Certified Management Accountants

CMA Conference: Create Opportunities

June 2 to 3, 2011, Marriott Harbourfront, Halifax, Nova Scotia

Session F: Project Management for Finance Professionals

Presented by: Lisa James

Sponsored by: PINNACLE PROJECT MANAGEMENT

Project Management for Finance Professionals

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Pinnacle Project Management

What is a Project?

Thinking of your experience in your own organization, how would you describe what a project is or is not?

What is a Project?

- A temporary activity
- Has a defined beginning and end
- Has its own budget
- Has specific goals and objectives
- Has a finite scope
- Demands skills other than those used in your regular (operational) job
- Often crosses organizational functions

What is Project Management?

Based on your experience, using words or phrases, how would you describe Project Management?

What is Project Management?

- Planning, organizing and managing resources
- To accomplish a specific set of tasks
- Managing scope, time, quality and cost
- Using tools, techniques and knowledge that help to meet the requirements of the project

What is Project Management?

The Project Management Institute defines a project as:

“a temporary endeavor undertaken to create a unique product, service, or result”

Why Project Management?

- Applies a degree of rigour to the initiative
- Distinguishes the project from daily operations
- Provides a focus on achieving a specific set of goals

When is Project Management Used?

- Traditionally an engineering discipline
- Has moved into IT sector and many areas of business
- We even use it in everyday life

A Practical Example: Managing Christmas

- Set budget
- Determine scope
- Plan activities
  - Gift shopping
  - Gift wrapping
  - Card writing
  - Baking
  - Party planning
  - Family visits, Christmas concerts, etc.
  - Christmas dinner
- Execute the plan
  - Manage schedule, cost, scope and quality
- Close project
  - Evaluate the outcome
  - What will you do differently next year

When is Project Management Used?

- New product design/build
- Building construction
- Process redesign
- Software development
- System implementation
- Conference planning
- Wedding planning
- Theatre productions

PM Knowledge Areas

- Scope Management
- Time/Schedule Management
- Cost Management
- Quality Management
- Resource Management
- Communications Management
- Risk Management
- Procurement Management
- Integration Management

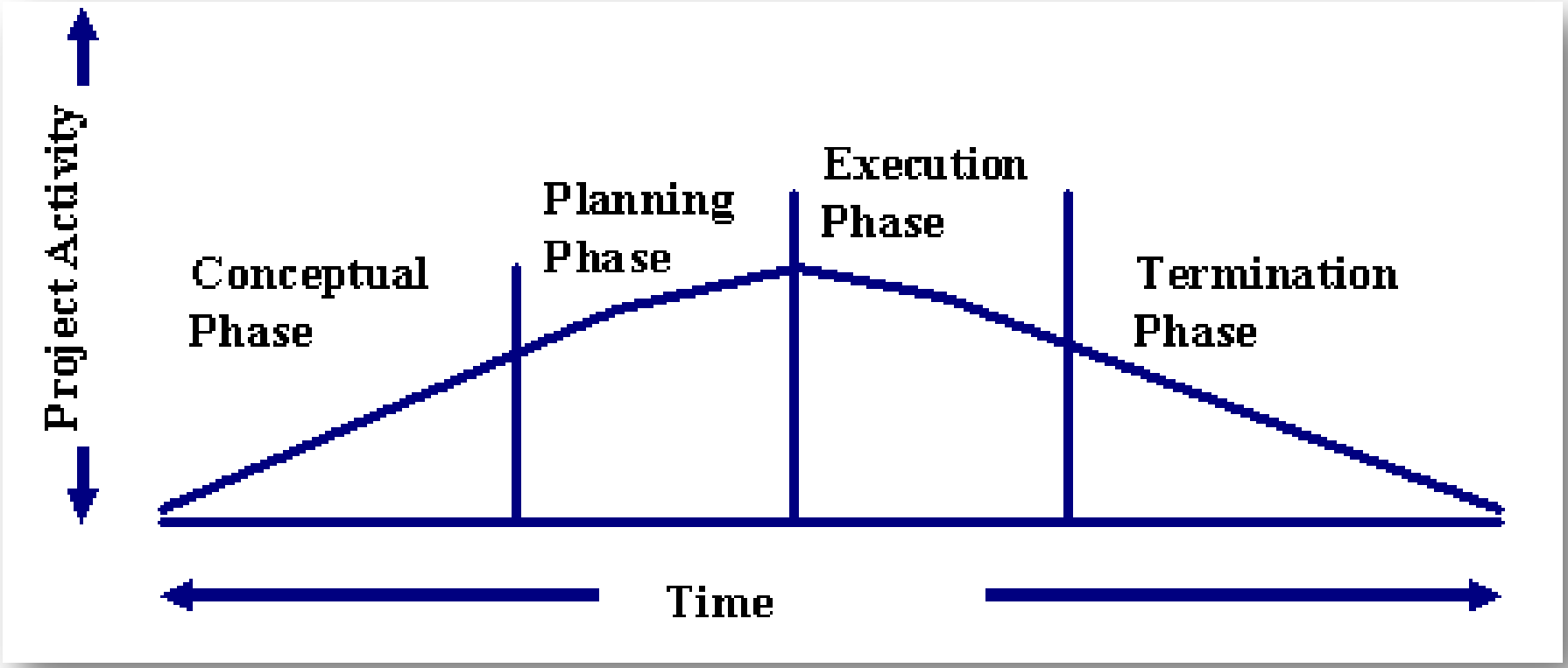
CMA's and Project Management

- We understand the impact of projects on all facets of the organization
- We can relate a project to overall organizational strategy
- We understand scope, cost, schedule and quality management
- We understand risk management

Phases of a Project

- Project Initiation
- Planning and Design
- Execution
- Closing

A Project's Life Cycle



Project Initiation

Project Initiation

Define the project at a high level:

- What is the main objective?
- Who are the key players?
- Is there a budget?
- What is the timeline?
- What is the scope?
- What are the quality expectations?
- Other constraints?
- Develop the business case/project charter

Define the Project Team

The project team will help to plan, execute and control the project.

