IS 321

Project Management

3rd&4th level, second term 2024/2025

Lecture 3
Core Concepts of Project Management Cont'd

Learning objectives

1. Identify Project stakeholders.
2. Differences Between Managers and Leaders.
3. Select projects and set priorities.
4. Write a project charter.
5. Prepare and write a project scope.
6. Construct a Work Breakdown Structure (WBS) and develop a Responsibility Assignment Matrix (RAM) for a project.

4 Project Initiation (Project Charter)

A project charter is a document that formally recognizes a project, includes a problem statement, project objectives, benefits, process owners, and a project sponsor or a champion.

- Project purpose or justification
- Project objectives
- Project success criteria
- Project description
- Project risks at a high level
- Key milestones
- Budget information

Project Initiation (Project Charter)

- High level requirements of the project
- Project approval requirements
- Roles and responsibilities of the project manager and the project team
- Level of authority of the project manager
- Sponsor and authorizing persons of the project charter

Sample Project Charter

Project Title: Information Technology (IT) Upgrade Project

Project Start Date: March 4, 2007 **Projected Finish Date:** December 4, 2007

Project Manager: Kim Nguyen, 691-2784, *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. Budgeted $1,000,000 for hardware and software costs and $500,000 for labor costs.

Approach:

- Update the information technology 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

ROLES AND RESPONSIBILITIES:

NAME	*ROLE*	*RESPONSIBILITY*
Walter Schmidt	CEO	Project sponsor, monitor project
Mike Zwack	CIO	Monitor project, provide staff
Kim Nguyen	Project Manager	Plan and execute project
Jeff Johnson	Director of Information, Technology Operations	Mentor Kim
Nancy Reynolds	VP, Human Resources	Provide staff, issue memo to all employees about project
Steve McCann	Director of Purchasing	Assist in purchasing hardware and software

Sample Project Charter (cont'd)

Sign-off: (Signatures of all the above stakeholders)

Walter Schmidt	*Steve McCann*
Mike Zwack	*Nancy Reynolds*
Kim Nguyen	*Jeff Johnson*

Comments: (Handwritten or typed comments from above stakeholders, if applicable)

"This project must be done within ten months at the absolute latest." Mike Zwack, CIO

"We are assuming that adequate staff will be available and committed to supporting this project. Some work must be done after hours to avoid work disruptions, and overtime will be provided." Jeff Johnson and Kim Nguyen, Information Technology department

5 Project Scope

Project scope *is* ***<u>everything about a project</u>*** *– work content as well as expected outcomes.*

Scope management *is the function of* ***<u>controlling a project</u>*** *in terms of its goals and objectives and consists of:*

1) Conceptual development
2) Scope statement
3) Work authorization
4) Scope reporting
5) Control systems
6) Project closeout

1) Conceptual Development

*The **process** that addresses **project objectives** by finding the best ways to meet them.*

Key steps in information development:

- Problem/need statement
- Information gathering
- Constraints
- Alternative analysis
- Project objectives

Problem Statements

Successful conceptual development requires:

- **Reduction** of overall project **complexity**
- Goals and objects are **clearly stated**
  - Reference points are provided
- Complete **understanding** of the problem

Statement of Work (SOW)

*A SOW is a **detailed narrative description** of the work required for a project.*

Effective SOWs contain

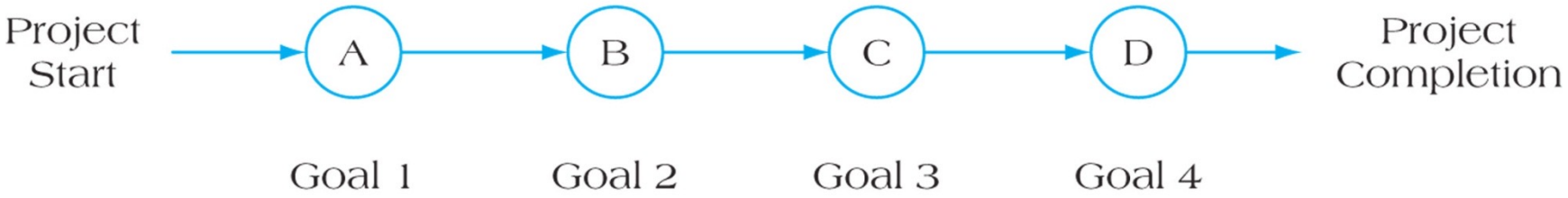
1. Introduction and background
2. Technical description
3. Timeline and milestones
4. Client expectations

