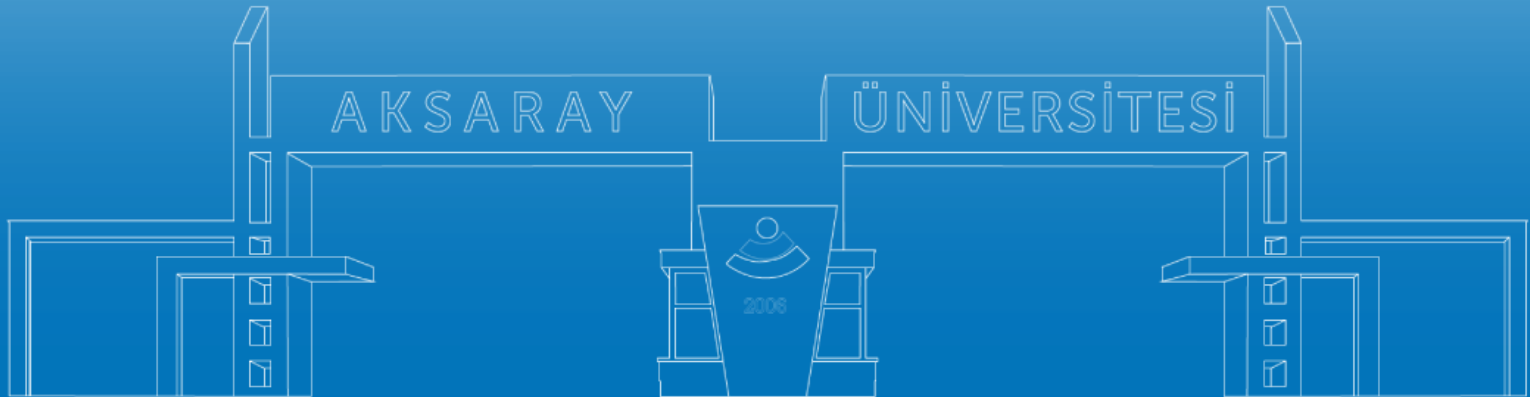




# Introduction to Project Management



# What is a Project?

- A project is a temporary endeavor undertaken to produce a unique product or service



- **Temporary** – Definitive beginning and end
- **Unique** – New undertaking, unfamiliar ground



