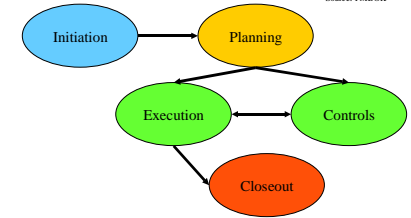


Project Management Process

Source: PMBOK



Project Lifecycle

Project Stakeholders



Break Timer



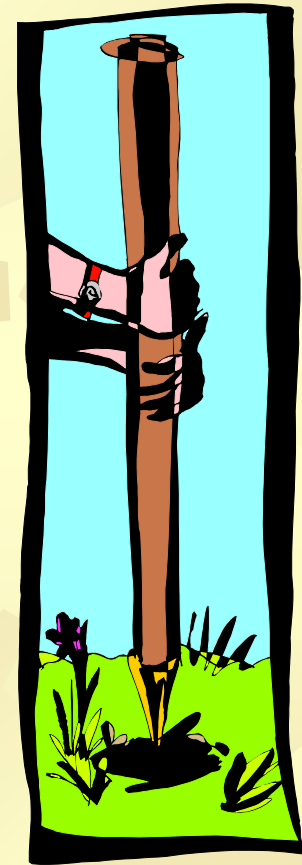
Project Stakeholders

- ✿ What is a project stakeholder?
 - ✿ *If you can gain or lose from the success or failure of a project, you have a “stake” in the project.*



Key Project Stakeholders

- ★ Customer/client
- ★ Project sponsor
- ★ Project manager
- ★ Project team



Break Timer

Customer/Client

- ✿ Provide a point of contact
- ✿ Fulfill responsibilities outlined in the statement of work
- ✿ Approve:
 - ✿ Measurable success indicators, deliverables, budget, schedule
 - ✿ Use of customer resources
 - ✿ Changes
 - ✿ Closing
- ✿ Share lessons learned



Project Sponsor

☀ Identify:

- ☀ Reason for the project
- ☀ Expected outcome
- ☀ Success measures
- ☀ Time frames

☀ Help:

- ☀ Obtain resources
- ☀ Remove barriers



In Addition the Project Sponsor...

- ✿ Clarify any role or responsibility issues
- ✿ Ensure that progress reviews occur after the schedule is finalized
- ✿ Review the project team's monthly report
- ✿ Keep the team focused on implementing the project management process
- ✿ Participate in the project close-out
- ✿ Support the project manager



Project Manager

- Define and manage customer expectations.
- Coordinate development of the project plan.
- Monitor and control project work according to the approved plan.
- Communicate project status by preparing status reports and conducting progress review meetings.
- Establish and follow a change management process.
- Lead the project team and resolve conflicts between team members.
- Maintain the project notebook.
- Conducting project close-out activities.



Project Manager Skills

- Leadership
- Communications
- Organizing
- Negotiating
- Managing conflict
- Motivating
- Controlling
- Team building
- Planning
- Directing
- Problem solving
- Coaching
- Delegating
- Supporting

The skill set for a good general manager!!



Break Timer

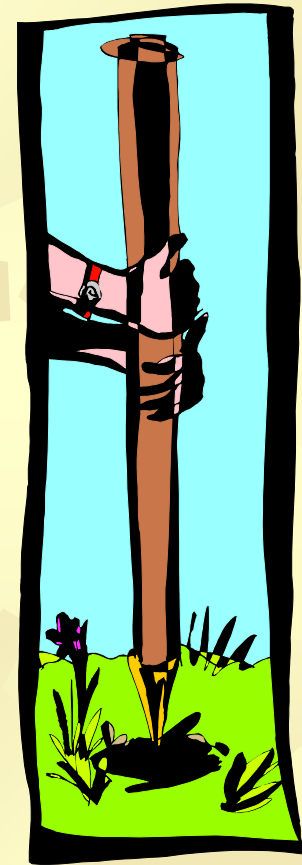
Project Team Members

- Identify work tasks
- Estimate the duration of work tasks
- Help prepare the project network diagram
- Honestly report work status
- Keep the project manager informed on project issues
- Attend scheduled progress review meetings
- Raise issues important to the project's success
- Keep their functional managers updated
- Participate in the project close-out



