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Project Management (Introduction to)

2-Day Version

Introduction to Project Management

2-Days

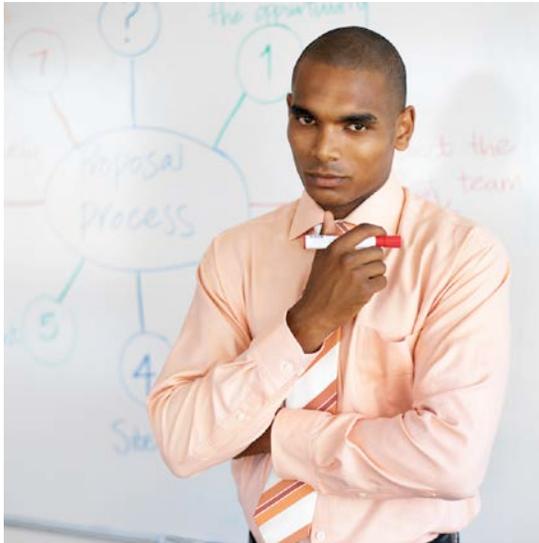


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Introduction to Project Management CPS

Discuss and demonstrate the essentials of project management at the introduction level.

Introduction into the Project Management

- Why project management
- Reviewing project management basic terminology
- Project constraints
- Project team members
- Project management competencies

Define a project by using four key documents to manage and define project success

Defining the Project

- Identifying and working with key stakeholders
- Develop a project charter
- Develop project statement of work/proposal
- Create a communication plan with responsibility matrix

Execute the project planning elements, resources, and tools to ensure project is completed within time, budget, and risk constraints

Planning the Project

- Identify and manage project risk (the what if?)
- Creating the work breakdown structure (WBS)
- Building a project schedule
- Obtaining plan approval
- Conducting the kickoff meeting

Leveraging project team, communication, measurement, and problem solving procedures to keep the project moving to a successful completion

Controlling the Project

- Building project team performance
- Implement the change management plan
- Measuring project performance

Closing the Project

- Obtaining final acceptance for the project
- Releasing project resources
- Identifying, documenting and communicating lessons learned
- Creating and distributing a final project report

Introduction to Project Management

- Why project management?

Advantages	Challenges

Reviewing Project Management Basic Terminology

Project –

Project management –

The three phases of project management –

- 1.
- 2.
- 3.

Team –

Leadership –

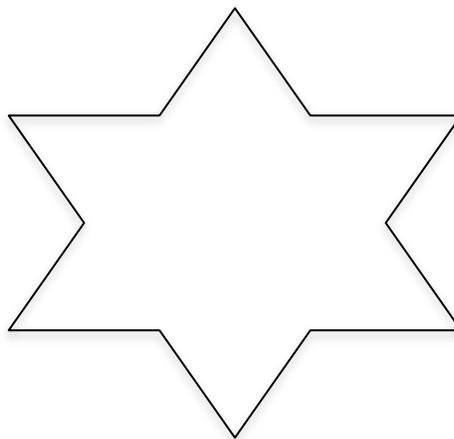
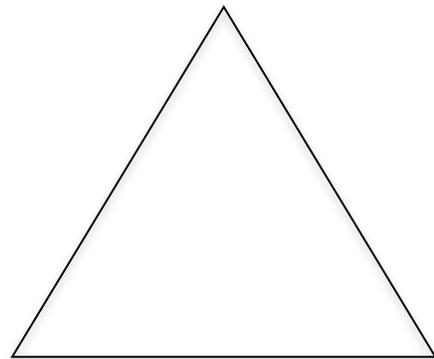
Project Constraints

PM Measurement baselines:

1. _____
2. _____
3. _____

Project Constraints:

- T^3
1. _____
 2. _____
 3. _____



Project Team Members

1. Sponsor –
2. Project manager –
3. Functional Manager –
4. Subject Matter Experts (SMEs) –
5. Support Staff –
6. Suppliers / Vendors –
7. Customer –

Project Management Competencies

Being successful as a project manager allows you to exercise many different essential competencies and skills, working as a small group, identify all project management competencies (PMBOK lists more than 40 competencies):

Defining the Project

Define a project by using four key documents to manage and define project success

- Identifying and working with key stakeholders
- Develop a project charter
- Develop project statement of work/proposal
- Create a communication plan with responsibility matrix

Project Definition Checklist

Project Manager:

Stakeholder Analysis

- The project sponsor is known and actively involved in supporting the project.
- The project sponsor has sufficient authority within the project environment to effectively champion the project team.
- Functional managers supplying personnel or other resources to the project have been identified and are ready to supply the required resources.
- The people who will approve requirements & specifications, changes to requirements & specifications, and who will accept the final product are identified and have agreed to the process for these approvals.
- The people who will approve funding and changes to funding are known and a process exists for approving changes to funding.
- Stakeholders inside and outside the firm that will have veto power over any decision in the project are known and are identified in the responsibility matrix and communication plan.
- All contributors necessary to complete the project have been identified and understand their role on the project.
- The stakeholders that will receive and operate the outcome of the project are included in the responsibility matrix.
- Stakeholders who will be affected by the outcomes of the project are known, their stake is understood, and there is a strategy for managing them to benefit the project.
- A project charter that clearly identifies and shows management support for the project manager has been published.

Project Proposal (if needed)

- A project proposal has been prepared and approved.
- The project manager has received and understands the proposal.
- Any future milestones requiring an updated proposal and renewed approval have been identified.

Documenting the Rules

- A statement of work has been accepted in writing by the primary stakeholders.
- The assumptions used to write the statement of work, particularly the cost and schedule estimates, are identified as assumptions and are realistic.
- There is a clear chain of authority for making decisions and escalating issues.
- A communication plan exists to identify the strategies for keeping all project stakeholders appropriately informed.
- A responsibility matrix has documented the roles of the various stakeholders as they relate to the major decisions and activities within the project. The stakeholders represented on the responsibility matrix have agreed that it accurately represents their involvement.
- A process has been established for evaluating and approving changes to the statement of work, specifications, requirements, and other control documents.

Stakeholder Analysis

Project Manager:

Stakeholder Role Profile

These questions will encourage the project team to consider a wide variety of stakeholders. Use these questions to identify as many stakeholders as possible. After generating the list, you may decide some of the stakeholders are represented by other stakeholders or will have so little involvement in the project that you don't need to consider them and you may remove them from your list.

This list is a starting point

Add questions to this list that fit your project environment. If you miss an important stakeholder on one project, add a question to this list that will cause the next project team to identify that stakeholder.

For each of the questions below answer the question: "Who...?"

Question	All stakeholders that apply. Use people's names whenever possible.
1. Approves funding for this project?	
2. Approves functional requirements?	
3. Approves technical requirements?	
4. Approves design decisions?	
5. Approves changes to requirements?	
6. Approves changes affecting schedule?	
7. Approves changes affecting cost?	
8. Will use the product or service produced by the project?	
9. Set the organizational goals that drive the necessity of this project?	
10. Will assign people to the project team and determine the hours per day they work on the project?	
11. Approves contracts for suppliers?	
12. Is the manager or executive sponsoring this project (will use their authority on behalf of the project team to overcome organizational obstacles)?	
13. Will manage the project (provide leadership to assure tasks are assigned and completed on time, cost and schedule are monitored, issues are identified and resolved)?	
14. Represents organization policies governing this project?	
15. Represents regulations or laws affecting this project?	

16. Will have their work disrupted by this project?	
17. Will have to change their systems or processes because of this project?	
18. Will benefit from this project? (If this is a large group, who will represent this group?)	
19. Will perform the work on this project? (This includes all vendors and subcontractors as well as employees)	
20. Will participate in decisions to approve moving the project to the next phase?	

Stakeholder Alignment Questions

These questions will ask for a minimum amount of understanding about *each* stakeholder. Use these for each stakeholder that has a high interest in the project or can have a high impact on the project. The better you understand each stakeholder, the better prepared you'll be to win cooperation.

Not for publication

These questions are meant to stimulate thinking about stakeholders. Your assumptions and insights into the motivations of each stakeholder or stakeholder group are a private assessment and should not be published.

For each significant stakeholder, answer the following questions:

Name:	Title:
1. What is their contribution to the project?	
2. To whom do they report?	
3. What authority do they have over the project?	
4. What is their goal for the project (what is their stake in the project) and how does it relate to their organization's goal or other personal goals? (What makes this a 'win' for them?)	
5. Do they present a specific threat or opportunity?	
6. What perception do you want them to have about the project?	

