

PROJECT HUMAN RESOURCES MANAGEMENT

STUDY NOTES

PMBOK 2000 based, Version 7

In Preparation For
PMP® Certification Exam



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Project Human Resources Management Study Notes

Reference Material to study:

- ✓ *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, Chapters 2 and 9 (2000 edition)
- ✓ *Principles of Project Management*, Adams, John, 1997
- ✓ *Human Resource Skills for the Project Manager*, Verma, Vijay K, 1996
- ✓ *Organizing Projects for Success*, Verma, Vijay K., 1995
- ✓ *Project Management, A Managerial Approach*, Meredith, Jack R. 1995, Chapters 3-4, 6,
- ✓ *PMP® Exam Practice Test and Study Guide*, 4th Edition, by Ward, J. LeRoy, PMP®, 2001
- ✓ *PMP® Exam Prep, 3rd Edition*, by Mulcahy, Rita, PMP®, 2001
- ✓ *ESI PMP® Challenge!*, 3rd Edition, Human Resources Section, Ward, J. LeRoy, 2001

What to Study?

- ✓ The PMBOK® phases of Project Human Resources Management: Organizational Planning, Staff Acquisition, and Team Development (Be familiar with Inputs, Tools and Techniques, and Outputs for each phase)
- ✓ Know the various organizational aspects which influence projects. These include: organizational systems, organizational cultures and styles, and organizational structures. (see PMBOK®, Chapter 2)
- ✓ Know the different types of organizational structures: functional, weak matrix, balanced matrix, strong matrix, and projectized are the main ones. Also be familiar with the differences between project expeditor and project coordinator.
- ✓ Know the roles and responsibilities of the project manager. (see *Principles of Project Management*, pgs. 69-84)
- ✓ Know the primary sources of authority and control (power) for project managers: formal, coercive, reward, expert, and referent (see *Human Resource Skills for the Project Manager*, pgs. 232-233)
- ✓ Know the different leadership styles for project managers: autocratic, consultative autocrat, consensus manager, shareholder manager. (see *Principles of Project Management*, pg. 158)
- ✓ Know the various motivation theories of human behavior: Theory X, Y, and Z, Expectancy, Contingency, Goal-Setting, Reinforcement, and Equity. (see *Human Resource Skills for the Project Manager*, pgs. 70-75)
- ✓ Know the different methods of managing conflict: forcing, problem solving, compromising, smoothing, and withdrawal. (see *Principles of Project Management*, pgs. 178-179)
- ✓ Know the one party conflict management methods: win-lose, yield-lose, lose-leave, compromise, and integrative and understand the relation between this method and the above methods. For instance, forcing is considered a win-lose situation. (see *Principles of Project Management*, pgs. 179-180)

Project Human Resources Management Study Notes

- ✓ Read up on *Team Building* and be familiar with it. (see *Principles of Project Management*, pgs. 125-164)
- ✓ Read up on the *Project Manager's Work Environment* and be familiar with it. (see *Principles of Project Management*, pgs. 29-63)

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Key Definitions

Colocation	Placement of project team members in the same physical location to enhance their ability to perform as a team.
Concurrent Engineering	An approach to project staffing that, in its most general form, calls for implementors to be involved in the design phase. (Sometimes confused with fast tracking)
Functional Manager	A manager responsible for activities in a specialized department or function. (e.g., engineering, manufacturing, marketing)
Functional Organization	An organizational structure in which staff are grouped hierarchically by specialty (e.g., production, marketing, engineering, accounting) at the top level and then further divided within specialty.
Leading	The action of directing, aligning, and motivating people.
Line Manager	(1) The manager of any group that actually makes a product or performs a service. (2) A functional manager.
Managing	The action of producing the results expected by stakeholders.
Matrix Organization	Any organizational structure in which the project manager shares responsibility with the functional managers for assigning priorities and for directing the work of individuals assigned to the project.
Modern Project Management (MPM)	A term used to distinguish the current broad range of project management (scope, cost, time, quality, risk, etc.) from narrower, traditional use that focused on cost and time.
Organizational Breakdown Structure (OBS)	A depiction of the project organization arranged so as to relate work packages to organizational units.
Project Coordinator	Reports to a higher level manager than do the functional managers. Therefore, does have some authority to assign work.
Project Expediter	Coordinates projects across the various functional units. The expeditor has limited formal authority. This form is used when the project's cost and importance are relatively low.
Project Management Team	The members of the project team who are directly involved in project management activities. On some smaller projects, the project management team may include virtually all of the <i>project team members</i> .
Project Manager	The individual responsible for managing a project.
Project Team Members	The people who report either directly or indirectly to the project manager.
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.
Responsibility Assignment Matrix (RAM)	A structure that relates the project organization structure to the WBS to help ensure that each element of the project's scope of work is assigned to a responsible individual. Also called an Accountability Matrix .
Team Development	Developing individual and group competencies to enhance project performance.