Other Project Stakeholders

- Senior management
- Internal cross-functional organizations
- External third-party suppliers



Senior Management

- “Champion” implementation of PM process
- Assign project manager
- Approve project plan/changes
- Provide resources
- Lead continuous improvement efforts
- Establish priorities among projects
- Provide methods for performing work
- Approve close-out of project
- Help resolve issues and conflict
- Support the project manager



Internal Cross-Functional Organization

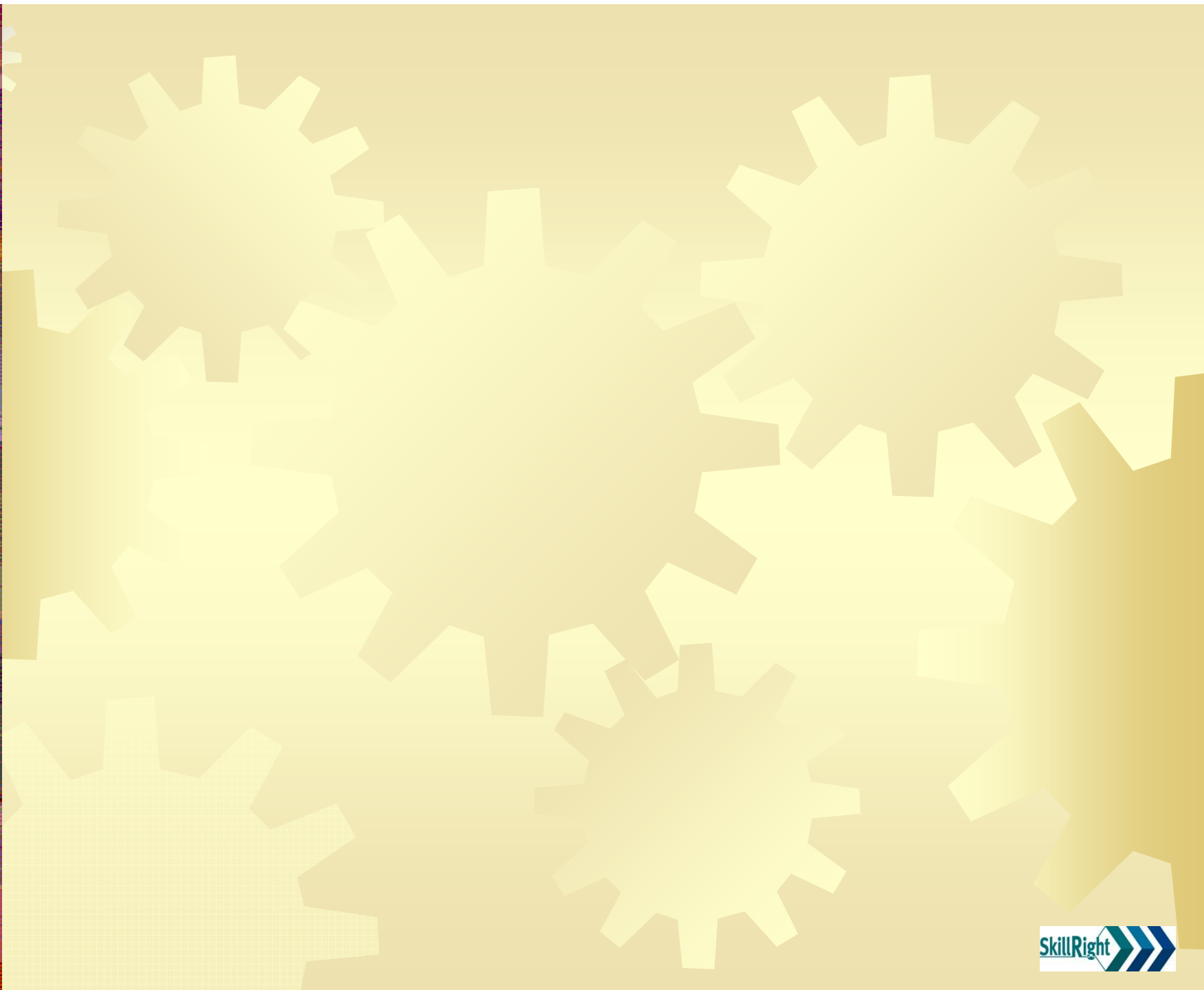
- ✿ Provide necessary resources for the project.
- ✿ Manage any work elements, or sub-projects that have been assigned to the functional group.
- ✿ Interface with the project manager to be sure all the work is done as planned.



