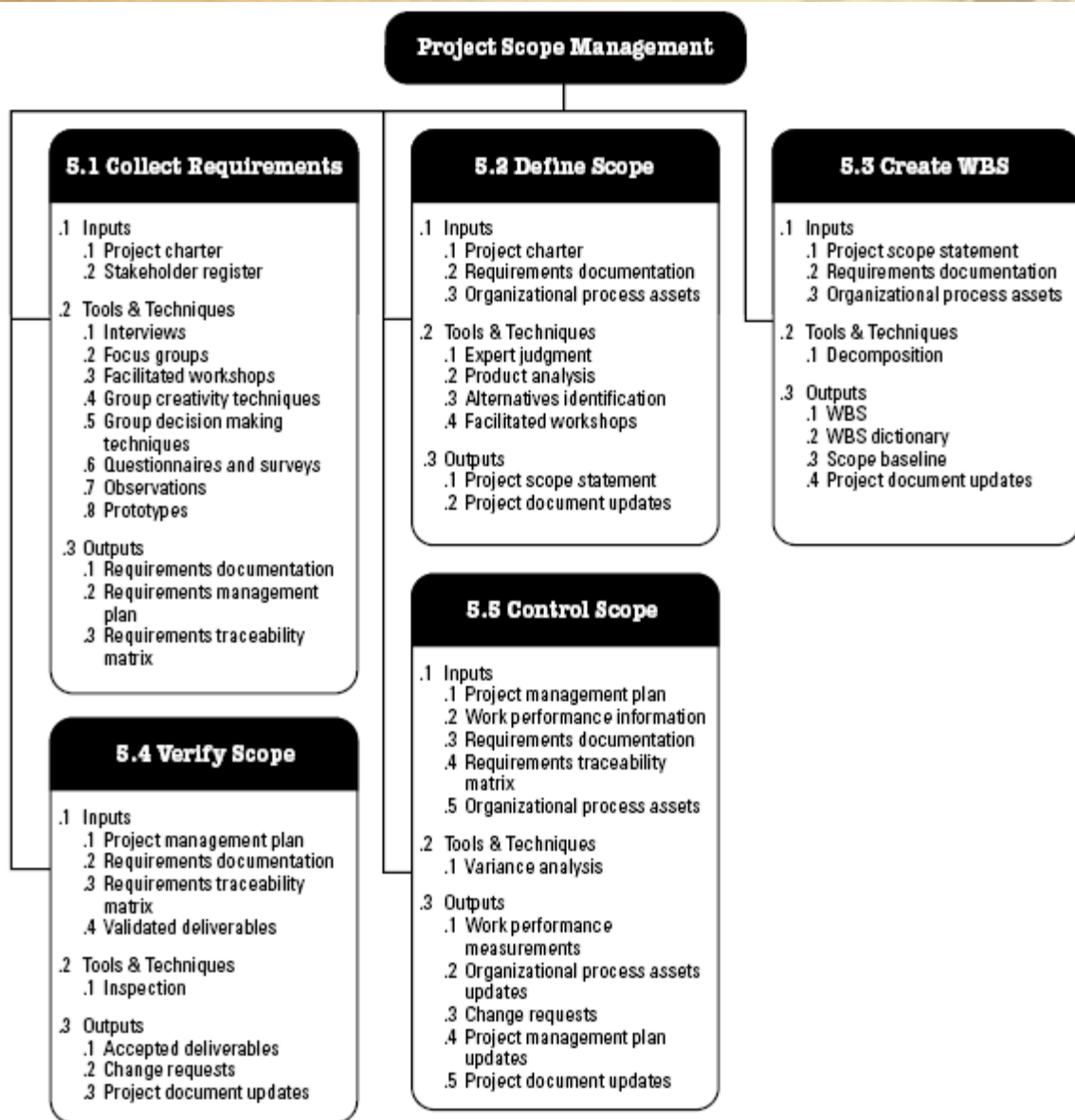


Figure 5-1. Project Scope Management: Inputs, Tools & Techniques, and Outputs

Collect Requirements



Figure 5-2. Collect Requirements: Inputs, Tools & Techniques, and Outputs

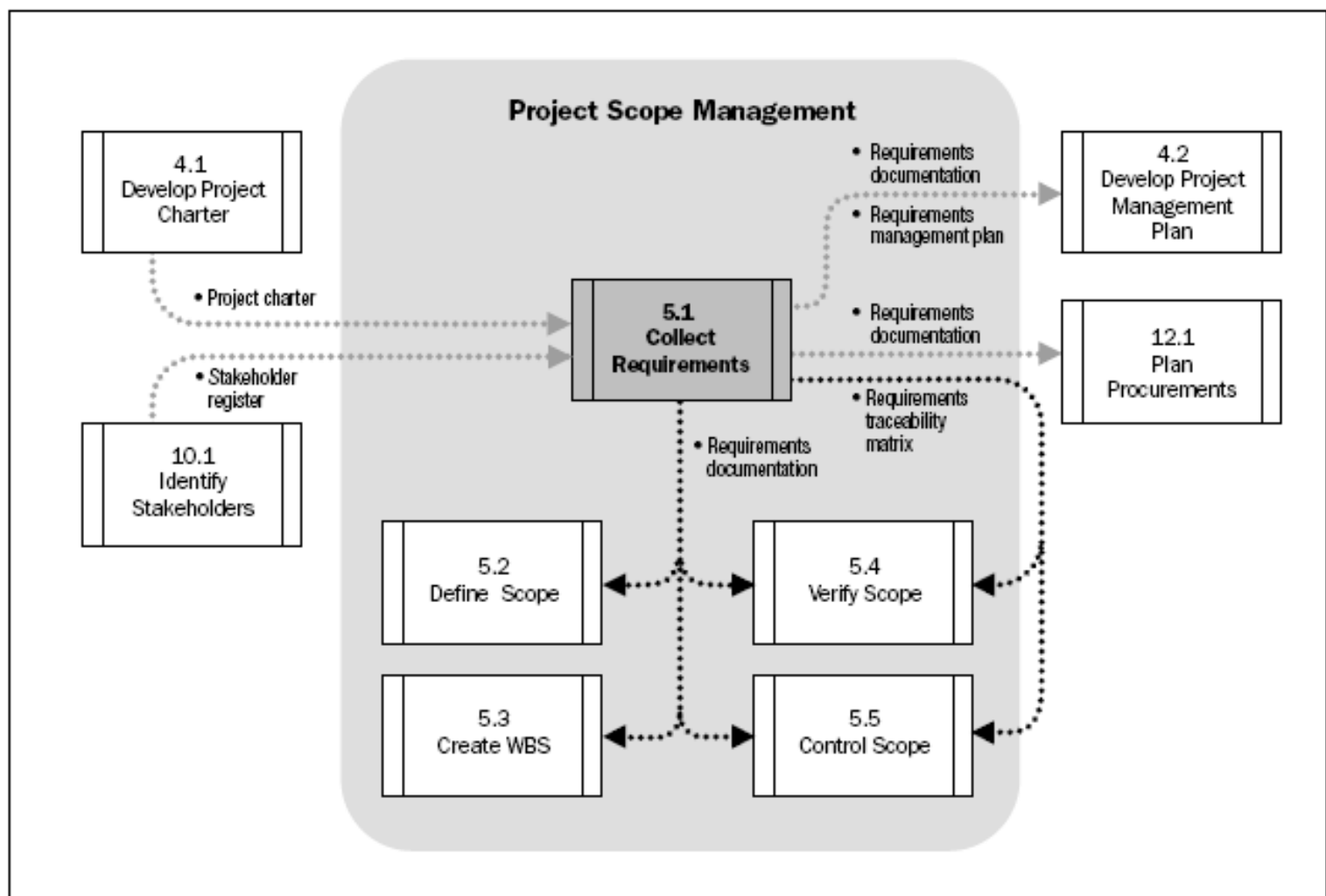


Figure 5-3. Collect Requirements Data Flow Diagram

Scope Definition Process



Figure 5-4. Define Scope: Inputs, Tools & Techniques, and Outputs

Why Scope Definition?

“When there is poor scope definition, final project costs can be expected to be higher because of the inevitable changes which disrupt rhythm, cause rework, increase project time, and lower the productivity and morale of the workforce.”

- Scope Definition and Control, Publication 6-2. 1986 (July). Austin, TX: Construction Industry Institute, p.45 [as cited in PMBOKGuide2000, p.57]

Scope Definition Defined

- The process of developing a detailed scope statement as the basis for future project decisions.
 - Builds upon the information gathered during Project Initiation
 - Stakeholder needs, wants, and expectations are converted into requirements
 - Assumptions and constraints are analyzed