Project Human Resource Management Concepts

Project Human Resource Management:

- Includes the processes required to make the most effective use of the people involved with the project.
- Includes all of the project stakeholders - sponsors, customers, partners, individual contributors, project management team, etc.
- Human resource topics which deal with people in an operational, ongoing context include:
 - Leading, communicating, negotiating, problem solving, and influencing the organization.
 - Delegating, motivating, coaching, mentoring, and other skills related to working with individuals.
 - Performance appraisals, recruitment, retention, labor relations, health and safety regulations, and other subjects related to administering the human resource function.
- Project managers should be familiar with human resource topics as well as savvy in how the knowledge is applied to the project. For example:
 - The temporary nature of projects means that the personal and organizational relationships may be both temporary and new. In this situation, the project manager must take care to select techniques that are appropriate for such transient relationships.
 - The nature and number of project stakeholders will often change as the project moves from phase to phase of its life cycle. As a result, techniques that are effective in one phase may not be effective in another. The project management team must take care to use techniques that are appropriate to the current needs of the project.
 - While human resource administrative activities are seldom a direct responsibility of the project management team, the team must be sufficiently aware of administrative requirements to ensure compliance. (e.g., export licenses for foreign nationals to work on specific projects)

Project Human Resource Management Processes

Organizational Planning (9.1): (Process Group: Planning)

- The process of identifying, documenting, and assigning project roles, responsibilities, and reporting relationships.
- Roles, responsibilities, and reporting relationships may be assigned to individuals or to groups.
- The individuals and groups may be part of the organization performing the project or they may be external to it.
- On most projects, organizational planning is done in the early project phases; however, the results of the process should be reviewed regularly to ensure continued applicability.
- Organizational planning and communications planning are often tightly linked since the project's organizational structure will have a major effect on the project's communications requirements.
- Inputs include:
 - Project interfaces:
 - **Organizational interfaces:** formal and informal reporting relationships among different organizational units. May be highly complex or very simple. For example: developing the first release of a new product line may require coordinating efforts and reporting from several internal and external organizations while fixing an error in a system installed at a single site may require little more than notifying the user and the operations staff upon completion.
 - **Technical interfaces:** formal and informal reporting relationships among different technical disciplines. Technical interfaces occur both within the project phases (e.g., the site design developed by the civil engineers must be compatible with the superstructure developed by the structural engineers) and between the project phases (e.g., the automotive design team passes the results of its work to the retooling team responsible for creating the manufacturing capability of the vehicle).
 - **Interpersonal interfaces:** formal and informal reporting relationships among different individuals working on the project.
 - Project interfaces often occur simultaneously.
 - Staffing requirements: define what kinds of competencies are required from what kinds of individuals or groups and in what time frames. (a subset of the overall resource requirements)
 - Constraints: factors that limit the project team's options. May include the following:
 - Organizational structure (functional, weak matrix, balanced matrix, strong matrix, projectized, composite)
 - Collective bargaining agreements (union agreements, etc.)
 - Preferences of the project management team (what worked before, etc.)
 - Expected staff assignments (skills and competencies of specific individuals)

Project Human Resource Management Processes, cont.

- Methods used during organizational planning:
 - Templates (role & responsibility definitions, reporting relationships from previous projects, etc.)
 - Human resource practices (policies, guidelines, procedures, etc.)
 - Organizational theory (theories about how best to organize)
 - Stakeholder analysis (identification of stakeholders and their needs)

- Outputs include:
 - Role and responsibility assignments
 - **Roles** are *who does what* while **responsibilities** are *who decides what*
 - Roles and responsibilities must be assigned to the appropriate project stakeholders.
 - Roles and responsibilities may vary over time.
 - Should be closely linked to the project scope definition. A **Responsibility Assignment Matrix (RAM)** can be used for this purpose.
 - Staffing Management Plan:
 - Describes when and how human resources will be brought onto and taken off the project team.
 - May be formal or informal, highly detailed or broadly framed, based on the needs of the project.
 - A subsidiary element of the project plan.
 - Should also consider how project team members will be released when no longer needed. (should reduce or eliminate the need to “make work” to fill in the time between one assignment and the next, and should reduce or eliminate the uncertainty about future employment opportunities)
 - Organization chart:
 - A graphic display of project reporting relationships.
 - An **Organizational Breakdown Structure (OBS)** is a specific type of organization chart that depicts which organizational units are responsible for which work packages.
 - Supporting Detail. May include:
 - Organizational impact: what alternatives are precluded by organizing in this manner.
 - Job descriptions (also called position descriptions)
 - Training needs

Project Human Resource Management Processes, cont.

Staff Acquisition (9.2): (Process Group: Planning)

- The process of obtaining the required human resources (individuals or groups) and having them assigned and working on the project.
- If the “best” resources are not available, the project management team must take care to ensure that the resources that are available will meet project requirements.
- Inputs include:
 - Staffing management plan
 - Staffing pool description: Considerations include:
 - Previous experience (Have the individuals or groups done similar or related work before?)
 - Personal interests (Do they want to work on the project?)
 - Personal characteristics (Will the individuals or groups work well together as a team?)
 - Availability (Will the most desirable individuals or groups be available in the necessary time frame?)
 - Competencies and proficiency (What competencies are required and at what level?)
 - Recruitment practices (policies, guidelines, or procedures governing staff assignments which may constrain the staff acquisition process).
- Methods used during staff acquisition are:
 - Negotiations: May need to negotiate with:
 - Responsible functional managers to ensure that the project receives appropriately competent staff in the necessary time frame.
 - Other project management teams within the performing organization to assign scarce or specialized resources appropriately.
 - Pre-assignment. Staff may be pre-assigned when:
 - The project is an internal service project, and staff assignments were defined as part of project charter.
 - The project is the result of a competitive proposal agreement and specific staff were promised as part of the proposal.
 - Procurement: used when organization lacks sufficient in-house human resource or skills.
- Outputs include:
 - Project staff assigned (may be full time, part time, or variably, based on the needs of the project).
 - Project team directory (lists all the project team members and other stakeholders.)