Project Charter

Project Manager:

Sponsor:

Date:

This charter serves to announce the initiation of the project. We are undertaking this project [describe project background and purpose].

[Project manager name] _____ has been selected to lead this project.

Please provide your complete cooperation to the project and to [project manager name]

_____.

Thank you.

[This charter formally authorizes the project manager and is sent out from the sponsor or project selection board.]

Project Statement of Work/Proposal

Project Manager:

Sponsor:

Revision History

Revision date	Revised by	Approved by	Description of change

Project Definition Statement (purpose):

Scope

Major project activities:

- 1.
- 2.
- 3.

Out of scope activities that are critical to the success of the project

Project Selection & Ranking Criteria

Project benefit category:

- Compliance/Regulatory Efficiency/Cost reduction Revenue increase

Project-Program fit and interdependencies

Project Urgency: **HIGH** **MED** **LOW** (circle with a brief justification)

Measures of Success

Deliverables

Schedule Overview

Estimated Project Completion Date: [mm/dd/yy]

Major Milestones

[Milestone] mm/dd/yy

[Milestone] mm/dd/yy

External Milestones Affecting the Project

[Milestone] mm/dd/yy

[Milestone] mm/dd/yy

Impact of Late Delivery

Cost Estimates

	Cost Type	Amount
	Labor hours	
	External costs	
	Labor (consultants, contract labor)	
	Equipment, hardware or software	
	List other costs such as travel & training	

Stakeholder Analysis

Name & Role	Major Responsibility or Contribution
Name: Customer	
Name: Sponsor	
Name: Management	
Name: Team	

Assumptions

Assumption:

Impact if assumption is incorrect:

Major Obstacles

- 1.
- 2.

Risks

- 1.
- 2.

Additional information is needed if this is a project proposal

Problem/Opportunity Definition

Proposed Solution

Business Case/Reason/Requirements

- 1.
- 2.

Cost/Benefit Analysis

Tangible Benefits

- Benefit
- Value & Probability
- Assumptions Driving Value

Intangible Benefits

- Benefit
- Value & Probability
- Assumptions Driving Value

Cost Categories

Amount

- Internal Labor hours
- External costs
- Labor (consultants, contract labor)
- Equipment, hardware or software
- List other costs such as travel & training

Financial Return/ROI:

Communication Plan and Responsibility Matrix

Key

Project:

(R) Responsible

Project Manager:

(A) Approver

Last Updated:

(C) Contributor

(I) Receives Information (Communication)

Major Project
Activities/
Deliverables

--	--	--	--	--	--	--	--	--	--

Stakeholder (Who)	Purpose / Objective of Communication (Why)	Frequency (When)	Communication Method (How)	Using the Key, identify who is responsible for what								

Communication Plan and Responsibility Matrix

Project:

Project Manager:

Last Updated:

Example

Key

(R) Responsible

(A) Approver

(C) Contributor

(I) Receives Information (Communication)

Major Project Activities/
Deliverables

Stakeholder (Who)	Purpose / Objective of Communication (Why)	Frequency (When)	Communication Method (How)	Using the Key, identify who is responsible for what							
				SOW/Proposal	Communication	Change mgt	Risk mgt	Reports	WBS	Lessons Learned	Final report
Sponsor	To Inform, update and approve	Pre, mid and end of Project	Meeting	A	A	A	A	I	A	I	A
Project Mgr	Baseline review	Daily	Huddles	R	R	R	R	A	R	A	R
Functional Mgrs	Resource requirements	Monthly	Report	C	C	C	C	I	R	R	C
SMEs	Updates and change approvals	Weekly	Huddles	C	C	R	R	R	R	R	C
Vendors	Schedule, scope and deliverable approved	Monthly	Meeting	I	C	I	C	R	R	R	C
Customers	Vision, feedback and satisfaction	Pre, mid and after project	Meeting and survey	I	I	I	C	I	I	I	C

Planning the Project

Execute the project planning elements, resources, and tools to ensure project is completed within time, budget, and risk constraints

- Identify and manage project risk (the what if?)
- Creating the work breakdown structure (WBS)
- Building a project schedule
- Obtaining plan approval
- Conducting the kickoff meeting

Project Planning Checklist

Project Manager:

Risk Management

- The project team has invested time and energy into identifying all project risks.
- A risk response strategy has been developed for all risks that have a significant impact or probability.
- Contingency funds or time have been allocated by management.
- Funds to account for unexpected problems have been set aside as Project Management Reserve.
- A risk log has been developed to manage known risks and is accessible to all project team members.
- Every risk in the log has someone responsible for managing it.
- There is a plan in place for continuously identifying and responding to new risks.

Work Breakdown Structure

- Tasks have been identified to produce every deliverable in the statement of work.
- The work breakdown structure for the project is consistent with standard WBS guidelines and/or templates for similar projects.
- The project team participated in building the WBS or has reviewed and approved it.
- Every task on the WBS has a strong, descriptive name that includes a noun and a verb.
- Every task on the WBS has a beginning, an end, and clear completion criteria.
- Project management tasks are included on the WBS.
- Tasks have been broken down to a level that enables clear responsibility to be assigned.
- The WBS follows the rules for creating a top-down decomposition.
- The structure of the WBS has been evaluated to ensure the summary tasks are meaningful to stakeholders that require high-level understanding of the project.

Task Sequence

- All work packages have predecessor tasks identified and task relationships are illustrated using a network diagram.
- The team has reviewed all predecessor-successor relationships to ensure there are none missing and that none of the relationships are unnecessary.
- Work packages have predecessor-successor relationships defined. These relationships are not defined for summary tasks.
- External schedule constraints are represented by milestones.

Estimating

- Wherever possible, historical data has been used as the basis for estimating.
- Ballpark estimates have only been used for initial screening and are not the basis for setting any project baselines.
- Estimates have been prepared by people who understand how to perform the work and who understand the constraints of the people who will perform the work.
- Work package estimates include both the duration and the estimated labor.

Scheduling

- Critical path analysis has been performed to identify critical path tasks and schedule float.
- Resource leveling has been applied to ensure the schedule represents a realistic allocation of personnel and other resources.
- The schedule is based on realistic assumptions about the availability of project personnel.
- Portions of the schedule that contain many concurrent tasks have been evaluated for risk.
- The cost-schedule-quality equilibrium is realistic and acceptable to the customer.

Vendors and sub-contractors

- Vendors and sub-contractors have signed contracts with specific scopes of work.
- The work to be performed by vendors and sub-contractors is integrated into the WBS and schedule.
- There are specific milestones and activities planned for monitoring vendors and sub-contractors.

Approvals

- The detailed action plan has been presented and approved.

Project Risk Template

Project Name:

Risk ID #:

Responsible person:

Risk identification date:

Condition:

Trigger event:

Consequence/Impact description:

Consequence/Impact value (quantify impact):

Probability (choose from 20, 40, 60, 80):

Expected Value:

Response Strategy:

Accept Avoid Contingency plan Transfer Mitigate

Known Cost of Response:

Contingency for Response:

WBS Relationship (tasks associated with condition or response strategy):

Project Risk Log

Last updated [mm/dd/yy]

Project Manager: [Name]

Risk ID	WBS	Rank	Date Found	Assigned	Description	Strategy	Status	Close Out Date

Description of fields:

Risk Id: A unique identifier

WBS: WBS number of the task(s) related to this risk

Rank: How important is this risk relative to others? Rank with 1=highest. No risks have the same rank.

Date found: Date risk became known. mm/dd/yy

Assigned to: Person who is assigned to manage this risk

Description: High level description of risk event, impact and probability

Strategy: What will be done to reduce the probability, impact, or both?

Status: On-going log of changes to risk, in order from most recent to oldest. Format: mm/dd/yy – action/update

Close out date: When did the risk probability go to zero? Describe in the final status. Remove any rank from this risk.