External Suppliers

- ✱ Provide the deliverables, products, and/or services contracted for.
- ✱ Prepare status reports and attend review meetings as required.
- ✱ Meet all contractual commitments according to terms and conditions agreed upon.





Break Timer



The Project Team

How are project teams formed?

Careful selection process?

Luck of the draw?



Team selection and the strength of the team depends on the company's type of Project Organization!



Break Timer



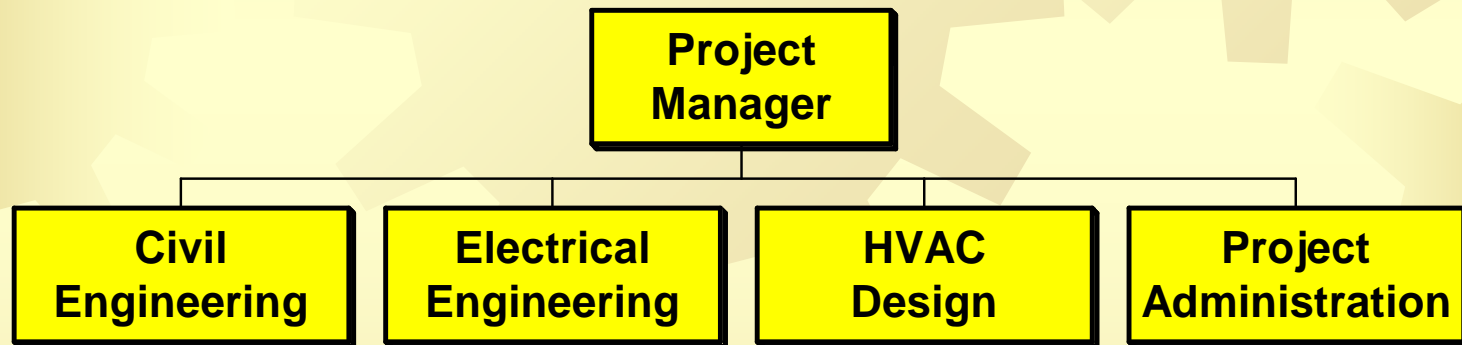
Organizations and Project Management

Project Characteristics	Functional	Matrix			Projectized
		Weak	Balanced	Strong	
Project Manager's Authority	Little or None	Limited	Low to Moderate	Moderate to High	High to Almost Total
Percent of Organization's Personnel Assigned Full Time to Project Work	Virtually None	0% – 25%	15% – 60%	50% – 95%	85% – 100%
Project Manager's Role	Part-time	Part-time	Full-time	Full-time	Full-time
Common Titles for Project Manager's Role	Project Coordinator/Project Leader	Project Coordinator/Project Leader	Project Manager/Project Officer	Project Manager/Program Manager	Project Manager/Program Manager
Project Management Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time



Break Timer

Organizational Breakdown Structure (OBS)



Project Lifecycle

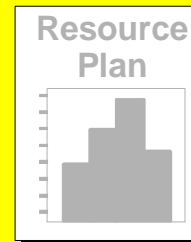
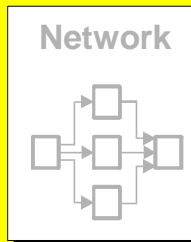
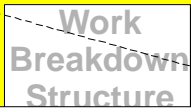
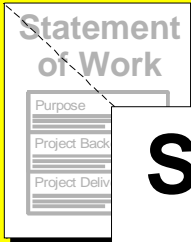
Planning