Project Human Resource Management Processes, continued

Team Development (9.3): (Process Group: Executing)

- The process of developing individual and group competencies to enhance project performance.
- Team development on a project is often complicated when individual team members are accountable to both a functional manager and a project manager. Effective management of this dual reporting relationship is often a critical success factor for the project and is generally the responsibility of the project manager.
- Inputs include:
 - Project staff
 - Project plan
 - Staffing management plan
 - Performance reports: (Provides feedback to the project team about performance against the project plan)
 - External feedback: (Project team must periodically measure itself against the performance expectations of external stakeholders.)
- Methods used during team development include:
 - Team-building activities:
 - Include management and individual actions taken specifically and primarily to improve team performance.
 - May vary from a five minute agenda item in a regular status review meeting to an extended, off-site, professionally facilitated experience designed to improve interpersonal relationships among key stakeholders.
 - General management skills (reference PMBOK® Guide, Chapter 1)
 - Reward and recognition systems
 - Formal management actions that promote or reinforce desired behavior.
 - To be effective, must make the link between project performance and reward clear, explicit, and achievable.
 - Should consider cultural differences.
 - Collocation: involves placing all, or almost all, of the most active project team members in the same physical location to enhance their ability to perform as a team. (a **war room** is an example of collocation)
 - Training (includes all activities designed to enhance the competencies of the project team.)
- Outputs include:
 - Performance improvements: improved project performance. Improvements can come from various sources and affect many areas of project performance such as:
 - Improvements in individual skills may allow personnel to perform their work more effectively.
 - Improvements in team behaviors may allow team members to devote a greater percentage of their effort to technical activities.
 - Improvements in either individual skills or team capabilities may facilitate identifying and developing better ways of doing project work.
 - Input to performance appraisals (project staff should provide input to the appraisals of fellow staff members they significantly interact with on a regular basis.)

Project Human Resource Management Concepts Organizational Influences

Organizational Systems:

- Project based: Operations consist primarily of projects. Two categories:
 - Organizations that derive their revenue primarily from performing projects for others (architectural firms, engineering firms, consultants, construction contractors, government contractors, etc.)
 - Organizations that have adopted **management by projects**
 - Have management systems such as accounting, financial, reporting and tracking in place to facilitate project management
- Non-project based:
 - Absence of project-oriented systems generally makes project management more difficult.
 - Examples include: manufacturing companies, financial service firms, etc.

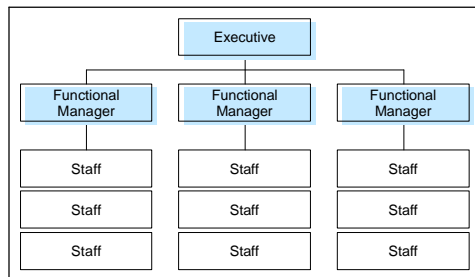
Organizational Cultures and Style:

- Culture is reflected in shared values, beliefs, norms, expectations, policies, procedures, view of authority relationships, etc.
- Organizational cultures often have a direct influence on the project.
 - A team proposing an unusual or high-risk approach is more likely to secure approval in an aggressive or entrepreneurial organization.
 - A project manager with a highly participative style may encounter problems in a rigidly hierarchical organization while a project manager with an authoritarian style may be equally challenged in a participative organization.
- Project managers need to be aware of the organization's cultures and style.

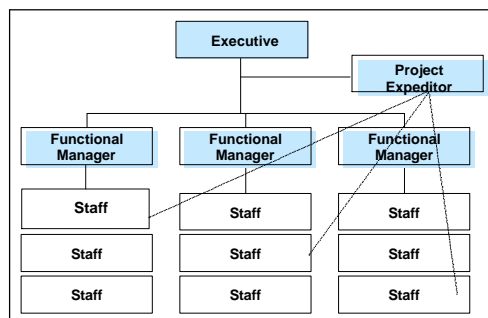
Project Human Resource Management Concepts Organizational Influences, continued

Organizational Structure:

- The organization's structure often constrains the availability of resources for the project.
- Structure types:
 - **Functional:**
 - A hierarchy where each employee has one clear superior.
 - Staff are grouped by specialty, such as production, marketing, engineering, and accounting.
 - Project work is done independently within each department.

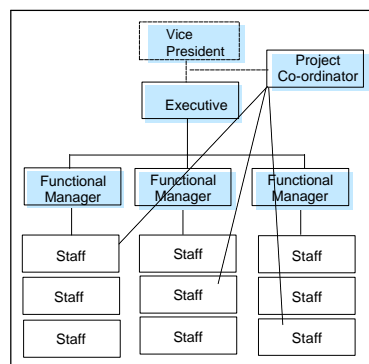


- **Project Expeditor (PE):**
 - The project expeditor acts as a staff assistant to the executive who has ultimate responsibility for the project.
 - The workers remain in their functional organizations and provide assistance as needed.
 - The PE has little formal authority. The PE's primary responsibility is to communicate information between the executive and the workers.
 - Most useful in the traditional functional organization where the project's worth and costs are relatively low.



Project Human Resource Management Concepts Organizational Influences, continued

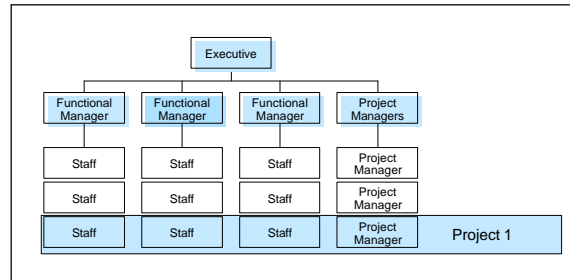
- **Project Coordinator (PC):**
 - Project expediter is moved out of facilitator position into a staff position reporting to a much higher level in the hierarchy.
 - The project coordinator has more authority and responsibility than a PE.
 - The PC has the authority to assign work to individuals within the functional organization.
 - The functional manager is forced to share resources and authority with the PC.
 - The size of projects in terms of dollars is relatively small compared to the rest of the organization.