The project team consists of:

- The Sponsor
- The Project Manager
- Stakeholders
- SMEs
- Customers
- Suppliers

Build a Winning Team

- Define roles
- Lists all skills needed for each role
- Do a skills inventory
- Negotiate for the team members you need
- Do the best with the resources you have

Project Teams

- Choosing your project team
  - Think carefully about who you choose
  - Determine the areas that are affected by the project
  - Choose people with varying skills in different areas
  - Choose high performers and good team workers
- Assigned project team
  - Make a wish list of skills and compare to assigned team
  - Look for potential as well as actual skills/experience
  - If large gaps exist, think about training, hiring consultants, or proceeding with the team as is

Team Meetings

- Meet with each team member individually
  - Set expectations
- The Project Kick-Off Meeting
  - Introduce the team
  - Introduce the project
  - Establish the goals
  - Build the team charter
- Regular Status Meetings
  - Regular project updates
  - Identify issues and resolutions
  - Plan for the next period

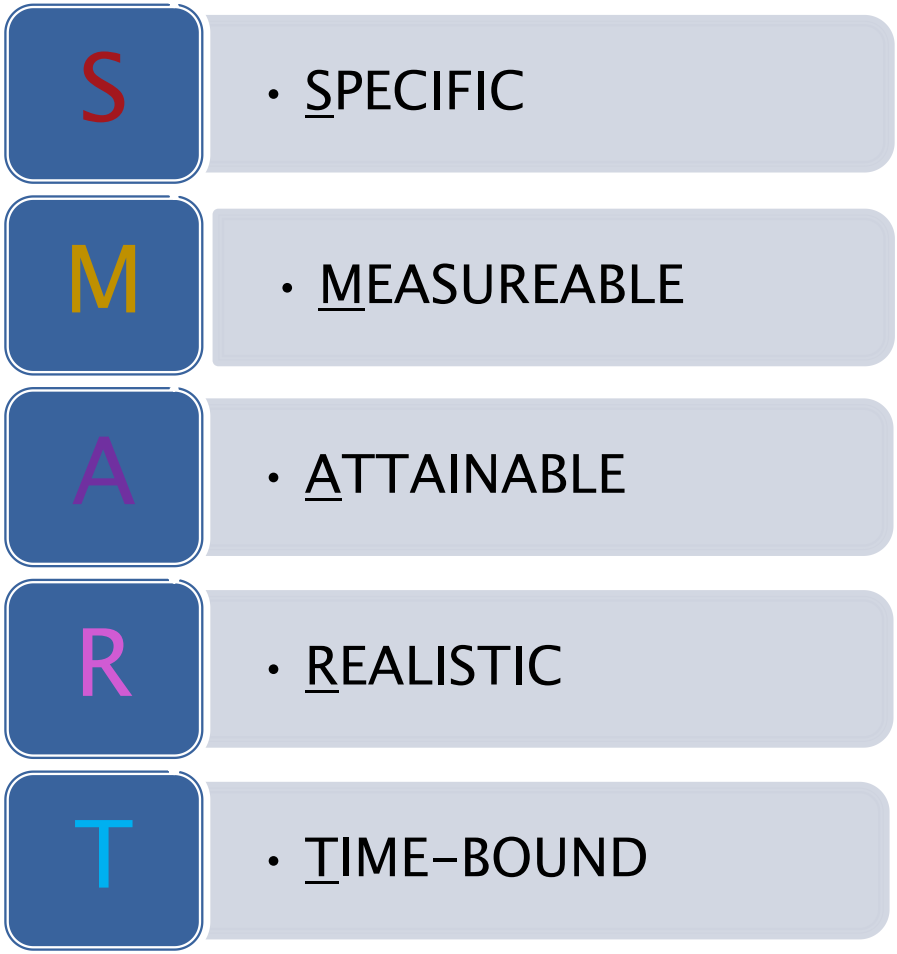
Effective Meetings

- Publish an agenda & circulate
- Start the meeting on time
- Stick to the agenda
- Introduce anyone new to the group
- Set clear objectives
- Ensure minutes are taken
- Review action items before the meeting breaks
- End the meeting on time

Project Goals

- Projects must have an overall goal
- Goals provide criteria for evaluating project success
- Goals must be agreed upon
- Goals must have clear responsibility
- The three P's of goal setting:
  - Put it in writing
  - Personal
  - Positive
- The acronym SMART

A Good Goal is a SMART Goal



Tips About Project Goals

- Project goals need to be reviewed periodically to make sure you have consensus, and as you move from stage to stage in a project
- All members of a team must be involved in goal setting and kept up to date on goal progress
- Set goals high but make sure they are achievable
- It might be useful to keep a goal chart on the wall
- Celebrate when you accomplish a goal

Planning & Design

Planning and Design

- Define Scope Statement
- Define Deliverables
- Identify Activities (Work Breakdown Structure)
- Estimate Resource Requirements
- Estimate Time & Cost
- Develop the Schedule
- Develop the Budget
- Plan Communication
- Plan for Risk

Scope Statement

- Determine the parameters for the project
- Define what is in scope
- Define what is out of scope
- It is important to define the scope precisely in order to manage stakeholder expectations
- Revisit the scope statement periodically throughout the project
- Formalize the process for changing the scope – it impacts the project

Deliverables

- A defined work product
- Could be a document, component, or other tangible product
- Deliverables are generally synonymous with project milestones

The Work Breakdown Structure

- WBS
  - “A family tree that graphically breaks down an end goal or deliverable into manageable units.”
  - Created from the top down with the project as a single event
  - Can be created by the PM alone or with the project team
- Role of WBS
  - Determines how to get from current state to end goal
  - Breaks down a project into manageable tasks

Creating a WBS

1. Understand the scope and requirements of the project
2. Indentify major areas and tasks required to complete the project
3. Continue subdividing tasks into actionable items and don't worry about order of events
4. Draw the WBS in organization chart format, or as an indented list in MS Word, MS Excel, MS Project or another program of choice.