2) Scope Statement Process

1. Establish the project ***goal criteria***
   a) cost
   b) schedule
   c) performance
   d) deliverables
   e) review and approval gates
2. Develop the ***management plan*** for the project
3. Establish a ***work breakdown structure***
4. Create a ***scope baseline***

Goal Setting With and Without Work Breakdown Structures (WBS)

A. Goal Setting Using WBS



B. Goal Setting Without WBS

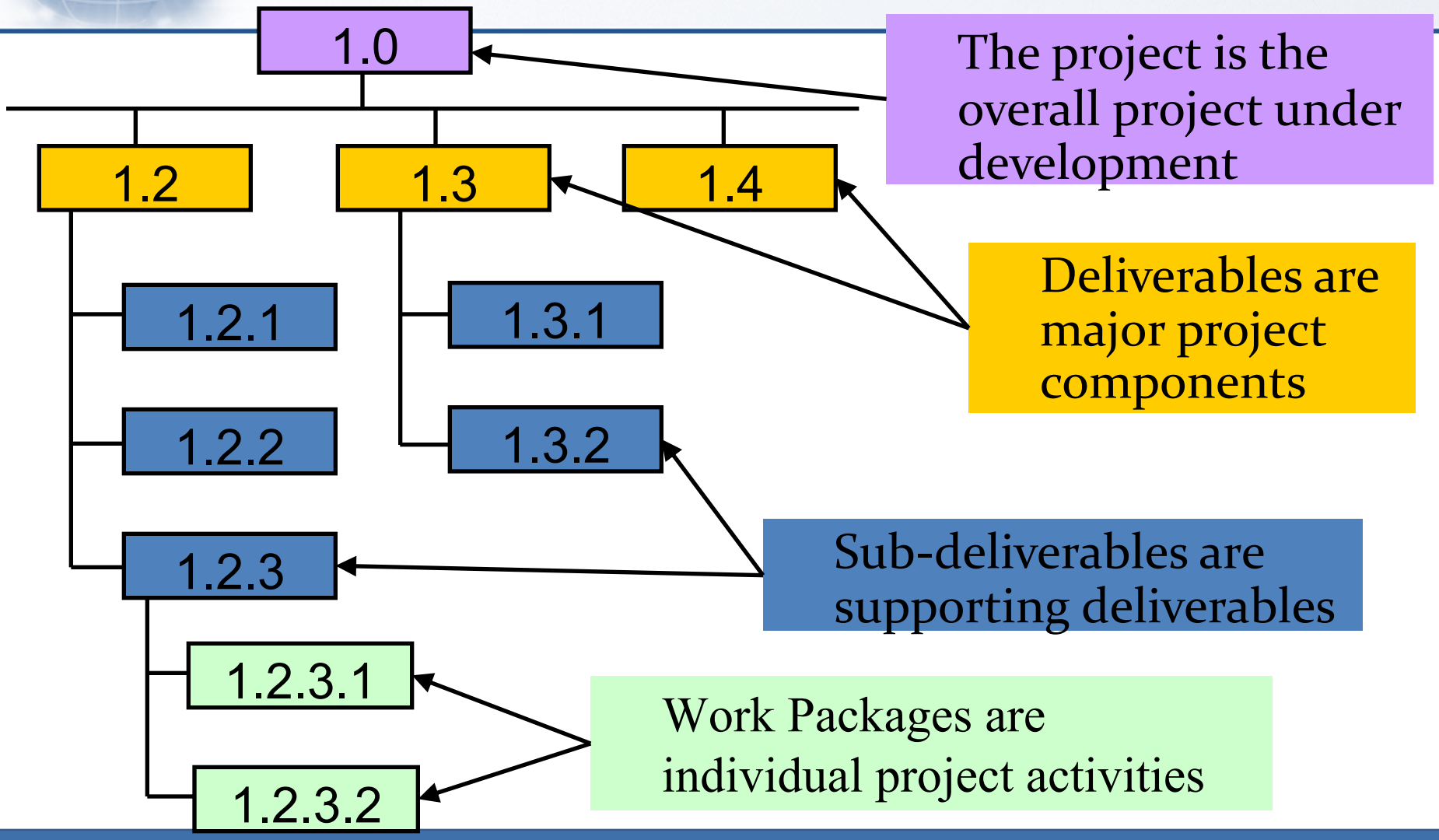
6 Work Breakdown Structure (WBS)