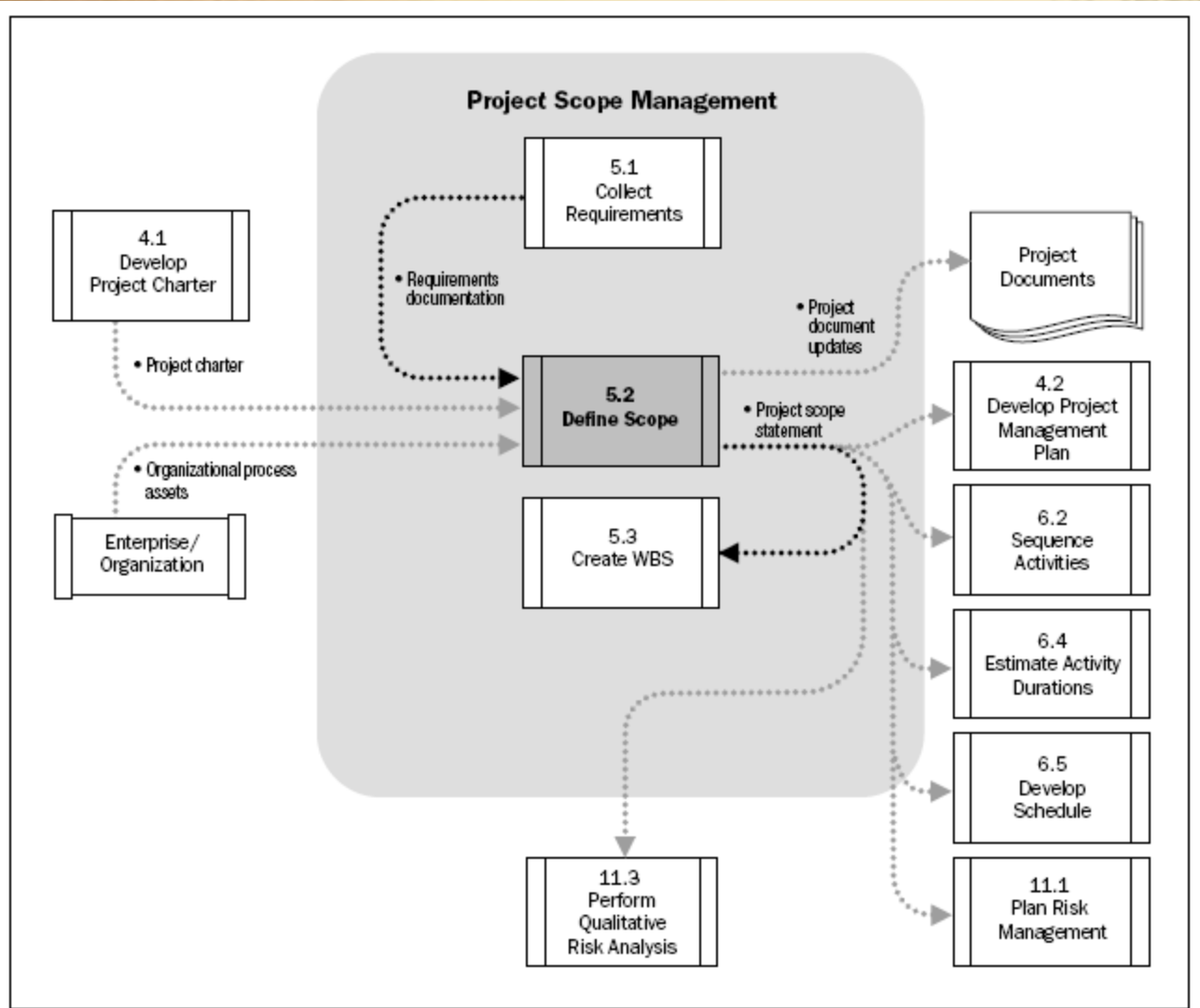
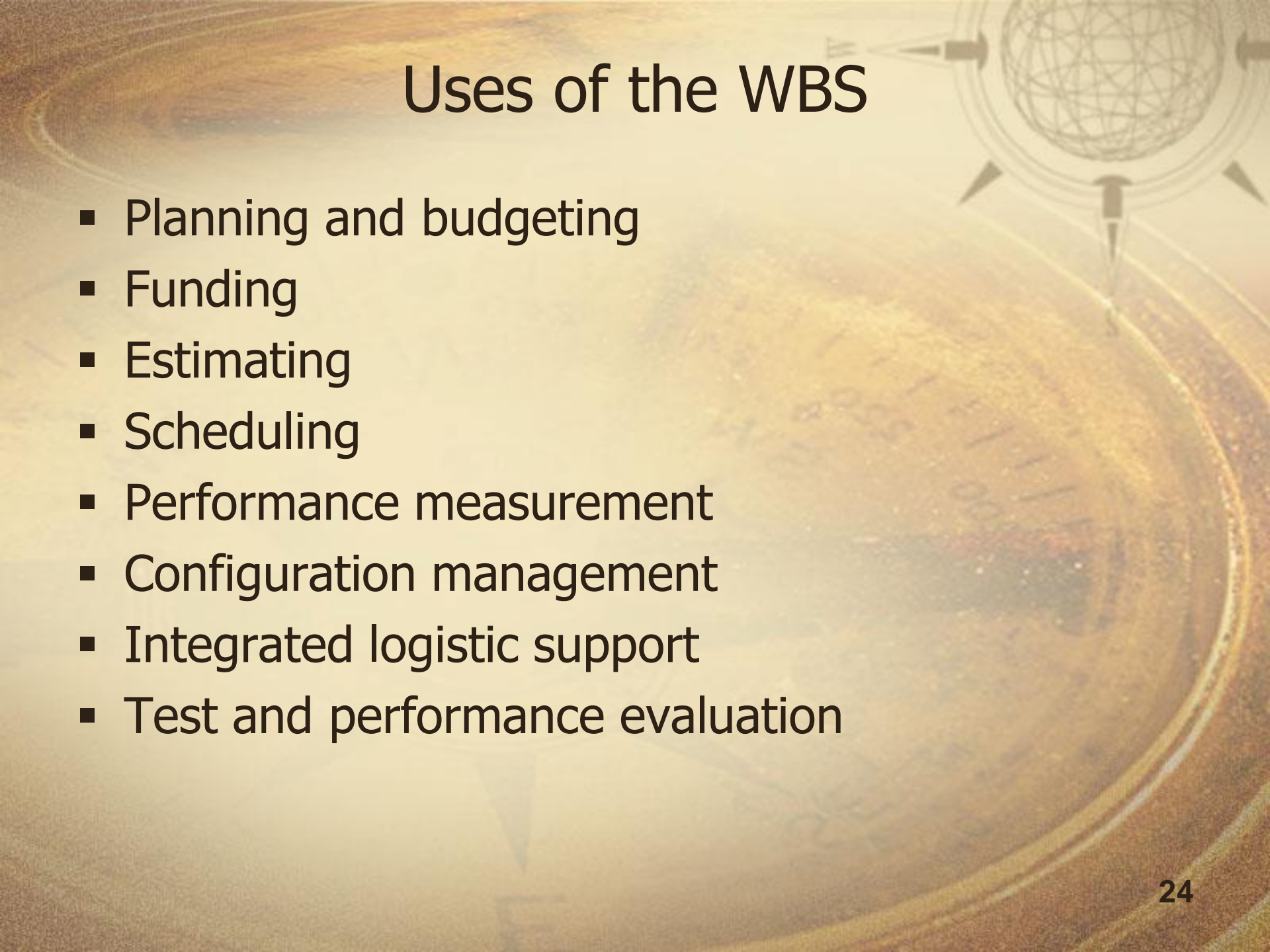