Creating a WBS

1. Understand the scope and requirements of the project
   - Familiarize yourself with the project scope
   - Work not indicated on the WBS is out of scope

Creating a WBS

2. Indentify major areas and tasks required to complete the project
   - Carry out task breakdown with project team
   - Start the WBS as Level 1 – Project
   - Next define the major deliverables or activities
   - Ask “what needs to be done in order to complete this deliverable?”
   - Write down all major components on Level 2

Creating a WBS

3. Continue subdividing tasks into actionable items and don't worry about order of events
   - Continue asking "what has to be done in order to complete this task"
   - Stop dividing when all tasks have been accounted for or until you've reached the desired time measurement (weeks, days, hours, months)
   - No limit to the number of levels

Creating a WBS

4. Draw the WBS in organization chart format, or as an indented list
   - Choose the structure for the WBS (deliverable-based, activity-based, or combo of both)
   - Number each level/milestone activity
   - List activities using verbs
   - Choose the format that works best for the project (indented list, spreadsheet, organizational chart)

WBS Format – Indented List

- Clean Room
  - Room is Vacuumed
    - Get vacuum
    - Plug in vacuum
    - Turn on vacuum
  - Room is Dusted
    - Get duster
  - Sheets are Washed
    - Strip bed
  - Floor is Washed
    - Get mop
    - Get bucket
    - Fill bucket
  - Floor is Free from Debris

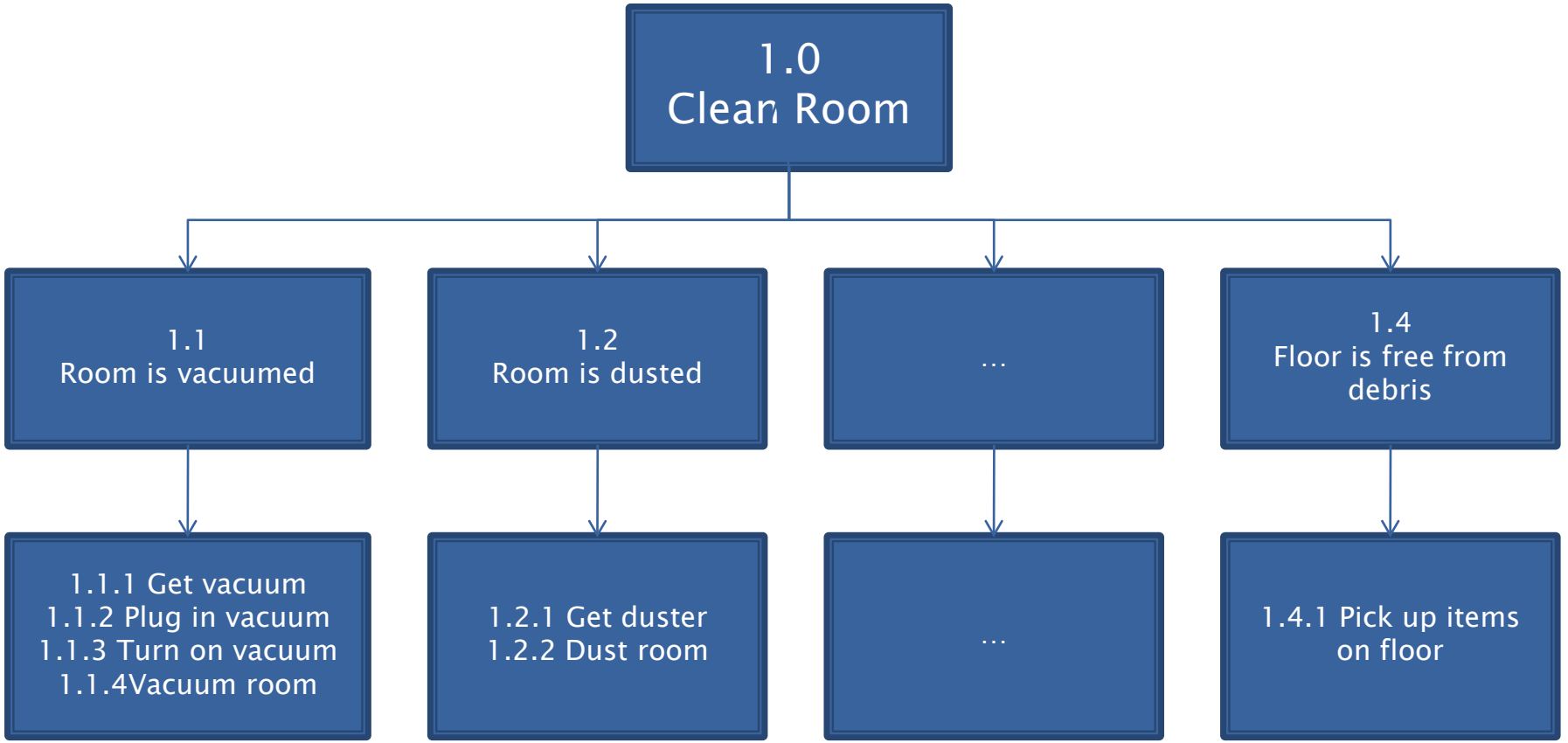
WBS Format – Indented List

ID	WBS	Task Name
1	1	Microsoft Office SharePoint Server 2007 Deployment
2	1.1	Envisioning
3	1.1.1	Evaluate Microsoft Office SharePoint Server 2007 features
4	1.1.2	Evaluate corporate objectives for Microsoft Office SharePoint Server 2007 (corporate knowledg
5	1.1.3	Evaluate customer needs for Microsoft Office SharePoint Server 2007
6	1.1.4	Formulate preliminary cost/benefit analysis
7	1.1.5	Determine project scope (lab, pilot, international/regional deployment, coexistence strategies, et
8	1.1.6	Determine major milestones
9	1.1.7	Secure executive sponsorship and funding
10	1.1.8	Document as needed
11	1.1.9	Envisioning complete
12	1.2	Planning
13	1.2.1	Define vision statement for requirements
14	1.2.2	Determine success criteria
15	1.2.3	Assemble Project Teams, Define Roles
16	1.2.3.1	Assemble Project Teams
17	1.2.3.2	Assign/define Development/Design team
18	1.2.3.3	Assign/define Communication team
19	1.2.3.4	Assign/define project manager
20	1.2.3.5	Assign/define infrastructure/network administrator
21	1.2.3.6	Assign/define deployment administrator
22	1.2.3.7	Assign/define desktop administrator
23	1.2.3.8	Assign/define intranet/Internet administrator
24	1.2.3.9	Assign/define workspace coordinators
25	1.2.3.10	Assign/define database administrator
26	1.2.3.11	Assign/define test/QA lead
27	1.2.3.12	Assign/define education/training lead
28	1.2.3.13	Establish subteam roles and responsibilities (infrastructure, security, hosting, etc.)
29	1.2.3.14	Document as needed
30	1.2.3.15	Assemble project teams, define roles complete
31	1.3	Review/Detail Technical Requirements
32	1.3.1	Review/detail Microsoft Office SharePoint Server 2007 requirements
33	1.3.2	Content and Audit activities
34	1.3.3	Review/detail technology architecture