Break Timer

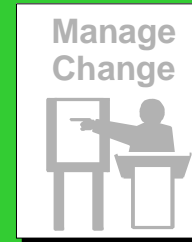
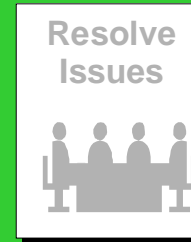
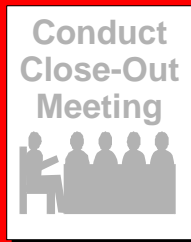
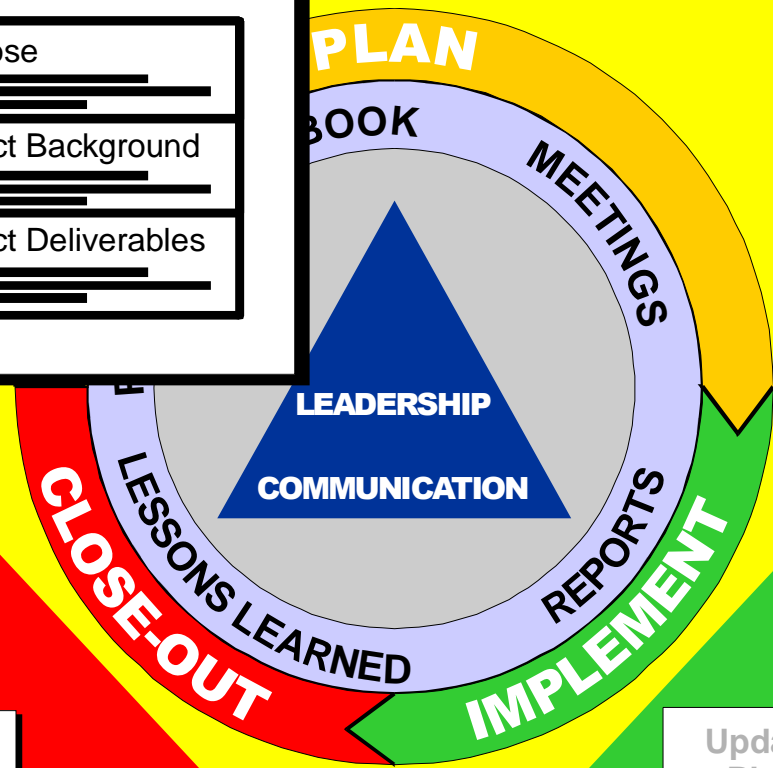


Roadmap to Project Management Success



Statement of Work

Purpose	_____
Project Background	_____
Project Deliverables	_____



Why Plan?

“The nicest thing about not planning is that failure comes as a complete surprise and is not preceded by a period of worry and depression.”

John Preston, Boston College

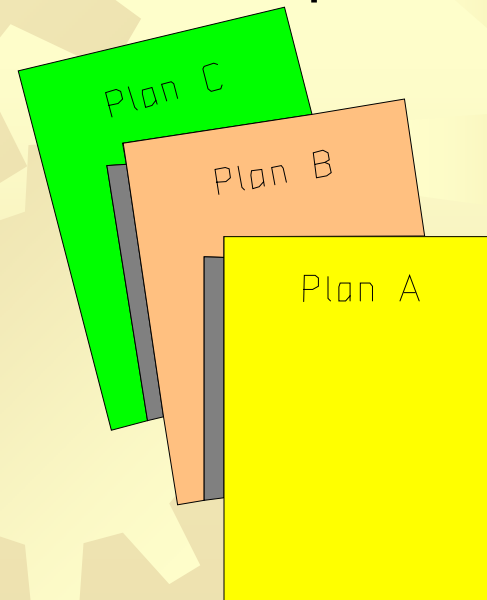


Break Timer



Project Plan Contents

- Statement of work (SOW)
- Work breakdown structures (WBS)
- Responsibility assignment matrices
- Project schedule
- Resource plans/histograms
- Budget
- Risk management plan
- Communications plan
- Quality plan
- Verification and validation plan



Project Plan Benefits

- ✿ Provides an effective communication tool to ensure understanding of project goals and the means to achieve them
- ✿ Defines outcomes and commitments
- ✿ Establishes guidelines and standards
- ✿ Establishes the baseline for evaluating and reporting progress
- ✿ Forms the basis for scope control and change management



Project Notebook

- **Project Pre-plan**
 - Background information
 - Customer data
 - Third-party data (vendors, suppliers, etc.)
- **Project Plan**
 - Statement of Work (SOW)
 - Work Breakdown Structure (WBS)
 - Organization/responsibility charts
 - Schedule data
 - Budget/capital plan
 - Risk management
- **Project Implementation**
 - Meetings (agenda/minutes)
 - Team/management/customer/third party progress reports
 - Customer change requests/decision matrix issue resolution forms/reports
- **Project Close-out**
 - Final evaluation of measurable success indicators
 - Close-out meeting (agenda/minutes)
 - Final project report
 - Reference letters
 - Lessons learned
- **Project Administration**
 - Contractual documents
 - Invoices
 - Expenses
 - Correspondence
 - Contact log



Statement of Work — Purpose

- ✿ Define the scope of the project
- ✿ Establish customer expectations
- ✿ Serve as a “contract” if necessary



Break Timer



A Good SOW will answer ...