Issue Log as of XX/XX/XX

Project:

Project Manager:

Issue #	Issue Name	Issue Description (Include Impact)	Owner (Name)	Status (with strategy)	Issue Open or Closed?	If Open: Next Follow Up Date	Date Closed

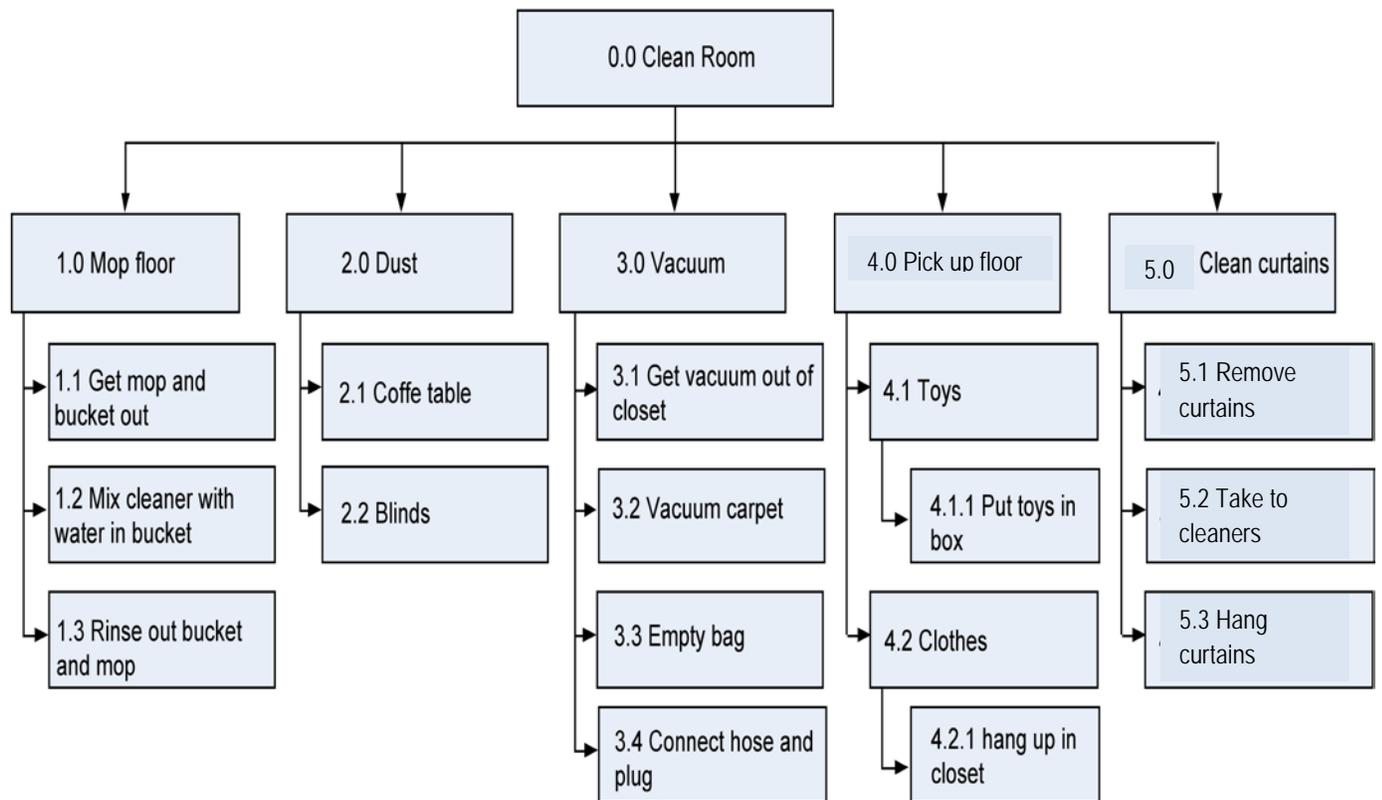
Work Breakdown Structures (WBS)

A complex project is made manageable by first breaking it down into individual components or “chunks” into a hierarchical structure.

1. Begin at the top
2. Task name describes an activity that produces a product (deliverable)
3. Organize WBS

Two main formats are:

Graphical



Outline Formatted WBS

Task 1

Sub-Task 1.1

Work Package 1.1.1

Work Package 1.1.2

Sub-Task 1.2

Work Package 1.2.1

Work Package 1.2.2

Task 2

Sub-Task 2.1

Work Package 2.1.1

Work Package 2.1.2

Sub-Task 2.2

Work Package 2.2.1

Work Package 2.2.2

Task 3

Sub-Task 3.1

Work Package 3.1.1

Work Package 3.1.2

Sub-Task 3.2

Work Package 3.2.1

Work Package 3.2.2

Tips for building a WBS

Notes:

1. _____

2. _____

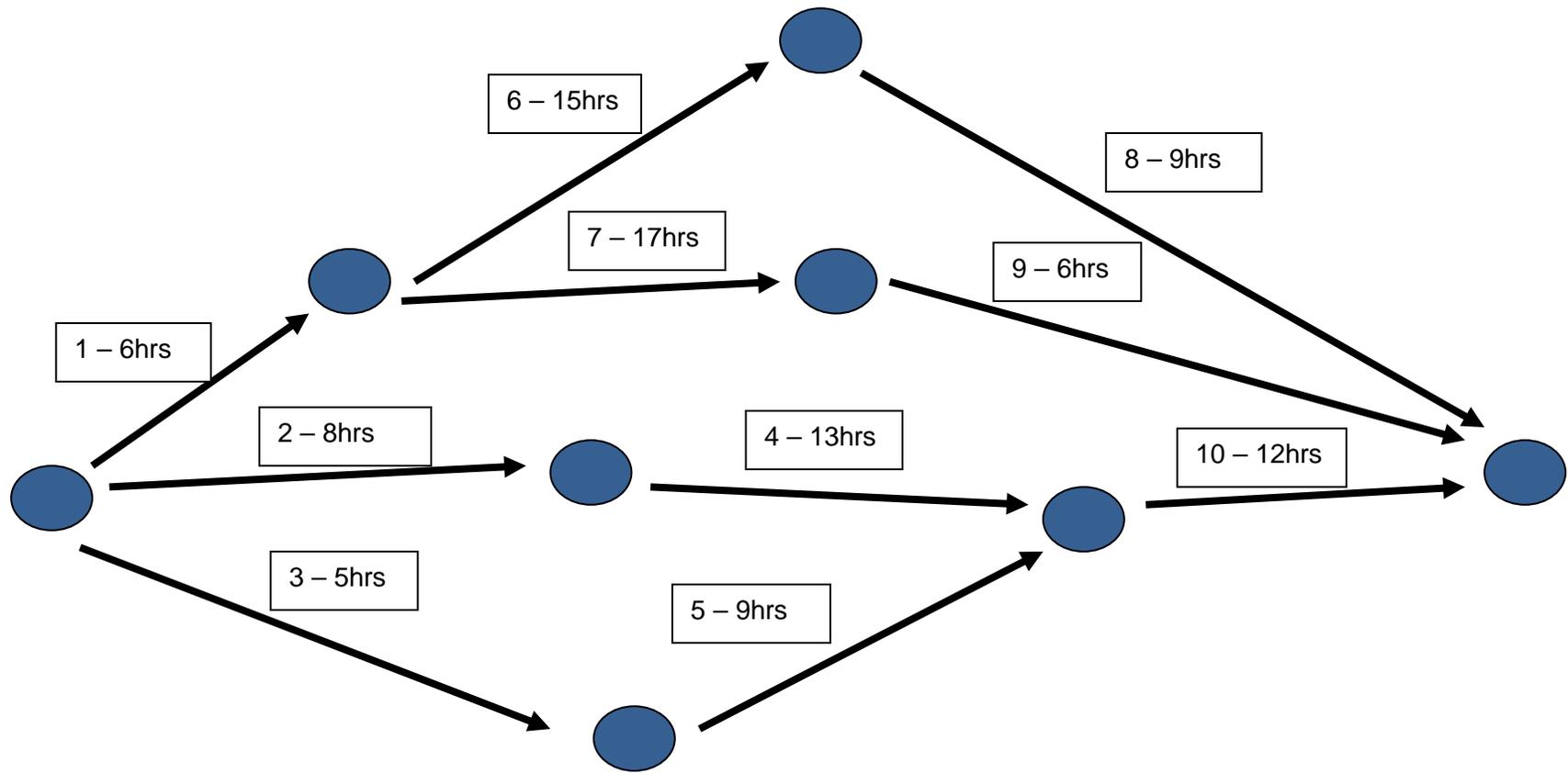
3. _____

4. _____

Building a Project Schedule

1. Identify task relationships
2. Estimate work packages
 - Labor (duration & productivity)
 - Equipment
 - Materials
 - Fixed-price bids
3. Calculate an initial schedule
 - Forward pass
 - Backward pass
 - Float
 - Critical Path
 - Gantt Charts
 - PERT

PERT



Building a Project Schedule

Three Point Estimating

Three point estimating is a technique that helps project managers produce better estimates. Rather than a ballpark estimate, project managers can use three point estimating to gain a greater degree of control over how the end value is calculated. The end value is the weighted average of three estimates.

