



Schedule and Cost Control

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Presentation for Instruction or
Meetings



Objectives

This presentation will discuss these critical points of project schedule and cost control components:

- What is schedule and cost control and why do we need it?
- How does the project relate to the business strategy?
- Requirements definition and development
- Project planning
- Project monitoring and control
- Project Closeout



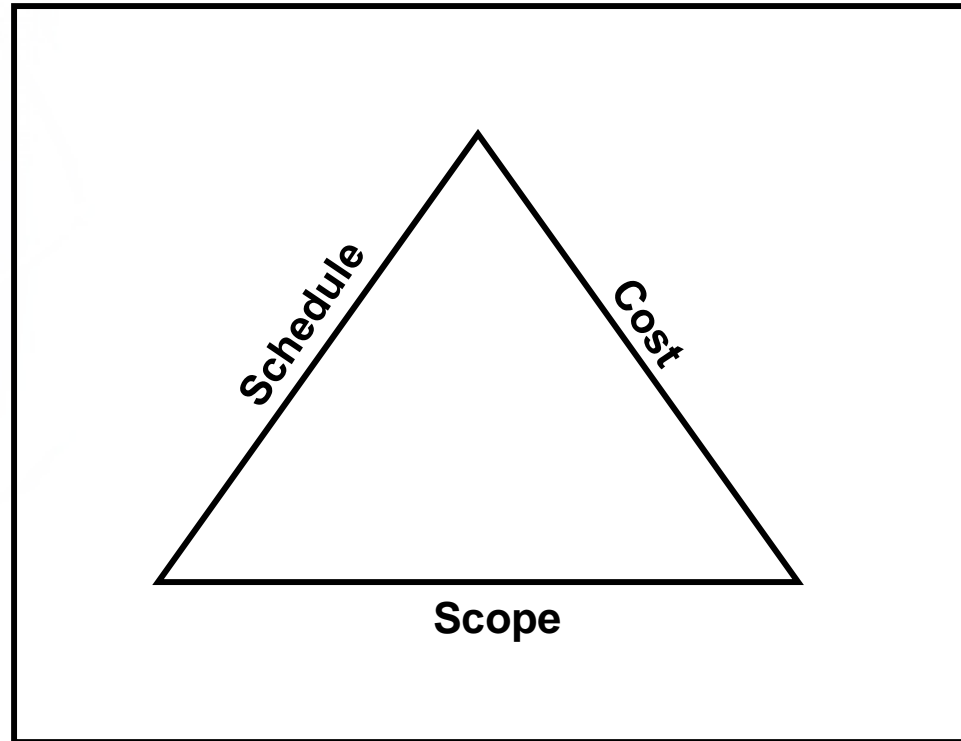
What is Schedule and Cost Control?

The practice of Schedule and Cost Control can be summarized by these four project management actions:

- Directing progress
- Directing actions
- Controlling results
- Conserving resources