- ★ What is the purpose or goal of the project?
- ★ Why is the project being done?
- ★ Who is the initial customer?
- ★ Who is the end user or final customer?
- ★ What are the customer deliverables?
- ★ What technical support is required for the deliverables?



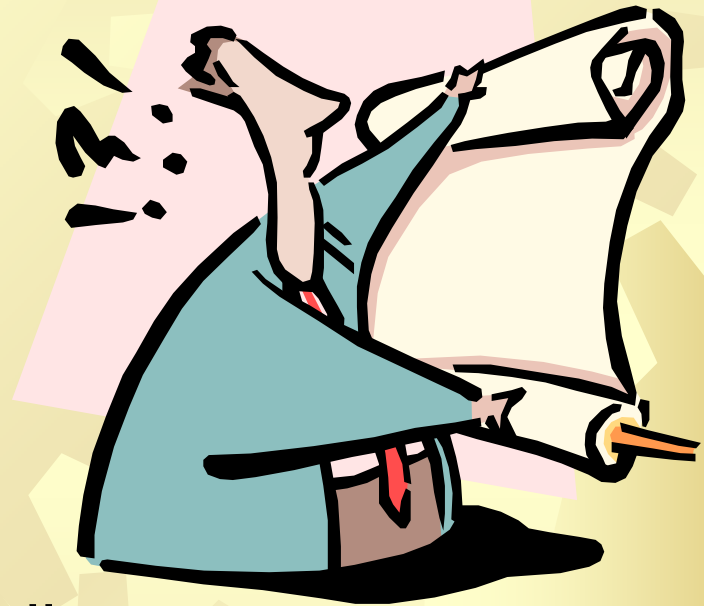
And continue to answer ...

- ✿ What is the budget?
- ✿ What is the final date for the deliverables?
- ✿ What are the measurable success indicators (metrics)?
- ✿ What kind of support is required from the customer?
- ✿ What contingency plans are in place?



SOW — Generic Contents

- ★ Customer
- ★ Project
- ★ Title
- ★ Purpose
- ★ Background
- ★ Deliverables
- ★ Measurable success indicators
- ★ Customer support
- ★ Risk plans



Statement of Work - Page 1

STATEMENT OF WORK

Date: Form completion date

Contributors: People who helped write the statement of work

Immediate Customer: Person or organization requesting the work

Final End User: Person or organization who will use the results of the project

PROJECT TITLE:

The project title should be a short, concise statement that defines the project.

PURPOSE:

The purpose of the project is the goal; why you are doing the project. This should be clearly stated.



Break Timer



PROJECT BACKGROUND:

The project background should contain information pertaining to the history of the project. It also includes a statement that justifies the project.

- ◆ For a first draft, brief statements are acceptable. Formal statements of work are usually in paragraph form.
- ◆ Supply information that explains the philosophy behind the project. Also describe what makes the project unique/special.
- ◆ This information can be used later to:
 - Leverage resources
 - Gain support from external organizations/departments
 - Accommodate management directives
 - Accommodate changes

Many of the statements made in the background section must be substantiated in the measurable success indicators section of the statement of work.

The project background includes the following key elements:

- ◆ History
- ◆ Justification
- ◆ Consequences
- ◆ Uniqueness of project

Some examples on the type of information to include in the project background section include:

- ◆ Meet safety requirements
- ◆ Support business plan
- ◆ Meet quality requirements
- ◆ Meet customer expectations
- ◆ Improve performance/efficiency



DELIVERABLES:

Deliverables are the outputs of the project. They are what is promised to the customer.

- ◆ Deliverables are written as nouns. They are things.
- ◆ Quantities must be identified in this section.
- ◆ Include the major elements of the deliverables.

It is important to be very clear in the deliverables section. Misinterpretation of project deliverables can establish incorrect customer expectations.