How the customer explained it



How the Project Leader understood it



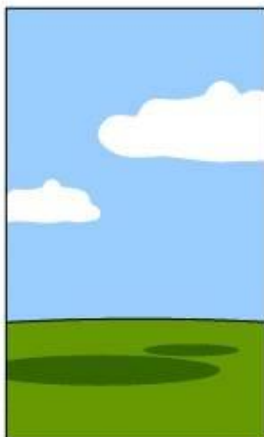
How the Analyst designed it



How the Programmer wrote it



How the Business Consultant described it



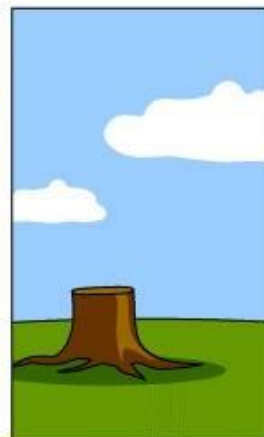
How the project was documented



What operations installed



How the customer was billed



How it was supported



What the customer really needed

# Project Success

**Customer  
Requirements  
satisfied/exceeded**

**Completed within  
allocated time frame**



**Completed within  
allocated budget**

**Accepted by the  
customer**

# Project Failure

**Scope Creep**

**Poor Requirements  
Gathering**



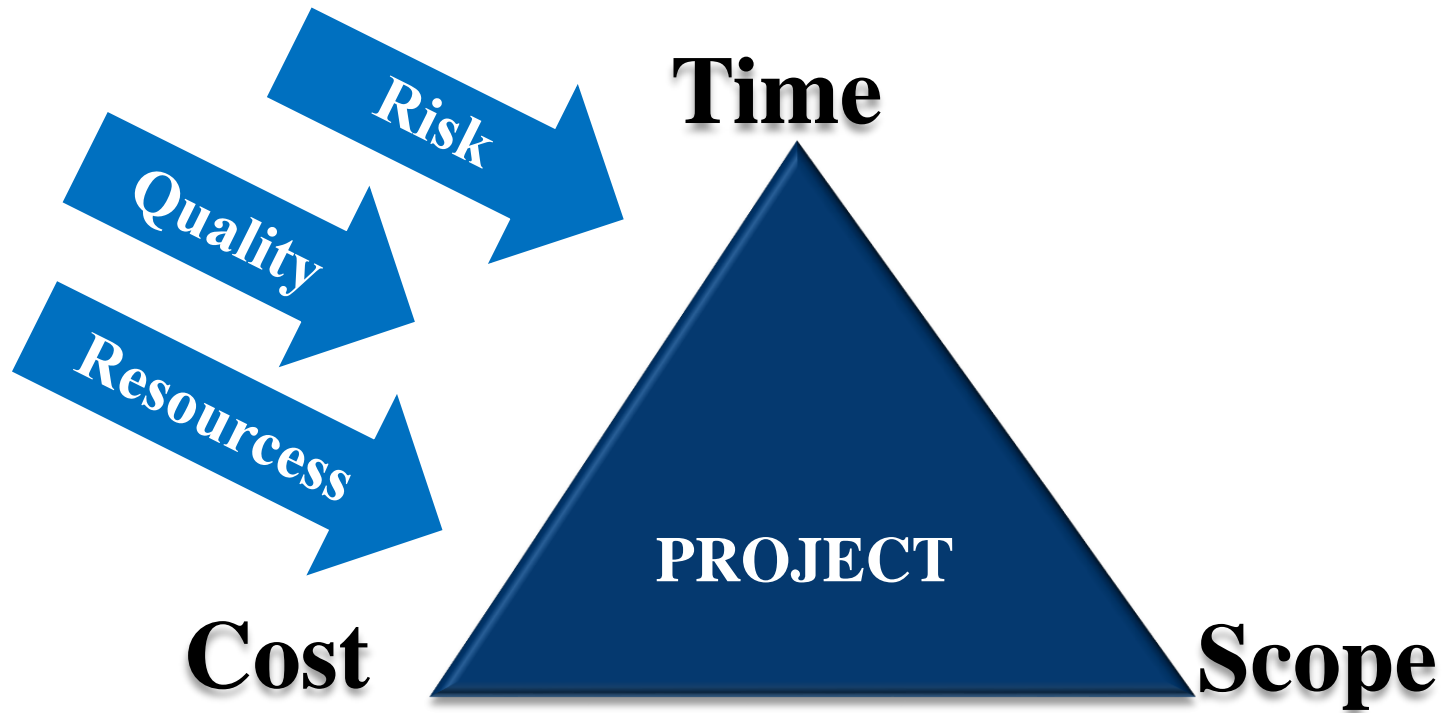
**Poor Requirements  
Gathering**

**Lack of resources**

# What is Project Management

- Project Management is the application of skills, knowledge, tools and techniques to meet the needs and expectations of stakeholders for a project.
- The purpose of project management is **prediction** and **prevention**, NOT recognition and reaction.

# Triple Constraint



# Triple Constraint

- Increased Scope = increased time + increased cost
- Tight Time = increased costs + reduced scope
- Tight Budget = increased time + reduced scope.



# Key Areas of Project Management

- Scope Management
- Issue Management
- Cost Management
- Quality Management
- Communications Management
- Risk Management
- Change Control Management

# Scope Management

- Primarily it is the definition and control of what **IS** and **IS NOT** included in the project.



# Issue Management

- Issues are restraints to accomplishing the deliverables of the project.
- Typically identified throughout the project and logged and tracked through resolution.



**Rope not thick**

**Issue... already impacting the cost, time or quality**

# Cost Management

- This process is required to ensure the project is completed within the approved budget and includes:



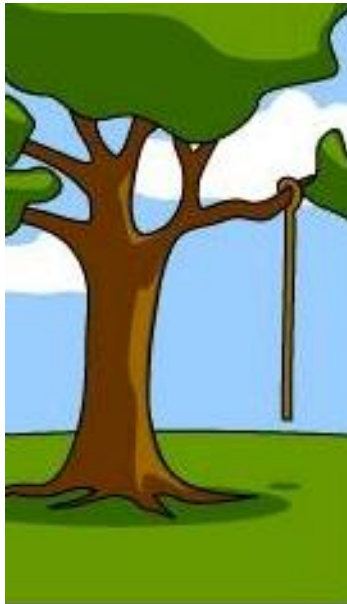
**Budget**

**Resources**  
**People**  
**Equipment**  
**Materials**  
**Quantities**



# Quality Management

- Quality Management is the process that insure the project will meet the needs



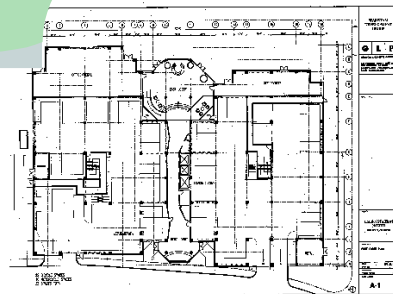
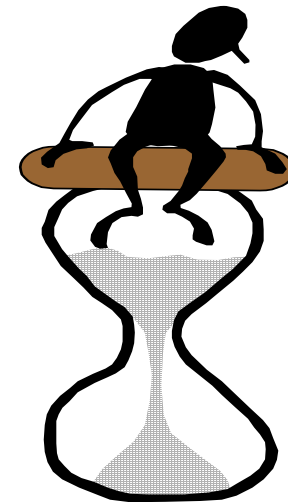
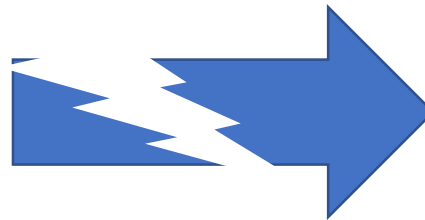
“conformance to requirements”

“fitness for use”

“the totality of characteristics of an entity that bear on its ability to satisfy stated and implied need’ - **ISO 8402:1994**

# Communications Management

- This process is necessary to ensure timely and appropriate generation, collection, dissemination, and storage of project information