WBS Format – Spreadsheet

Work Breakdown Structure										
Project						Project #				
Project manager						Sponsor	0			
Project artifacts						Updated				
ID	Task	Dependencies	Status	Effort Hours	Cost	Start Date	Planned Completion	Estimate to Completion	Actual Completion	Resource
1		ID # of task								
2										
3										
4										
5										
6										
7										
8										
9										
10										

WBS Format – Organizational Chart



Project Scheduling

- Assign durations to each WBS task
- Include all affected team members in the estimation process
- Determine optimistic, pessimistic, and probable durations for each task
- Gather availability and vacation details for each team member
- Factor in “float time” to accommodate Murphy’s Law (“If something can go wrong, it will”)

Estimating Task Durations

- This standard formula used for estimating time (T_e):

$$\frac{T_o + 4T_m + T_p}{6}$$

T_m= probable time

T_o= optimistic time

T_p=pessimistic time

T_e=calculated time

Developing the Schedule

- Ask yourself:
  - How much information is needed?
  - What form of schedule do they want or expect to see?
  - Should I create customized versions of the schedule for certain audiences, or for display purposes?
- Schedules are a communication tool
- Ensure the schedule is understood by everyone
- Use version control
- Figure out what project activities can occur simultaneously

Project Budgeting

- Most projects run on a tight budget
- Build budgets task by task, step by step
- Costs are tied to project goals
- Costs are tied to time frames and schedules
- Don't make "guesstimates" about areas you know nothing about; ask the subject matter experts
- One of the most difficult tasks a Project Manager faces

Project Budgeting

- There are two main methods of estimating costs:
  - Bottom-up budget: You and your team get to build the budget by hammering out costs, item by item.
  - Top-down budget: Senior managers estimate the costs and allocate that amount to you for execution.

  (Perhaps the best type of budget combines both methods)

Communication Plan

- The five components of the communication plan:
  - Who
  - When
  - Why
  - What
  - How

Communication Tips

- Create templates for status reports, issue logs, customer letters, any other communication pieces you will use
- Set-up group email lists, mailing lists
- Customize the medium for specific people, where necessary
- Stay organized

Sample Communication Plan

Who	When	Why	What	How
Product Consumers/End Users	1 month before implementation	Inform them of pending change in product	Detail new product features	Letter, follow up email
Design Engineers	Conceptual and planning	Keep them up to date	Detail planning that has been done so far	Weekly status meetings Daily status report (e-mail or telephone)
Project team	All phases	Keep them up to date	Detail accomplishments so far	Weekly status meetings

Project Risks

- There are three types of risks:
  - Those that you or your stakeholders can identify from experience
  - Predictable risks (based on instinct rather than something concrete)
  - Unexpected — the “stuff” that happens
- Risk has two characteristics:
  - Uncertainty: May or may not happen (probability)
  - Loss: Has unwanted consequences (Impact)
- Project Managers must plan for risk

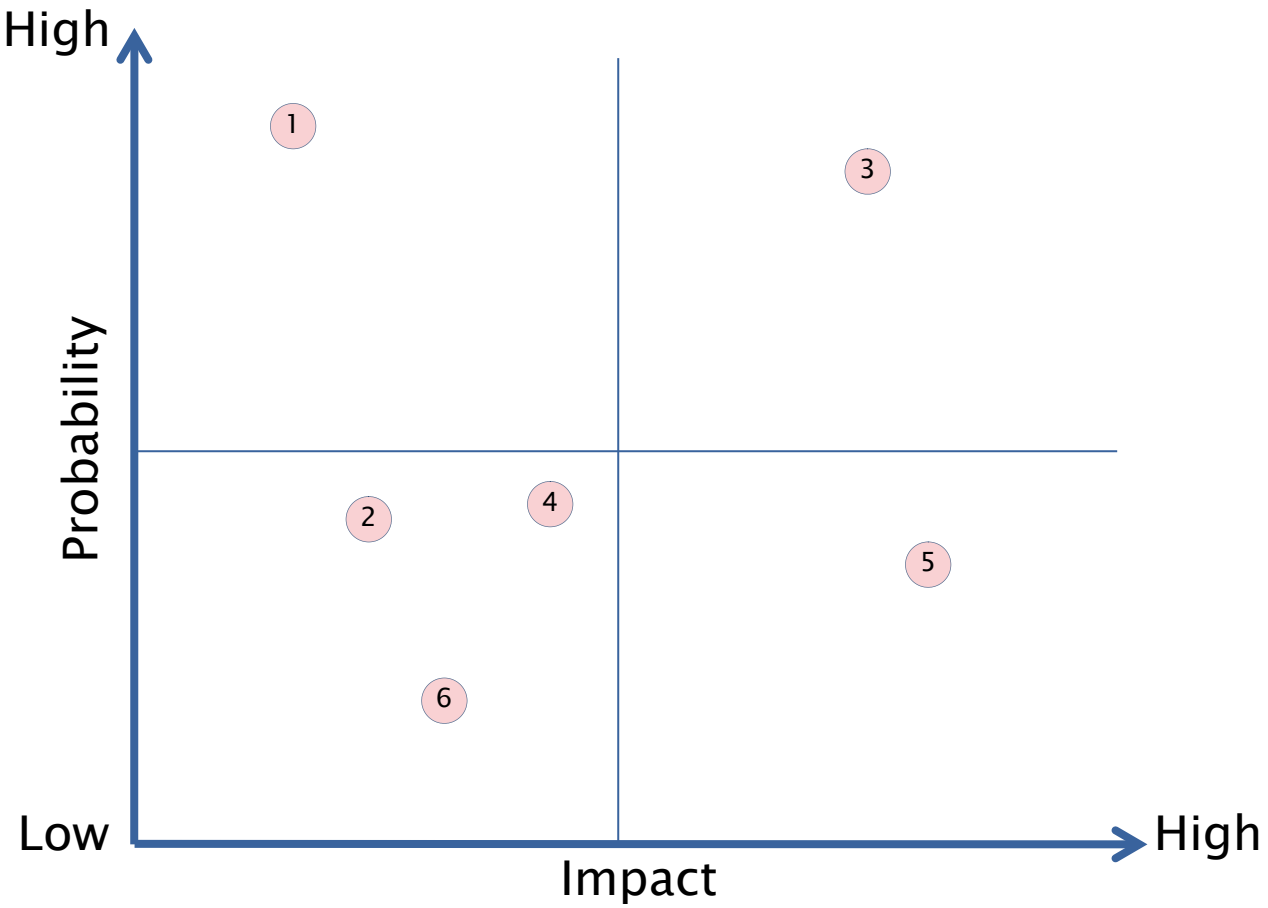
Common Risks

- Funding
- Time
- Staff
- Customer Relations
- Project Size or Complexity
- External Factors

