

PMP® V5 RDS

Project Human Resource Management

Overview

- The processes that organize, manage, and lead the project team
- Project team members may have varied skill sets, may be assigned full or part-time, and may be added or removed from the team as the project progresses
- Although specific roles and responsibilities for the project team members are assigned, the involvement of all team members in project planning and decision making is beneficial
- Participation of team members during planning adds their expertise to the process and strengthens their commitment to the project

HR Management Processes

- **9.1 Plan Human Resource Management** — The process of identifying and documenting project roles, responsibilities, required skills, reporting relationships, and creating a staffing management plan.
- **9.2 Acquire Project Team** — The process of confirming human resource availability and obtaining the team necessary to complete project activities.
- **9.3 Develop Project Team** — The process of improving competencies, team member interaction, and overall team environment to enhance project performance.
- **9.4 Manage Project Team** — The process of tracking team member performance, providing feedback, resolving issues, and managing changes to optimize project performance.

Related Concepts

- Managing and leading the project team includes:
 - **Influencing the project team.** The project manager needs to be aware of and influence human resource factors that may impact the project.
 - These factors includes: team environment, geographical locations of team members, communications among stakeholders, internal and external politics, cultural issues, organizational uniqueness, etc.
 - Intrinsic factors: someone believes that something is valuable e.g. vision, virtue, truth, value, beauty
 - Extrinsic factors: rewards, publishment
 - **Professional and ethical behavior.** The project management team ensure that all team members follow professional and ethical behavior.

PMI's View

- An important human resource function is to create recognition and rewards systems
- Improving the team members' competencies is a responsibility of the project manager
- Human resource management is primarily done in the **executing process group**
- The project manager's human resource activities are formal and require documentation
- There should be formal roles and responsibilities on the project

PMI's View

- The exam assumes that the project is operating in a **matrix** environment
- Projects are mainly planned by the team
- The project manager must continually confirm resource availability
- The project is so large that some of the team only help with project management activities, project management team.
- Team-building activities are formally planned in advance

Plan Human Resource Management (planning)

Plan HR Management

- The process of identifying and documenting project roles, responsibilities, required skills, reporting relationships, and creating a staffing management plan
- The key benefit of this process is that it establishes project roles and responsibilities, project organization charts, and the staffing management plan including the timetable for staff acquisition and release

Plan Human Resource Management

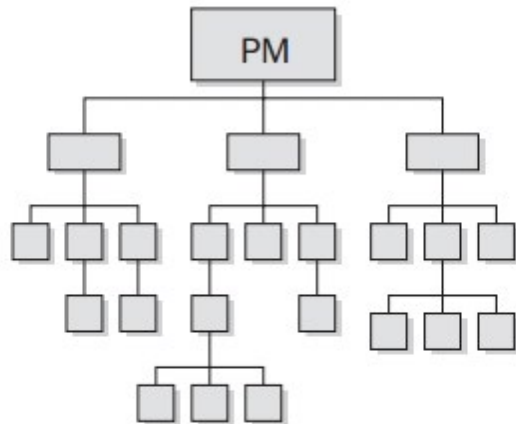
Inputs

- **Activity Resource Requirements**
 - Requirements regarding the required people and competencies for the project team members
- **Enterprise Environmental Factors**
 - Organizational culture and structure
 - Existing human resources
 - Personnel administration policies
 - Marketplace conditions
- **Organizational Process Assets**
 - Organizational standard processes, policies, and role descriptions
 - Templates for organizational charts and position descriptions
 - Lessons learned
 - Escalation procedures for handling issues

Plan Human Resource Management

Tools and Techniques

- Organization Charts and Position Descriptions
 - Helps clarify roles and responsibilities



Organization Chart
(hierarchical)

A Responsibility Chart (matrix) with 'RAM' in the top-left cell. The matrix has 5 columns and 10 rows.

RAM				

Responsibility Chart
(matrix)

A Role Description form with fields for Role, Responsibilities, and Authority.

Role _____

Responsibilities _____

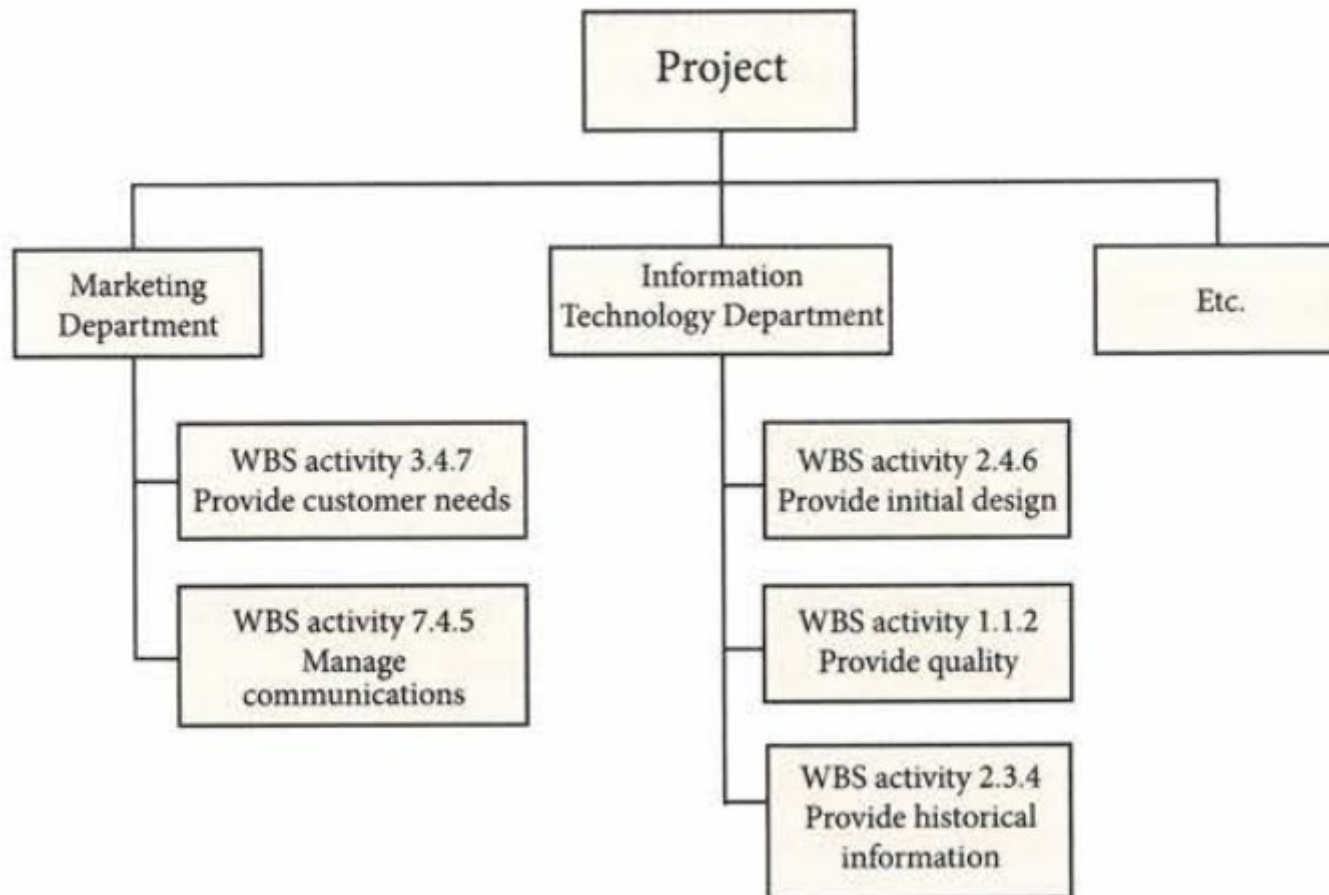
Authority _____

Role Description
(text)