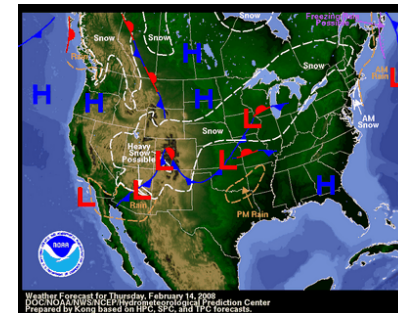
# Risk Management

- Risk identification and mitigation strategy
- Risk update and tracking

**Risk... POTENTIAL negative impact to project**



**Tree – location, accessibility,  
ownership**



**Weather**

# Change Control Management

- Define how changes to the project scope will be executed

## Scope Change



## Technical Specification Changes

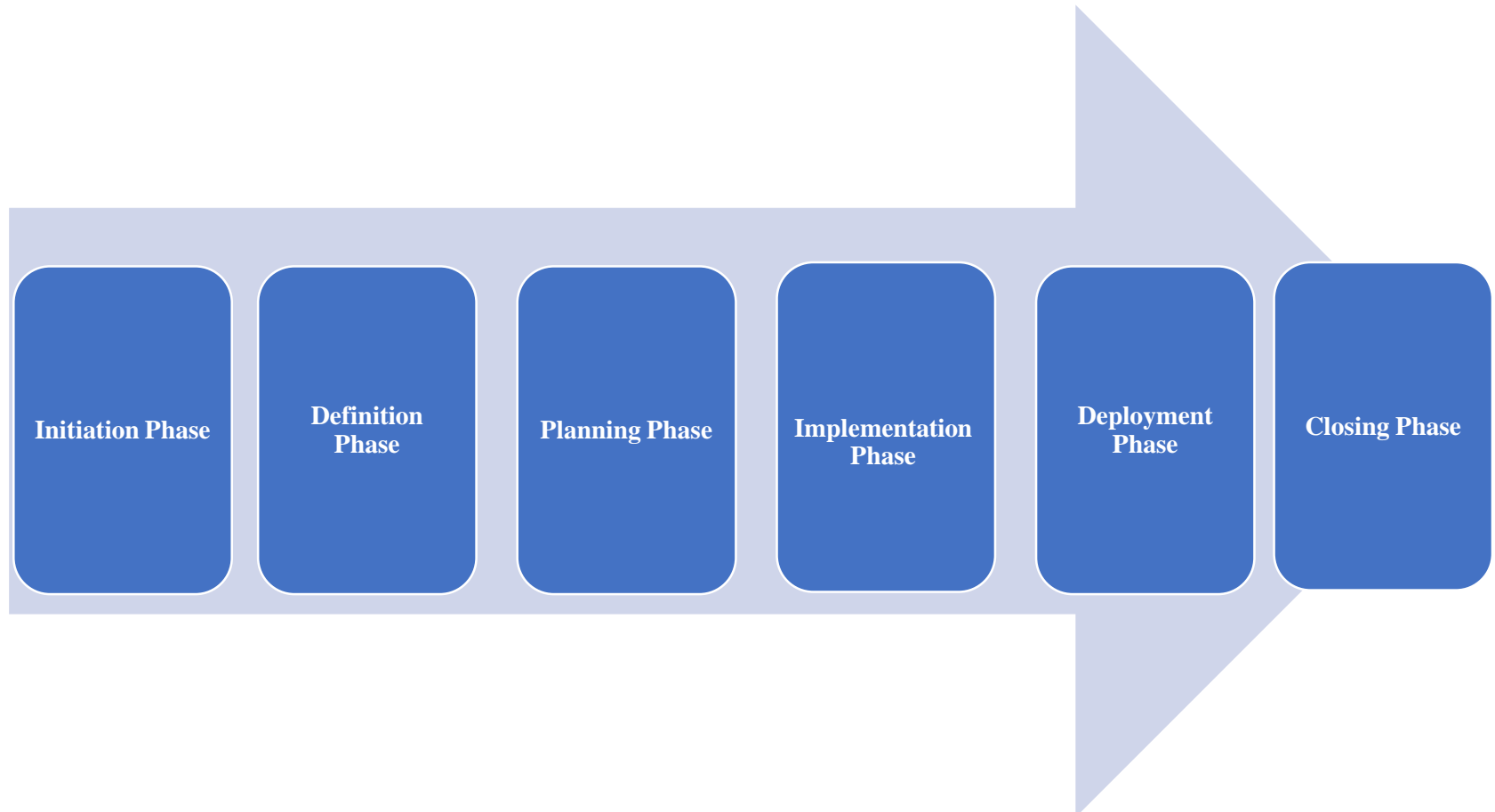


## Schedule changes

All changes require collaboration and buy in via the project sponsor's signature prior to implementation of the changes



# Project Life Cycle



# Initiation Phase

- Define the need
- Return on Investment Analysis
- Make or Buy Decision
- Budget Development



# Definition Phase

- Determine goals, scope and project constraints
- Identify members and their roles
- Define communication channels, methods, frequency and content
- Risk management planning



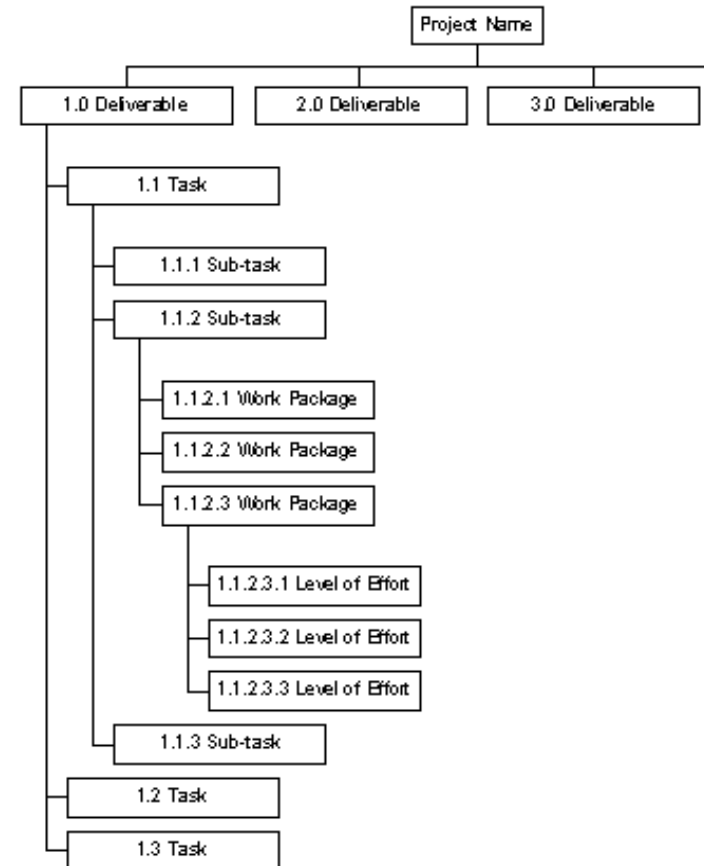
# Planning Phase

- Resource Planning
- Work Breakdown Structure
- Project Schedule Development
- Quality Assurance Plan