A *process that sets a project's scope by **breaking down** its overall **mission into** a cohesive set of synchronous, increasingly **specific tasks**.*

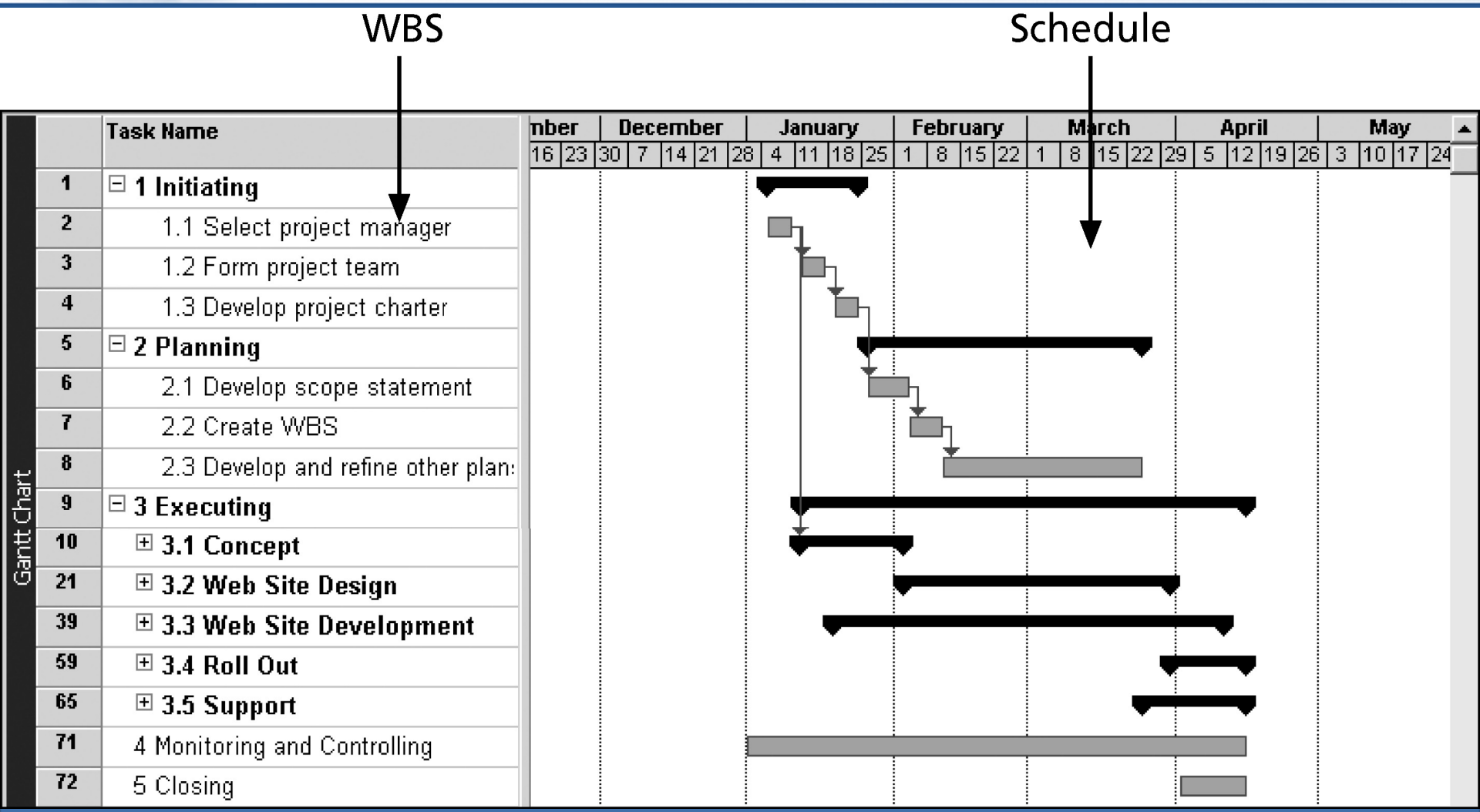
What does WBS accomplish?