Reducing Risk on Projects

- Consult the team and stakeholders
- Identify the Risks
- Determine probability and impact
- Plot them on the Risk Matrix

Risk Matrix



Reducing Risk on Projects

- Based on the Risk Matrix, Determine the Response:
  - Avoid it – change project to avoid risk
  - Transfer it – shift risk to someone else
  - Mitigate it – look for ways to reduce the probability and impact factors
  - Accept it – decide risk is not worth acting upon
- Determine an Action Plan – who is responsible, and when should they act

Controlling Change

- Have a formal change request process in place for managing changes
- Determine who needs to sign off change requests
- If a change will impact in scope, schedule or cost, invoke the process
- Ensure the team agrees not to make any unauthorized changes to the project, regardless of who asks

Planning Tools

- We are familiar with many planning tools
- Planning tool examples:
  - Action Planning Worksheets
  - Milestone Charts
  - PERT
  - Gantt Charts
  - The Network Diagram
  - The Flow Chart

Planning Tools

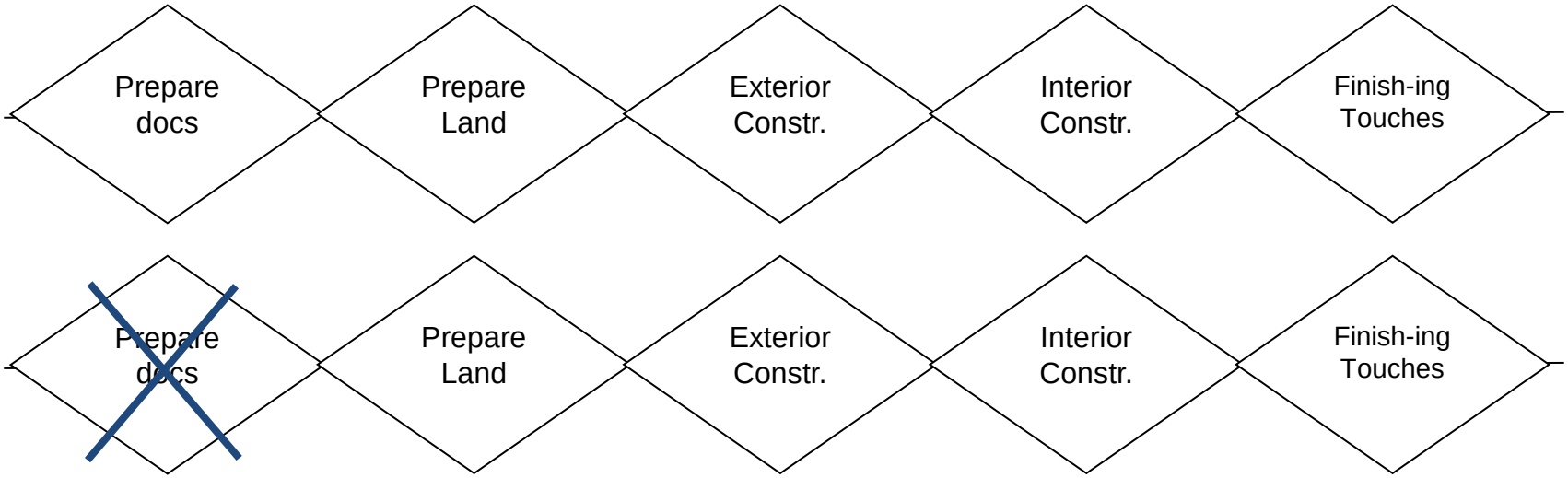
- Action Planning Worksheets
  - Varied complexity
  - Most basic form includes only those steps required to complete a project

Activity Planning Worksheet

Critical Step or Activity	Who will complete this activity?	Cost of activity	Info or assistance needed?	Time required to complete	How we will know the task is completed

Planning Tools

- Milestone Charts
  - Signify key accomplishments
  - Summary of work that has been done if used to track progress (see “X” below)

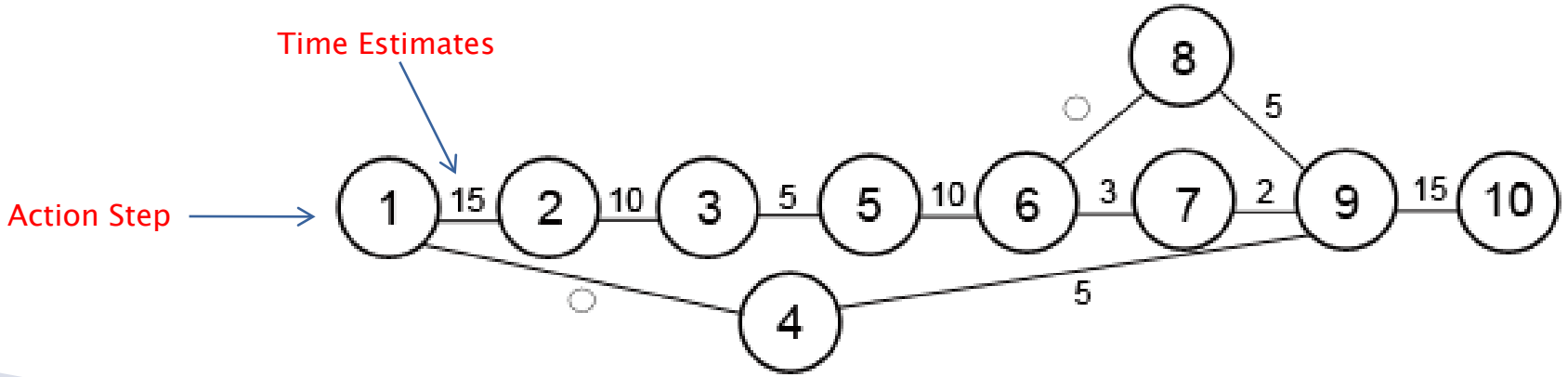


Planning Tools

- PERT/CPM
  (Program Evaluation Review Technique/ Critical Path Method)
  - A diagram that represents an added degree of sophistication in the planning process
  - Displays each task and the relationship among the tasks
  - Easy way to calculate the critical path (the shortest amount of time needed to complete a project)

