



# Project Scope Management

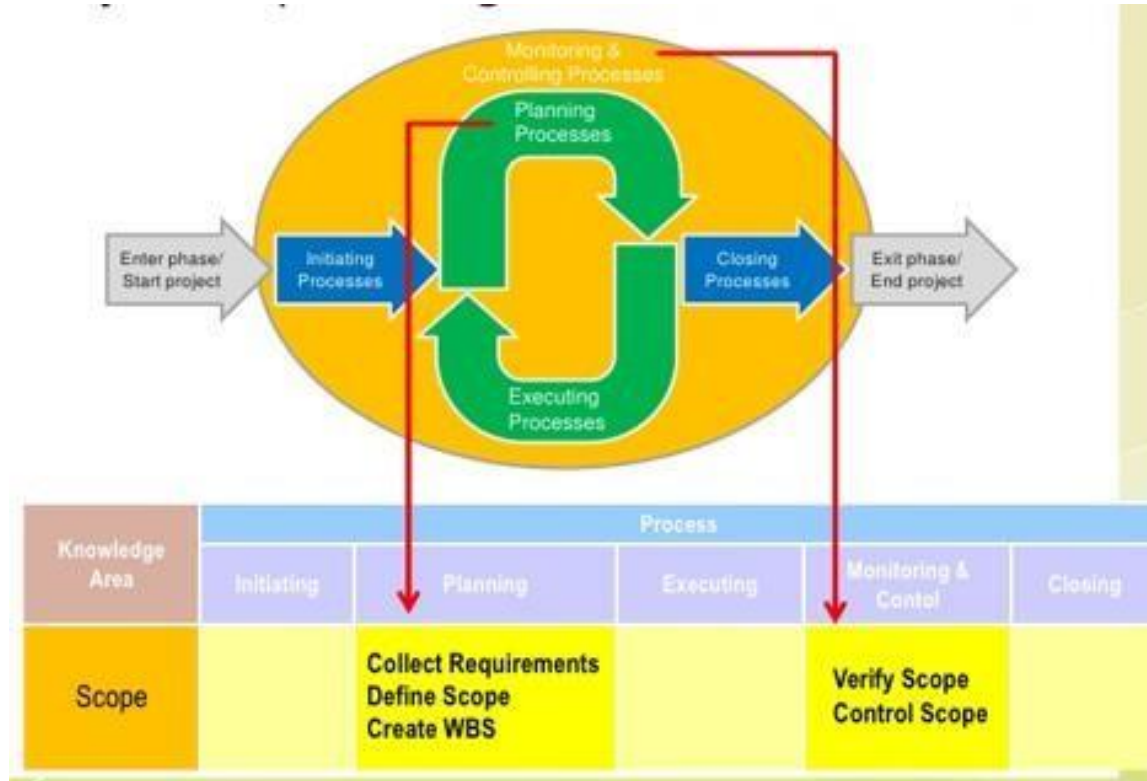
Dr. Dewi Puspaningtyas Faeni, MBA, MHt

# Project Integration Management Processes

Process Group	Integration Management Process	Major Output
<b>Initiating</b>	Developing the project charter	Project Charter
<b>Planning</b>	Developing the project management plan	Project Management Plan
<b>Executing</b>	Directing and managing project work	Deliverables, work performance info, change requests
<b>Monitoring and Controlling</b>	(1) Monitor/Control Project Work (2) Perform Integrated Change Control	(1) Change Requests (2) Status updates
<b>Closing</b>	Close Project/Phase	Product Transition

# What is Project Scope Management?

- **Scope** refers to *all* the work involved in creating the products of the project and the processes used to create them