To do three point estimating for a particular task or activity, ask the resource for their best case, most likely and worst case estimates. Add the best case estimate to four times the most likely, then the worst case and divide by six. This gives you your estimate (E value) which is a slightly more balanced view of how long the task or activity is likely to take.

The formula can be expressed as:

$$E = (B + 4 M + W)/6$$

- B = best case (1/6)
- M = most likely (4/6)
- W = worst case (1/6)

PERT/CPM

ID	Immed. Predec.	Optimistic Time (Hr)	Most Likely Time (Hr)	Pessimistic Time (Hr)	$E = (B + 4 M + W)/6$
1	--	4	6	8	
2	--	5	8	11	
3	--	3	5	7	
4	2	5	14	17	
5	3	6	8	16	
6	1	10	14	24	
7	1	10	18	20	
8	6	7	9	11	
9	7	4	5	12	
10	4,5	9	11	19	

Obtaining Plan Approval Checklist

<input checked="" type="checkbox"/>	Completed project tool	Date of review and approval
	Statement of work	
	Resource requests	
	Project plan	
	Schedule	
	Proposed change process	
	Project communication plan with responsibility matrix	
	Risk management plan	
	Other project specific tools:	
	Sponsor and management approval	Who:

Project Kick-Off Checklist

Project Manager:

Stakeholder Participation

- The project sponsor has clearly communicated the project goal to the project team.
- The project goal is understood and accepted by the project team.
- The project team understands how the project fits into the overall goals of the organization.
- Team members understand their specific assignments and how they fit into the overall project.
- Part-time team members and support organizations within the firm understand their contribution to the project and have agreed to fulfill this role.
- Functional managers who contribute personnel to the project understand the work required from their personnel.
- The customer is represented and has agreed to a regular plan for communication.

Project Process

- The project plan has a baseline budget and schedule.
- The project plan shows specific tasks and responsibilities and is easily accessible to all project team members.
- There is an accepted process for team members to record progress against their task assignments.
- There is a change management process in place.
- An issue log has been established and it is easily accessible to all project team members.
- A configuration management plan has established the location of all project documents, naming conventions, and version control.
- Management has agreed to a format and frequency for reporting project status.
- There is a schedule established for project team meetings.

Project Team

- The team has established ground rules for team behaviors.
- All team members understand the contributions that other team members will be making.
- All team members understand the experience and skills other team members bring to the project.
- There are activities planned to build relationships within the team, including improving communication among team members.

Agenda Sample

Example

Title
Date and Location

Meeting Objective:

Pre-meeting Preps: None this week.

-
-

Time **Topic/Action** **Owner** **Notes**

Time	Topic/Action	Owner	Notes

Post-Meeting Agreed to Action Required (AR):

By when?

-
-

Meeting Minutes of Meeting Title or Purpose

Example

Date, Time (start & stop), Location

Attendees

Names (identify leader and facilitator)

Names

1. Items discussed (open or closed):

- Manager meeting "Updates"
 - Modified policy requirements (open)
 - New report format requested (closed)
- Project XYZ Update (closed)

2. Decisions made:

- Decided to start using new report format by (date)
- Solved process breakdown by deciding to do ...

3. Actions Items/next steps with owner and by when:

Item #	Action Item/Next Steps	Owner	Date

4. Date and time of next meeting for this team:

Controlling the Project

Leveraging project team, communication, measurement, and problem solving procedures to keep the project moving to a successful completion

- Building project team performance
- Implement the change management plan
- Measuring project performance report

Project Control Checklist

Project Manager

Use this evaluation on an on-going basis throughout the project.

Stakeholder Participation

- The project sponsor is fully aware of the state of the project, including revised schedule and budget estimates.
- The customer is fully aware of the state of the project, including revised schedule and budget estimates.
- The project team is fully aware of the state of the project, including revised schedule and budget estimates.
- Team members understand their specific assignments and how they fit into the overall project.
- Part-time team members and support organizations within the firm understand their contribution to the project. These expectations are clearly communicated both well in advance and again just prior to their involvement in order to give them the opportunity to plan to meet these expectations.
- The responsibility matrix is accurate.
- All stakeholders who need to be informed of project progress have adequate access to project information.

Project Process

- The project plan is routinely updated to reflect the near term action plan.
- Progress against the baseline budget and schedule is recorded and understood by the team.
- The baseline budget and schedule continue to be realistic.
- Document and track project issues on action plan as they transpire and report to project team.
- Continuous risk management activities reveal new risks, which are evaluated and assigned to team members.
- Known risks are monitored and, where possible, mitigation strategies are followed to reduce the probability or impact.
- The project team meets on a regular basis to discuss accomplishments, plan for near-term activities, and share new information about the project.

Project Team

- The team has established ground rules for team behaviors and follows them.
- The team understands and has internalized the project goal.
- Team members practice active listening skills.

- Team members actively attempt to adjust their communication or problem solving styles to accommodate other members of the team whose styles are different.
- Good meeting management practices are followed, including sending out agendas in advance and documenting decisions and action items in the meeting minutes.
- The team has an articulated problem-solving process and displays good problem analysis skills.
- The team is able to use multiple decision modes, including effectively reaching consensus.
- The team demonstrates the ability to work through conflict, reaching better decisions and maintaining positive relationships.

Project Leadership

- I lead by example, showing a positive attitude and commitment to the project goal.
- I am accessible to team members so they can easily discuss problems or concerns with me.
- I hold myself and others accountable to project responsibilities.
- I consciously work to develop a positive team environment.
- I consciously work to develop collaborative problem solving skills among the team.
- I treat all team members and stakeholders with respect.

Building Project Team Performance

Team defined: A group of people working interdependently to produce an outcome for which they hold themselves mutually accountable. (Verzuh)

Challenges and Problems:

How can we overcome them?

How to build high-performing teams?

1. Everyone counts
2. Ways to interact
3. Communication is key
4. Positive team environment
5. Collaborative problem solving
6. Leadership
7. Build on trust and respect

5 Dysfunctions of a Team (Patrick Lencioni)

1.

2.

3.

4.

5.

Project Team Process Assessment

Assessment Date:

Use this evaluation on an on-going basis throughout the project.

For the following statements, rank our team on a scale of 1-5					
	1	2	3	4	5
1. Our meetings are productive and organized.	1	2	3	4	5
2. People are contributing equitably in the meetings.	1	2	3	4	5
3. Everyone has contributed equitably to project work.	1	2	3	4	5
4. The project is on schedule.	1	2	3	4	5
5. We are dealing with conflict effectively.	1	2	3	4	5
6. I feel my ideas and input are appropriately considered.	1	2	3	4	5
7. I am satisfied with the progress of the project.	1	2	3	4	5
8. I am comfortable in the team setting.	1	2	3	4	5

Please complete the following statements.	
9. The best thing about our team...	
10. A current challenge for our team is...	
11. Do we need to change this form in any way to better serve our purposes?	

Project Team Process Assessment II

Assessment Date:

Use this evaluation on an on-going basis throughout the project.

For the following statements, rank our team on a scale of 1-5					
	1	2	3	4	5
1. The objectives of the project are clear.	1	2	3	4	5
2. Roles and responsibilities are clear.	1	2	3	4	5
3. Everyone is contributing a fair amount to the project.	1	2	3	4	5
4. Our processes are working well.	1	2	3	4	5
5. Our relationship issues are solid (I feel respected, listened to, and valued).	1	2	3	4	5
6. Conflict is dealt with effectively in our team.	1	2	3	4	5

Please complete the following statements.	
7. What I really like about our team is ...	
8. Issues that need to be addressed immediately ...	

Implement the Change Management Plan

Change Management Plan Defined:

Who must be involved in project changes? Why?

Documents required

[Project Name] Change Request

Change name [short description]

Date Submitted [mm/dd/yy]

Change Request Number [nnnn]

Requested by [Name of person requesting change]

Submitted by [Name of person writing this request]

Detailed Description of Change

[description]

Impact Analysis

Schedule

Cost

Related affects to
other projects or parts
of this project

Decision and Rationale

[description]

Approval: _____ [signature]

Approved by: [name]

Approval date: [mm/dd/yy]

[Project Name] Change Log

Last updated [mm/dd/yy]

Project Manager: [Name]

Change ID	Date Submitted	Requested by:	Description	Cost/Schedule Impact	Status

Description of fields:

Change Id: A unique identifier

Date Submitted: Date issue became known. mm/dd/yy

Requested by: Person who is requesting the change

Description: Describe the change being requested.