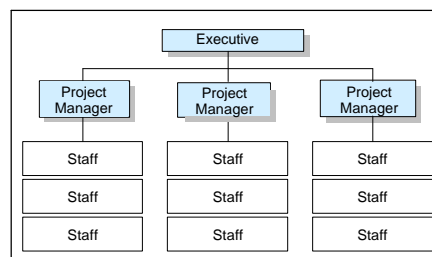
- **Matrix:** (see PMBOK®, pgs. 22-23)
 - Maintains the functional (vertical) lines of authority while establishing a relatively permanent horizontal structure to interact with all functional units supporting the projects.
 - One result of the matrix is that workers frequently find themselves caught between the project manager and their functional manager.
 - Advantages: Improved PM control over resources, rapid response to contingencies, improved coordination effort across functional lines, people have a “home” after the project is over, etc. (see Adams, *Principles of Project Management*, pg. 19)
 - Disadvantages: Not cost effective due to excess administrative personnel, workers report to multiple bosses, more complex structure to monitor and control, higher potential for conflicts due to differing priorities, power struggles, and competition for resources, etc. (see Adams, *Principles of Project Management*, pg. 19)
 - **Weak matrix:** Maintains many of the characteristics of a functional organization. The project manager's role is more like that of a project expediter.
 - **Balanced matrix:** In-between weak and strong. The project manager has more authority than in a weak matrix. The PM is more likely to be full-time than part-time as in a weak matrix.

Project Human Resource Management Concepts Organizational Influences, continued

- **Strong matrix:** Similar in characteristics to a projectized organization. There is likely to be a department of project managers which are full-time.



- **Note:** The term *tight matrix* refers to collocation of the project team in a single area such as a bull pen and is not an organizational structure.
- **Projectized:**
 - Team members are often collocated.
 - Most of the organization's resources are involved in project work.
 - Project managers have a great deal of independence and authority.
 - Departments either report directly to the project manager or provide services to the various projects.



Project Human Resource Management Concepts

Roles and Responsibilities of the Project Manager:

- Integrator
 - PM is the most likely person who can view both the project and the way it fits into the overall plan for the organization.
 - Must coordinate the efforts of all the units of the project team.
- Communicator
 - Communicates to upper management, the project team, and other stakeholders.
 - The PM who fails to decipher and pass on appropriate information to the appropriate people can become a bottleneck in the project.
 - The PM has the responsibility of knowing what kind of messages to send, who to send them to, and translating the messages into a language understood by all recipients.
- Project Leader
 - Must be able to solve problems
 - Guide people from different functional areas
 - Coordinate the project to show leadership capabilities
- Decision Maker
 - Makes key decisions such as allocation of resources, costs of performance and schedule tradeoffs, changing the scope, direction or characteristics of the project.
 - This is an important role with significant consequences for the project as a whole.
- Creator of a Team Climate
 - The PM should attempt to build a climate conducive to maximizing the output of the project team so that team members work together
 - Encourage the creative potential of all the project team members
 - Seek to avoid unrest and negative forms of conflict by building supportive atmosphere early.

Project Human Resource Management Concepts, continued

Sources of Authority and Control: (Power)

- The PM must deal with upper management, subordinates, functional managers, interface personnel, and people outside the firm.
- The degree to which the PM can influence each of these groups will have a bearing on the success or failure of the project.
- The PM must exert some type of power so that the necessary concessions or cooperation can be obtained.
 - **Formal:**
 - A legitimate (or positional) form of power.
 - Based on a person's formal position in the company.
 - **Reward:**
 - A legitimate (or positional) form of power.
 - Refers to positive consequences or outcomes that a person can offer.
 - **Coercive (Penalty):**
 - A legitimate (or positional) form of power.
 - Refers to negative consequences that a person can inflict on others. (firing, docking, reprimand, etc.)
 - **Resource Control Power:**
 - A legitimate (or positional) form of power.
 - Is influenced by the degree of control you have on money or resources
 - **Referent:**
 - A form of personal power.
 - Refers to earned power when people admire a person and want to follow that person.
 - Can also refer to power that a person possesses due to their connections with other people or by citing the authority of a more powerful person as the basis for their authority.
 - **Expert:**
 - A form of personal power.
 - Refers to earned power that a person acquires based on his/her technical knowledge, skill, or expertise on some topic or issue.
 - **Bureaucratic Power:**
 - A form of personal power.
 - Originates from your knowledge of rules, policies, procedures, and regulations.
 - **Charismatic/Persuasive Power:**
 - A form of personal power.
 - Originates from personal ability to communicate charismatically. (also called charisma)
 - It is the nearest to being purely personal power

NOTES: 1) The exam may equate legitimate power with formal power. Formal power, reward power, and coercive power are considered legitimate **forms** of power. You'll have to figure out from the question as to what context *legitimate* is being used. 2) Some texts do not distinguish charismatic power from referent power. For purposes of the exam, referent power may or may not include charisma. Check the context of the question.