# Project Scope Management Processes

Process Group	Integration Management Process	Major Output
<b>Planning</b>	P1: Plan Scope Management	Scope Mgmt Plan Requirement Mgmt Plan
	P2: Collect Requirements	Req. Documentation Req. Traceability Matrix
	P3: Define Scope	Project Scope Stmt Project Docs Update
	P4: Create WBS	Scope Baseline Project Docs Update
<b>Monitoring and Controlling</b>	MC1: Validate Scope	Accept Deliverables Change Requests Work Performance Info
	MC2: Control Scope	Change Requests Project Mgmt Plan Updates Org, Process Asset Updates

# Project Scope Management Processes

- **Planning scope**
- **Collecting requirements**
- **Defining scope**
- **Creating the WBS**
- **Validating scope**
- **Controlling scope**

## **Planning**

Process: **Plan scope management**

Outputs: Scope management plan, requirements management plan

Process: **Collect requirements**

Outputs: Requirements documentation, requirements traceability matrix

Process: **Define scope**

Outputs: Project scope statement, project documents updates

Process: **Create WBS**

Outputs: Scope baseline, project documents updates

## **Monitoring and Controlling**

Process: **Validate scope**

Outputs: Accepted deliverables, change requests, work performance information, project documents updates

Process: **Control scope**

Outputs: Work performance information, change requests, project management plan updates, project documents updates, organizational process assets updates

Project Start

Project Finish

# P1: Planning Scope Management

- The project team uses expert judgment and meetings to develop **two important outputs**
- The scope management plan is a subsidiary part of the project management plan

# P1: Scope Management Plan Contents

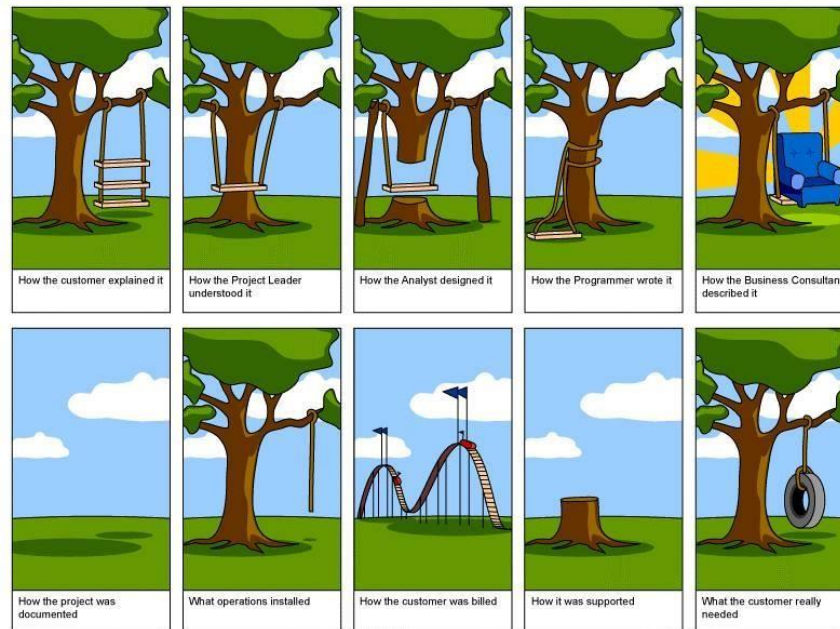
- How to prepare a detailed project scope statement
- How to create a WBS
- How to maintain and approve the WBS
- How to obtain formal acceptance of the completed project deliverables
- How to control requests for changes to the project scope

[Example A](#)

[Example B](#)