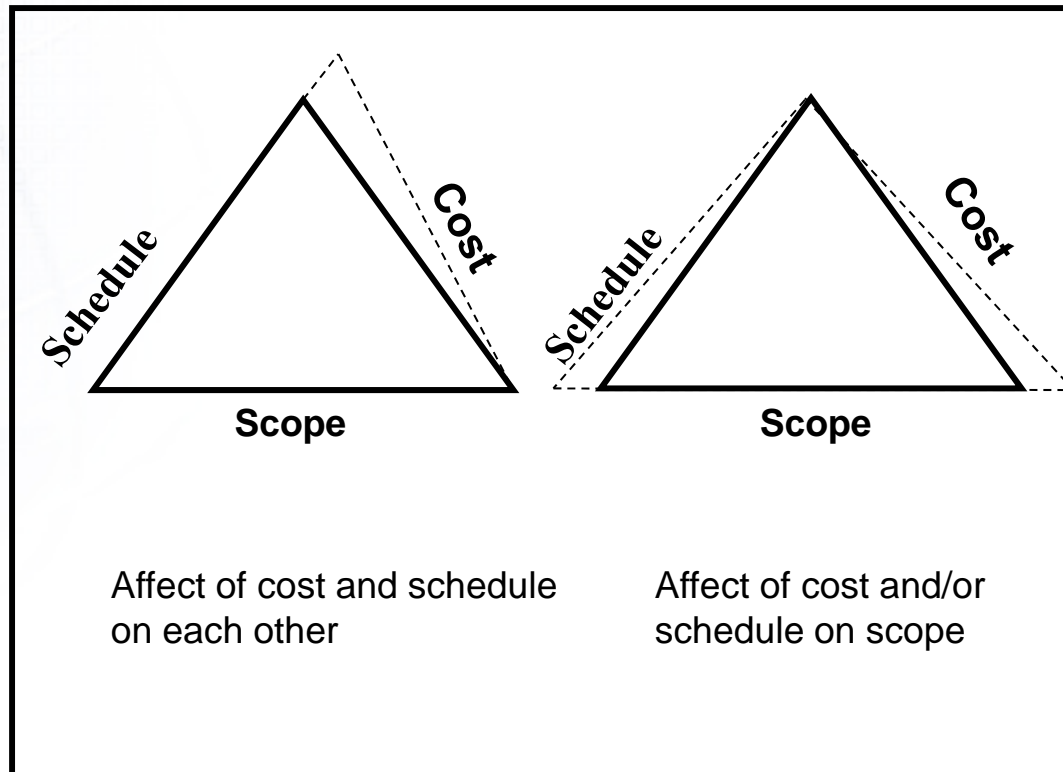


Why Schedule and Cost Control?