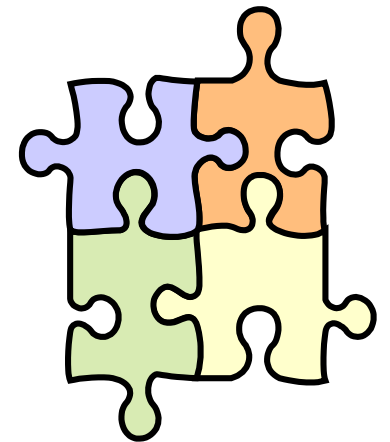
# Work Breakdown Structure

- For defining and organizing the total scope of a project
- **First two levels** - define a set of planned outcomes that collectively and exclusively represent 100% of the project scope.
- **Subsequent levels** - represent 100% of the scope of their parent node



# Implementation Phase

- Execute project plan and accomplish project goals
- Training Plan
- System Build
- Quality Assurance



# Deployment Phase

- User Training
- Production Review
- Start Using



# Closing Phase

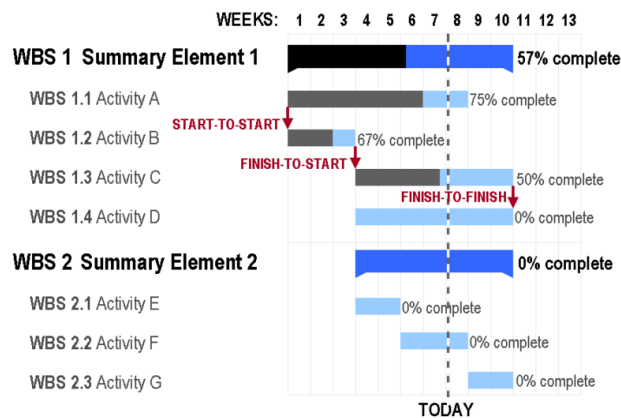
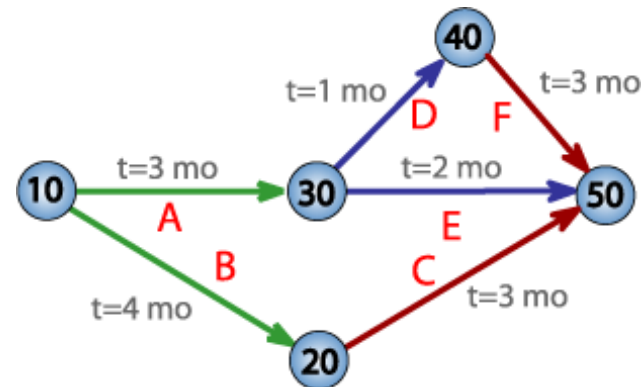
- Contractual Closeout
- Post Production Transition
- Lessons Learned





# Project Management Tools

**PERT Chart-** designed to analyze and represent the tasks involved in completing a given project

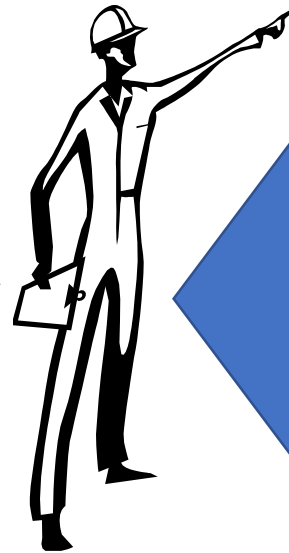


- **Gantt Chart** - popular type of bar chart that illustrates a project schedule

# Role of a Project Manager

- Project issues
- Disseminating project information
- Mitigating project risk
- Quality
- Managing scope
- Metrics
- Managing the overall work plan