- ❖ Echoes project objectives
- ❖ Offers a logical structure
- ❖ Establishes a method of control
- ❖ Communicates project status
- ❖ Improves communication
- ❖ Demonstrates control structure

Work Breakdown Structure and Codes



Intranet Gantt Chart Organized by Project Management Process Groups

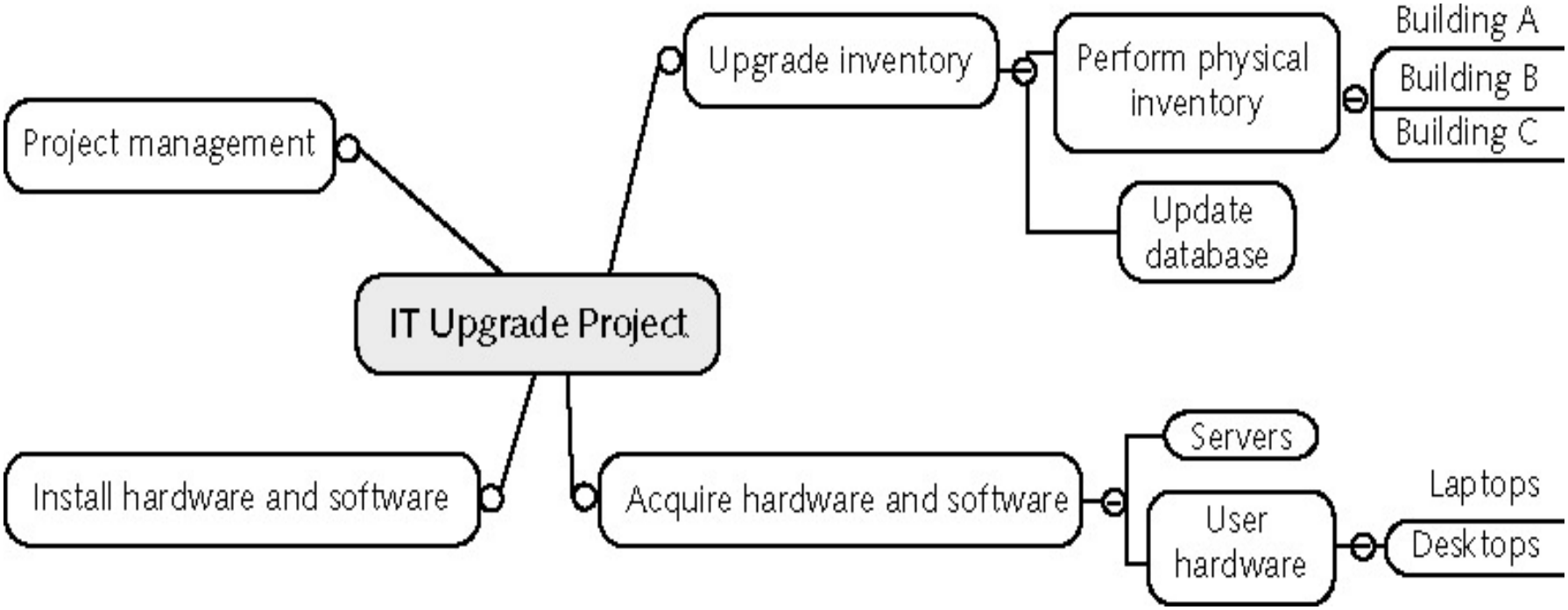


Approaches to Developing WBSs

Using guidelines for preparing WBSs:

- The **analogy approach**: review WBSs of similar projects and tailor to your project
- The **top-down approach**: start with the largest items of the project and break them down
- The **bottom-up approach**: start with the specific tasks and roll them up
- Mind-mapping approach: **mind mapping** is a technique that uses branches radiating out from a core idea to structure thoughts and ideas

Sample Mind-Mapping Approach for Creating a WBS



Defining a Project Work Package

- Work package forms lowest level in WBS.
- Work package has a deliverable result.
- Work package has one owner.
- Work package may be considered by its owner as a project in itself.
- A work package may include several milestones.
- A work package should fit organizational procedures and culture.
- The optimal size of a work package may be expressed in terms on labor hours, calendar time, cost, reporting period, and risks.