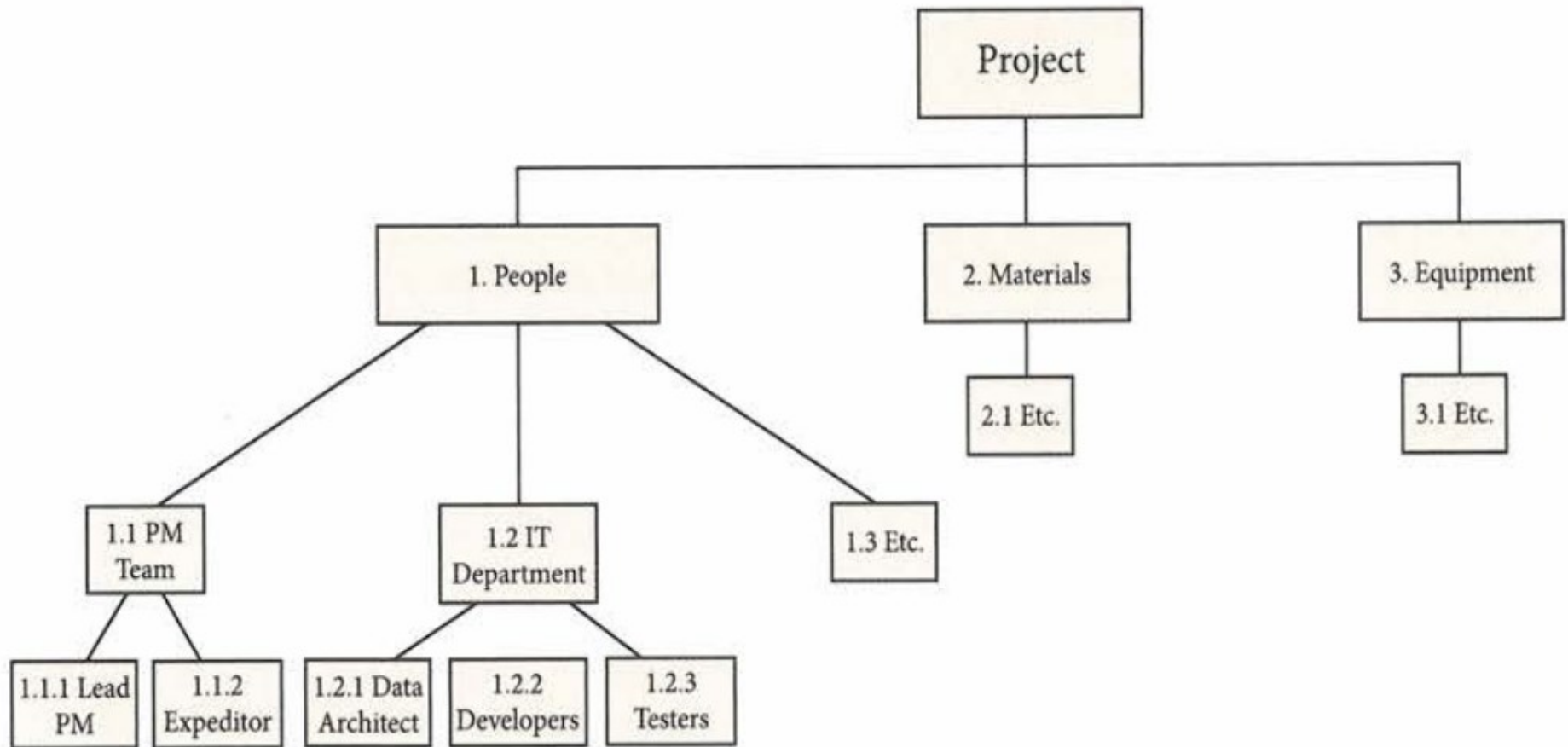
Hierarchical-type Charts

- Organizational breakdown structure (OBS)
 - arranged according to departments, units, or teams with the project activities or work packages listed under each department
 - an operational department can see all of its project responsibilities by looking at its portion of the OBS
- Resource breakdown structure (RBS)
 - breaks down the project by types of resources
 - helps track project costs and can be aligned with the organization's accounting system
 - contain **resource categories** other than human resources

OBS



RBS



Matrix-based Charts

- RACI (responsible, accountable, consult, and inform) chart
 - The assigned resources can be shown as individuals or groups
 - The RACI is particularly important when the team consists of internal and external resources to ensure clear divisions of roles and expectations
- Responsibility assignment matrix (RAM)
 - Illustrate the connections between work packages or activities and project team members
 - The matrix format shows all activities associated with one person and all people associated with one activity
 - Old style chart

RACI Chart

RAM is with the same format:

P: primary

S: secondary

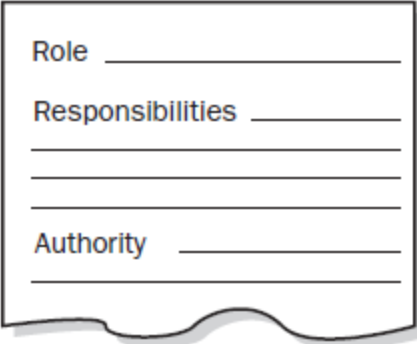
RACI Chart	Person				
Activity	Ann	Ben	Carlos	Dina	Ed
Create charter	A	R	I	I	I
Collect requirements	I	A	R	C	C
Submit change request	I	A	R	R	C
Develop test plan	A	C	I	I	R

R = Responsible A = Accountable C = Consult I = Inform

* For each activities, there should be one and only one "A".

Text Oriented Formats

- Responsibilities can be detailed descriptions in text-oriented formats
- Usually in outline form, the documents provide information such as responsibilities, authority, competencies, and qualifications
- Also known as position descriptions or role-responsibility-authority forms



A diagram of a text-oriented format form, which is a rectangular box with a wavy bottom edge. Inside the box, there are three sections: 'Role' followed by a horizontal line, 'Responsibilities' followed by a horizontal line and three more horizontal lines for text entry, and 'Authority' followed by a horizontal line and one more horizontal line for text entry.