Planning Tools – Sample PERT

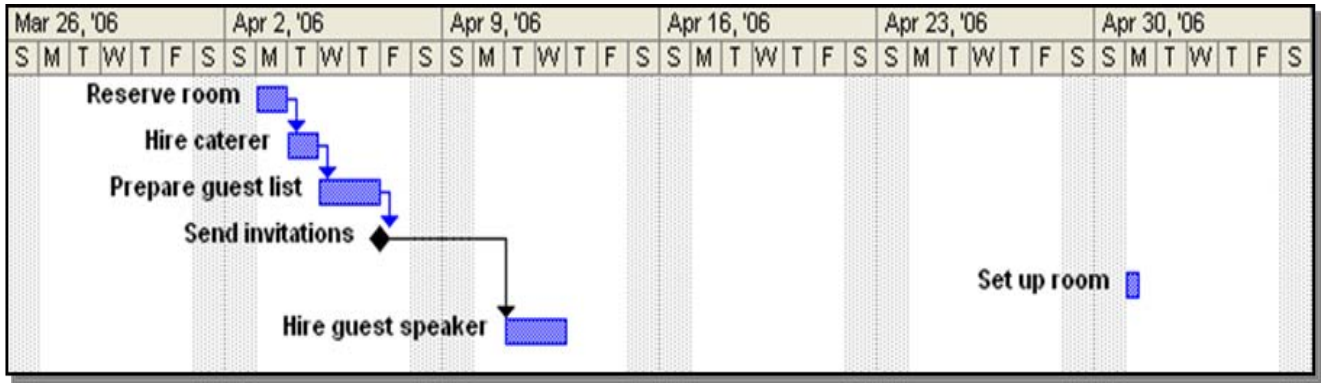
OBJECTIVE: Publish a Work Planning and Review Workbook			
Action Steps with Time Estimates:			
1.Write draft	15 days	6.Proofread	3 days
2.Type draft	10 days	7.Make corrections	2 days
3.Proofread	5 days	8.Draw figures	5 days
4.Draw cover	5 days	9.Reproduce	15 days
5.Type final	10 days	10.Deliver books	

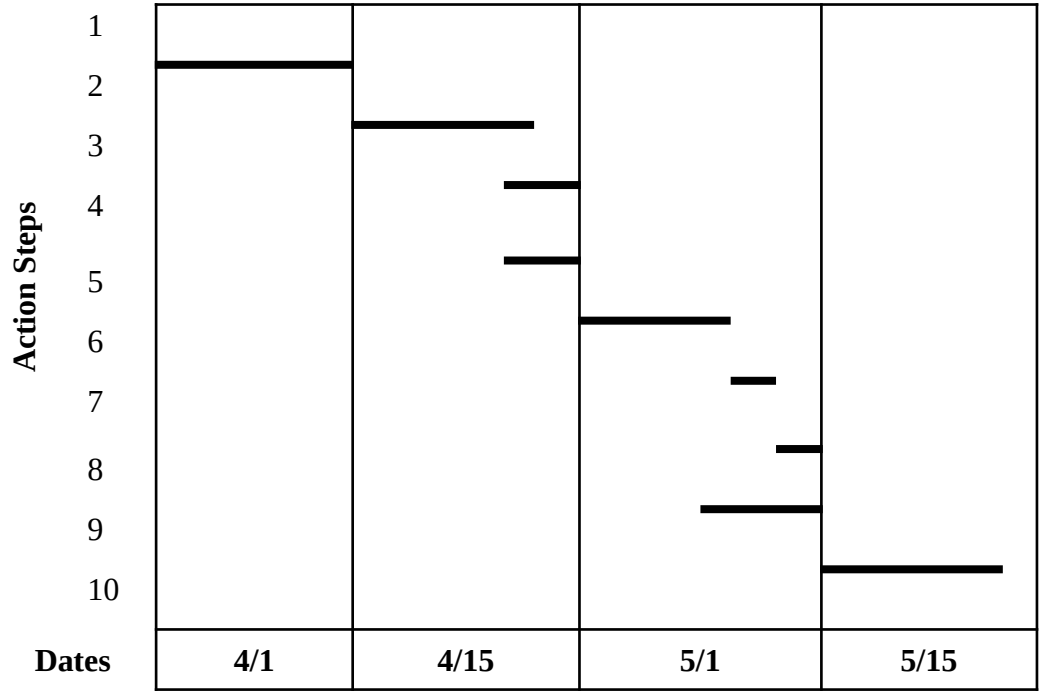


Planning Tools

- Gantt Chart
  - Bar charts that show activities as blocks of time
  - Once you have estimated the duration of a project a Gantt Chart should be created

Planning Tools – Sample Gantt Charts





PINNACLE PROJECT MANAGEMENT

Planning Tools

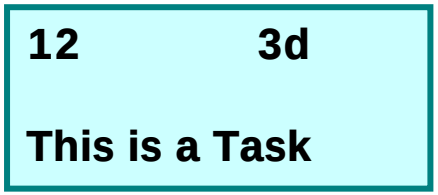
- Network Diagram
  - Organizes the sequence of steps in a project (based on dependencies)
  - Helps you picture how the pieces fit together
  - Manual or computer created
  - Shows start date, end date and responsible person
  - Great visual for project room
  - More detailed than task lists and WBS'
  - Identify each task and milestone with a unique number/identification label

Planning Tools – Network Diagram

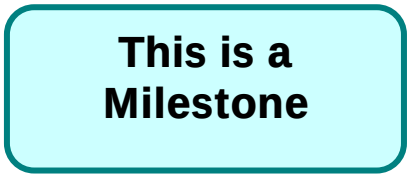
- 5 Steps to Create a Network Diagram
  - List the tasks
  - Establish task dependencies
  - Identify Milestones
  - Lay out tasks and milestones as a network
  - Review the logic of the network
- Helpful Hint
  - It can be helpful to number tasks in relation to milestones, to maintain flexibility in the network when requirements change or different tasks are required