Figure 5-5. Define Scope Data Flow Diagram

Benefits of Using a WBS

- Builds project team
- Provides a framework to identify projects separately from organizations, accounting systems, funding sources, etc.
- Clarifies responsibilities
- Focuses attention on project objectives
- Forces detailed planning and documentation
- Identifies specific work packages for estimating and assigning work

Uses of the WBS



- Planning and budgeting
- Funding
- Estimating
- Scheduling
- Performance measurement
- Configuration management
- Integrated logistic support
- Test and performance evaluation

Create WBS Defined

- Process of subdividing the major project deliverables and project work into smaller, more manageable components
- Work Breakdown Structure (WBS):
 - A deliverable-oriented “family tree” which organizes, defines and graphically displays the work to be performed
 - Has descending levels representing increasingly detailed definition of the project work
 - Relates elements of work to each other and end product
 - Organizes and defines total scope of the project

PMBOKGuide, Third Edition, p. 112

Create WBS Process

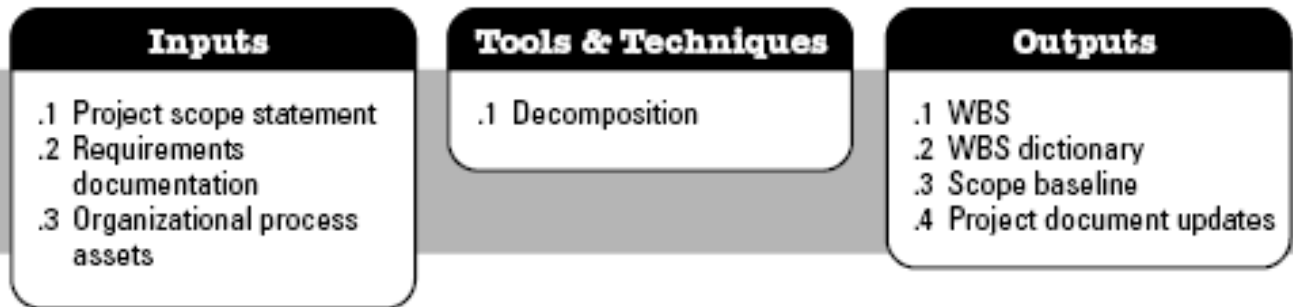


Figure 5-6. Create WBS: Inputs, Tools & Techniques, and Outputs

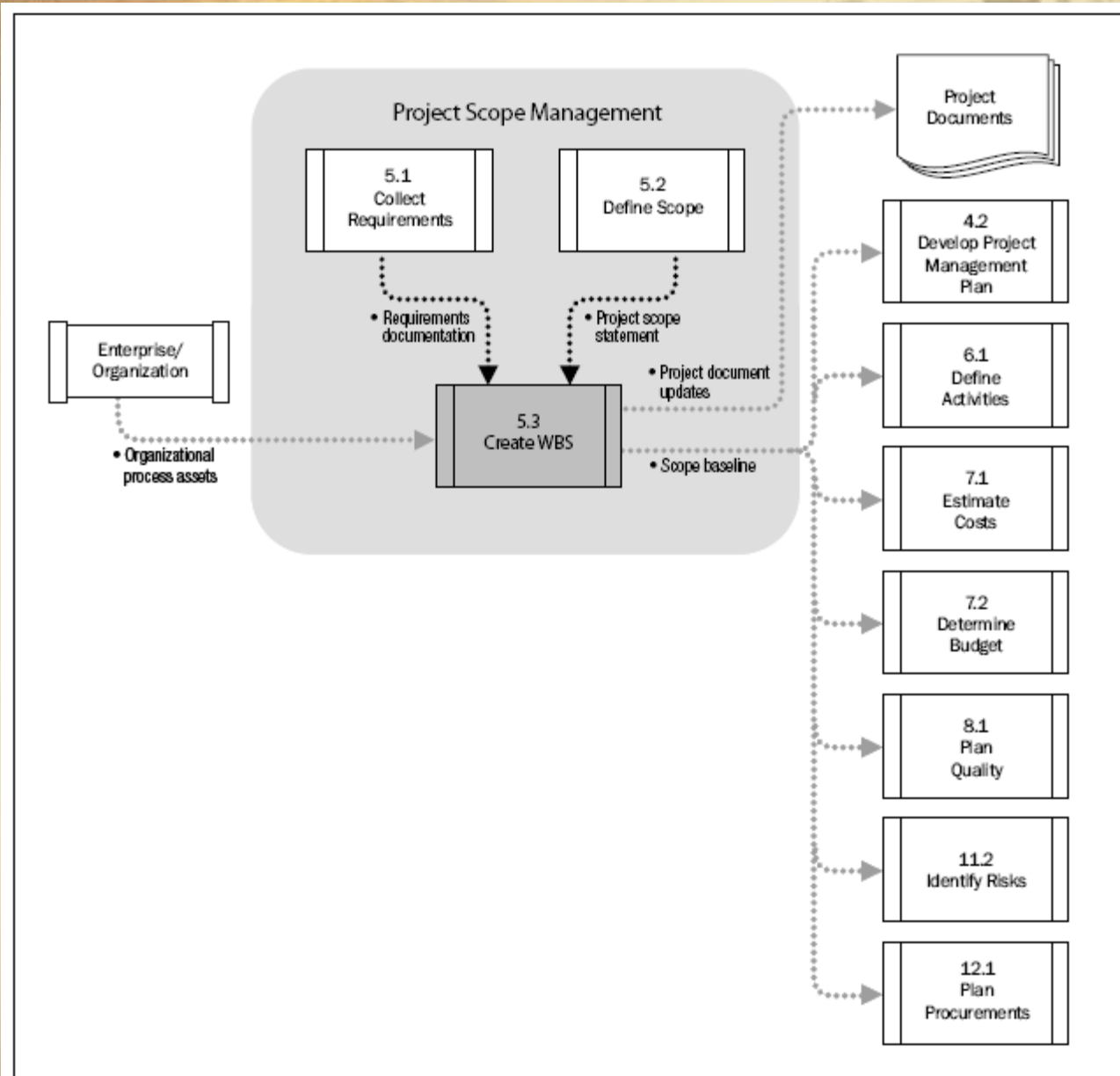


Figure 5-7. Create WBS Data Flow Diagram

Create WBS: Ts & Ts

- Decomposition: Definitions
 - Continuing process of subdividing deliverables into smaller components until work and deliverables are defined to work package level