Impact: Describe the impact to cost or schedule.

Status: *Approved* or *Pending* or *Rejected* and date.

Measuring Project Performance

- Value
 - Planned Value (PV) (old BCWS) =
 - Earned Value (EV) (old BCWP) =
 - Actual Cost (AC) (old ACWP) =
- Schedule

$$SV\% = \frac{EV - PV}{PV}$$

$$SV\% = \frac{-}{-}$$

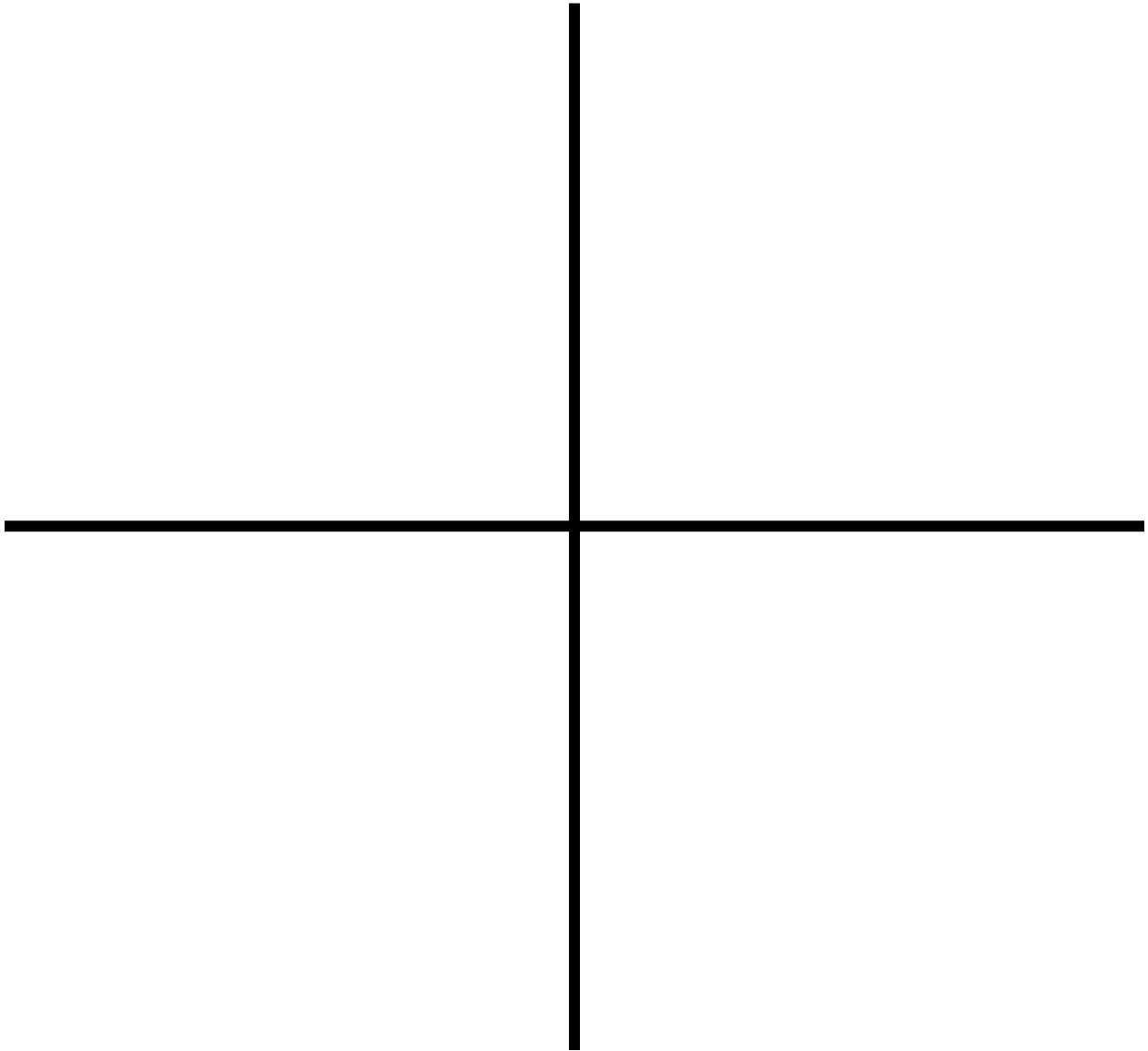
- Cost

$$CV\% = \frac{EV - AC}{EV}$$

$$CV\% = \frac{-}{-}$$

Project Performance Gantt Example

ID	Task Name	Plan Value (PV) Earn Value (EV)	Actual Cost (AC)	Month of:	Month of:	Month of:	Month of:				
				1	30	1	30	1	30	1	30
	A	100	110	[Black bar from Day 1 to Day 15]							
	B	100	90	[Black bar from Day 15 to Day 30]							
	C	100	100			[Black bar from Day 1 to Day 15]					
	D	100	80			[Black bar from Day 15 to Day 30]					
	E	100					[White bar from Day 1 to Day 15]				
	F	100						[White bar from Day 15 to Day 30]			
	G	100							[White bar from Day 1 to Day 15]		
	H	200								[White bar from Day 15 to Day 30]	
	I	100									[White bar from Day 1 to Day 15]
	J	200									[White bar from Day 15 to Day 30]



Baseline Review

Topics	Within Plan?	Issues/Changes
Schedule		
Budget		
Scope		
Risk Management		

Reports and meetings

Comments of logs

Review and ensure quality

Example

Project Status Report <Project Name>

Project Manager: Name
Reporting Period: mm/dd/yy – mm/dd/yy

Project Overview				
Project Description				
Executive Summary / Highlights				
Project Updates				
Key Milestones				
Task Description	Status	Status Description	Scheduled Completion Date	Actual Completion Date
	●			
	●			
Project Detail				
Issues	Priority (L, M, H)	Description	Escalation Level	Impact / Status
Risks	Priority (L, M, H)	Description	Escalation Level	Impact / Status

Status Key Legend	
On Track	●
Off Track; Possible Mitigation	●
Off Track; Executive Planning Required	●

Project Status Reports – Coding

The Project Status Report is written by the Project Manager and reviewed by the Project Sponsor. The Status Report summarizes project activity and is issued based on communication plan.

A project's status can be conveyed using a color-coded system. The "stop light" tracking system allows for a quick at-a-glance status update. An example of a section of a Project Status Report that houses the "stop light" is shown below.

The "stop light" updates measures budget, schedule and scope as follows:

Budget –

- a. Green – within budget
- b. Yellow – less than 10% over or under budget
- c. Red – greater than 10% over or under budget

Schedule –

- a. Green – within 5% of the schedule dates or ahead of schedule
- b. Yellow – behind schedule by 6%-10%
- c. Red – greater than 10% behind schedule

Scope –

- a. Green – small scope change
- b. Yellow – moderate scope change
- c. Red – significant scope change

(Note: once the scope change is approved, it returns to green status)

Overall Project Status				
Overall Project Status Yellow				
Budget	Schedule	Scope	Risk	Issues
Green	Yellow	Red	Low	Low/No

Closing the Project

- Obtaining final acceptance for the project
- Releasing project resources
- Identifying, documenting and communicating lessons learned
- Creating and distributing a final project report

Obtaining Final Acceptance for the Project

Steps:

<input checked="" type="checkbox"/>	Completed Actions/Steps	Date/initials

Tools:

<input checked="" type="checkbox"/>	Completed Actions/Steps	Date/initials
	Lesson learned reports	
	Final report	
	Matrix evaluation	
	Review/completed action:	
	Risk log	
	Change log	
	Communication/responsibility log	

Releasing Project Resources

Process:

Identifying, Documenting and Communicating Lessons Learned

Lessons learned purpose and objectives

Throughout each project, lessons are learned and opportunities for improvement are identified. The information gathered should be applied to improve future projects: maximizing future successes and minimizing future failures.

Lessons learned will be a combination of both fact and perception. Facts will be determined by quantifiable project results, and perceptions will be based on individual and collective views of project performance. Either way, documenting lessons learned should focus on helping the project team identify the root causes of problems that occurred and avoid those problems in future projects.

The objective of this report is to gather all relevant information for better planning and execution of future projects and preventing or minimizing risks for future projects.