The following are examples of deliverables:

- ◆ Parts
- ◆ Prototypes
- ◆ Procedures
- ◆ Equipment
- ◆ Installation of equipment
- ◆ Written reports
- ◆ Test results
- ◆ Training
- ◆ Specifications
- ◆ Technical drawings
- ◆ Plans



STATEMENT OF WORK (Page 2)

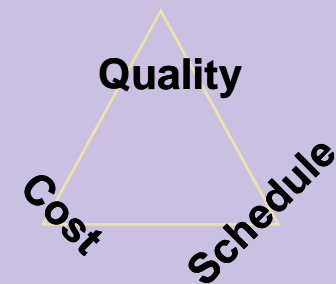
MEASURABLE SUCCESS INDICATORS:

Measurable success indicators include concise, measurable, information that will be used to determine if a project was successful. Measurable success indicators must substantiate any statements made in the background section.

Include what is known about quality, cost, and schedule expectations.

Examples of measurable success indicators include:

- ◆ Complete project in three months
- ◆ Reduce mass by 30%
- ◆ Complete ROI for initial expenditure by Nov. 30, 20xx
- ◆ Achieved \$1.00 reduction in piece cost
- ◆ Demonstrate meeting of EPA Standard # xxxx
- ◆ New process will require two fewer operators
- ◆ Stay within budget of \$275,000.00



Two specific measurable success indicators which are most important in terms of seeing the “big picture” of a project are:

- ◆ Overall schedule
- ◆ Budget

It’s also important to note any key milestone dates that have been established.

“SMART” is an acronym used to help write good measurable success indicators for a project.

The words which comprise the acronym SMART are:

- ◆ Specific
- ◆ Measurable
- ◆ Agreed upon
- ◆ Realistic
- ◆ Time (cost) framed



Smart Measurable Success Indicators (SMART)

S - Specific

M - Measurable

A - Agreed upon

R - Realistic

I - Time and cost framed



CUSTOMER SUPPORT:

The customer support area provides a means to list the items and services that must be provided by the customer/sponsor to ensure the success of the project. Examples include:

- ◆ Drawings
- ◆ Subject matter experts
- ◆ Equipment
- ◆ Computer time
- ◆ Photocopying
- ◆ Phone/secretarial support

PROJECT RISK PLANS:

The last section of the statement of work is the risk plan. Risk plans consider the possibility of an event occurring that would drastically alter the schedule, budget, or quality of the project.

- ◆ Identify what is likely to go wrong, and also what can have the most impact.
- ◆ Ask “What can go wrong?” “How will I handle it?”
- ◆ Put your statements in “If _____, then _____.” format

Examples of risk plans are:

- ◆ If a labor strike occurs, then outsource production.
- ◆ If supplier cannot ship materials in time, then contact another vendor.
- ◆ If design freeze date is not maintained, then use current product design.



Language to Avoid

- ★ “User friendly”
- ★ “Efficient”
- ★ “Maximize”
- ★ “Optimize”
- ★ “User oriented”
- ★ “Minimize”
- ★ “Timely”
- ★ “Approximately”



Misinterpretations are caused by:

- ✿ Unclear or ambiguous specifications
- ✿ Insufficient work descriptions
- ✿ No definitions of specific terminology
- ✿ No formal review of the Statement of Work
- ✿ Not having an “objective” third party involved in the review process