Text-oriented
Format

Tools and Techniques

- Networking
 - Formal and informal interaction with others in an organization, industry, or professional environment
- Organizational Theory
 - Provides information regarding the way people, teams, and organizational units behave

HR Management Plan

Plan Human Resource Management: Outputs

■ Contents

• Role

- The label describing the portion of a project for which a person is accountable
- Role clarity concerning authority, responsibilities, and boundaries should be documented

• Authority

- The right to apply project resources, make decisions, and sign approvals.
- Team members operate best when their individual levels of authority match their individual responsibilities

HR Management Plan

Plan Human Resource Management: Outputs

- Contents
 - Responsibility
 - The work that a project team member is expected to perform in order to complete the project's activities
 - Competency
 - The skill and capacity required to complete project activities
 - Project organization charts
 - A display of project team members and their reporting relationships

Staffing Management Plan

- It is a part of HR plan
- It includes:
 - Staff acquisition
 - where will they come from?
 - Resource calendars
 - Staff release plan
 - Recognition and rewards
 - Compliance
 - Safety
 - Training Needs

Recognition and Rewards Systems

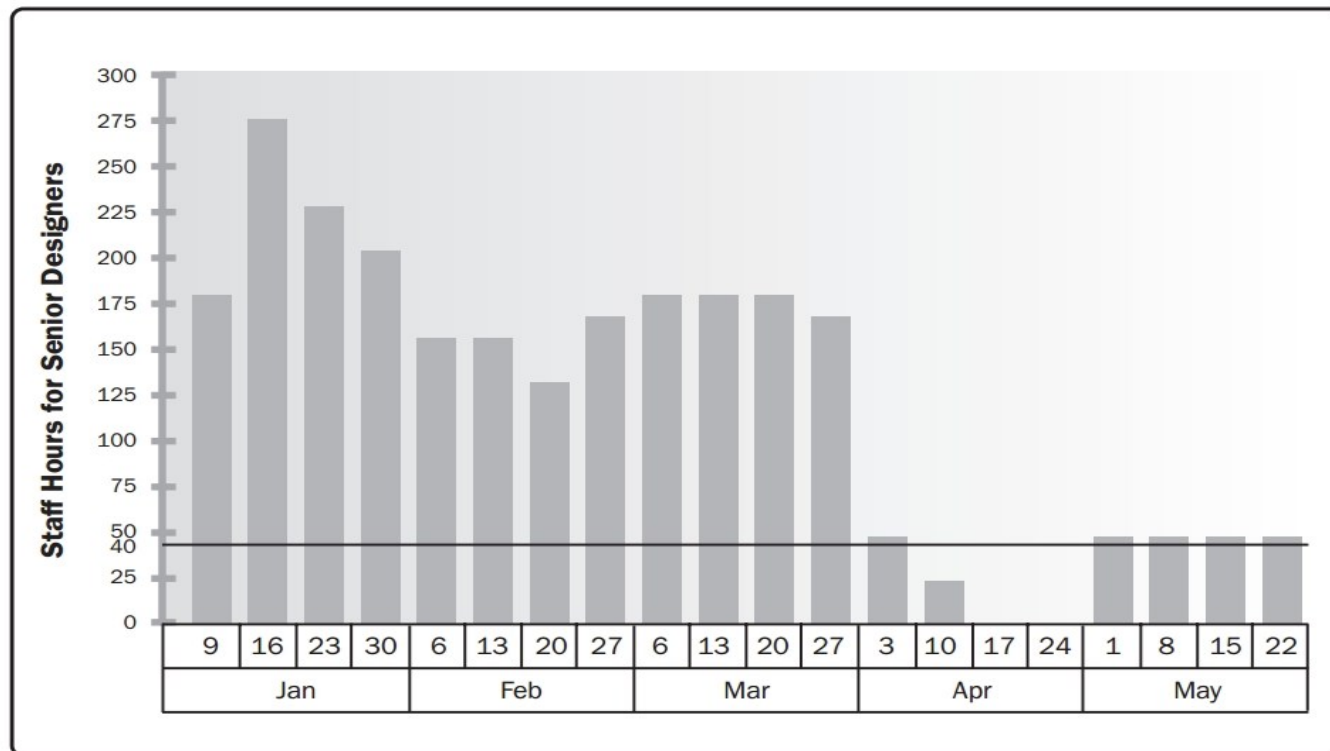
- “How do I get improved performance from people who do not report directly to me in the organization?”
- Focus on team member individually, not the team
- Asking and knowing what your team members want to get out of the project, on professional and personal level

Recognition and Rewards Systems

- Team members are usually more loyal to functional managers. PM should:
 - Say “thank you” more often
 - Award prizes for performance
 - Recommend team members for raises or choice work assignments
 - Send notes to team members’ managers about great performance
 - Plan milestone parties or other celebrations
 - Acquire training for team members, paid for out of the project budget
 - Assign a team member to a non-critical path activity so that he or she can gain more knowledge in that area

Resource Histogram / Calendar

- Visual representations of information
- Bar chart shows the number of resources used per time period and where there is a spike in the need for resources
- Resource leveling



Plan Human Resource Management (planning)

Inputs

- .1 Project management plan
- .2 Activity resource requirements
- .3 Enterprise environmental factors
- .4 Organizational process assets

Tools & Techniques

- .1 Organization charts and position descriptions
- .2 Networking
- .3 Organizational theory
- .4 Expert judgment
- .5 Meetings

Outputs

- .1 Human resource management plan

Acquire Project Team

(executing)

Acquire Project Team

- The process of confirming human resource availability and obtaining the team necessary to complete project activities
- The key benefit of this process consists of outlining and guiding the team selection and responsibility assignment to obtain a successful team

Acquire Project Team

- Factors to be considered:
 - The project manager should effectively negotiate and influence others to provide the required human resources.
 - Failure to acquire the necessary human resources for the project may affect decrease the probability of success.
 - If the human resources are not available, alternative resources, perhaps with lower competencies may be acquired.
- Actually means “Acquire **Final** Project Team” not just the project management team
- Actual people should not be selected until shortly before the work is to begin

Activities

- Knowing which resources are pre-assigned and confirming their availability
- Negotiating for the best possible resources
- Hiring new employees
- Outsourcing
- Understanding the possibilities and problems with using **virtual teams** - teams made up of people who never or rarely meet
- Managing the risk of unavailable resources

Acquire Project Team

Tools and Techniques

- Pre-assignment
- Negotiation
 - Know the priority of the project within the organization
 - Be able to express how the resource manager has his own work to do
 - Be able to prove, by using tools of project management, why the project requires the stated quantity and quality of resources
 - Use the negotiation as an **opportunity to discover what the resource manager will need** from the project manager in order to manage his or her own resources
 - **Build a relationship** so that the project manager can call on the resource manager's expertise later
 - Parties to negotiate with:
 - Functional managers
 - Other PM teams
 - External organizations, vendors, suppliers, contractors

Acquire Project Team

Tools and Techniques

- Virtual Teams
 - Team that do not meet face to face
 - May reach out to the whole world to find the best team members
- Acquisition
 - When the performing organization lacks the in-house staff needed to complete a project, the required services may be acquired from outside sources
 - Hiring individual consultants or subcontracting work to another organization
- Other concepts: Halo Effect
 - A tendency to rate team members high or low on all factors due to the impression of a high or low rating on some specific factor

Acquire Project Team

Tools and Techniques

- Multi-Criteria Decision Analysis
 - Availability
 - Cost
 - Experience
 - Ability
 - Knowledge
 - Skills
 - Attitude
 - International factors
 - Consider team member location, time zone and communication capabilities

Acquire Project Team

Outputs

- Project Staff Assignments
- Resource Calendars
 - Document the time periods that each project team member can work on the project
- Project Management Plan updates

Acquire Project Team (executing)

Inputs

- .1 Human resource management plan
- .2 Enterprise environmental factors
- .3 Organizational process assets

Tools & Techniques

- .1 Pre-assignment
- .2 Negotiation
- .3 Acquisition
- .4 Virtual teams
- .5 Multi-criteria decision analysis