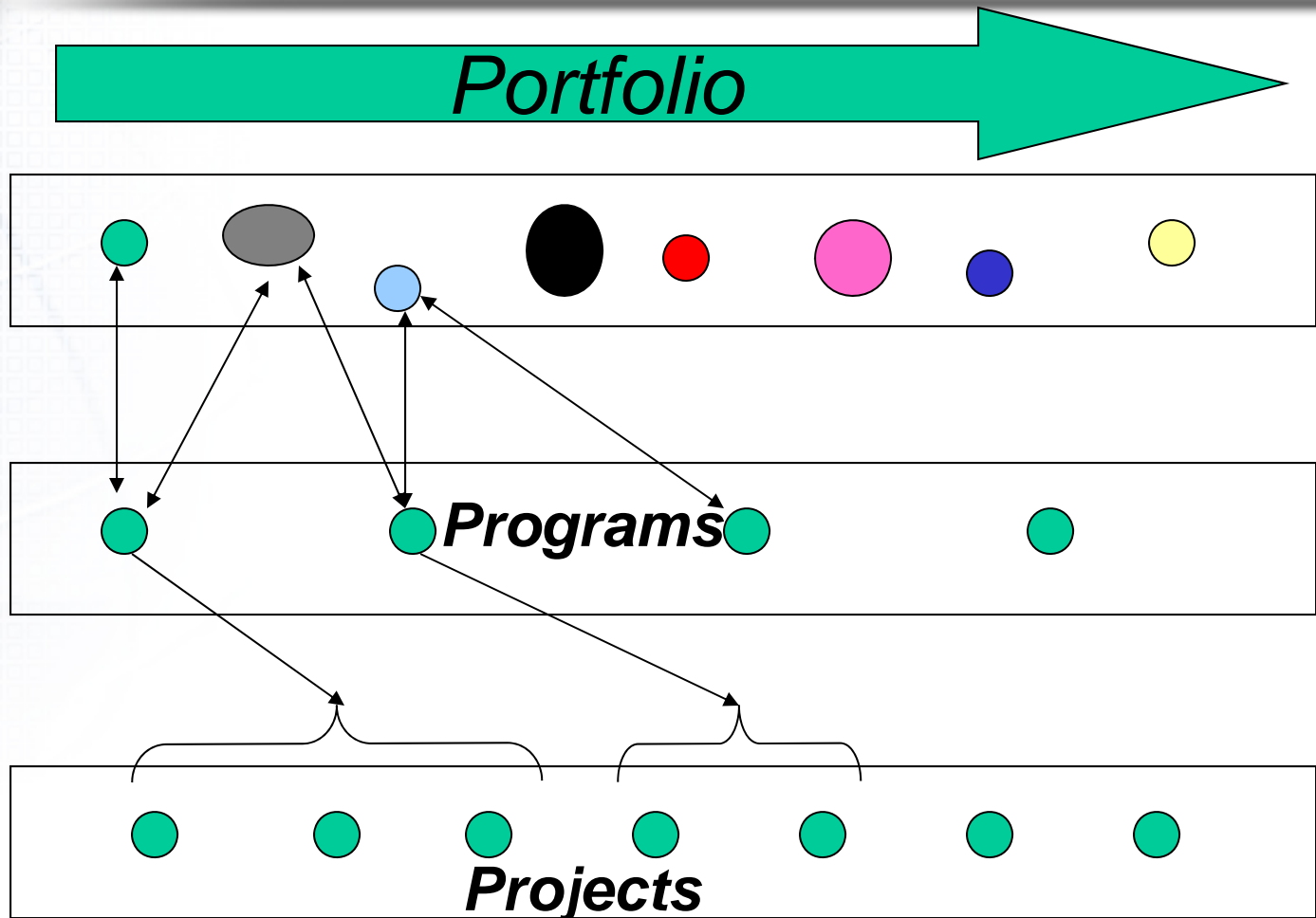


Affect of Schedule, Cost, or Scope Changes





How the Project Fits in the Organization





The Keys to Successful S&CC

- *There are six key project management knowledge competences that the successful project manager **MUST** possess. They are understanding:*
 - Requirements interpretation and development
 - Developing good work breakdown structures
 - Developing and interpreting network analyses
 - Developing accurate schedules
 - Developing accurate budgets
 - Implementing and using earned value analysis



Developing Requirements

Basics of requirements development

- Understanding where requirements originate
- Understanding how to determine what is and what is not a requirement
- Understanding types of requirements
 - Functional requirements
 - Non-functional requirements
 - Hidden and generated requirements