Exercise

Prepare a Statement of Work

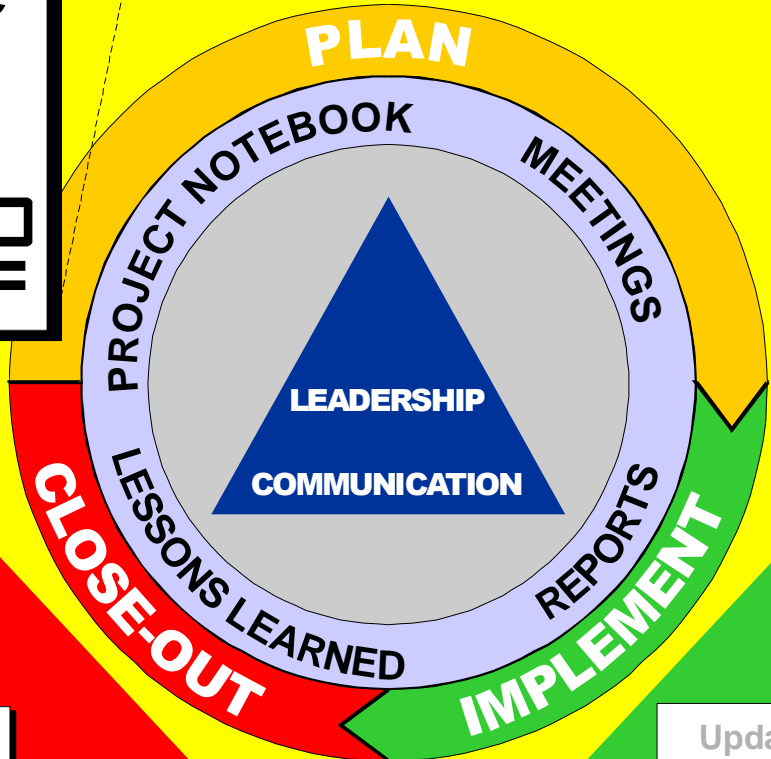
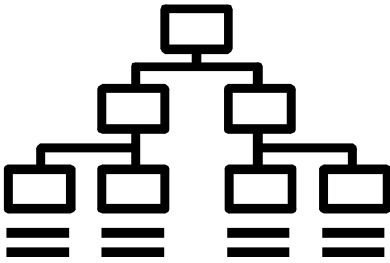


Break Timer

Roadmap to Project Management Success

Statement of Work Work Breakdown Structure Responsibility Matrix Network Gantt Resource Plan Budget

Work Breakdown Structure



Conduct Close-Out Meeting

Share Lessons Learned

Evaluate Success

Perform Tasks

Track Progress

Update Plan

Resolve Issues

Manage Change

Work Breakdown Structure— Purpose

- ✿ Identify all of the work that needs to be done to complete the project.
- ✿ Structure the work into logical components and subcomponents.
- ✿ Define the work to a level of detail so individual responsibilities can be assigned.
- ✿ Summarize and report project data.



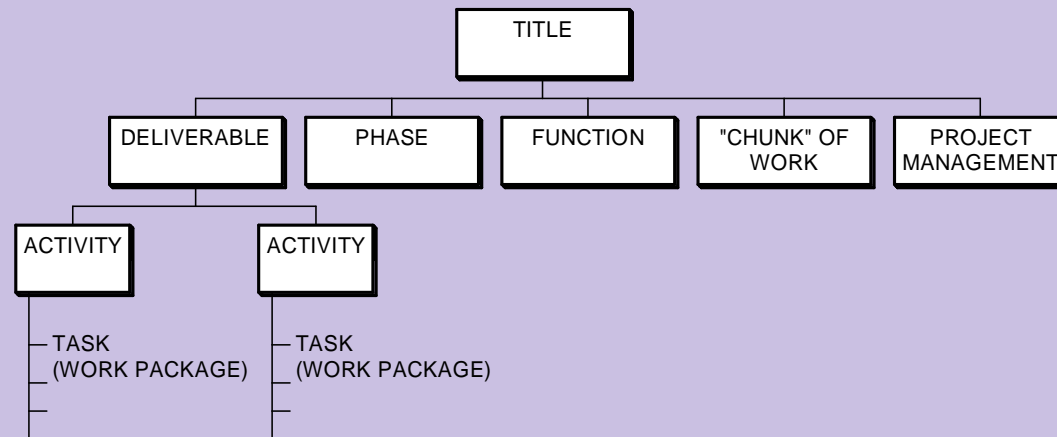
Representative Work Breakdown Structure

Level I
(Noun)

Level II
(Noun)