# P1: Requirements Management Plan

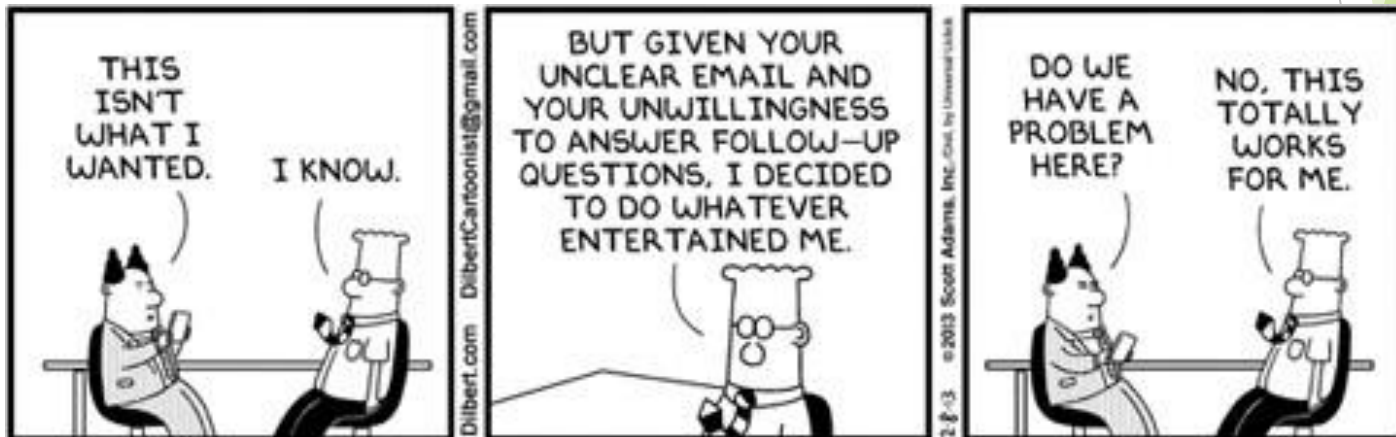
“conditions or capabilities that must be met by the project or present in the product, service, or result to satisfy an agreement or other formally imposed specification\*”