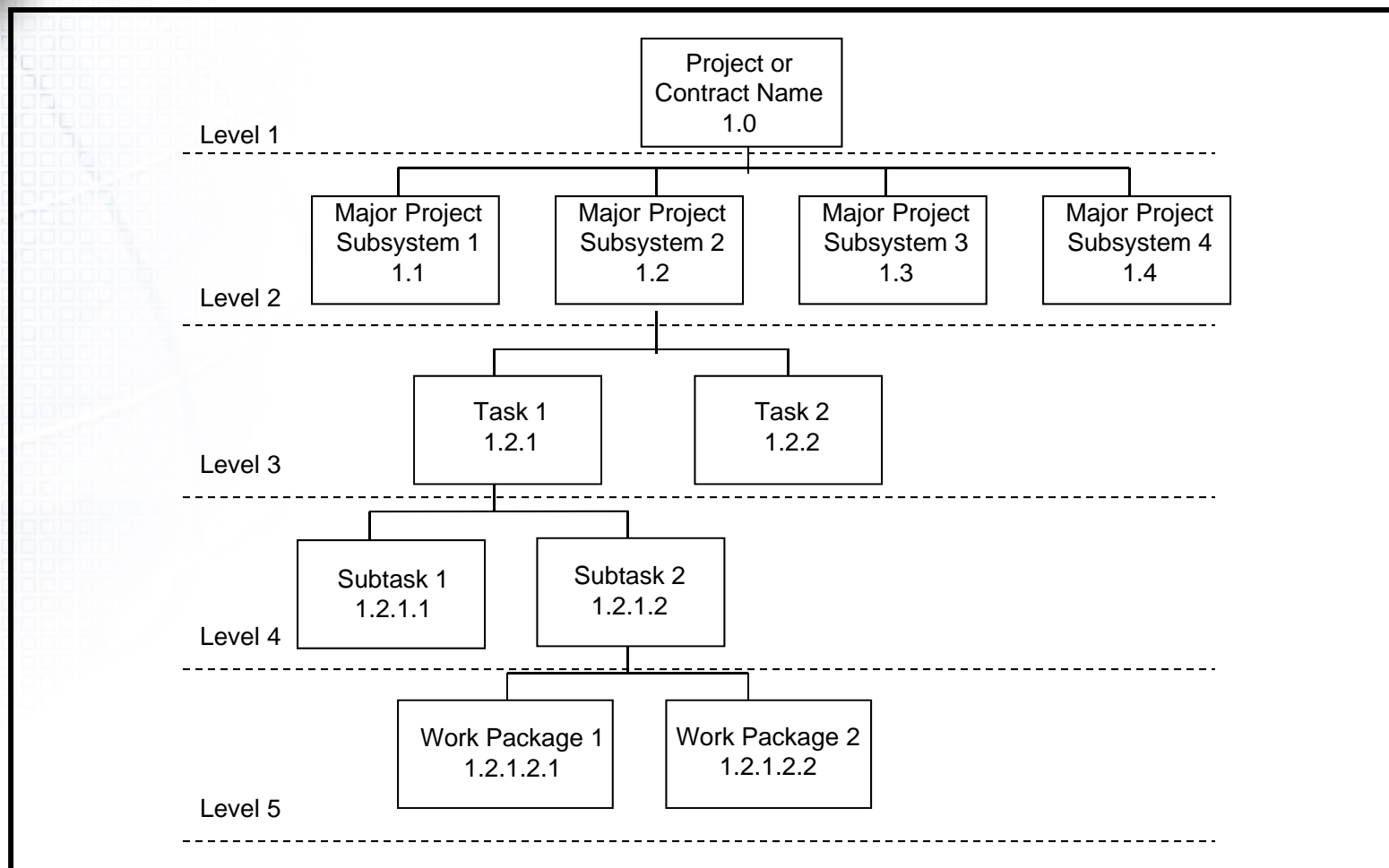
Work Breakdown Structures

There are two ways to display a work breakdown structure (WBS)