Planning Tools – Network Diagram

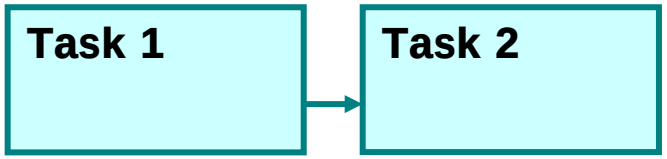
- Things to know…



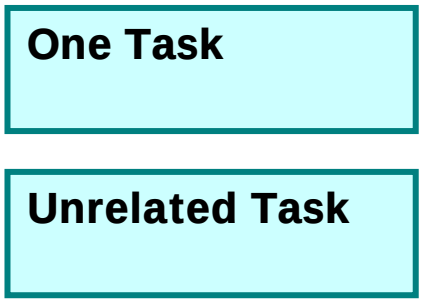
Task



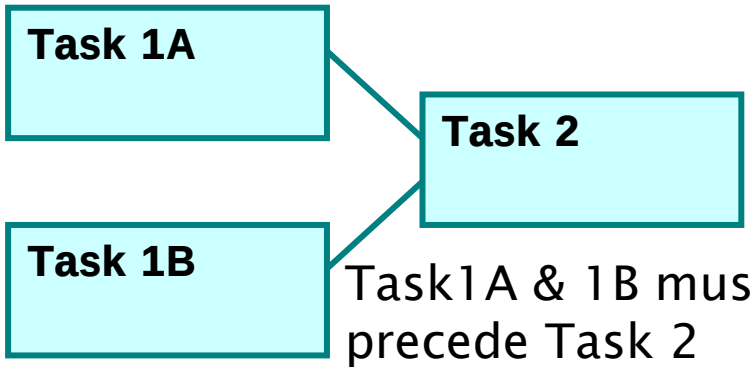
Milestone



Task 1 must precede Task 2



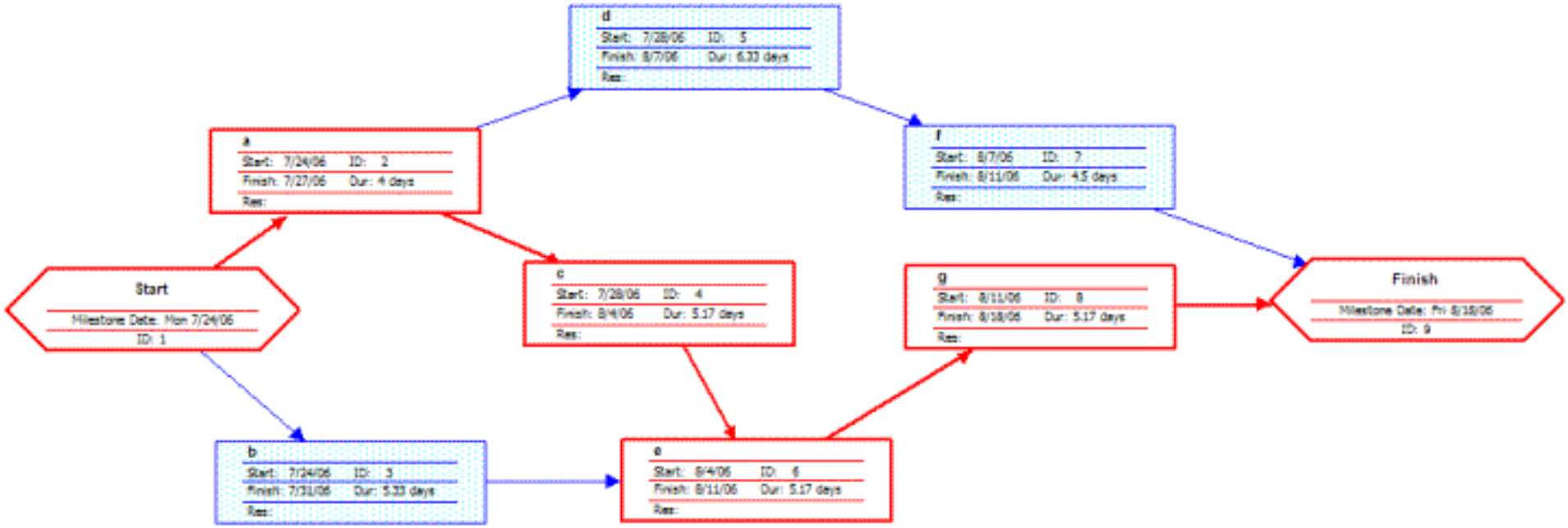
Concurrent Tasks



Task1A & 1B must precede Task 2

PINNACLE PROJECT MANAGEMENT

Planning Tools – Network Diagram



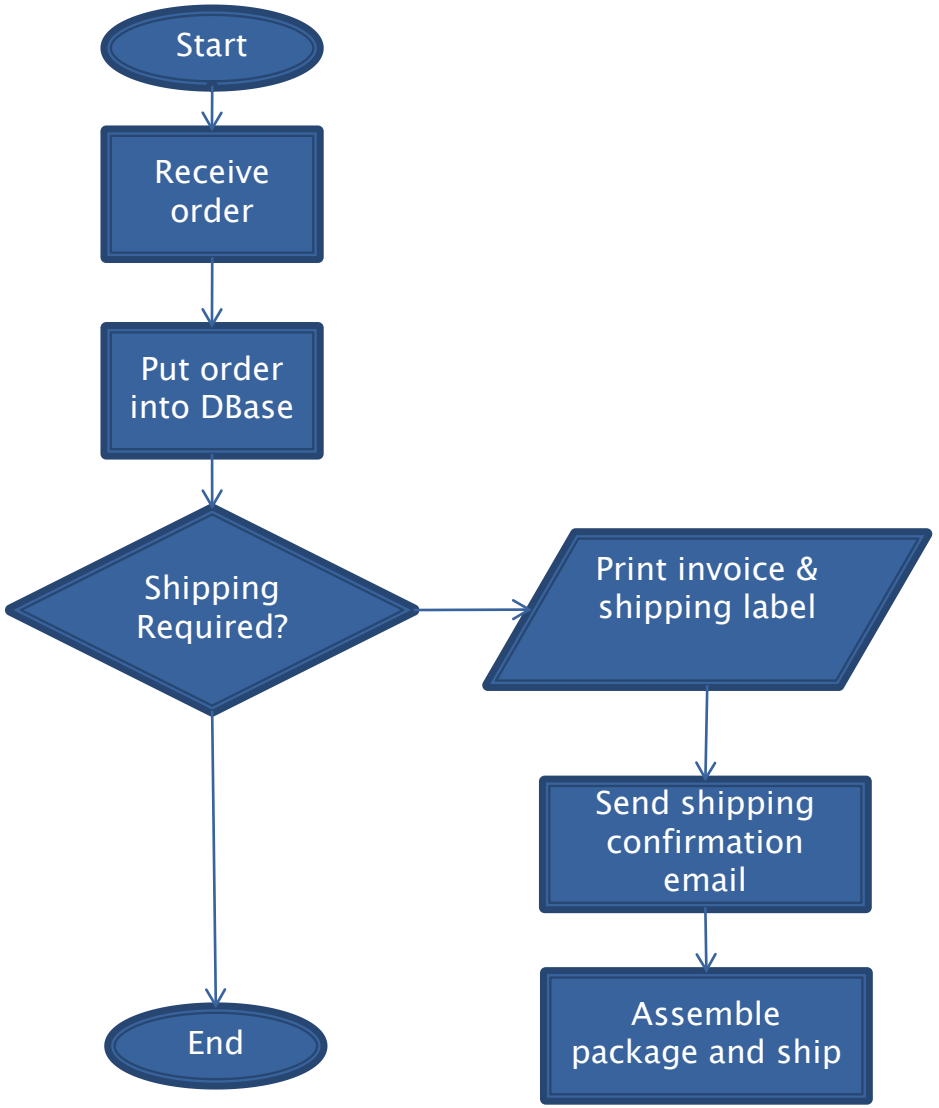
PINNACLE PROJECT MANAGEMENT

Planning Tools

- Flow Chart
  - Shows the flow of information or activities based on different outcomes or decisions
- Five Steps to Making a Flow Chart
  1. Gather resources from each part of the process
  2. Decide where the process begins and ends
  3. Brainstorm the main activities and decision points
  4. Arrange activities/decisions points in proper order
  5. Break down activities to show complexity (as required)

Planning Tools – Sample Flow Chart

Order Processing



Preparing The Final Plan

- The final plan can include a variety of documents, depending on size and scope of a project. Below are some of the documents that could make up a Final Plan:

SOW	Risk Identification Chart
Project Charter	Risk Action Plan
Planning Tools (including milestone chart, Gantt chart, network diagram, etc.)	Communication Plan
Resource List & Cost	Tracking Tools
Budget	Business Case
Change Management	Quality Control Process

Execution Phase

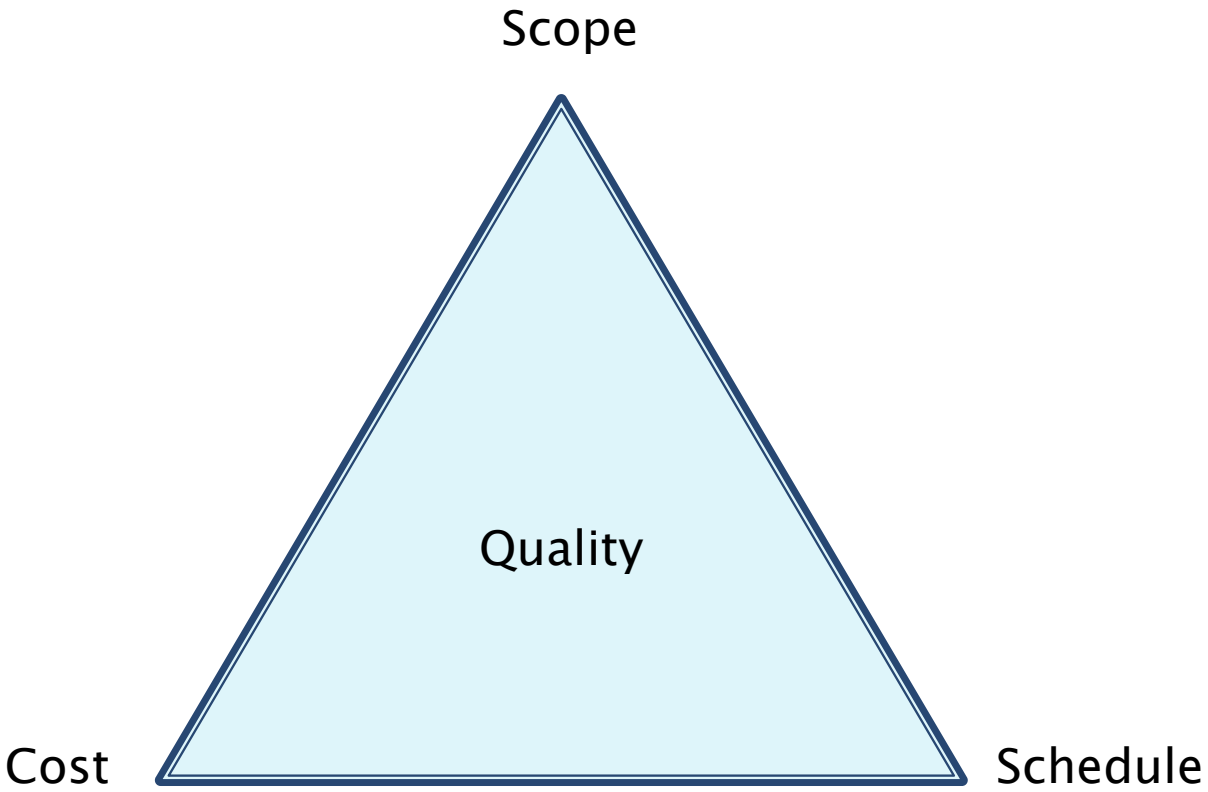
It's So Simple…

- Perform the scheduled activities
- On time
- Within budget
- Deliver quality
- Meet the goals

The PM MUST:

- Manage Scope
- Manage Time/Schedule
- Manage Cost/Budget
- Manage Quality
- Manage Resources
- Manage Communication
- Manage Risk
- Manage Procurement
- Manage Integration

The Project Management Triangle



Closing Out A Project

- Have a plan for a smooth closing
- Return borrowed items (lease/rental)
- Ensure all project tasks are complete
- Pay final bills
- Present final deliverables to stakeholders
- Obtain sign-off
- Conduct post-project evaluations with team
- Thank the team for their effort
- If project was a success, celebrate!
- Keep track of lessons learned

Questions?

PINNACLE
PROJECT MANAGEMENT

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