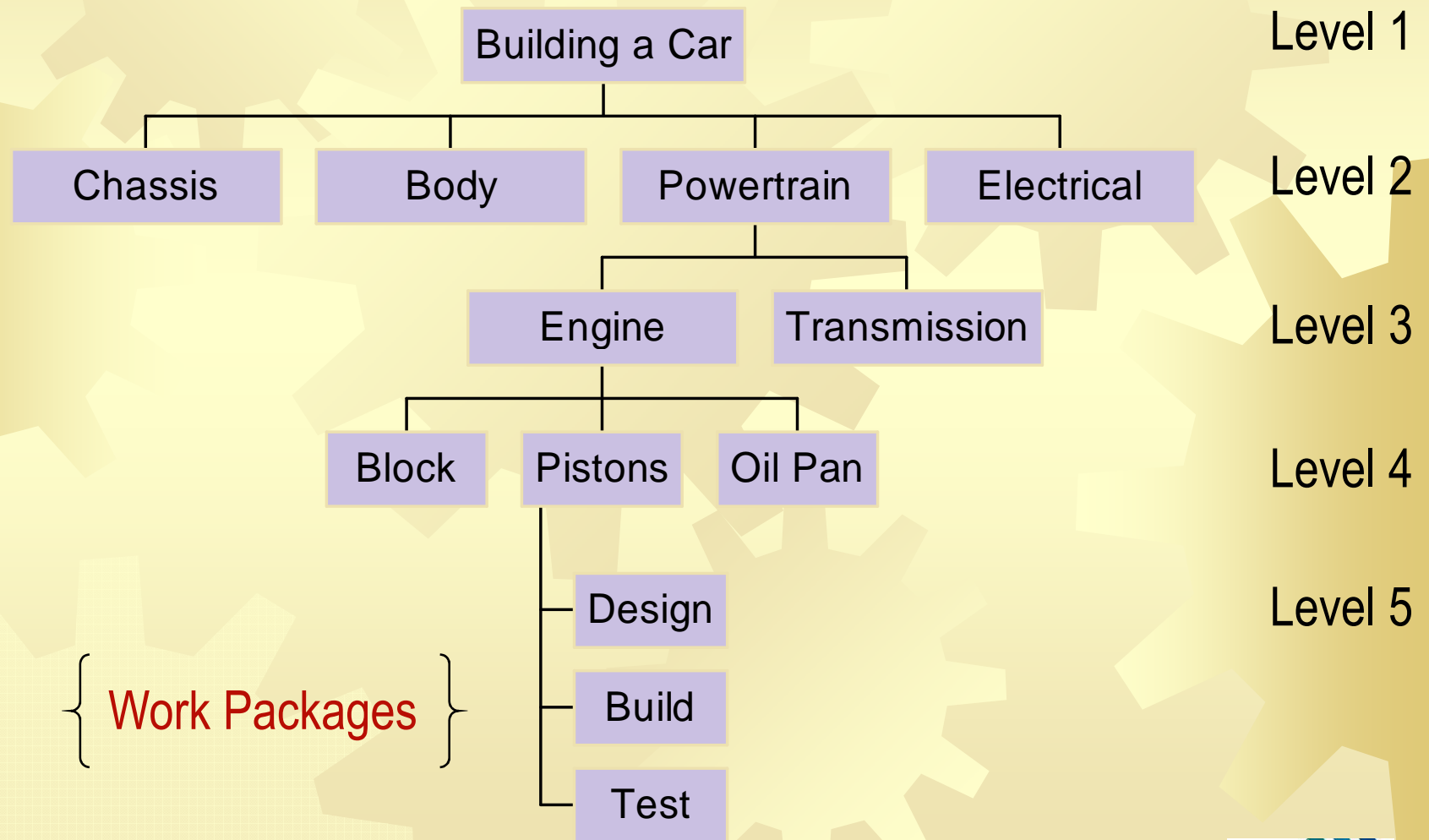
Level III
(Action Verbs)

Level IV
(Action Verbs)



Break Timer

Automotive WBS



WBS Work Package – Level of Detail

- ★ **WHO** will be the responsible individual or organization?
- ★ How much **TIME** will the activity take?
- ★ What **COST** is associated with accomplishing the activity?
- ★ Can **PROGRESS** be tracked easily?



WBS — Outlining Approach

3-4-10

- I. Main Project Deliverable **Level 1**
 - A. Major Element **Level 2**
 - 1. Activity **Level 3**
 - 2. Activity **Level 3**
 - a. task **Level 4**
 - b. task
 - c. task
 - 3. Activity **Level 3**
 - B. Major Element **Level 2**
 - 1. Activity **Level 3**
 - 2. Activity **Level 3**

The outline approach is used by Microsoft® Project®



Break Timer



Exercise

Create a WBS



Break Timer