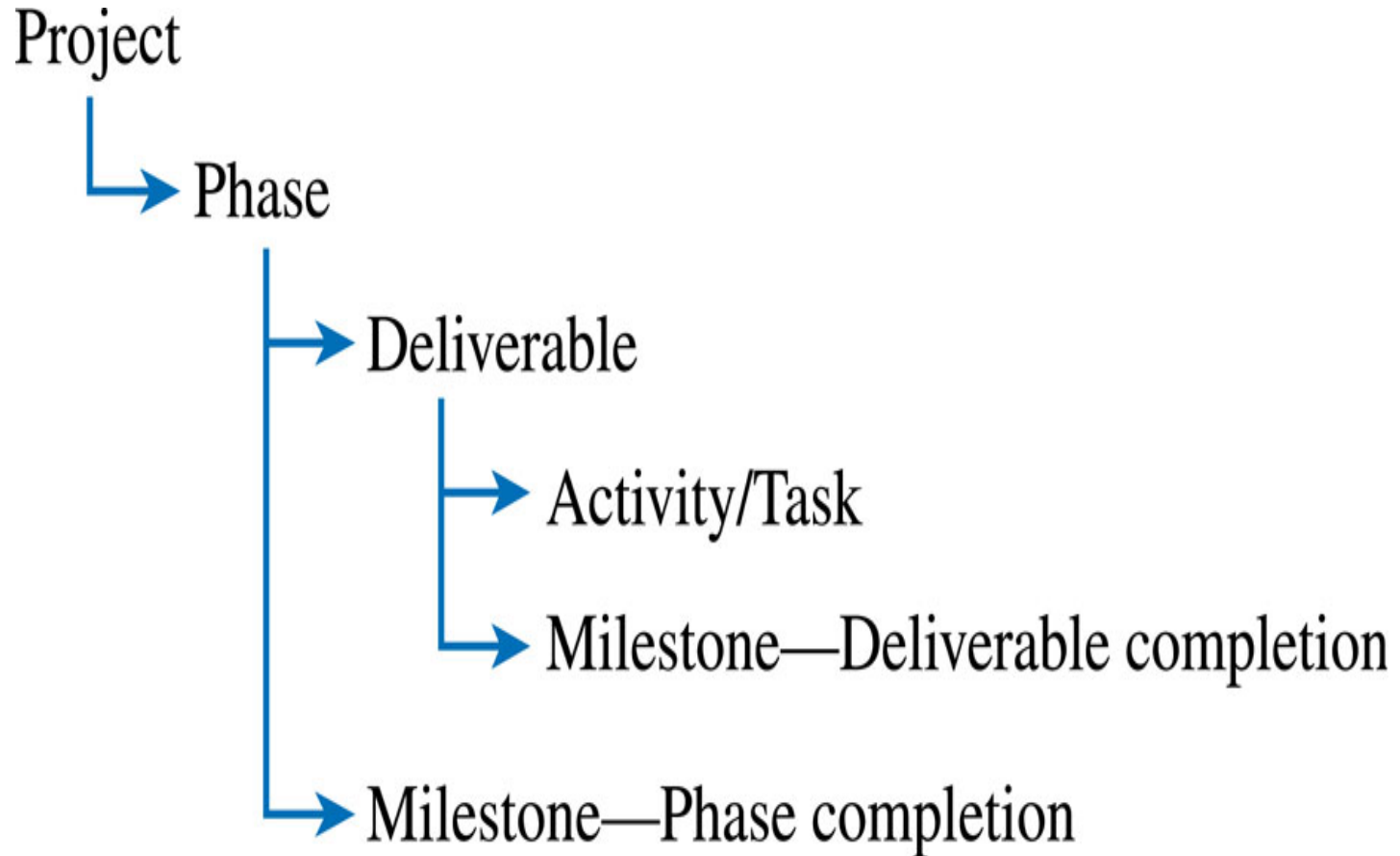


Work Breakdown Structure (WBS)

- ▶ The WBS represents a logical decomposition of the work to be performed and focuses on how the product, service, or result is naturally subdivided. It is an outline of what work is to be performed
 - PMBOK Guide® (17).



Work Package



Deliverables versus Milestones

▶ Deliverables

- ▶ Tangible, verifiable work products
 - ▶ Reports, presentations, prototypes, etc.

▶ Milestones

- ▶ Significant events or achievements
- ▶ Acceptance of deliverables or phase completion
- ▶ Cruxes (proof of concepts)
- ▶ Quality control
- ▶ Keeps team focused



Example Work Breakdown Schedule

–0.0 EC Bank Project

+1.0 Conceptualize & initialize project

+2.0 Develop charter & plan

+3.0 Analysis

+4.0 Design

+5.0 Construction

–6.0 Testing

+6.1 Test plan

–6.2 Test results report

6.2.1 Review test plan with client

6.2.2 Carry out test plan

6.2.3 Analyze results

6.2.4 Prepare test results report and presentation

6.2.5 Present test results to client

6.2.6 Address any software issues or problems

6.2.7 **Milestone:** client signs off on test results

+6.3 **Milestone:** testing completed

+7.0 Implementation

+8.0 Close project

+9.0 Evaluate project success



The WBS Should Follow the Work Package Concept

- 0.0 EC Bank Project
 - +1.0 Conceptualize & initialize project
 - +2.0 Develop charter & plan
 - +3.0 Analysis
 - +4.0 Design
 - +5.0 Construction

- 6.0 Testing

- +6.1 Test plan

- 6.2 Test results report

- 6.2.1 Review test plan with client
 - 6.2.2 Carry out test plan
 - 6.2.3 Analyze results
 - 6.2.4 Prepare test results report and presentation
 - 6.2.5 Present test results to client
 - 6.2.6 Address any software issues or problems
 - 6.2.7 **Milestone:** client signs off on test results

- +6.3 **Milestone:** testing completed

- +7.0 Implementation
 - +8.0 Close project
 - +9.0 Evaluate project success

Project

Phase

Deliverable

Activity/Task

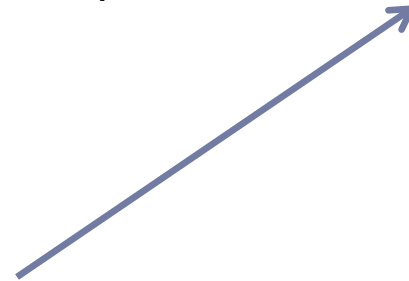
Milestone—Deliverable completion

Milestone—Phase completion

Estimates are made for each activity in the WBS

6.2 Test Results Report

6.2.1 Review test plan with client	1 day
6.2.2 Carry out test plan	5 days
6.2.3 Analyze results	2 days
6.2.4 Prepare test results report and presentation	3 days
6.2.5 Present test results to client	1 day
6.2.6 Address any software issues or problems	5 days



How did we come up with these estimates? Using a technique, or combination of techniques, with the exception of guestimating!