To start the lessons learned process, consider some of the following questions:

- What would you do differently in your next project?
- What worked well for the project and/or the project team?
- What did not work well for the project and/or the project team?
- What surprises did the team have to deal with? What circumstances were not anticipated?
- Consider the following areas when discussing lessons learned: communications, training, project team / teamwork, tools, roles and responsibilities, planning, risk management, governance, issue identification and resolution, meetings, project management, budget / funding, project support, organizational change management, project change control (scope, schedule, budget), etc. When finalizing the lessons learned document, consider categorizing comments by area.

Lessons Learned Report

Project:

Date:

What worked well?

What will you do differently based on what you learned during this project?

Doc Version	Date	Author	Document Change Description
1.0			

Version <<>>

Creating and Distributing a Final Project Report

Project Closure Report

Project Manager: [Name]

Sponsor: [Name]

Project Goal

Project Objectives & Results

Objectives from Statement of Work

Results

1

2

Scope Comparison

Additional scope

Decreased scope

Cost Performance

Cost Categories

Approved

Actual

Internal Labor hours

External costs

Labor (consultants, contract labor)

Equipment, hardware or software

List other costs such as travel & training

Explanation of cost variance

Schedule Performance

Approved

Actual

Project completion date

Explanation of schedule variance

Major Obstacles Encountered

1

2

Lessons Learned that are Relevant to Other Projects

1

2

Course Summary

Course Objectives:

Discuss and demonstrate the essentials of project management at the introduction level for CPS

Introduction into the Project Management

- Why project management
- Reviewing project management basic terminology
- Project constraints
- Project team members
- Project management competencies

Define a project by using four key documents to manage and define project success

Defining the Project

- Identifying and working with key stakeholders
- Develop a project charter
- Develop project statement of work/proposal
- Create a communication plan with responsibility matrix

Execute the project planning elements, resources, and tools to ensure project is completed within time, budget, and risk constraints

Planning the Project

- Identify and manage project risk (the what if?)
- Creating the work breakdown structure (WBS)
- Building a project schedule
- Obtaining plan approval
- Conducting the kickoff meeting

Leveraging project team, communication, measurement, and problem solving procedures to keep the project moving to a successful completion

Controlling the Project

- Building project team performance
- Implement the change management plan
- Measuring project performance

Closing the Project

- Obtaining final acceptance for the project
- Releasing project resources
- Identifying, documenting and communicating lessons learned
- Creating and distributing a final project report

Action Plan and Application

As a result of attending this training, what are two or three actions you plan to apply to your project management processes?

When will you apply these actions?

Who will you share these with to become an accountability partner for your development?

Project Management Glossary of Terms

Activity

An element of work or measurable effort.

Activity-on-Arrow

A network diagram showing sequence of activities in which each activity is represented with arrows and circles representing an event.

Activity-on-Node

A network diagram showing sequence of activities in which each activity is represented by a box interconnected with arrows to show precedence and successor activities.

Agency

A formally organized unit of government having administrative, programmatic, legal, fiduciary, and regulatory functions ascribed to it through Legislation, Federal mandate, or other means and for which it receives or generates revenue.

Assumptions

Assumptions are factors that, for planning purposes, are considered to be true, real, or certain. Assumptions affect all aspects of project planning, as are part of the progressive elaboration of the project. Project teams frequently identify, document, and validate assumptions as part of their planning process. Assumptions generally involve a degree of risk.

Backup Package

A backup package consists of all the related supporting documentation for expenditures required to successfully pass an audit.

Business Alignment

Strategic business alignment represents an agency's capability to coordinate all the activities of its components for the purpose of achieving its objectives. A key to the success of any project is its alignment with the strategic direction of the sponsoring organization.

Business Case

The information necessary to enable approval, authorization and policy making bodies to assess a project proposal and reach a reasoned decision.

Change Control Board (CCB)

A formally constituted group of stakeholders responsible for approving or rejecting changes to the project baselines.

Change Management Plan

A systematic plan to manage all change within a project. Two processes within change management are request (how does change get requested) and review for approval/denial (who approves or denies the change request).

Communication

The transmission and validated receipt of information so that the recipient understands what the sender intends, and the sender is assured that the intent is understood.

Communications Management Plan

A plan describing the organization and control of information transmitted by whatever means to satisfy the needs of the project. It includes the processes of transmitting, filtering, receiving and interpreting or understanding information using appropriate skills according to the application in the project environment. It is at once the master and the servant of a project in that it provides the means for interaction between the many disciplines, functions and activities, both internal and external to the project, and which together result in the successful completion of that project.

Consequences

The results following some activity or activities

Constraints

Applicable restrictions that will affect the performance of the project. Any factor that affects when an activity can be scheduled

Contract

A mutually binding agreement which obligates services and products to be provided and payment for those services or products

Contract Administration

Managing the relationship with the seller

Contract Review

Monitoring and control of performance and progress, making payments, recommending modifications and approving contractor's actions to ensure compliance with contractual terms during contract execution.

Contract Closeout

Completion and settlement of the contract, including resolution of any open items.

Cost Analysis

The analysis of the cost elements of a proposal or on-going work. It includes verification of cost data, evaluation of all elements of costs, and projection of these data to determine the effect on price.

Cost Control System

Any system of keeping costs within the bounds of budgets or standards based upon work actually performed.

Cost Variance (CV)

Any difference between the budgeted cost of an activity and the actual cost of that activity. In earned value, EV (Earned Value) less ACWP (Actual Cost of Work Performed)

Crashing

Taking action to decrease the total project duration after analyzing a number of alternatives to determine how to get the maximum duration compression for the least cost.

Critical Path Analysis

Procedure for calculating the critical path and floats in a network.

Critical Path Method (CPM)

A network analysis technique used to predict project duration by analyzing which sequence of activities (which path) has the least amount of schedule flexibility (the least amount of float). Early dates are calculated by means of a forward pass, using a specified start date. Late dates are calculated by means of a backward pass, starting from a specified completion date (usually the forward pass' calculated early finish date).

Deliverable

Any measurable, tangible, verifiable outcome, result, or item that must be produced to complete a project or part of a project. Often used more narrowly in reference to an external deliverable, which is a deliverable that is subject to approval by the project sponsor or customer

Deliverable/Product Verification

The measurement of physical properties stated in the specifications for a product/deliverable and compare them with the values for each requirement documented in the product specifications.

Design Reviews

A formal, documented, comprehensive and systematic examination of a design to evaluate the design requirements and the capability of the design to meet these requirements and to identify problems and propose solutions.

Documentation

The collection of reports, user information and references for distribution and retrieval, displays, back-up information and records pertaining to the project.

Earned Value

The physical work accomplished plus the authorized budget for this work. The sum of the approved cost estimates (may include overhead allocation) for activities (or portions of activities)

completed during a given period (usually project-to-date). Previously called budgeted cost of work performed (BCWP) for an activity or a group of activities.

Engineering or Design Change Proposal (ECP)

A proposal submitted by the seller in response to a buyer's request for an ECP to change the existing contract effort. Only the buyer can initiate the request for an Engineering Change Proposal. This activity is usually preceded by a Request for Change. The user, buyer, or the seller can initiate a Request for Change to the contract. It is an exploratory activity.

Executive Sponsor

The sponsor is an executive responsible for the strategic direction of a project. An Executive Sponsor should have the authority to define project goals, secure resources, and resolve organizational and priority conflicts. Multiple studies indicate a direct correlation between the lack of project sponsorship and project failure. Well-meaning but costly mistakes include substituting a steering committee for a sponsor, and assuming that a big-budget and highly visible project does not need a formal sponsor. The Executive Sponsor's primary role is to:

- Champion projects from initiation to completion
- Participate in the development and selling of the project business case
- Present overall vision and priorities for the project
- Assist in determining final funding and project direction
- Serve as executive liaison to key State stakeholders, e.g., legislators, Agency directors and managers
- Chair the project steering committee

Formal Acceptance

Accepting the delivery of a deliverable or product according to established processes normally based on verifying that it is in accordance with the Product Description or specifications of the Project Deliverable.

Gantt Chart or Schedule

A graphic display of schedule-related information. In the typical Gantt or bar chart, activities or other project elements are listed down the left side of the chart, dates are shown across the top, and activity durations are shown as date placed horizontal bars.

Information Distribution

Making needed information available to project stakeholders in a timely manner.

Knowledge Management

The acquisition, management and distribution of relevant information to the parties who need to know.

Leadership

The art of influencing others to accomplish a task or goal.

Lessons Learned

The learning gained from the process of performing the project. Lessons learned may be identified at any point. Also considered a project record.