Outputs

- .1 Project staff assignments
- .2 Resource calendars
- .3 Project management plan updates

Develop Project Team

(executing)

Develop Project Team

- The process of improving competencies, team member interaction, and overall team environment to enhance project performance
- The key benefit of this process is that it results in improved teamwork, enhanced people skills and competencies, motivated employees, reduced staff turnover rates, and improved overall project performance

Develop Project Team

- Project managers should identify, build, maintain, motivate, lead, and inspire project teams to achieve high team performance
- The process objectives include:
 - Improve feelings of **trust** and agreement among team members to raise morale, lower conflict, and increase team work
 - Create a dynamic and cohesive team culture
 - Allow cross-training and mentoring between team members to share knowledge and expertise

PMI's View

- The Project Manager needs to
 - Use many soft skills, including mentoring, leadership, empathy, communication, etc.
 - Encourage teamwork
 - Communicate honestly, effectively, and in a timely manner
 - Establish and maintain trust
 - Collaborate with the team to make good, bought-into decisions and to find mutually beneficial solutions to problems

PMI's View

- The Project Manager needs to
 - Hold team-building activities
 - Establish ground rules
 - Create and give recognition and rewards
 - Place team members in the same location (co-location)
 - Assess and improve team member performance
 - Improve individual team knowledge

Training

Develop Project Team: Tools and Techniques

- All activities designed to enhance the competencies of the project team members
 - Formal or informal
 - Methods: classroom, online, computer-based, on-the-job training, mentoring, and coaching
 - Scheduled training: as stated in the HR management plan
 - Unplanned training: result of observation, conversation, and project performance appraisals
 - Training costs:
 - included in the project budget
 - supported by performing organization if the added skills may be useful for future projects
 - In-house or external

Team-Building Activities

Develop Project Team: Tools and Techniques

- Forming the project team into a cohesive group
 - It is the project manager's job to guide, manage, and improve the interactions of team members
 - The project manager should incorporate team-building activities into all project activities
 - Team building requires a concrete effort and continued attention throughout the life of the project
 - Team building should start early in the life of the project

Team Development Stages

- Also known as Tuckman ladder
- Forming
 - People are brought together as a team
- Storming
 - There are disagreements as people learn to work together
- Norming
 - Team members begin to build good working relationship
- Performing
 - The team becomes efficient and works effectively together.
- Adjourning
 - The project ends, and the team is disbanded

Ground Rules

Develop Project Team: Tools and Techniques

- Establish clear expectations regarding acceptable behavior by project team member
- Clear guidelines decreases misunderstandings and increases productivity
- Even more important for virtual teams
- Areas cover code of conduct, communication, working together, or meeting etiquette allows team members to discover values that are important to one another
- Examples
 - How should a team member resolve a conflict with another team member?
 - Is it allowable for people to join a meeting late? What are the consequences?
 - May people take other phone calls, look at e-mails, or read text messages during the meeting?

Develop Project Team

Tools and Techniques

- Colocation
 - “Tight matrix”
 - The physical room - War Room
 - Arrange for the entire team in one place or one room
- Recognition and Rewards
 - Intangible rewards could be equally or even more effective as the tangible rewards
 - Should be given during the whole project lifecycle

Personnel Assessment Tools

Develop Project Team: Tools and Techniques

- Gives the project manager and the project team insight into areas of strength and weakness
- Helps project managers assess the team preferences, aspirations, how they process and organize information
- Tools:
 - Attitudinal surveys, specific assessments, structured interviews, ability tests, and focus groups
- Provide improved understanding, trust, commitment, and communications among team members and facilitate more productive teams throughout the project

Team Performance Assessments

Develop Project Team: Outputs

- Formal or informal assessments of team's performance
 - Improvements in skills that allow individuals to perform assignments more effectively
 - Improvements in competencies that help the team perform better as a team
 - Reduced staff turnover rate
 - Increased team cohesiveness where team members share information and experiences openly and help each other to improve the overall project performance

Develop Project Team (executing)

Inputs

- .1 Human resource management plan
- .2 Project staff assignments
- .3 Resource calendars

Tools & Techniques

- .1 Interpersonal skills
- .2 Training
- .3 Team-building activities
- .4 Ground rules
- .5 Colocation
- .6 Recognition and rewards
- .7 Personnel assessment tools

Outputs

- .1 Team performance assessments
- .2 Enterprise environmental factors updates

Manage Project Team

(executing)

Manage Project Team

- The process of tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance
- The key benefit of this process is that it influences team behavior, manages conflict, resolves issues, and appraises team member performance

Manage Project Team

- Result:
 - change requests are submitted
 - the human resource plan is updated
 - issues are resolved
 - input is provided for performance appraisals
 - lessons learned

Actions

- Encouraging good communications
- Using negotiation skills
- Using leadership skills
- Observing
- Using an issue log
- Keeping in touch
- Completing project performance appraisals
- Actively looking for and helping resolve conflicts that the team members cannot resolve on their own

Manage Project Team

Inputs

■ Issue Log

- Many project managers keep a log of issues to be resolved on the project
- Such logs tell people that **their needs will be considered**, even if they are not considered at the time the issue arises

Issue #	Issue	Date Added	Raised By	Person Assigned	Resolution Due Date	Status	Date Resolved	Resolution

Observation and Conversation

Manage Project Team: Tools and Techniques

- Staying in touch with the work and attitudes of project team members
- Paying attention to the tone of emails and phone conversation will tell you more about what is going on than simply looking at reports
- A project manager watches what is happening and specifically talks to people to understand how things are going

Powers

- Power is the ability to influence others
- Types
 - Formal (Legitimate)
 - Reward
 - Penalty
 - Expert
 - Referent (power of charisma and fame)
- The best forms of power: Expert, Reward
- The worse: Penalty
- Formal, Reward, and Penalty are powers derived from your position. Expert power is earned on your own.

Leadership Styles

- Directing
 - Facilitating
 - Coaching
 - Supporting
 - Consultative
 - Consensus
 - Delegating
 - Bureaucratic
 - Democratic
 - Charismatic
 - Laissez-faire
- Analytical
 - Driver
 - Influencing

* Refer to p.360 of Rita's book

Project Performance Appraisals

Manage Project Team: Tools and Techniques

- Objectives include:
 - Clarification of roles and responsibilities
 - Constructive feedback to team members
 - Discovery of unknown or unresolved issues
 - Development of individual training plans
 - Establishment of specific goals for future time periods
- Example: 360-degree review
 - A new and sophisticated way to complete performance appraisals is to include the input of coworkers and subordinates, as well as supervisors

Conflict Management

Manage Project Team: Tools and Techniques

- Is conflict “bad”?
 - No, it actually presents opportunities for improvement
- New views of Conflict
 - Conflict is an inevitable consequence of organizational interactions
 - Conflict can be beneficial
 - Conflict is resolved through openness, identifying the causes, and problem solving by the people involved and their immediate managers

Conflict Management

Manage Project Team: Tools and Techniques

- Conflict is INEVITABLE because of the
 - Nature of projects trying to address the needs and requirements of many stakeholders
 - Limited power of the project manager
 - Necessity of obtaining resources from functional managers
- Avoid conflicts through:
 - Informing the team of
 - Exactly where the project is headed; Project constraints and objectives; All key decisions; Changes
 - Clearly assigning work without ambiguity or overlapping responsibilities
 - Making work assignments interesting and challenging
 - Following good project management and project planning practices