- Graphical
- Indented



Example of a Graphical WBS





Example of an Indented WBS

1.0 Project or Contract Name

1.1 Major project subsystem 1

1.2 Major project subsystem 2

1.2.1 Task 1

1.2.1.1 Subtask 1

1.2.1.2 Subtask 2

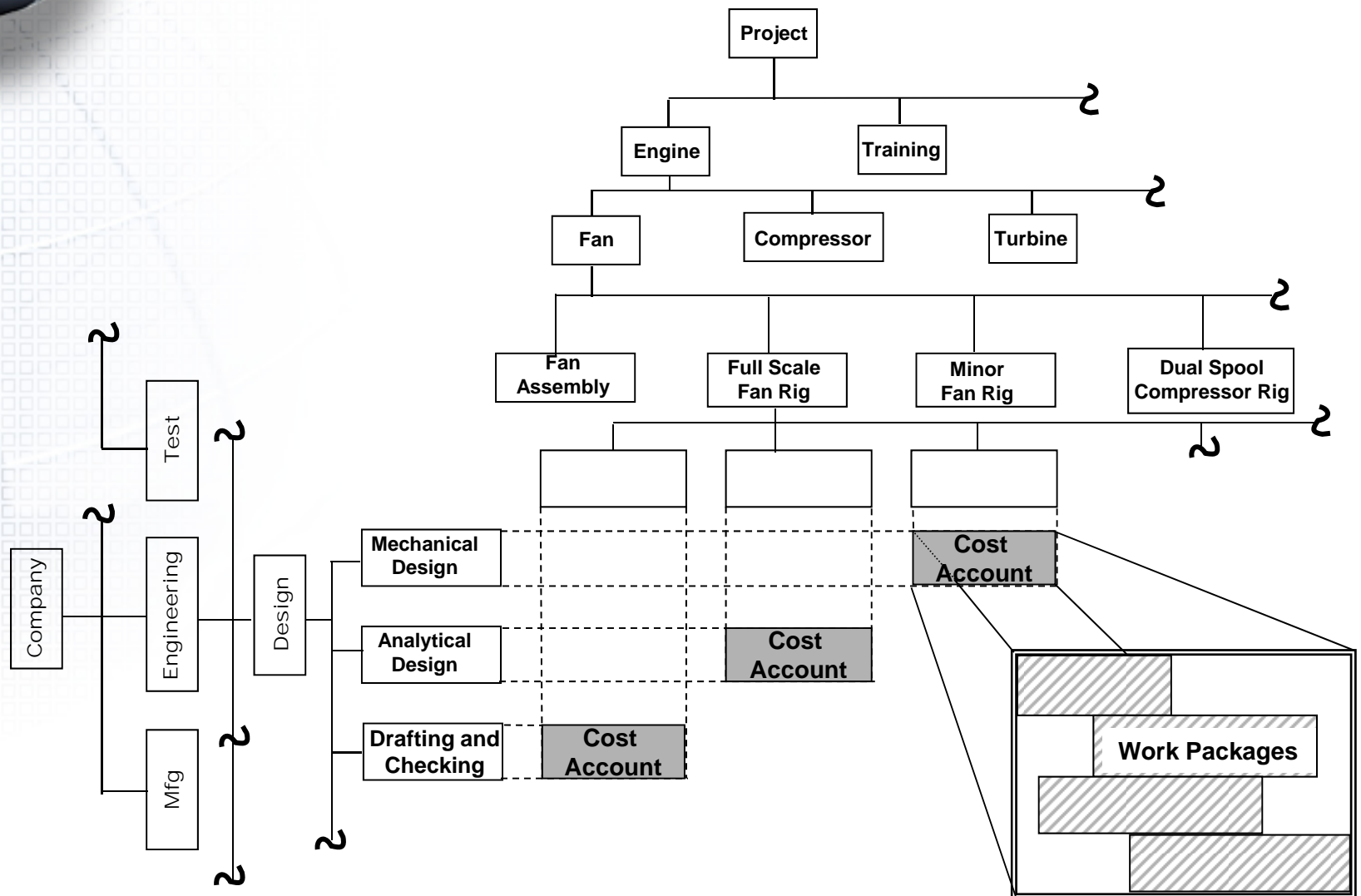
1.2.1.2.1 Work package 1

1.2.1.2.2 Work package 2

1.2.2 Task 2



The WBS and the Organization





FISCAL YEAR	2007
	2008

THIS TASK IS	RECURRING
	NON-RECURRING

WORK BREAKDOWN STRUCTURE DICTIONARY

WBS ELEMENT NO.	

RFP NUMBER	
PERSON RESPONSIBLE	

WBS ELEMENT NO.

Attach Supporting Documentation to show Estimating Rationale

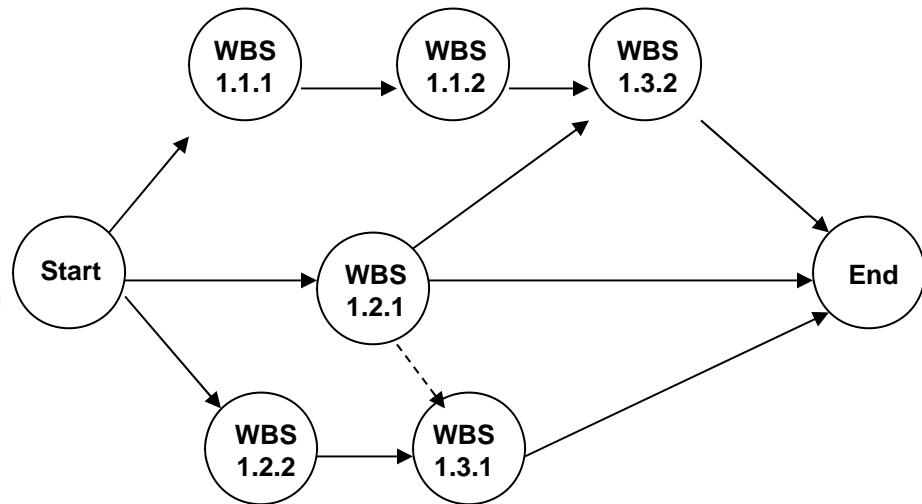
WORK SCHEDULE				WBS HOURS AND COST			
PERSON RESPONSIBLE	LABOR CAT.	FROM	TO	LABOR HOURS	ODC	MATERIAL COST	TOTAL
						WBS ELEMENT COST	