Project Human Resource Management Concepts, continued

Leadership Styles:

- Many PM's have a preferred style of leadership.
- Some may fit their leadership style to the situation.
- Leadership styles have been described in terms of four possible extremes:
(as described in Adams, *Principles of Project Management*, pg. 158-159)
 - **Autocratic:**
 - The PM solicits little or no information from team.
 - Makes decision solely.
 - Also referred to as **Directing**.
 - **Consultative autocrat:**
 - Intensive information input is solicited from the team.
 - The PM still makes the decisions, solely.
 - May also be referred to as **Persuading**.
 - **Consensus Manager:**
 - Problem presented to the team for open discussion and information gathering.
 - Team makes decision.
 - Also referred to as **Participating**.
 - **Shareholder Manager:**
 - Little or no information exchange takes place within the group.
 - The team has the ultimate authority for the final decision.
 - Also referred to as **Delegating**.
 - This style is considered to be poor management.
 - **NOTE:** May also want to study the leadership styles as defined in Verma's, *Human Resource Skills for the Project Manager*, pg. 218. The styles are slightly different.

Project Human Resource Management Concepts

Motivation Theories:

- Motivation theories attempt to explain and analyze how personal and intrinsic factors interact and influence one another to produce certain types of behavior.
- It is important for project managers to understand what motivates their workers.
- **Maslow's hierarchy of human needs:** (from lower to higher)
 - Physiological needs - food, water, clothing, shelter, etc.
 - Security (Safety) - economic and physical
 - Social - love, friendship, group membership
 - Self Esteem - reputation, respect from others
 - Self Actualization - creativity, striving for excellence, also referred to as 'self-fulfillment'
- **Herzberg's Theory of Motivation** related Maslow's needs to the job.
 - Hygiene factors (pay, attitude of supervisor, working conditions) can only destroy motivation. These are sometimes referred to as 'dissatisfiers'.
 - Relate to Maslow's physiological, security, and social needs
 - Motivators (opportunity to achieve and experience self-actualization) will improve motivation. These are sometimes referred to as 'satisfiers'.
 - Relate to Maslow's needs for self esteem and self actualization
- **McGregor's Theory X and Theory Y**
 - **Theory X:** (developed to describe how managers relate to subordinates)
 - Most people dislike their work and will avoid it.
 - Most people lack ambition and have little capacity for problem solving and creativity.
 - Workers prefer direction and avoid taking responsibility and initiative.
 - Workers motivated only by Maslow's lower level needs (physiological and safety).
 - Workers are self-centered, indifferent to the needs of the organization, and resistant to change.
 - **Theory Y:** (developed to describe how managers relate to subordinates)
 - Most people meet high performance expectations if appropriately motivated and the climate supportive.
 - Most people are creative, imaginative, ambitious, and committed to meeting the organization's goals.
 - Most people are self-disciplined, can direct and control themselves, desire responsibilities, and accept them willingly.
 - Workers are motivated by Maslow's higher level needs (self esteem and self actualization)

Project Human Resource Management Concepts, continued

Motivation Theories, cont.:

- **Theory Z:** (Developed by Ouchi. The source was the Japanese workplace)
 - Similar characteristics as Theory Y.
 - Management deems workers as trustworthy and capable of working without close supervision.
 - Workers are motivated by self esteem and self actualization.
 - Japanese management provides a supportive environment with lifetime employment, consensus decision making, and collective responsibility.
 - Ouchi compared Japanese organizations (Type J) with traditional American organizations (Type A).
 - Ouchi theorized that to the extent lifetime employment, consensus decision making, and collective responsibility could be incorporated into American organizations, then worker productivity and motivation would improve.
 - Ouchi called this new hybrid American organization, Type Z.
- **Contingency Theory:** (Developed by Morse and Lorsch)
 - People have a central need to develop a sense of competence. This need continues to motivate even after competence has been achieved.
 - Project managers should ensure that there is a good match between team members' skills and their assignments and that the organizational climate is conducive to meeting team members needs and achieving a sense of competence.
- **Goal Setting Theory:** (Developed by Latham and Locke)
 - Working towards a goal is a major source of job motivation.
 - Individuals have an internal desire to achieve goals.
 - Clear, specific, concise, and challenging goals motivate team members.
 - Project participants must be allowed to participate in setting goals, formulating plans and implementation strategies in order to gain participants' acceptance and commitment to meeting project goals.
- **Expectancy Theory:** (Developed by Victor Vroom)
 - People think seriously about how much effort they should put into a task before doing it.
 - Motivation occurs if there is an expectation of a favorable outcome.
 - A person's behavior is based on the strength of their expectation that an act will be followed by a desired outcome or good performance.
 - A person's behavior is based on their expectation that good performance will be rewarded. The attractiveness of the reward to the individual also influences a person's behavior.
 - Project managers should try to ascertain the most important needs of their team via informal communication and by developing interrelationships with team members.
- **Reinforcement Theory:** (Based on Skinner's behavior modification theories)
 - Human behavior is shaped by the previous positive or negative outcomes experienced by a person.
 - Desirable behavior will be repeated if rewarded and undesirable behavior can be discouraged by punishment.

Project Human Resource Management Concepts, continued

Motivation Theories, cont.:

- **Equity Theory:** (Developed by Adams)
 - People are motivated by their desire to be treated equitably.
 - People compare their jobs and compensation with those of others on the project. Inequities can influence the degree of effort they exert.
 - Inequities can result in conflicts and problems, thus requiring considerable effort from the project manager, functional managers, and human resources personnel to resolve.
 - Project managers must ensure that all project participants are compensated fairly for their contributions to project success.
 - See Verma's, *Human Resource Skill for the Project Manager*, pg. 75, for general suggestions on motivating employees. The suggestions are taken from the best of the above motivation strategies.