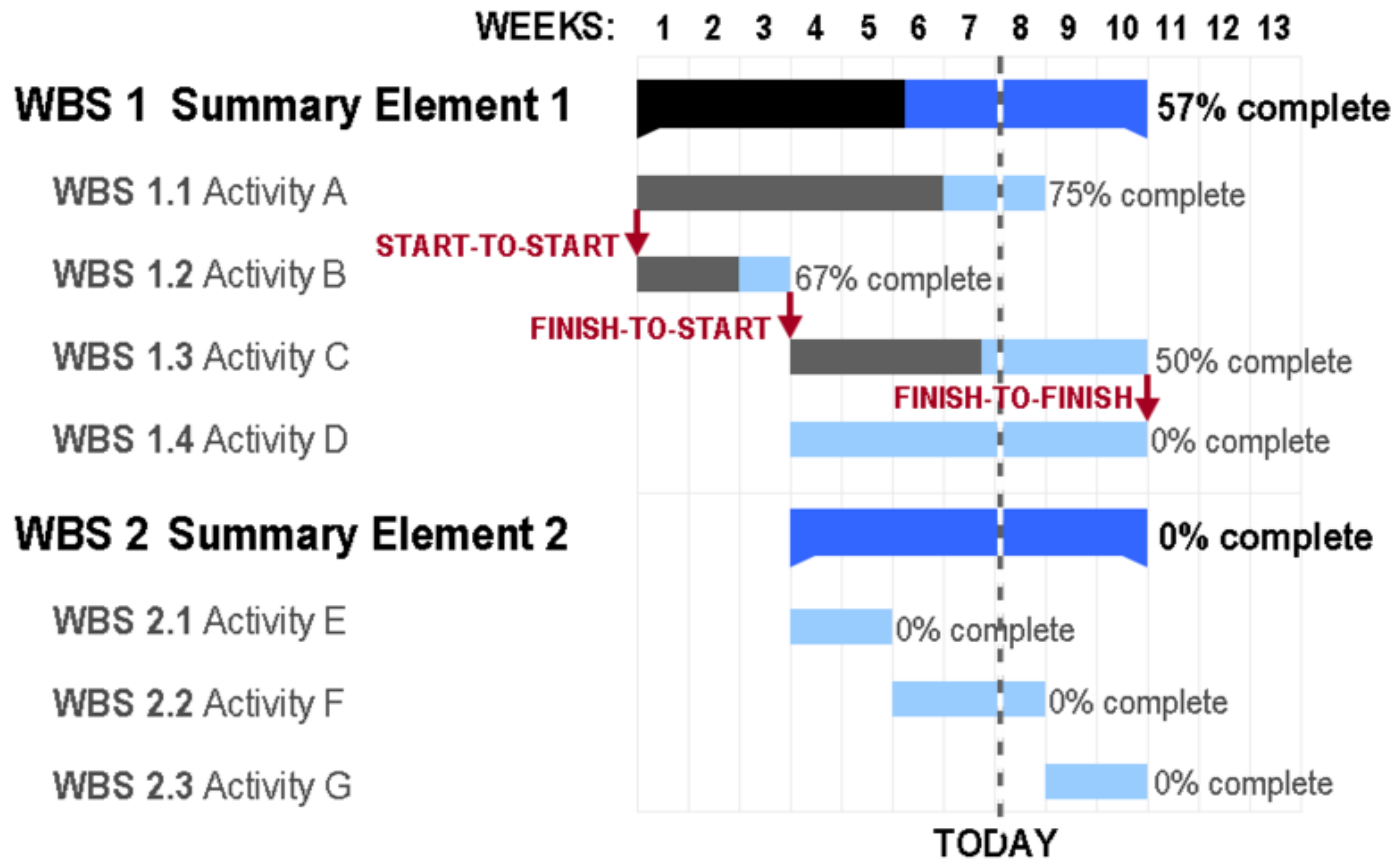
**Process  
Responsibilities**



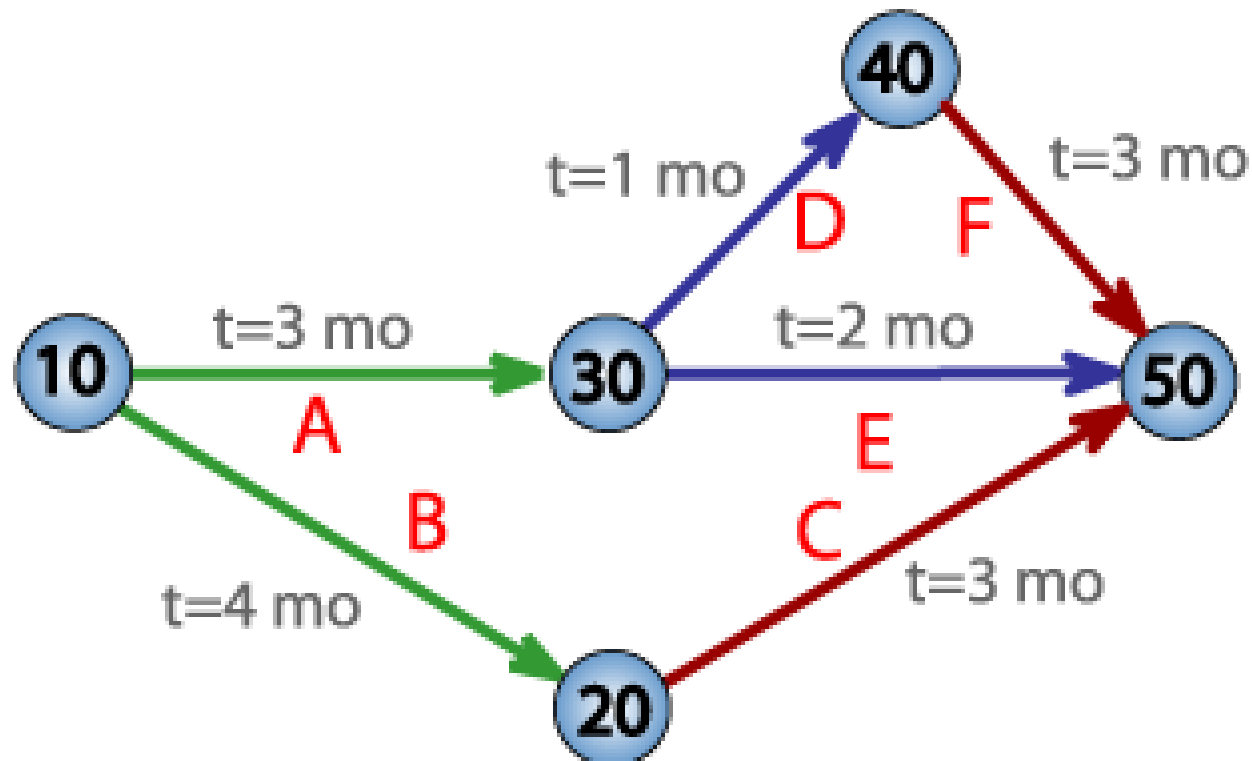
- Implementing standard processes
- Establishing leadership skills
- Setting expectations
- Team building
- Communicator skills

**People  
Responsibilities**

# Gantt Chart



# PERT Chart



# Scope Management

- Project Scope Management is the process to ensure that the project is inclusive of all the work required, and only the work required, for successful completion.
- Primarily it is the definition and control of what *IS* and *IS NOT* included in the project.

# Issue Management

- Issues are restraints to accomplishing the deliverables of the project.
- Issues are typically identified throughout the project and logged and tracked through resolution.
- In this section of the plan the following processes are depicted:
  - Where issues will be maintained and tracked
  - The process for updating issues regularly
  - The escalation process
  - The vehicle by which team members can access documented issues

# Cost Management

- This process is required to ensure the project is completed within the approved budget and includes:
  - ***Resource Planning*** - The physical resources required (people, equipment, materials) and what quantities are necessary for the project
  - ***Budget***
    - Budget estimates
    - Baseline estimates
    - Project Actuals

# Quality Management

- Quality Management is the process that insures the project will meet the needs via:
  - Quality Planning, Quality Assurance, and Quality Control
    - Clearly Defined Quality Performance Standards
    - How those Quality and Performance Standards are measured and satisfied
    - How Testing and Quality Assurance Processes will ensure standards are satisfied
    - Continuous ongoing quality control



# Communications Management

- This process is necessary to ensure timely and appropriate generation, collection, dissemination, and storage of project information using:
  - Communications planning
  - Information Distribution
  - Performance Reporting
- Define the schedule for the Project Meetings (Team, OSC, ESC), Status Meetings and Issues Meetings to be implemented

# Risk Management

- Risk identification and mitigation strategy
- When/if new risks arise
- Risk update and tracking

# Change Control Management

- Define how changes to the project scope will be executed
  - Formal change control is required for all of the following
    1. Scope Change
    2. Schedule changes
    3. Technical Specification Changes
    4. Training Changes
- All changes require collaboration and buy in via the project sponsor's signature prior to implementation of the changes