Conflict Management

Manage Project Team: Tools and Techniques

- 7 sources of conflict in the order of frequency
 1. Schedules
 2. Project priorities
 3. Resources
 4. Technical opinions
 5. Administrative procedures
 6. Cost
 7. Personality
- Conflict is best solved by those involved in the conflict (confronting)
- If necessary, the sponsor or functional managers may be called in to assist
- In instances of professional and social responsibility (breaking laws, policies, ethics), the project manager must go over the head of the person in conflict

Conflict Resolution Techniques

- Withdraw/Avoid
 - Retreating from an actual or potential conflict situation
 - Postponing the issue to be better prepared or to be resolved by others
- Smooth/Accommodate
 - Emphasizing areas of agreement rather than areas of difference
 - Conceding one's position to the needs of others to maintain harmony and relationships
- Compromise/Reconcile
 - Searching for solutions that bring some degree of satisfaction to all parties in order to temporarily or partially resolve the conflict
 - Lose-lose situation
 - May be a second best technique

Conflict Resolution Techniques

- Force/Direct
 - Pushing one's viewpoint at the expense of others
 - Offering only win-lose solutions
 - Enforced through a power position to resolve an emergency
- Collaborate/Problem Solve
 - Incorporating multiple viewpoints and insights from differing perspectives
 - Requires a cooperative attitude and open dialogue that typically leads to consensus and commitment
 - Win-win solution
 - Also known as **confronting**
 - The most long lasting solution

Interpersonal Skills

Manage Project Team: Tools and Techniques

- Leadership
 - Communicate the vision and inspire the project team to achieve high performance
- Influencing
 - PM's usually don't have direct authority over their team members in a matrix environment
 - Ability to be persuasive and clearly articulate points and positions
 - High levels of active and effective listening skills
 - Consideration of the various perspectives in any situation
 - Gathering relevant and critical information to address important issues and reach agreements while maintaining mutual trust

Interpersonal Skills

Manage Project Team: Tools and Techniques

- Effective decision making
 - This involves the ability to negotiate and influence the organization and the project management team
 - Some guidelines:
 - Focus on goals to be served
 - Follow a decision-making process
 - Study the environmental factors
 - Analyze available information
 - Develop personal qualities of the team members
 - Stimulate team creativity
 - Manage risk

Related Techniques

- Problem Solving Method
 - Define the problem
 - Analyze the problem
 - Identify solutions
 - Pick a solution
 - Implement a solution
 - Review the solution
 - Confirm that it solved the problem
 - Otherwise, iterative to pick another solution

Manage Project Team (executing)

Inputs

- .1 Human resource management plan
- .2 Project staff assignments
- .3 Team performance assessments
- .4 Issue log
- .5 Work performance reports
- .6 Organizational process assets

Tools & Techniques

- .1 Observation and conversation
- .2 Project performance appraisals
- .3 Conflict management
- .4 Interpersonal skills

Outputs

- .1 Change requests
- .2 Project management plan updates
- .3 Project documents updates
- .4 Enterprise environmental factors updates
- .5 Organizational process assets updates

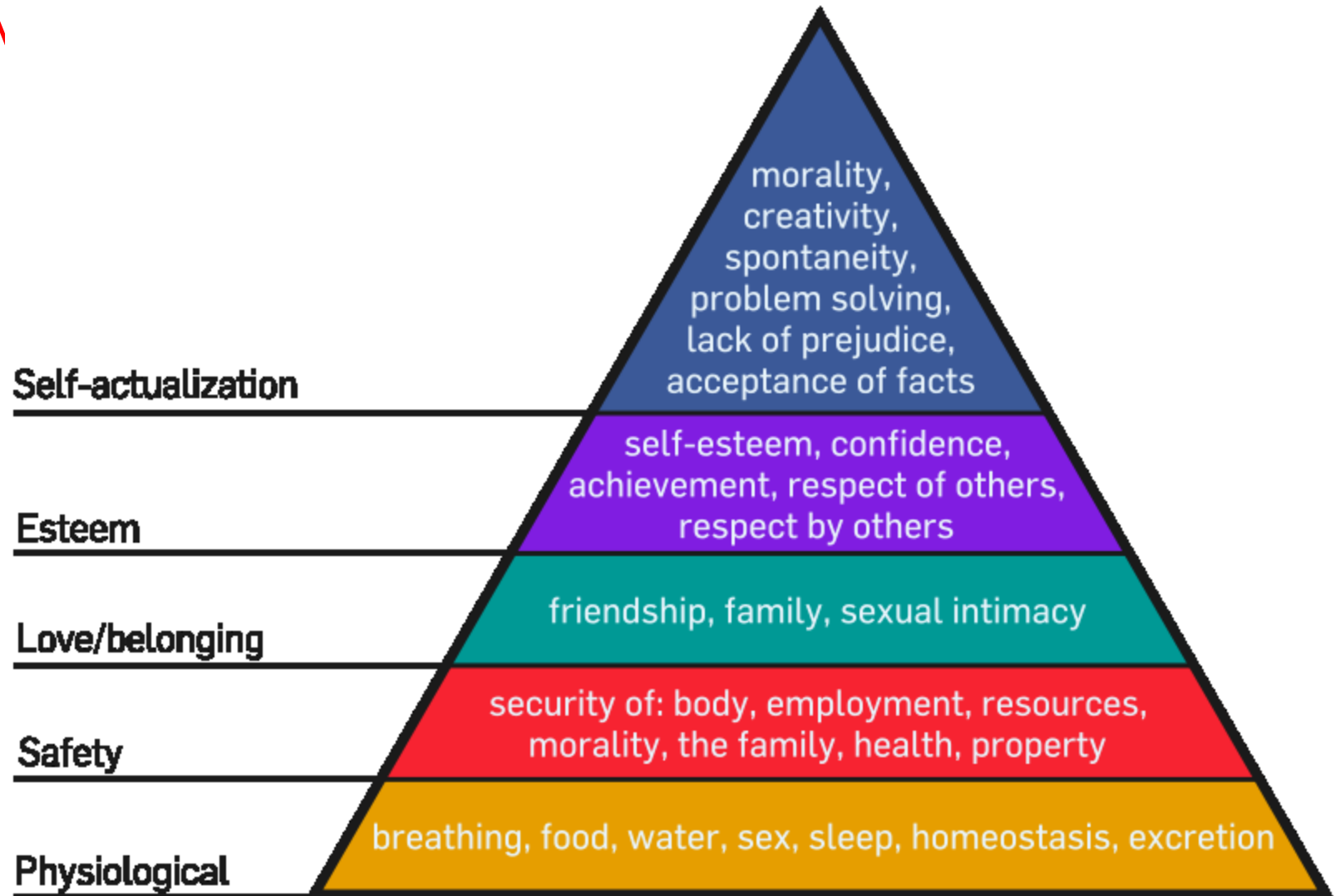
Related Concepts

- Arbitration
 - A neutral party hears and resolves a dispute
- Perquisites (Perks)
 - Some employees receive special rewards, such as assigned parking spaces, corner offices, and executive dining
- Fringe Benefits
 - “Standard” benefits formally given to all employees, such as education benefits, insurance, and profit sharing

Motivation Theories

- **McGregor's** Theories (2 perspectives of viewing workers)
 - Theory X: believe people need to be watched every minute. People are incapable, avoid responsibility, and avoid work.
 - Theory Y: believe people are willing to work without supervision, and want to achieve.