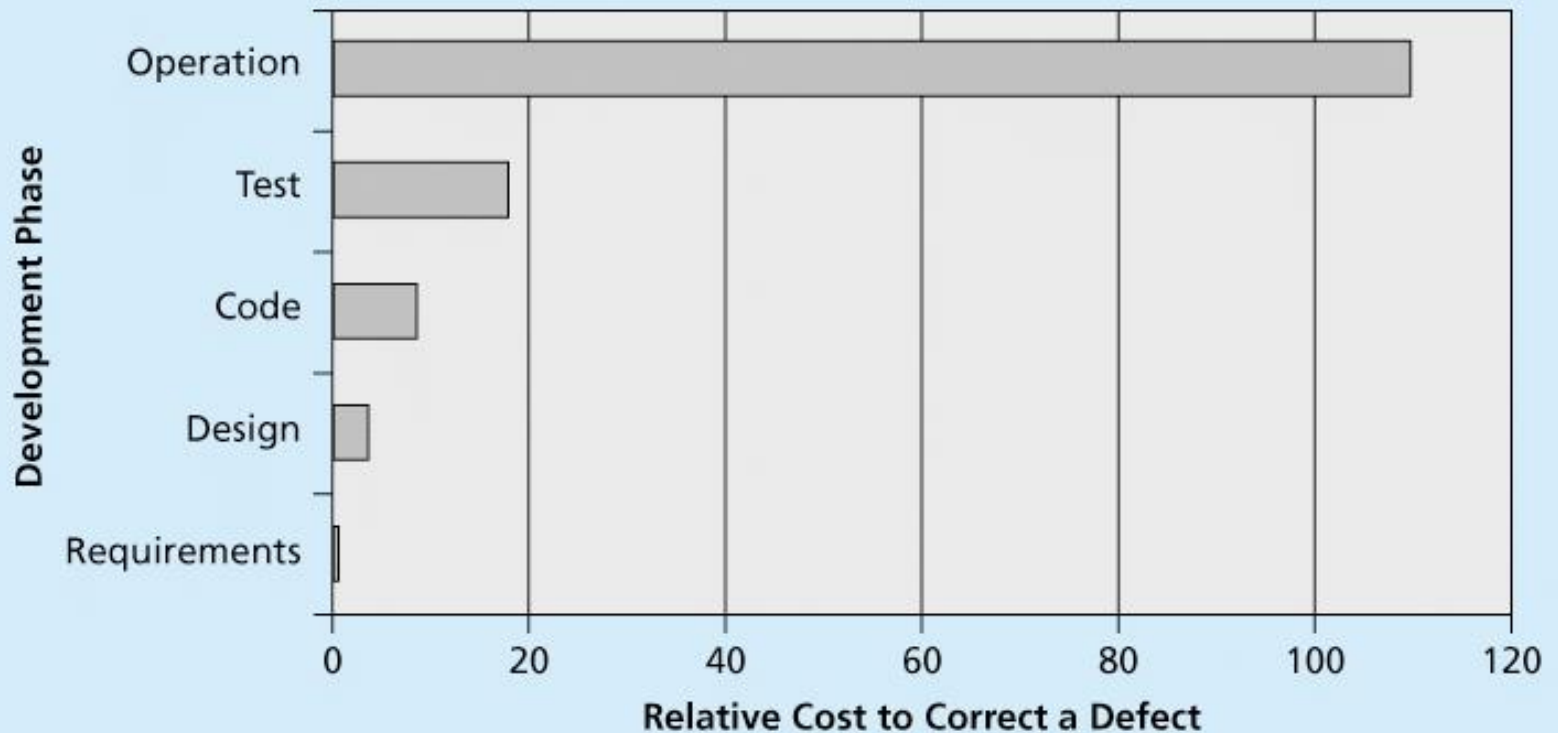


# P2: Collecting Requirements

- For some IT projects, it is helpful to divide requirements development into categories called elicitation, analysis, specification, and validation