Project Human Resource Management Concepts, continued

Conflict Management:

- Contemporary view of conflict management:
 - Inevitable between humans
 - Often beneficial
 - Natural result of change
 - Can and should be managed
 - Neither good nor bad but can have positive and negative results for the organization.
- The PM must carefully select the method of managing conflict appropriate for his/her organization so that an atmosphere conducive to constructive results is developed.
- Five methods of managing conflict:
 - **Withdrawal:** (avoidance)
 - Retreating from actual or potential disagreements and conflict situations.
 - Appropriate only in certain situations such as when a *cooling-off* period is needed.
 - A temporary tactic: does not resolve the conflict, only delays it.
 - Considered a lose-lose situation because the conflict is delayed, not resolved.
 - **Smoothing:** (accommodating)
 - De-emphasizes differences and emphasizes commonalities.
 - Keeps the atmosphere friendly.
 - A temporary tactic: does not resolve the conflict, only delays it. (considered a lose-lose situation)
 - Should be used in conjunction with another method.
 - **Forcing:** (coerce)
 - Exerts one's viewpoint at the potential expense of another party.
 - This method provides resolution but is considered to be a win-lose.
 - **Compromising:** (bargaining)
 - Considers various issues and searches for solutions which bring some degree of satisfaction to the conflicting parties.
 - Both parties must give up something that is important to them; however, this method usually provides some acceptable form of resolution.
 - May or may not provide the best solution to the conflict. Hence, many texts consider compromise to be a lose-lose resolution since both parties give ground. However, some texts consider compromise to be win-lose.
 - **Collaborating:**
 - Involves incorporating multiple ideas and viewpoints from people with different perspectives.
 - Used when a project situation is too important to be compromised.
 - Offers a good opportunity to learn from others.
 - Active participation by both parties makes consensus and commitment to resolution easier.
 - Loses effectiveness with the involvement of more than a few people with mutually exclusive perspectives.
 - Considered a win-win.

Project Human Resource Management Concepts, cont.

- **Problem Solving:** (confrontation)
 - Directly addresses disagreements.
 - Conflict is treated as a problem. The problem is defined; information is collected; alternatives are identified and analyzed, and the most appropriate alternative is selected.
 - Theoretically considered the best because both parties can be satisfied if they work together to solve the problem.
 - Both parties must want to solve the problem and be willing to work together.
 - Time-consuming method.
 - This method is considered to be a win-win.

One Party Conflict Management:

- This method relates more specifically to personal styles of the leaders handling conflict.
- Five styles of handling conflict:
 - **Win-Lose:**
 - High concern for personal goals and low concern for relationships.
 - Related to the forcing method above.
 - **Yield-Lose:**
 - Low concern for personal goals and high concern for relationships.
 - Related to the smoothing method above.
 - **Lose-Leave:**
 - Low concern for personal goals and low concern for relationships.
 - Related to the withdrawal method above.
 - **Compromise:**
 - Moderate concern for personal goals and moderate concern for relationships.
 - Related to the compromise method above.
 - **Integrative:**
 - High concern for personal goals and high concern for relationships.
 - Related to the problem solving method above.

Project Human Resource Management Concepts, continued

Team Building:

- Definition: the process of getting a diverse group of individuals to work together effectively as a team.
- Purpose: to get project team members focused on the *big-picture* and to concentrate on overall project goals.
- Benefits of Team Building:
 - Establishment of realistic, achievable, objectives for the team
 - Commitment of team member support to make the team successful
 - Understanding of team member's priorities to help address difficulties
 - Encouragement of open communications
 - More effective problem solving due to broader base of expertise
 - More meaningful performance feedback based on establishment of expectations
 - Allows for more effective conflict resolution
 - Maintenance of balance between group productivity and individual team members needs
 - Encouragement of team members to test their abilities and ideas
 - Conformation of individual behavior to meet team standards
 - Creates a pool of effective team members for future projects
 - Understanding the boundaries placed on the team which may dictate what the team can and cannot do
- Symptoms of bad teamwork:
 - Frustration
 - Conflict and unhealthy competition among team members
 - Team meetings are unproductive and demoralizing
 - Team members work independently and avoid needed cooperation
 - Problem-solving activities like constructive conflict are avoided
 - Lack of trust or confidence in the project manager
 - Team members are unresponsive to the needs of the team or the project
- Team building process guide. (Must be carried out by the PM although not necessarily in this sequence):
 - Plan for team building
 - Team goals and objectives must be well developed and aligned with those of the project
 - Project procedures and controls should be planned and implemented to encourage team effort
 - Project roles must be defined to assist in selecting the right team members for each assignment
 - Negotiate for team members
 - Selecting the right team is crucial to effective team building
 - Match interests and technical skills to the assignments
 - Organize the diverse group into a team
 - Make specific assignments
 - Clearly define roles and responsibilities

Project Human Resource Management Concepts, continued

Team Building:

- Hold a *kick-off* meeting
 - Crucial to the team building process because it helps start the project on the right foot
 - Carefully set the agenda to ensure that all technical and procedural items are covered
 - Get the team members to meet each other
 - Establish open working relationships and communications among team members
- Obtain team member commitments
 - One of the most important objectives of the kick-off meeting
 - Obtain commitments of time, role, and priority
- Build communication links
 - Good communications links both within and outside the performing organization are essential
 - Must recognize both formal and informal communications links
 - Must establish links for upward, downward, and lateral communications
- Obtain top management support
 - They must emphasize the importance of team building
 - Demonstrate their support
- Conduct team-building exercises
- Utilize ongoing project team development
 - Team building is an ongoing process
 - Should be part of meetings, counseling sessions, informal conferences with team members, celebrations, and organizational events
 - Introduce appropriate rewards and recognition systems
- Effectively manage team conflicts
- Effective Team Communications:
 - Be an effective communicator
 - Be a communications expediter
 - Get rid of communication blockers
 - Use a **tight matrix**. A tight matrix is aimed at improving communications and teamwork. It involves taken project personnel from their various functional departments (which could be spread across several buildings or even site locations) and collocating them in a single area. (such as a bull pen or a row of offices)
 - Have a war room.
 - Make meetings effective.
 - Establish a meeting policy.
 - Only call a meeting if there is a real need.
 - Make the purpose of the meeting clear.
 - Prepare an agenda and follow it.
 - Encourage participation.
 - Use meetings as part of the team building process.
 - Issue minutes.
 - Follow-up on assigned tasks and action items.

Sample Questions

1. The project manager's leadership style should be matched to the corresponding developmental level of the project team and should move through successive steps in the following order:
 - A. Disciplinary, autocratic, participative
 - B. Staff planning, team training, performance monitoring
 - C. Team building, team development, responsibility assignment
 - D. Directing, coaching, supporting, delegating

2. Which of the following conflict resolution techniques is most appropriate for a life-death situation where decisions must be made quickly?
 - A. Collaborating
 - B. Forcing
 - C. Smoothing
 - D. Compromise

3. A **mandatory** prerequisite for team building is:
 - A. Funding for staff development activities
 - B. Shared work ethics among team members
 - C. Commitment from top level management
 - D. Removal of troublesome individuals

4. Which of the following is best for handling cross-functional project needs for a large, complex project?
 - A. A strong matrix organization
 - B. A project coordinator
 - C. A project expediter
 - D. A functional organization

5. Collocation can mean:
 - A. All, or almost all, team members are moved to a central physical location for the life of the project.
 - B. Active team members may be at different physical locations, but meet on a regular basis.
 - C. A war room is established where team members can meet periodically.
 - D. a and c

6. A key barrier to team development is: Choose the best answer.
 - A. A strong matrix management structure.
 - B. When major problems delay the project completion date or budget targets.
 - C. When team members are accountable to both functional and project managers.
 - D. When members cannot be collocated.

Sample Questions, continued

7. Which of the following are examples of project-based organizations?
 - A. Architectural firms, engineering firms, and consultants
 - B. Most manufacturing companies and financial service firms
 - C. Organizations that have adopted a management by projects approach
 - D. a and c

8. Legitimate power is:
 - A. Power derived from a person's formal position in the organization.
 - B. Power bestowed due to a person's personal qualities and abilities.
 - C. Power earned based on a person's technical knowledge, skill, or expertise in a particular area.
 - D. Power to distribute information as one sees fit.

9. What impact does a matrix organization have on project team development?
 - A. No impact at all
 - B. It complicates team development.
 - C. It simplifies team development.
 - D. It hinders team development completely.

10. Which of the following is not a process of project human resource management?
 - A. Organizational Planning
 - B. Staff Acquisition
 - C. Information Distribution
 - D. Team Development

11. A technique for resolving conflict in which the parties agree to have a neutral third party hear the dispute and make a decision is called:
 - A. Negotiation
 - B. Arbitration
 - C. Smoothing
 - D. Forcing

12. Which of the following is not an input into organizational planning?
 - A. Recruitment practices
 - B. Project interfaces
 - C. Staffing requirements
 - D. Constraints

13. Forcing, as a means to manage conflict:
 - A. Exerts one's view at the potential expense of another party.
 - B. Emphasizes areas of agreement while avoiding points of disagreement.
 - C. Establishes a lose-lose situation.
 - D. a and c

Sample Questions, continued

14. When should the project expediter form of organization be used?
- A. When the project is extremely important to the organization.
 - B. When a project's cost and importance are relatively low.
 - C. When the project manager has a lot of responsibility and accountability.
 - D. When the organization's primary source of revenue is derived from projects.
15. The belief that management's high levels of trust, confidence and commitment to workers leads to high levels of motivation and productivity on the part of workers is a part of which motivation theory?
- A. Theory Y
 - B. Theory Z
 - C. Theory X
 - D. Contingency Theory
16. Which of the following is part of the expectancy theory of motivation?
- A. Clear, specific, and challenging goals generally motivate team members.
 - B. Project managers should ensure that tasks assigned to project participants match their skills and the organizational climate is conducive to helping them meet their needs and achieving a sense of competence.
 - C. People tend to be highly productive and motivated if they believe their efforts will lead to successful results and that success will lead to personal rewards.
 - D. All of the above are part of the expectancy theory of motivation
17. Which of the following statements concerning compromise as a conflict resolution is false?
- A. Neither party wins but both parties get some degree of satisfaction.
 - B. Important aspects of the project may be hindered in order to achieve personal objectives.
 - C. Compromise is generally considered a lose-lose situation.
 - D. A Definitive resolution is seldom achieved.
18. In which type of organization is team building likely to be most difficult?
- A. Functional
 - B. Projectized
 - C. Matrix
 - D. Project expediter
19. A document or tool which describes when and how human resources will be brought onto and taken off the project team is called a:
- A. Staffing Management Plan
 - B. Responsibility Assignment Matrix (RAM)
 - C. Organizational Breakdown Structure (OBS)
 - D. Resource Assignment Chart