Motivation Theories



Motivation Theories

- David McClelland's Theory of Needs (or Acquired Needs Theory)
 - States that people are most motivated by one of the three needs:
 - Need for achievement:
 - motivated by challenges and recognition
 - Need for affiliation:
 - cooperating with others
 - seek approval
 - Need for power:
 - like to organize and influence others

Motivation Theories

- Herzberg's Theory
 - Deals with hygiene factors and motivating agents
 - Hygiene Factors
 - Poor hygiene factors may destroy motivation
 - But improving them will not improve motivation
 - Examples: Working conditions, salary, personal life, relationships at work, security, status
 - Motivating Agents
 - What motivates people is the work itself
 - Such as: Responsibility, Self-actualization, Professional growth, Recognition

Motivation Theories

- Victor **Vroom**'s Expectancy Theory
 - Employee who believe their efforts will lead to effective performance and who expect to be rewarded for their accomplishments remain productive as rewards meet their expectations
 - 3 factors
 - Valence (rewards)
 - Expectancy (possibilities)
 - Instrumentality (effort, cost)
 - How to apply? How to motivate yourself to get PMP certified?

Exercise

- All of the following are forms of power derived from the project manager's position EXCEPT:
 - A. Formal.
 - B. Reward.
 - C. Penalty.
 - D. Expert.

Answer: D

- The halo effect refers to the tendency to:
 - A. Promote from within.
 - B. Hire the best.
 - C. Move people into project management because they are good in their technical fields.
 - D. Move people into project management because they have had project management training.

Answer: C

- Which of the following conflict resolution techniques will generate the MOST lasting solution?
 - A. Forcing
 - B. Smoothing
 - C. Compromise
 - D. Problem solving

Answer: D

- A project manager must publish a project schedule. Activities, start/end times, and resources are identified. What should the project manager do NEXT?
 - A. Distribute the project schedule according to the communications management plan.
 - B. Confirm the availability of the resources.
 - C. Refine the project management plan to reflect more accurate costing information.
 - D. Publish a bar chart illustrating the timeline.

Answer: B

- What theory proposes that employees' efforts will lead to effective performance and the employees will be rewarded for accomplishments?
 - A. Conditional reinforcement
 - B. Malsow's hierarchy
 - C. McGregor's
 - D. Expectancy

Answer: D

- The management theory that states that all people can direct their own efforts is:
 - A. Theory Y.
 - B. Herzberg's theory.
 - C. Maslow's hierarchy.
 - D. Theory X.

Answer: A

- What leadership style should you employ during the first two weeks of project planning?
 - A. Coaching
 - B. Directing
 - C. Supporting
 - D. Facilitating

Answer: B

- What is the MOST correct statement about conflict?
 - A. The primary source of conflict is personality.
 - B. Conflict can be beneficial.
 - C. Conflict is best resolved by smoothing.
 - D. The best way to prevent conflict in the procurement process is to make sure the project manager is not involved with negotiations.

Answer: B

- An obstacle to team building in a matrix organization is that the:
 - A. Team organization is technically focused.
 - B. Team members are borrowed resources and can be hard to motivate.
 - C. Teams are too centralized.
 - D. Teams are too large and therefore very hard to handle.

Answer: B

- Co-location can help with:
 - A. Bringing customers together.
 - B. Building the team.
 - C. Decreasing project rental costs.
 - D. Decreasing project time.

Answer: B

- Which of the following is the BEST method to make reward systems MOST effective?
 - A. Pay a large salary increase to the best workers.
 - B. Give the team a choice of rewards.
 - C. Make the link between performance and reward clear.
 - D. Present notification of rewards within the company.

Answer: C

- In which project management process group is the project manager likely to be more coaching?
 - A. Initiating
 - B. Planning
 - C. Executing
 - D. Monitoring and controlling

Answer: C

PMP® V5 RDS

Project Communications Management

Overview

- Ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information
- Project managers spend most of their time communicating (90%) with team members and other project stakeholders
- Effective communication creates a bridge between diverse stakeholders who may have different cultural and organizational backgrounds, different levels of expertise, and different perspectives and interests, which impact or have an influence upon the project execution or outcome

Communications Management Processes

- **10.1 Plan Communications Management** — The process of developing an appropriate approach and plan for project communications based on stakeholder's information needs and requirements, and available organizational assets.
- **10.2 Manage Communications** — The process of creating, collecting, distributing, storing, retrieving and the ultimate disposition of project information in accordance with the communications management plan.
- **10.3 Control Communications** — The process of monitoring and controlling communications throughout the entire project life cycle to ensure the information needs of the project stakeholders are met.

Related Concepts

- Internal (within the project) and external (customer, other projects, the media, the public)
- Formal (reports, memos, briefings) and informal (emails, ad-hoc discussions)
- Vertical (up and down the organization) and horizontal (with peers)
- Official (newsletters, annual report) and unofficial (off the record communications)
- Written and oral
- Verbal and non-verbal (voice inflections, body language)

Communication Skills

- Listening actively and effectively
- Questioning, probing ideas (eliciting) to ensure better understanding
- Educating to increase team's knowledge
- Fact-finding to identify or confirm information
- Setting and managing expectations
- Persuading
- Negotiating to achieve mutually acceptable agreements between parties
- Resolving conflict to prevent disruptive impacts
- Summarizing, recapping, and identifying the next steps

Plan Communications Management (planning)

Plan Communications Management

- The process of developing an appropriate approach and plan for project communications based on stakeholder's information needs and requirements, and available organizational assets
- The key benefit of this process is that it identifies and documents the approach to communicate most effectively and efficiently with stakeholders

Important Considerations

- Who needs what information, and who is authorized to access that information
- When they will need the information
- Where the information should be stored
- What format the information should be stored in
- How the information can be retrieved
- Whether time zone, language barriers, and cross-cultural considerations need to be taken into account

Related Concepts

- In order to have clear, concise communications, the project manager must handle communications in a structured way and choose the best type of communication for the situation
- Communication Types
 - Formal written: project management plans, memos
 - Formal verbal: presentations, speeches
 - Informal written: e-mail, handwritten notes
 - Informal verbal: meetings, conversations

Effective Listening

- The receiver should decode the message carefully and confirm the message is understood
 - watching the speaker to pick up physical gestures and facial expressions
 - thinking about what to say before responding
 - using active listening, in which the receiver confirms he or she is listening
 - para-phrasing: restatement of the meaning of a text or passage using other words
 - expresses agreement or disagreement
 - asks for clarification

Communications Requirements Analysis

Plan Communications Management: Tools and Techniques

- Determine the information needed, the type and format of information
- Communication Channels
 - No. of communication channels: $(N(N-1))/2$
 - N equals the number of people; E.g. 4 people = 6 channels
- Information used:
 - Organization charts
 - Project organization and stakeholder responsibility relationships
 - Disciplines, departments, and specialties involved in the project
 - Logistics of how many persons will be involved with the project and at which locations
 - Internal and external information needs
 - Stakeholder register and stakeholder management strategy