 - Work Package is lowest level of WBS where cost and schedule can be reliably estimated

Create WBS: Ts & Ts



- **Decomposition: Activities**

- Identify the deliverables and related work
- Structure and organize the WBS
- Decompose upper WBS levels into lower level detailed components
- Develop and assign identification codes to the WBS components
- Verify that degree of decomposition of work is necessary and sufficient

Create WBS: Ts & Ts

■ Decomposition: Additional Considerations

- Meet with key project personnel
- Begin with brainstorming session of all major areas and phases, including project management
- Focus on “deliverables” (nouns)
- Consider each major phase separately; determine how to accomplish its deliverables
- Break down each phase into elements until staffing and budget resources can be assigned, monitored and controlled
- Separate deliverables by method of obtainment (e.g., produced, purchased, contracted, etc.)
- Level of detail should reflect monitoring requirement to facilitate dealing with changes
- Bottom level work packages should relate to top level work packages of subcontractors, and other related WBSs
- Include major reporting elements (e.g., milestones, reports, meetings, etc.)

Create WBS: Outputs



- **WBS Dictionary**
 - Companion document to WBS
 - Contains following for each WBS component:
 - Code of Account ID
 - Statement of Work
 - Responsible Organization
 - List of schedule milestones
 - Interdependencies
- **Scope Baseline**
 - Represented by Project Scope Statement, WBS, and WBS Dictionary