Sample Questions, continued

20. A tool which links the project roles and responsibilities to the project scope definition is called:
- A. Scope Definition Matrix
 - B. Responsibility Assignment Matrix
 - C. Roles Assignment Matrix
 - D. Project Scope and Roles Matrix
21. Which of the following organization types results in the project managers having the least authority
- A. Projectized
 - B. Balanced Matrix
 - C. Functional
 - D. Strong Matrix
22. Management by projects:
- A. Is the same as program management
 - B. Treats many aspects of ongoing operations as projects in order to apply project management techniques to them
 - C. Refers specifically to the application of project reporting techniques
 - D. Uses the OBS to assign specific responsibilities for projects to the different units within an organization
23. The project manager is having a conflict with project personnel. Which of the following methods decreases the immediate intensity of the conflict?
- A. Smoothing
 - B. Compromising
 - C. Confronting
 - D. Forcing
24. Which of the following is not a technique for team development?
- A. Collocation
 - B. Reward and recognition systems
 - C. Confronting
 - D. Training
25. The outputs of team development are:
- A. Performance improvement, responsibility assignment matrix, and input to performance appraisals
 - B. Performance improvement, external feedback process, and input to performance appraisals
 - C. Performance improvement and staff management plan
 - D. Performance improvement and input to performance appraisals

Sample Questions, continued

26. Human Resource Management includes the following processes:
- A. Organizational planning, staff acquisition, and performance appraisal
 - B. Organizational planning, staff acquisition, and team development
 - C. Organizational planning, personnel administration, and team development
 - D. Organizational planning, staff acquisition, and performance reporting
27. A document or tool used to show which work elements have been assigned to which organizational units:
- A. Staffing Management Plan
 - B. Responsibility Assignment Matrix
 - C. Organizational Breakdown Structure
 - D. Resource Assignment Chart
28. Which of the following statements describes the difference between a balanced matrix project organization and a strong matrix project organization ?
- A. A strong matrix has a project manager and a balanced matrix does not have a project manager
 - B. In a strong matrix organization, the project manager reports directly to the CEO, while in the balanced matrix, the project manager reports to a functional manager
 - C. In a strong matrix organization, project coordination is performed by the project manager who resides in a department of project managers while in the balanced matrix, coordination is performed by a project manager who resides in a functional department with other staff members.
 - D. There is no difference. A balanced matrix is another name for a strong matrix.
29. Which of the following is *not* true about the team development process?
- A. Team development includes enhancing the ability of stakeholders to contribute as individuals
 - B. Team development occurs throughout the project life cycle
 - C. Reward and recognition systems are important techniques for team development
 - D. The primary output from team development is the identification of required training
30. Which of the following is not part of the definition of leadership?
- A. Leadership is concerned with consistently producing results expected by stakeholders
 - B. Leadership is developing a vision of the future and the necessary strategies
 - C. Leadership is aligning people through communication
 - D. Leadership is helping people to energize themselves to overcome barriers to change

Answer Sheet

- | | | | | | | | | | |
|-----|----------------------------|----------------------------|----------------------------|----------------------------|-----|----------------------------|----------------------------|----------------------------|----------------------------|
| 1. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 16. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 2. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 17. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 3. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 18. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
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| 7. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 22. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 8. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 23. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 9. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 24. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 10. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 25. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 11. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 26. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 12. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 27. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 13. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 28. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 14. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 29. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |
| 15. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d | 30. | <input type="checkbox"/> a | <input type="checkbox"/> b | <input type="checkbox"/> c | <input type="checkbox"/> d |

Answers

1	D	
2	B	
3	C	
4	A	
5	D	
6	C	
7	D	Project-base organizations fall into 2 categories: organizations that derive their revenue primarily from performing projects for others and organizations that use a management by projects approach -- meaning that they typically have management systems such as financial, accounting, tracking, and reporting specifically designed to support project management. PMBOK® Guide, pg. 18
8	A	See Adams, "Principles of Project Management", pg. 74 and Verma's, "Human Resource Skills for the Project Manager", pg. 233
9	B	Complicates team development because team members are accountable to both their functional manager and the project manager.
10	C	
11	B	
12	A	Recruitment practices is an input of Staff Acquisition.
13	A	Forcing establishes a win-lose situation
14	B	
15	B	Verma's "Human Resource Skills for the Project Manager", pg. 71-73
16	C	"A" is part of Goal-Setting Theory" and "B" is part of the Contingency Theory
17	D	A definitive resolution is achieved when a compromise is reached and accepted as a just solution by all parties in conflict.
18	C	
19	A	The staffing management plan often includes resource histograms
20	B	
21	C	PMBOK® Guide, pg. 19
22	B	PMBOK® Guide, pg. 6
23	A	
24	C	PMBOK® Guide, pg. 108
25	D	PMBOK® Guide, pg. 108
26	B	PMBOK® Guide, pg. 107
27	C	PMBOK® Guide Glossary
28	C	PMBOK® Guide, pgs. 19-23
29	D	PMBOK® Guide, pg. 114
30	A	PMBOK® Guide, pg. 24

PMP® Certification Exam Preparation

What did I do wrong ?

I would have answered a larger number of questions correctly if I had _____.	Number
1. Read the question properly and identified the keywords	_____
2. Read the answer properly and identified the keywords	_____
3. Read ALL the answers before answering the question	_____
4. Used a strategy of elimination	_____
5. Known the formula	_____
6. Known the PMBOK® definition	_____
7. Checked the mathematics	_____
8. Used the PMI® rather than my own perspective	_____
9. Reviewed my answer after reading the other questions	_____
10. NOT rushed to finish	_____
Total	_____