Communication Technology

Plan Communications Management: Tools and Techniques

- Face-to-face interactions, telephone, fax , email, meetings, video conferencing
- Factors affecting the choice of communication technology:
 - Urgency of the need for information.
 - Availability of technology
 - Ease of use
 - Duration of the project
 - Is the available technology likely to change before the project is over?
 - Project environment
 - Does the team meet and operate on a face-to-face basis or in a virtual environment?
 - Sensitivity and confidentiality of the information

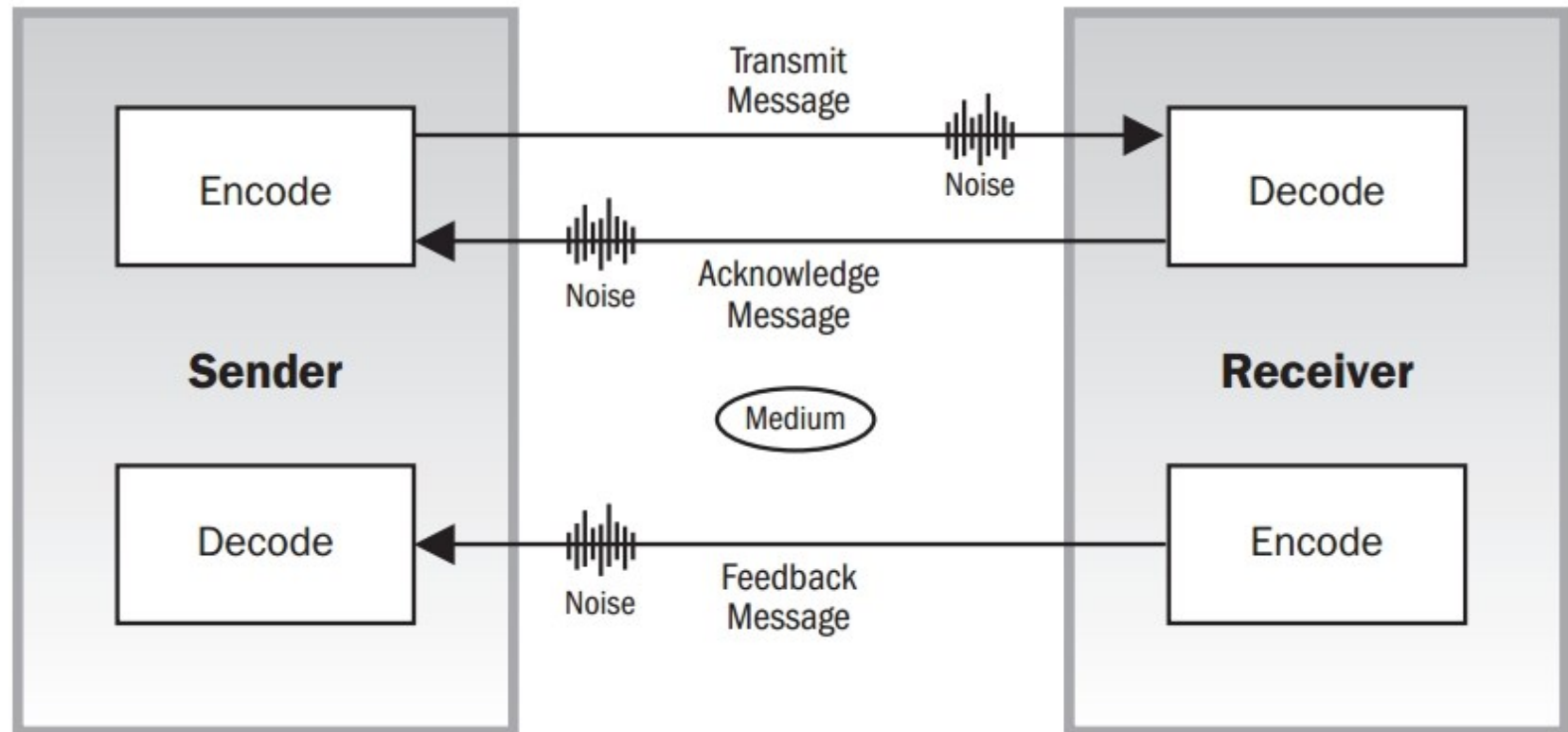
Communication Models

Plan Communications Management: Tools and Techniques

- **Encode:** Thoughts or ideas are translated into language by the sender
- **Transmit Message:** This information is then sent by the sender using communication channel (medium).
 - Compromised by various factors (**communication blockers**: e.g., distance, unfamiliar technology, inadequate infrastructure, cultural difference, lack of background information, and **noise**).
- **Decode:** The message is translated by the receiver back into meaningful thoughts or ideas.
- **Acknowledge:** Upon receipt of a message, the receiver may signal receipt of the message but this does not necessarily mean agreement with or comprehension of the message.
- **Feedback/Response:** When the received message has been decoded and understood, the receiver encodes thoughts and ideas into a message and then transmits this message to the original sender.

Communication Model

Plan Communications Management: Tools and Techniques



Communication Factors

- When encoding the message, sender needs to be aware the following communication factors:
 - Nonverbal
 - About 55% of all communication is nonverbal
 - Based on physical mannerisms
 - Para-lingual
 - Pitch and tone of voice also help to convey a message

Communication Methods

Plan Communications Management: Tools and Techniques

- Interactive Communication
 - Conversations, meeting, and conference calls
- Push Communication
 - Involves a one-way stream of information
 - Does not expect feedback
 - Status reports, e-mailed updates and memos
- Pull Communication
 - For large volumes of information
 - Place the information in a central location
 - The recipients are then responsible for retrieving the information from that location

Meetings

Plan Communications Management: Tools and Techniques

- Resource intensive activity
- Conducted face to face or online and in different locations
- General rules for meetings:
 - Set a time limit, and keep to it
 - Schedule recurring meetings in advance
 - Meet with the team regularly, but not too often
 - Create and distribute the agenda
 - Stick to the agenda
 - Bring the right people together
 - Chair and lead the meeting with a set of rules
 - Document and publish meeting minutes

Communications Management Plan

Plan Communications Management: Outputs

- Stakeholder communication requirements
- Information to be communicated, including language, format, content, and level of detail
- Reason for the distribution of that information
- Time frame and frequency for the distribution of required information and receipt of acknowledgment or response, if applicable
- Person responsible for communicating the information
- Person responsible for authorizing release of confidential information
- Person or groups who will receive the information
- Methods or technologies used to convey the information, such as memos, e-mail, and/or press releases

Communications Management Plan

Plan Communications Management: Outputs

- Resources allocated for communication activities, including time and budget
- Escalation process identifying time frames and the management chain (names) for escalation of issues that cannot be resolved at a lower staff level
- Method for updating and refining the communications management plan as the project progresses and develops
- Glossary of common terminology
- Flow charts of the information flow in the project, workflows with possible sequence of authorization, list of reports, and meeting plans, etc.
- Communication constraints usually derived from a specific legislation or regulation, technology, and organizational policies, etc.