Scope Verification Process

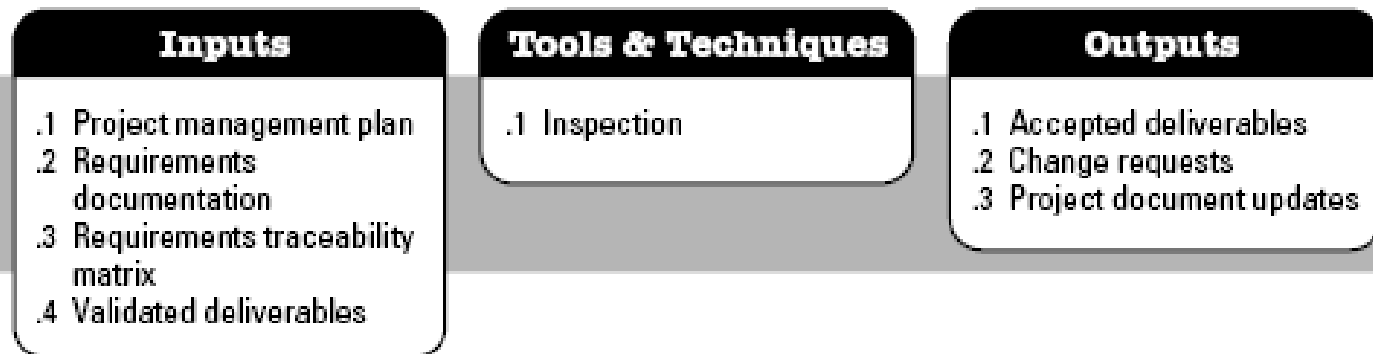


Figure 5-11. Verify Scope: Inputs, Tools & Techniques, and Outputs

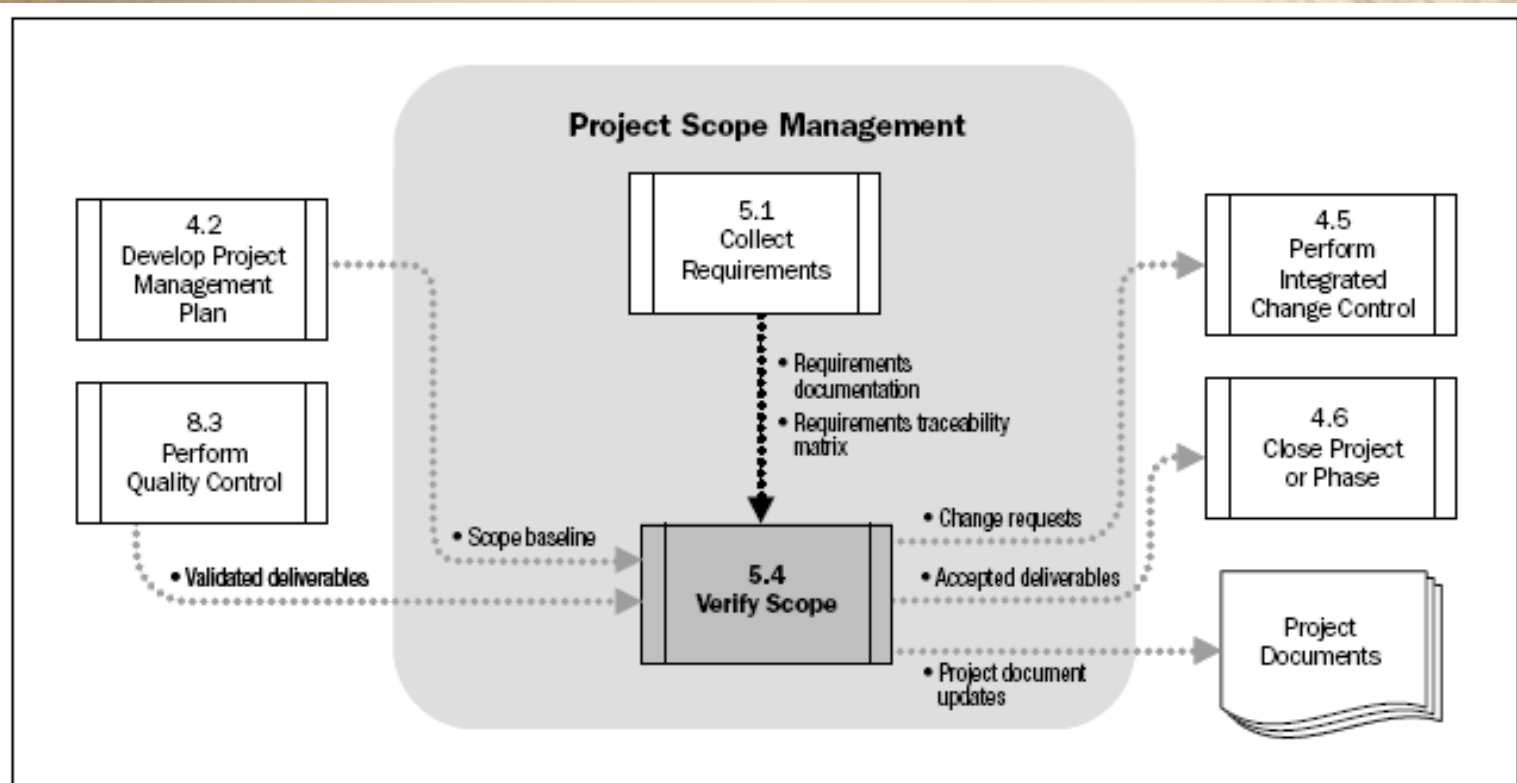


Figure 5-12. Verify Scope Data Flow Diagram

Scope Control Process

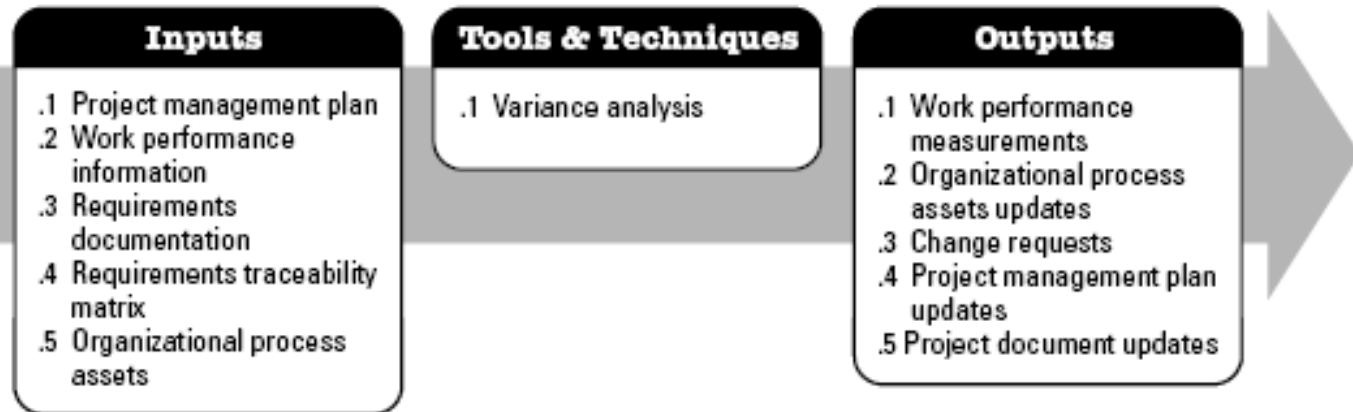


Figure 5-13. Control Scope: Inputs, Tools & Techniques, and Outputs

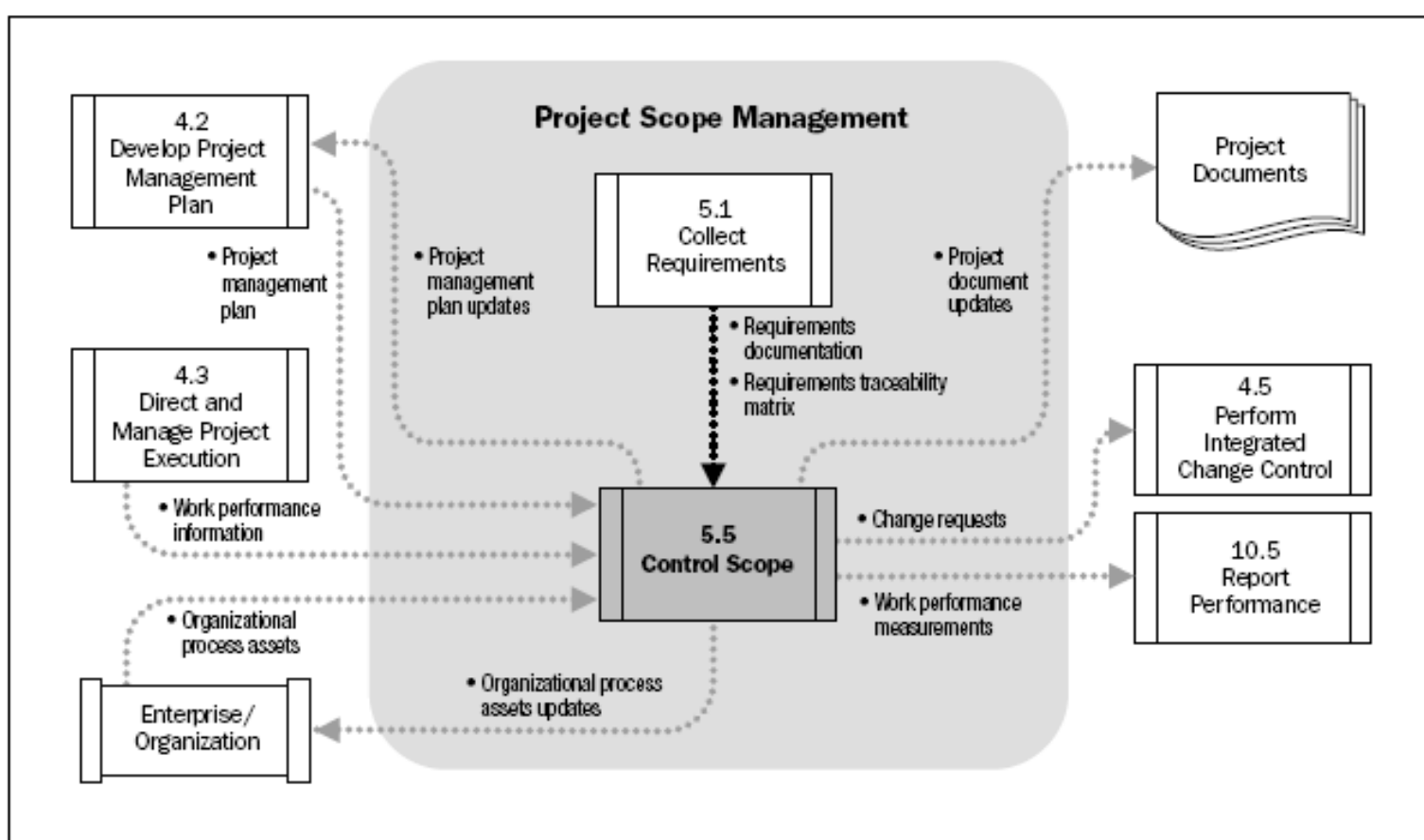


Figure 5-14. Control Scope Data Flow Diagram

Scope Control: Outputs

- **Project Scope Statement (Updates)**
 - Revised and reissued to reflect approved changes
 - Becomes new project scope baseline
- **WBS (Updates)**
 - Revised and reissued to reflect approved changes
- **WBS Dictionary (Updates)**
 - Revised and reissued to reflect approved changes
- **Scope Baseline (Updates)**
 - Comprised of above three items
- **Requested Changes**
 - Processes through ICC process

Scope Control: Outputs

- **Recommended Corrective Action**
 - To bring expected future performance in line with Project Management Plan and Project Scope Statement
- **Organizational Process Assets (Updates)**
 - Lessons learned
 - Causes of variances and reasoning behind corrective actions chosen
 - Updates to historical database
- **Project Management Plan (Updates)**
 - Approved change requests result in changes to corresponding component documents, cost baselines, and schedule baselines