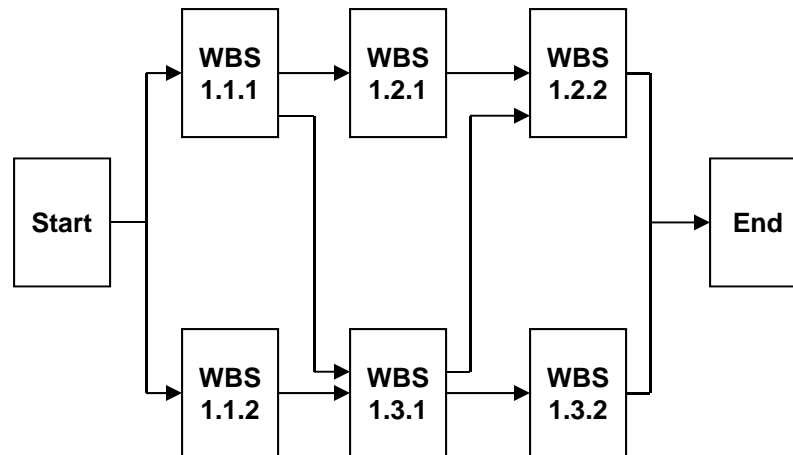
Network Analyses

There are two common network diagramming methods; PERT and PDM

Activity on the Arrow (AOA) Diagram

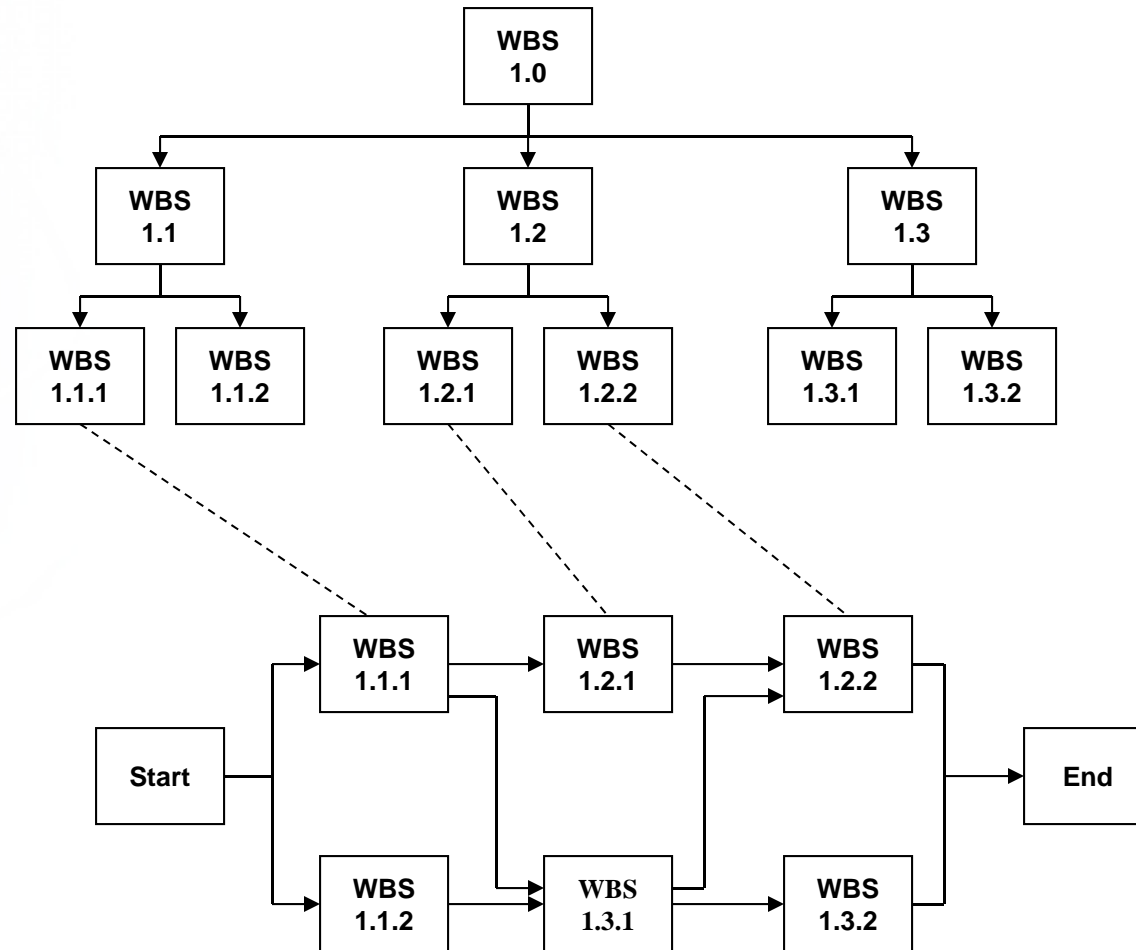


Activity on the Node (AON) Diagram





Relationship of WBS to Network Diagramming





Budget Estimate Basics

There are three basic types of budget estimates:

- Rough order of magnitude
- Top down or
- Bottom up or engineering estimate



Cost Categories

The common cost categories and budget terminology of interest to the PM are:

- Direct costs
- Other direct costs
- Indirect costs (general and administrative)
- Fixed costs
- Variable costs
- Sunk costs



Project Scheduling and Cost Control
By James C. Taylor



Earned Value Management—What it is

Earned value management is the preferred way of monitoring and controlling projects:

- *Introduced by the DoD in September, 1968*
- *Used widely by defense contractors in the 70s and 80s*
- *Adopted by the private sector in the late 80s*
- *PMI and most industries consider EVM to be THE method for monitoring and controlling projects*



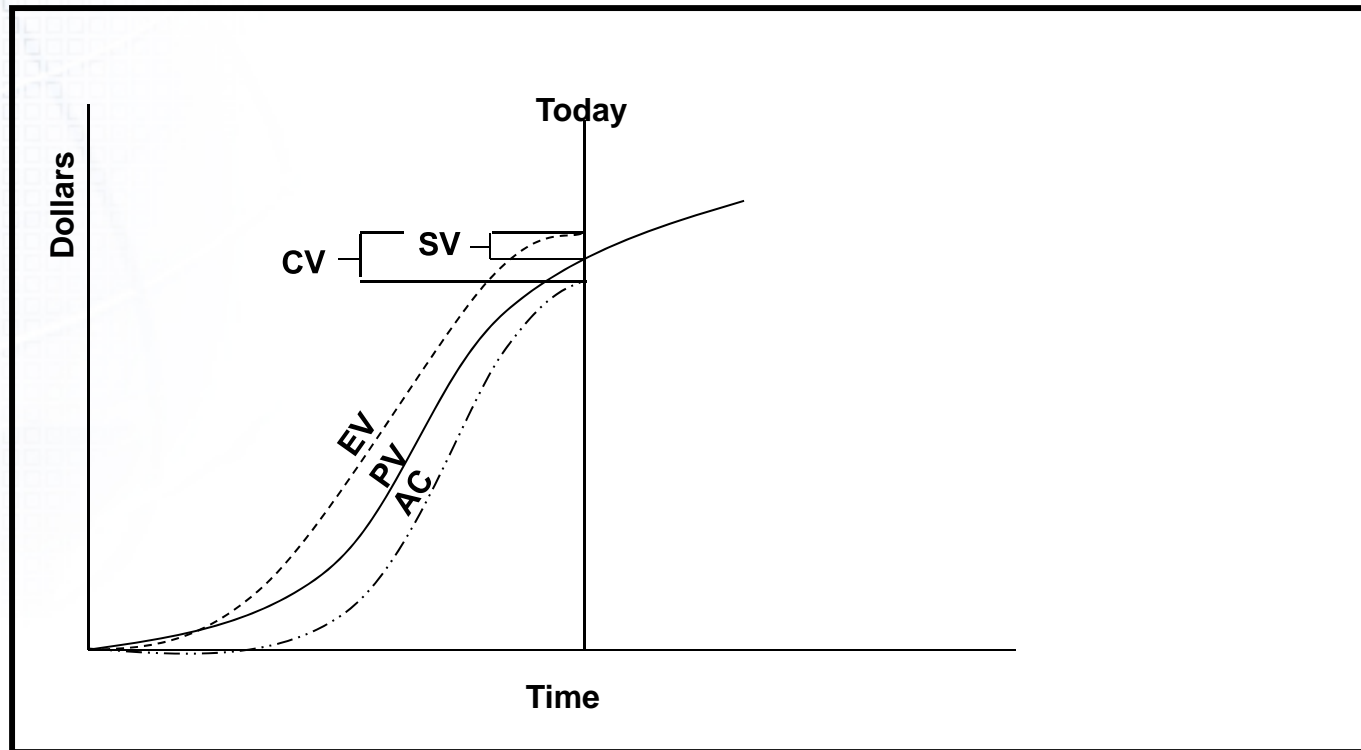
What is Earned Value Management?

*Earned value focuses on three primary components.
They are:*

- Planned value—The budgeted cost of the task/project
- Actual cost—The cost that is actually spent during the implementation and development of the task deliverable
- Earned value—The amount earned against the budgeted estimate



The Three Components of EVM





Closing a Project

Two types of audits are required at close out:

- Technical audit
- Financial audit



Summary

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