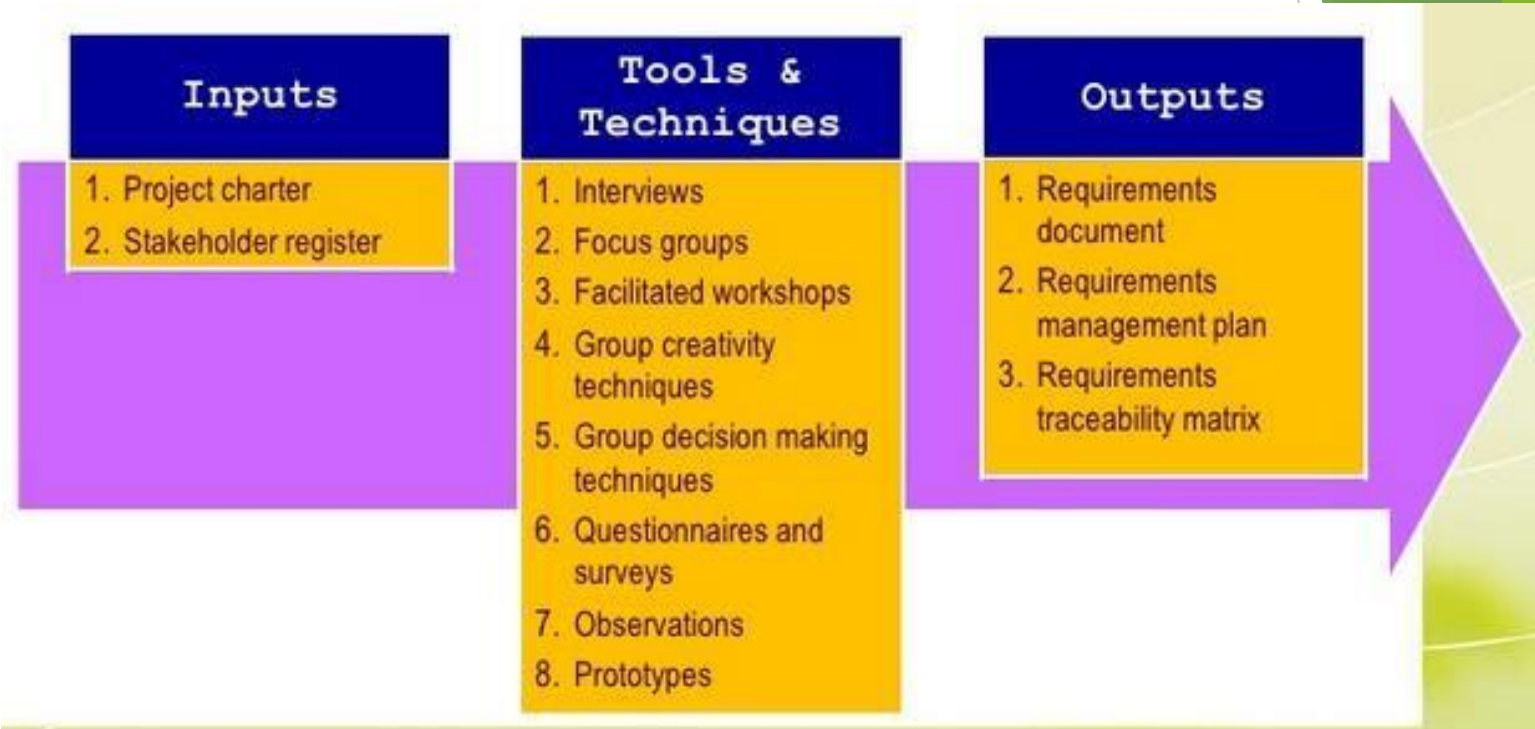


# Relative Cost to Correct a Software Requirement Defect



Source: Robert B. Grady, "An Economic Release Decision Model: Insights into Software Project Management." *Proceedings of the Applications of Software Measurement Conference* (Orange Park, FL: Software Quality Engineering, 1999), pp. 227-239.

# P2: Methods for Collecting Requirements



- **Interviewing**
- **Prototyping**
- **Benchmarking**

# Statistics on Requirements for Software Projects \*

- 88% of the software projects involved enhancing existing products instead of creating new ones
- 86% said that customer satisfaction was the most important metric for measuring the success of development projects
- 83% of software development teams still use MS Office applications (e.g. Word and Excel) as their main tools to communicate requirements

# PM Network: The Blame Game

- Surrender the pipe dream
- Always assume initial reqs. are wrong
- Accept that all requirements change
- Simplify your change management approach

## P2: Requirements Traceability Matrix

- A **requirements traceability matrix (RTM)** is a table that lists requirements, various attributes of each requirement, and the status of the requirements to ensure that all requirements are addressed

Requirement No.	Name	Category	Source	Status
R32	Laptop memory	Hardware	Project charter and corporate laptop specifications	Complete. Laptops ordered meet requirement by having 4GB of memory.

[Another Example](#)

# P3: Defining Scope

- **Project scope statements** should include at least:
  - a product scope description
  - product user acceptance criteria
  - detailed information on all project deliverables.





# Sample Project Charter (partial)

**Project Title:** Information Technology (IT) Upgrade Project

**Project Start Date:** March 4

**Projected Finish Date:** December 4

## **Key Schedule Milestones:**

- Inventory update completed April 15
- Hardware and software acquired August 1
- Installation completed October 1
- Testing completed November 15

**Budget Information:** Budgeted \$1,000,000 for hardware and software costs and \$500,000 for labor costs.

**Project Manager:** Kim Nguyen, (310) 555-2784, knguyen@course.com

**Project Objectives:** Upgrade hardware and software for all employees (approximately 2,000) within nine months based on new corporate standards. See attached sheet describing the new standards. Upgrades may affect servers as well as associated network hardware and software.

**Main Project Success Criteria:** The hardware, software, and network upgrades must meet all written specifications, be thoroughly tested, and be completed in nine months. Employee work disruptions will be minimal.

## **Approach:**

- Update the IT inventory database to determine upgrade needs
- Develop detailed cost estimate for project and report to CIO
- Issue a request for quote to obtain hardware and software
- Use internal staff as much as possible for planning, analysis, and installation