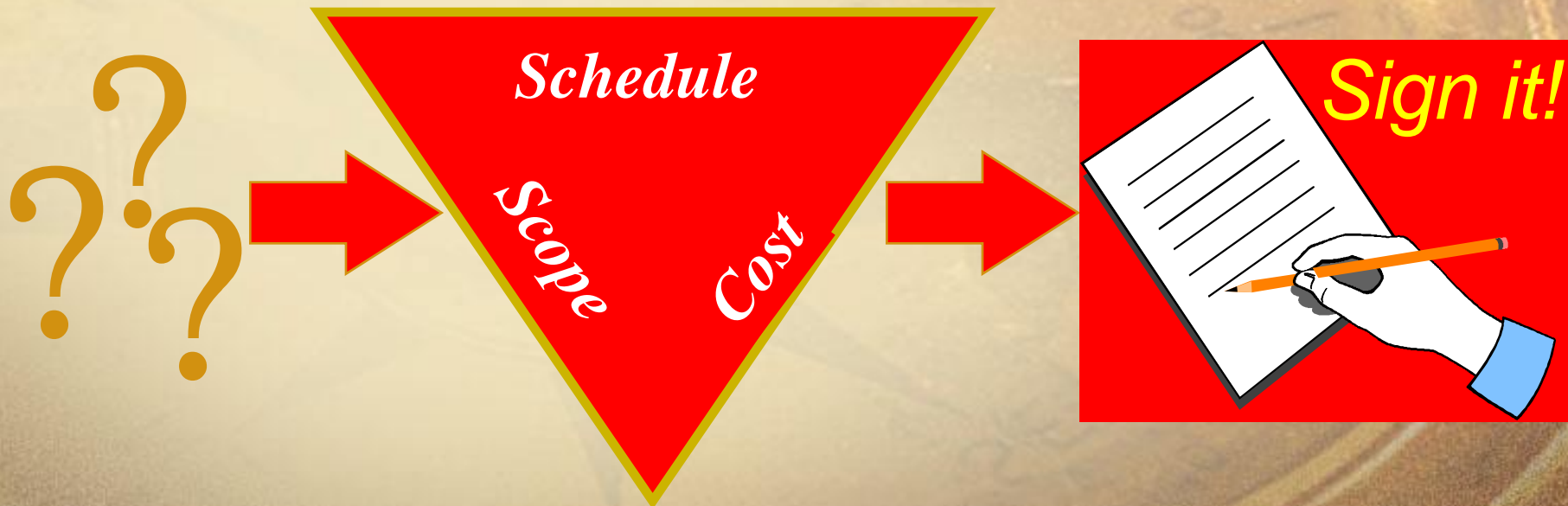
Scope Management Summary (1 of 3)

Manage expectations

Identify
Change

Evaluate
Change

Update
Documentation



Scope Management Summary (2 of 3)

- Identify change using Work Breakdown Structure
- Evaluate the impact on cost, schedule, resources, product quality
- Write it down!
- Customer and Project Board or Project Manager authorize change

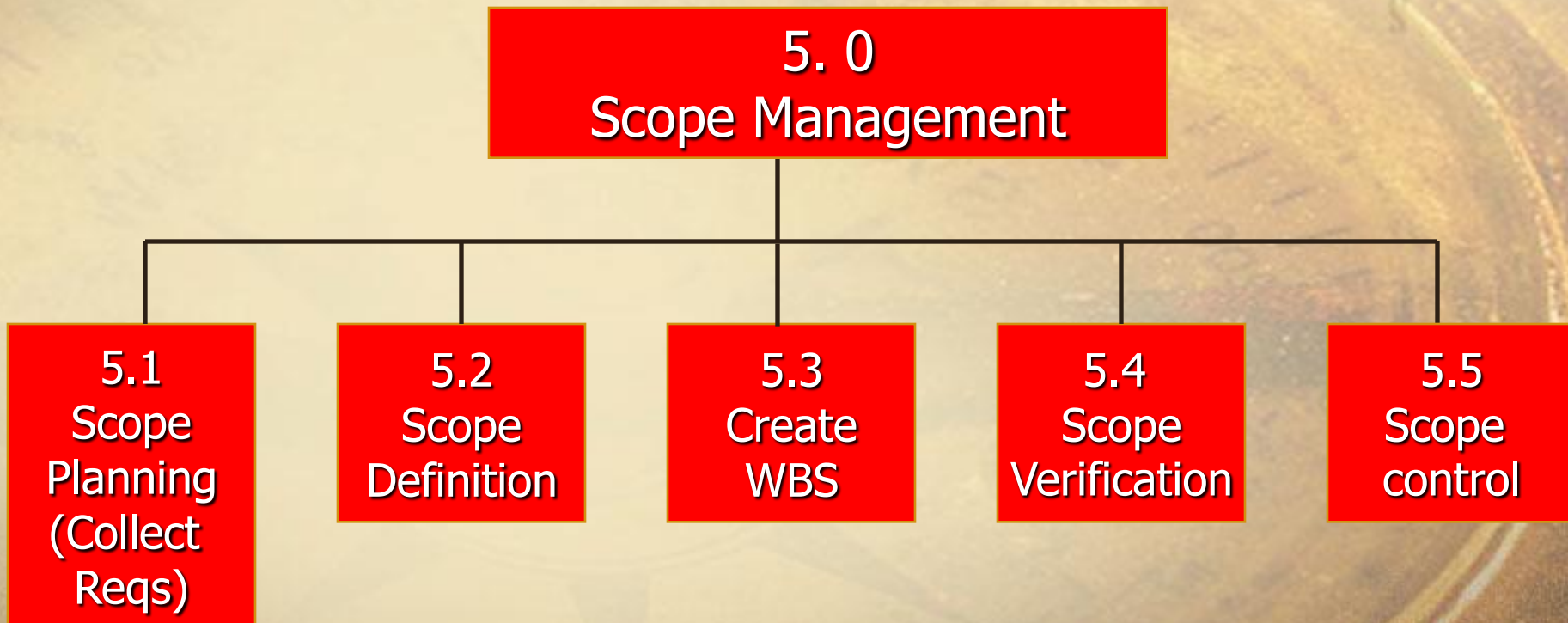
Scope Management Summary (3 of 3)

- Initiation, planning and definition each refine project scope
- Successful scope management requires documentation
- Change control is a natural and necessary process
- All the scope management processes work together to create satisfied stakeholders



Project Scope Management ...

the Whole Process



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Project Scope Management

Summary and Questions