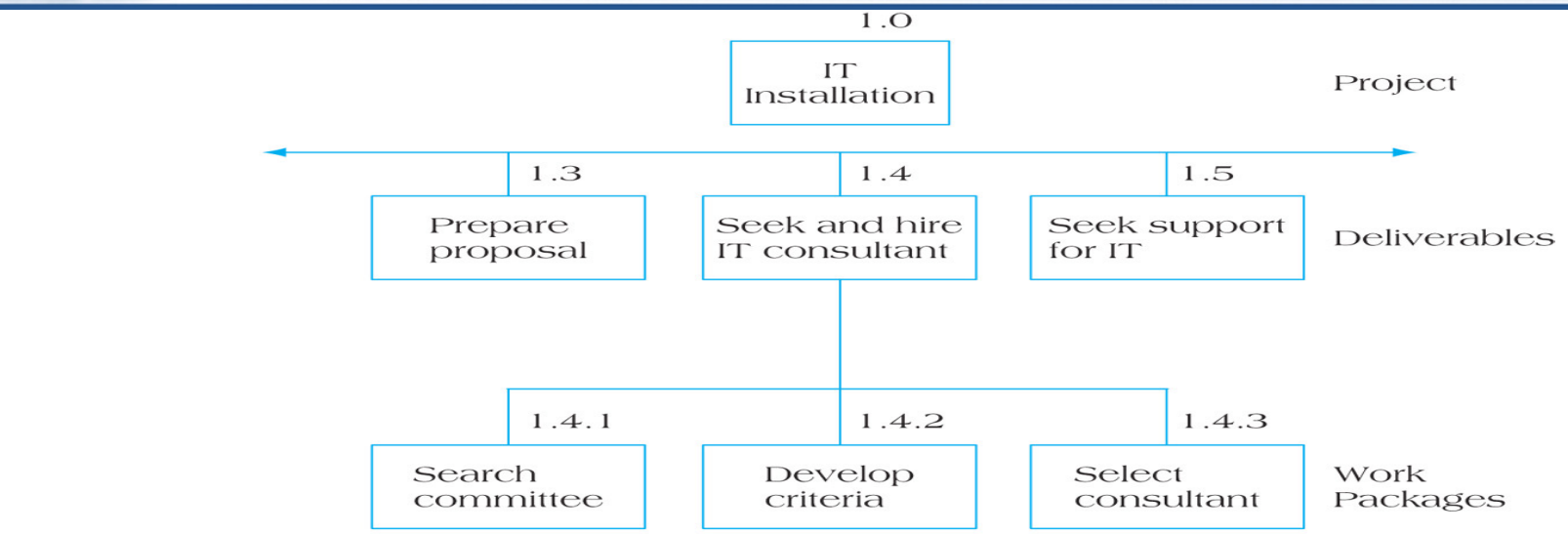
Organizational Breakdown Structure

Organizational Breakdown Structure (OBS) allows

- Work definition
- Owner assignment of work packages
- Budget assignment to departments

OBS links cost, activity & responsibility

Cost Account Rollup Using OBS



Departments			
Information Systems		$500	$1,000
Human Resources		$500	
Procurement		$500	
Totals	0	$1,500	$1,000

Responsibility Assignment Matrix

Deliverable	Task & Code	Lead Project Personnel: Bob IT	David IT	Susan HR	Beth Procurement	James Engineering	Terry Legal
Match IT to Org. Tasks—1.1	Problem Analysis–1.1.1	○	■			☆	□
	Develop info on IT technology–1.1.2	☆	○	■			
Identify IT user needs—1.2	Interview potential users–1.2.1	□		○	☆		
	Develop presentation–1.2.2	○	☆			■	
	Gain user "buy in"–1.2.3			☆	■	○	
Prepare proposal—1.3	Develop cost/benefit info–1.3.1	□			○		☆

○ Responsible ☆ Support

■ Notification □ Approval

3) Work Authorization

The formal ***"go ahead"*** to begin work

Follows the scope management steps of:

1. scope definition
2. planning document
3. management plans
4. contractual documents:
   - Requirements,
   - Valid consideration
   - Contracted terms

4) Scope Reporting

*determines **what** types of information reported, **who** receives copies, **when**, and **how** information is acquired and disseminated.*

Typical project reports contain:

1. Cost status
2. Schedule status
3. Technical performance

Assignment #1

WBS Exercise

You have 15 minutes to draw a WBS for one of the systems below and be prepared to explain your approach to the class.

1. House
2. Book
3. Banquet
4. Develop Windows 8

THANK YOU