Leveling

To smooth the use of resources (people, materials, equipment, etc.) to avoid over usage or gaps in the scheduling

Life -Cycle

A collection of generally sequential project phases whose name and number are determined by the control needs of the organization or organizations involved in the project.

Milestones

Significant events in the project, usually including the completion of a major deliverable.

Modeling

The creation of a physical representation or mathematical description of an object, system or problem that reflect the functions or characteristics of the item involved. Model building may be viewed as both a science and an art.

MOU

Any written agreement-in-principle describing how a commitment will be administered.

Network Diagram

A schematic display of the sequential and logical relationship of the activities which comprise the project. Two popular drawing conventions or notations for scheduling are arrow and precedence diagramming.

Organizational Breakdown Structure (OBS)

A depiction of the project organization arranged so as to relate work packages to organizational units.

Organizational Change Management

The task of organizational change management is to bring order to an organization that is responding to a change event. It is not pretending that change is or can always be well organized and disciplined.

Performance Indexes

Project planning and status indicators that periodically measure variances (usually cost and schedule) and require documented corrective actions to eliminate the variances that exceed predetermined thresholds.

PERT

Program Evaluation and Review Techniques (PERT). An event-oriented network analysis technique used to estimate program duration when there is uncertainty in the individual activity duration estimates. PERT applies the critical path method, using durations that are computed by a weighted average of optimistic, pessimistic, and most likely duration estimates. PERT computes the standard deviation of the completion date from those of the path's activity durations. Also known as the Method of Moments Analysis.

PMBOK®

Project Management Body of Knowledge® An inclusive term that describes the sum of knowledge within the profession of project management. As with other professions—such as law, medicine, and accounting—the body of knowledge rests with the practitioners and academics that apply and advance it. The PMBOK® includes proven, traditional practices that are widely applied, as well as innovative and advanced ones that have seen more limited use.

Portfolio

Is a manageable unit of work with multiple projects that are interdependent.

Probability

The likelihood of occurrence. The ratio of the number of chances by which an event may happen (or not happen) to the sum of the chances of both happening and not happening.

Process

The way something is done.

Procurement Liaison

In some governmental entities, this person is designated to be responsible for the procurement functions for the agency and acts a liaison between departments and agencies.

Procurement Planning

Determining what to procure and when.

Product-oriented WBS

A project's product components or elements that make up the overall deliverable assembled into some hierarchical arrangement that facilitates project management tracking and control.

Program

Program have multiple portfolios and projects for being completed, managed and worked within one area or field within an organization (e.g., training program, safety, operations)

Project

Projects are all the work we do one time. Every project produces an outcome and every project has a beginning and an end. Project is a clearly defined assignment with definable start and stop date/point, measurable objectives, and budgetary parameters.

Project Baseline Control

Established baselines for scope, cost and schedule under some form of version control. Once the project has been contained in these three dimensions, it can be measured, monitored and controlled. If a project does not have such baseline management, it cannot be managed and measured as a closed system, and must be therefore considered to be out of control.

Project Budget

The amount and distribution of money allocated to a project.

Project Champion/Leader

The person who espouses the project and secures for it necessary support and resources. See also Project Sponsor.

Project Charter

A document issued by senior management that formally authorizes the existence of a project. It provides the project manager with the authority to apply organizational resources to project activities.

Project Control Plan

A plan describing a sequence of activities which are used to steer the project towards conformance with project requirements

Project Deliverable(s)

Any measurable, tangible, verifiable outcome, result, or item that must be produced to complete a project or part of a project. Often used more narrowly in reference to an external deliverable, which is a deliverable that is subject to approval by the project sponsor or customer.

Project Leadership

Leadership in the context of a project, e.g. leading with a focus on the project's goals and objectives and the effectiveness and efficiency of the process.

Project Management

A discipline—a set of methods, theories and techniques that are ever-changing to manage the complexities of work that is unique and temporary. The systematic process of how to complete a project

Project Management Culture

An organizational culture that has created a systematic, yet flexible, process for how projects are completed, managed, communicated and worked within that organization. It fully embraces project management principles and processes through open and candid communications.

Project Management Principles

Tools, processes, skills and behaviors that are used to guide project performance.

Project Manager (PM)

The individual responsible for managing a project.

Project Objectives

Project scope expressed in terms of outputs, required resources and timing.

Project Organization

The orderly structuring of project participants.

Project Organizational Chart

A graphical display of the project's organization structure.

Project Plan

A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and decisions, facilitate communication among stakeholders, and document approved scope, cost, and schedule baselines. A project plan may be summary or detailed.

Project Procurement

The processes required to acquire goods and services to attain project scope from outside the performing organization. It consists of procurement planning, solicitation planning, solicitation, source selection, contract administration, and contract closeout.

Project Repository

A place (either physical or virtual) established for the consistent and effective storage and retrieval of all project information for the efficient use by the project manager and his/her project Team.

Project Reviews

An evaluation of current project results or procedures.

Project Schedule

The planned dates for performing activities and the planned dates for meeting milestones.

Project Scope

The work that must be done to deliver a product with the specified features and functions.

Project/Executive Sponsor

The person who has ultimate authority over the project. The executive sponsor provides project funding, resolves issues and scope changes, approves major deliverables and provides high-level direction. They also champion the project within their organization. Depending on the project, and the organizational level of the executive sponsor, they may delegate day-to-day tactical management to a project sponsor. If assigned, the project sponsor represents the executive sponsor on a day-to-day basis, and makes most of the decisions requiring sponsor

approval. If the decision is large enough, the project sponsor will take it to the executive sponsor.

Project Team Building

The forming of a group of people into a team that is to work together for the benefit of the project. It can be achieved in a formal manner by use of startup meetings, seminars, workshops, etc. and in an informal manner by getting the team to work well together. Motivating and resolving conflicts between individual members of the team are important elements of teamwork. Cultural characteristics of the team members should be given full consideration. Different cultures create different working needs.

Project Team Designation

The full-time and part-time resources assigned to work on the deliverables of the project, and achieve the project objectives. They are responsible for:

- Understanding the work to be completed
- Planning out the assigned activities in more detail if needed.
- Completing assigned work within the budget, timeline and quality expectations
- Informing the Project Manager of issues, scope changes, risk and quality concerns
- Proactively communicating status and managing expectations

The project team can be made up from within one functional department or organization, or from many. A cross-functional team has members from multiple departments or organizations, and typically involves matrix management.

Projectized Organization

Any organizational structure in which the project manager has full authority to assign priorities and to direct the work of individuals assigned to the project.

Quality Assurance (QA)

1) The process of evaluating overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards. 2) The organizational unit that is assigned responsibility for quality control.

Quality Control (QC)

1) The process of monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance. 2) The organizational unit that is assigned responsibility for quality control.

Quality Management

That aspect of the overall management function that determines and implements the quality policy

Quality Management Plan

A document setting out the specific quality practices, resources and sequence of activities relevant to a particular product, service, contract or project.

Quality Metrics

The tools and techniques of quality measurement that include: benefit/cost analysis, benchmarking, flowcharting, both cause and effect diagrams and system or process charts, design of experiments, and cost of quality.

Quality Plan

A plan identifying which quality standards are relevant to the project, and determining how to satisfy them.

Requirements Specifications

An information vehicle that provides a precise description of a specific physical item, procedure, or result for the purpose of purchase and/or implementation of the item or service.

Responsibility Assignment Matrix (RAM)

A structure that relates the project organization structure to the work breakdown structure to help ensure that each element of the project's scope is assigned to a responsible individual.

Risk Assessment

The process of identifying potential risks, quantifying their likelihood of occurrence and assessing their likely impact on the project.

Risk Avoidance

Risk avoidance is changing the project plan to eliminate the risk or to protect the project objectives from its impact. It is a tool of the risk response planning process.

Risk Evaluation Checklist

A template designed to assist the project manager in an assessment of the risks associated with the project.

Risk Identification

Determining which risks might affect the project and documenting their characteristics. Tools used include brainstorming and checklists.

Risk Management

The means by which uncertainty is systematically managed to increase the likelihood of meeting project objectives and outcomes. The two major steps within this process is risk identification and risk analysis.

Risk Management Plan

Documents how the risk processes will be carried out during the project. This is the output of risk management planning.

Risk Metrics

The tools and techniques for risk monitoring and control. They include: project risk response audits, periodic project risk reviews, earned value analysis, technical performance measurement, and additional risk response planning.