Plan Communications Management

(planning)

Inputs

- .1 Project management plan
- .2 Stakeholder register
- .3 Enterprise environmental factors
- .4 Organizational process assets

Tools & Techniques

- .1 Communication requirements analysis
- .2 Communication technology
- .3 Communication models
- .4 Communication methods
- .5 Meetings

Outputs

- .1 Communications management plan
- .2 Project documents updates

Manage Communications

(executing)

Overview

- The process of creating, collecting, distributing, storing, retrieving, and the ultimate disposition of project information in accordance to the communications management plan
- The key benefit of this process is that it enables an efficient and effective communications flow between project stakeholders

Overview

- Making relevant information available to project stakeholders
- Effective communications management includes the following techniques:
 - **Sender-receiver models:** Feedback loops and barriers to communication.
 - **Choice of media:** When to communicate in writing versus orally, when to write an informal memo versus a formal report, and when to communicate face-to-face versus by e-mail.
 - **Writing style:** Active versus passive voice, sentence structure, and word choice.
 - **Meeting management techniques:** Preparing an agenda and dealing with conflicts.
 - **Presentation techniques:** Body language and design of visual aids.
 - **Facilitation techniques:** Building consensus and overcoming obstacles.
 - **Listening techniques:** Listening actively and removal of barriers that affect comprehension.

New RDS Tasks

Manage Communications

- Manage the flow of information by following the communications plan in order to keep stakeholders engaged and informed.

Performance Reporting

Manage Communications: Tools and Techniques

- Collecting and distributing performance information, including status reports, progress measurements, and forecasts
- Periodic collection and analysis of baseline versus actual data
- A simple status report might show:
 - Performance information
 - Status dashboards for each areas
- More elaborate reports may include:
 - Analysis of past performance
 - Analysis of project forecasts
 - Current status of risks and issues
 - Work completed during the period and to be completed next
 - Summary of changes approved in the period
 - Other relevant information

Reports

- Status Report
 - Describes where the project now stands regarding the performance measurement baseline
- Progress Report
 - Describes what has been accomplished
- Trend Report
 - Examines project results over time to see if performance is improving or deteriorating
- Forecasting Report
 - Predicts future project status and performance

Reports

- Variance Report
 - Compares actual results to baselines
- Earned Value Report
 - Integrates scope, cost, and schedule measures (PV, EV, AC, etc.)
- Lessons Learned Documentation
 - For future projects
- These reports are **reference only**, PMBOK does not mention any reports explicitly

Manage Communications (executing)

Inputs

- .1 Communications management plan
- .2 Work performance reports
- .3 Enterprise environmental factors
- .4 Organizational process assets

Tools & Techniques

- .1 Communication technology
- .2 Communication models
- .3 Communication methods
- .4 Information management systems
- .5 Performance reporting

Outputs

- .1 Project communications
- .3 Project management plan updates
- .2 Project documents updates
- .4 Organizational process assets updates

Control Communications

(monitoring and controlling)

Overview

- The process of monitoring and controlling communications throughout the entire project life cycle to ensure the information needs of the project stakeholders are met
- The key benefit of this process is that it ensures an optimal information flow among all communication participants, at any moment in time

Issue Log

Control Communications: Inputs

- It is used to document and monitor the resolution of issues.
- It may be used to facilitate communication and ensure a common understanding of issues.
- A written log documents and helps to monitor who is responsible for resolving specific issues by a target date.
- Issue resolution addresses obstacles that can block the team from achieving its goals.
- It provides both a repository for what has already happened in the project and a platform for subsequent communications to be delivered.

Issue #	Issue	Date Added	Raised By	Person Assigned	Resolution Due Date	Status	Date Resolved	Resolution

Control Communications

(monitoring and controlling)

Inputs

- .1 Project management plan
- .2 Project communications
- .3 Issue log
- .4 Work performance data
- .5 Organizational process assets

Tools & Techniques

- .1 Information management systems
- .2 Expert judgment
- .3 Meetings

Outputs

- .1 Work performance information
- .2 Change requests
- .3 Project management plan updates
- .4 Project documents updates
- .5 Organizational process assets updates

Exercise

- Extensive use of ____ communication is most likely to aid in solving complex problems.
 - A. Verbal
 - B. Written
 - C. Formal
 - D. Nonverbal

Answer: B

- The MOST likely result of communication blockers is that:
 - A. The project is delayed.
 - B. Trust level is enhanced.
 - C. Conflict occurs.
 - D. Senior management is displeased.

Answer: C

- Communications are often enhanced when the sender ____ the receiver.
 - A. Speaks up to
 - B. Uses more physical movements when talking to
 - C. Talks slowly to
 - D. Shows concern for the perspective of

Answer: D

- A project manager has a problem with a team member's performance. What is BEST form of communication for addressing this problem?
 - A. Formal written communication
 - B. Formal verbal communication
 - C. Informal written communication
 - D. Informal verbal communication

Answer: D

- When a project manager is engaged in negotiations, nonverbal communication skills are of:
 - A. Little importance
 - B. Major importance
 - C. Importance only when cost and schedule objectives are involved
 - D. Importance only to ensure you win the negotiation

Answer: B

- As the project manager, you have three stakeholders with whom you need to communicate. A new stakeholder has been added that you also need to communicate with. How many communications channels do you have now?
 - A. 7
 - B. 10
 - C. 12
 - D. 16

Answer: B

- Two people are arguing about what needs to be done to complete a work package. If the project manager wants to know what is going on, she should pay MOST attention to:
 - A. What is being said and when.
 - B. What is being said, who is saying it, and the time of day.
 - C. Physical mannerisms and what is being said.
 - D. The pitch and tone of the voices, and physical mannerisms.

Answer: D

- A team member is visiting the manufacturing plant of one of the suppliers. Which of the following is the MOST important thing to be done in any telephone calls the project manager might make to the team member?
 - A. Ask the team member to repeat back what the project manager says.
 - B. Review the list of contact information for all stakeholders.
 - C. Ask the team member to look for change requests.
 - D. Review the upcoming meeting schedule.

Answer: A

- The purpose of status meetings is to:
 - A. Exchange information about the project
 - B. Have team members report on what they are doing
 - C. Issue work authorizations
 - D. Confirm the accuracy of the costs submitted by the team

Answer: A

- If a project manager wants to report on the actual project results vs. planned results, she should use
 - A. Trend report
 - B. Forecasting report
 - C. Status report
 - D. Variance report

Answer: D

- About midway through the project, the project manager learns that most members of the project team are not reviewing the weekly project updates. What should the project manager do?
 - A. Create a signature log so team members can indicate when they have read the project updates.
 - B. Revise the communications management plan appropriately to meet the informational needs of the stakeholders.
 - C. Improve the layout of the weekly project updates to encourage reading by team members.
 - D. Require the reading of the project updates in order to receive any rewards on the project.

Answer: B

- The level of detail of performance reports is described in the:
 - A. Project charter.
 - B. Communications management plan.
 - C. Monthly requests for information by management.
 - D. Project's monthly needs.

Answer: B

- In managing project communications, what should the project manager keep in mind?
 - A. Communication skills are most important during project executing.
 - B. The receiver is responsible for making sure communications are clear.
 - C. Only the team members need to be concerned about communicating with each other.
 - D. A choice must be made about how to communicate properly.

Answer: D

- You have decided to terminate a contract because you no longer need the work from the seller. What is the BEST way to communicate this to the seller?
 - A. Call the seller immediately.
 - B. Send the seller a notification by e-mail.
 - C. Send the seller a stop work order by overnight mail.
 - D. Hold an immediate meeting with the seller.

Answer: C

The End