Risk Mitigation

Risk mitigation seeks to reduce the probability and/or impact of a risk to below an acceptable threshold.

Schedule Control System

A system for controlling changes to the project schedule.

Schedule Estimating/Development

Determining the start and finish dates for project activities, using tools and techniques that include mathematical analysis (CPM, GERT, and PERT), duration compression, simulation, resource leveling, project management software and coding structure.

Schedule Management System

A system for the management or rearrangement of the activities in a project schedule to improve the outcome based on the latest available information.

Schedule Tracking

A process of periodically documenting the factors affecting time constraint status during the course of a project.

Schedule Variance

1) Any difference between the scheduled completion of an activity and the actual completion of that activity. 2) In earned value, $EV - BCWS = SV$.

Scope Definition

Subdividing the major deliverables into smaller more manageable components to provide better control.

Scope Management Plan

A plan describing the management of the project's scope, from given goals and objectives, through explicit definition, to production, to satisfactory delivery of the required product.

Scope Statement

The scope statement provides a documented basis for making future project decisions and for confirming or developing common understanding of project scope among the stakeholders. As the project progresses, the scope statement may need to be revised or refined to reflect approved changes to the scope of the project.

Stakeholder

Individuals and organizations that are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or project completion. They may also exert influence over the project and its results.

Stakeholder Management Plan

A plan for the management of expectations of the people who have a vested interest in the outcome of the project.

Statement of Work (SOW)

A description of all the work required to complete a project, which is provided by the customer.

Status Report

A written report given to both the project team and to a responsible person on a regular basis stating the position of an activity, work package, or whole project. Status Reports should be used to control the project and to keep management informed of project status.

Team

A group of people working interdependently to produce an outcome in which they hold themselves mutually accountable.

Variance

Any actual or potential deviation from an intended or budgeted figure or plan. A variance can be a difference between intended and actual time. Any difference between the projected duration for an activity and the actual duration of the activity. Also, the difference between projected start and finish dates and actual or revised start and finish dates.

Work Breakdown Structure (WBS)

A deliverable -oriented grouping of project elements that organizes and defines the total work scope of the project. Each descending level represents an increasingly detailed definition of the project work.

Work Package

A deliverable at the lowest level of the work breakdown structure, when that deliverable may be assigned to another project manager to plan and execute. This may be accomplished through the use of a subproject where the work package may be further decomposed into activities.

Risk Identification Questions

Project team

1. How many people are on the team?
2. What percentage of the team is fully dedicated to the project?
3. Which team members will spend 20 percent or less of their time working on this project?
4. What is the experience level of the team?
5. Have team members worked together before?
6. Is the team spread out geographically?

Customer

1. Will the customer change current processes to use the project? (No) (Minor changes) (Major changes)
2. Will the project require the customer to reorganize? (No) (Minor changes) (Major changes)
3. Does the project require the customer to be retrained?
4. Are the customers in different departments? In different companies?

Technology

1. Will there be technology that is new to the development team?
2. Will there be technology that is new to the users or customers?
3. Is there any new or leading-edge technology in the project?
4. Are the product requirements clearly documented and signed by all necessary stakeholders?
5. Are the product requirements stable or changing?

Executive Support

1. Is there a known sponsor who is actively involved in the project?
2. Is there sufficient recognition, support and involvement from all the senior management required for the success of the project?
3. Is senior management setting deadlines or budget limitations independent of the project manager's schedule and budget estimations? If so, are these constraints realistic and communicated?

-
- Develop categories of risk; then list several questions for each category
 - Each question probes at a possible weakness
 - Add new categories and questions over time

Project Management Baseline System

“Man is a tool-using animal. Without tools he is nothing, with tools he is all.” Thomas Carlyle

Phases	Activity	Tools	Why?
Definition	<ul style="list-style-type: none"> • Define what is the desired outcome • Feasibility / Definition meeting (sponsor and project manager) • Answer the 20 questions for stakeholders analysis and 6 for stakeholders alignment • Draft Charter (one-page) to initiate the project (PM) • Sponsor sends out charter to department heads • Assemble team to build SOW/p • Create team ground rules • Develop communication plan and responsibility matrix (RACI) • Have SOW/p, Communication plan with RACI obtain sponsor approval • Identify a process to manage project change • Review project definition checklist 	<ul style="list-style-type: none"> • Request form • Agenda • Meeting minutes • Stakeholders' analysis • Charter • Statement of work/proposal (SOW/p) • Communication plan with (RACI) responsibility matrix • Change request form • Change management log 	<p>Learn about the purpose and background</p> <p>Define “the who” might be involved</p> <p>Initiate project and request support for identified project manager</p> <p>Define what the project will produce and what it will not produce. Defines the scope.</p> <p>Who does what and how does communication work within this project</p> <p>Keep sponsor informed Establish change thresholds (team, sponsor, Change Control Board (CCB)) to approve request form Obtain sponsor agreement on all above prior to writing the plan</p>

Planning	<ul style="list-style-type: none"> • Establish risk management process for risk identification and risk analysis • Break down the project into “doable chunks” • Define work and quality expectations and how to measure to ensure expectations are met • Identify the amount of labor hours per activity • Add up totals hours and costs for each deliverable and the overall project • Identify all required resources and skill sets (competencies) for each work package • Create a project schedule of all work packages • Identify how long the project will take • Working with functional managers, ensure resources are available for the scheduled time frame for each work package scheduled • Confirm all costs for labor, production and transportation • Review project planning checklist • Present project schedule plan and budget for approval to sponsor or committee • Obtain plan approval • Host project kickoff meeting • Send out agenda • Complete and sent out meeting minutes to all stakeholders 	<ul style="list-style-type: none"> • Risk log • Risk analysis template • Issue log • Create the work breakdown structure (WBS) • Create work-packages at the activity/task level • Project action plan • Gantt • PERT • Network diagrams • Forward pass • Backward pass • 3-point estimating • Checklist • Approval checklist • Agenda • Meeting minutes 	<p>Sooner risk is identified and analyzed it can be built into the planning of the project</p> <p>Identify all tasks/ activities / work-packages</p> <p>Determine how each task gets measured for quality?</p> <p>Identify all costs associated</p> <p>Write out the plan</p> <p>Identify the critical path</p> <p>Build a schedule from today until project is complete Build schedule from end date until today</p> <p>Use 5 data points to give you a best estimate Make sure you include everything for the planning phase</p> <p>Have sponsor review and approve Communicate with team</p>
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Phases	Activity	Tools	Why?
Control (Execution)	<ul style="list-style-type: none"> • Monitor project progress • Define cost and schedule variance thresholds • Monitor risk • Monitor quality of deliverables • Monitor change and change requests • Facilitate change board/ committee • Manage and measure schedule • Manage and measure cost • Manage and measure scope • Host team meetings • Meet with sponsor • Complete project reports • Report when all deliverables are complete and meet quality requirements as defined within work packages • Review project control checklist 	<ul style="list-style-type: none"> • WBS, Gantt or Action plan • CV% & SV% Chart (cross chart) • Manage risk and issue log • Maintain change log • Agenda • Meeting minutes • CV% & SV% Chart (cross chart) • Use change request form and log • Agenda • Meeting minutes • Status report form • Deliverable checklist or 3rd party review • Checklist 	<p>Track the progress</p> <p>Provides definition for green, yellow and red for reporting Be proactive versus reactive</p> <p>To avoid Scope-creep without approval</p> <p>Documentation</p> <p>Tracking to measure two of the three baselines</p> <p>Having representatives to review and approve all change requests</p> <p>Documentation and communication</p> <p>Documentation and communication</p> <p>Keeping and ensuring quality is the focus</p> <p>Ensure nothing is missed</p>

Phases	Activity	Tools	Why?
Close out	<ul style="list-style-type: none"> • Obtain final acceptance of project deliverables • Request project information from all stakeholders • Consolidate information and documentation from project team • Release project resources • Write final project report • Survey customers to determine satisfaction 	<ul style="list-style-type: none"> • Acceptance checklist • Transference process • Lesson learned format • Project folder • Notification of project closure • Final report format • Schedule (4-6 months after delivery) customer interview/survey/questionnaires 	<p>To closeout and ensure you received exactly what was planned and requested</p> <p>What needs to be maintained and added to workload for ongoing work or maintenance?</p> <p>Create knowledge management to make projects in the future better, faster &/or cheaper</p> <p>So everyone knows it is done</p> <p>Finalize the document history for future like projects</p> <p>Ensure the customers received what they requested</p>

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Clarizon

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