Engineering Project Management & Finance

(UESTC 3031 & UESTCHN 3012)

Project Management (Part 1)

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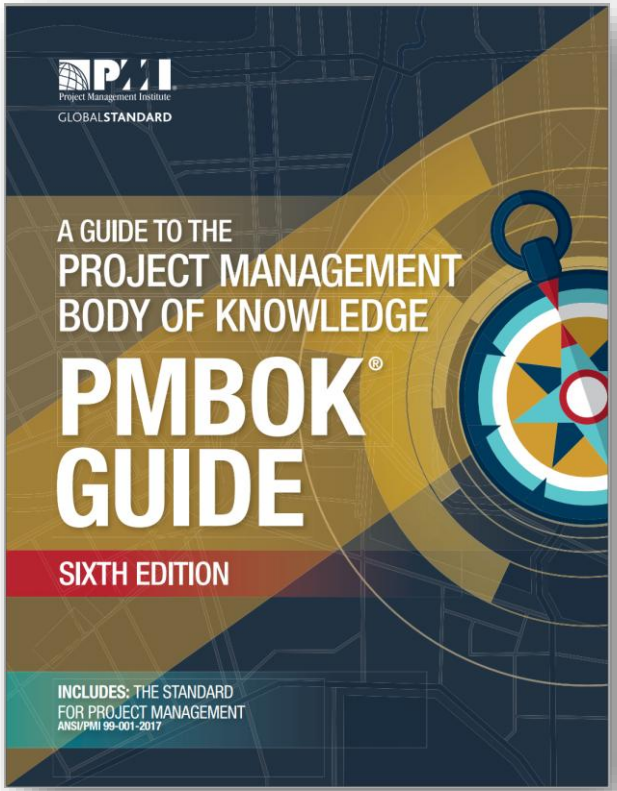
Outline

- **Part 1:** Introduction, The Role of the Project Manager
- **Part 2:** Project Scope Management, Project Schedule Management
- **Part 3:** Project Cost Management, Project Resource Management
- **Part 4:** Project Communications Management, Project Risk Management

Reference

Project Management Institute. PMP



This lecture is based on the PMBOK® Guide. For further details, students may refer to the PMBOK Guide or other PMI resources. The slides serve as the primary material for the final exam. A PMP® certification is a globally recognized credential in PMI's certification process.

INTRODUCTION

Session Overview

- Why project management?
- What is a Project?
- What is Project Management?
- Relationship between Portfolio, Program and Project
- Project Management, Program Management, Portfolio, Operations Management
- Organizational Project Management (OPM) and Strategies
- Components of the guide
- Project Management Business Documents

Why project management?

- ✓ Project management skills ensure projects are completed on time and within budget, enhancing overall efficiency.
- ✓ Effective communication is vital for collaboration within technical teams and with clients.
- ✓ Understanding project management helps in identifying and mitigating risks early on, preventing costly mistakes.
- ✓ Project management ensures projects meet client expectations, enhancing satisfaction and fostering long-term relationships.
- ✓ Proficiency in project management opens doors to leadership roles and career advancement opportunities.
- ✓ …

Definition of a Project

A project is a temporary endeavor undertaken to create a unique product, service, or result

- **Temporary effort** that **has a defined start and end** date
  - Temporary **does not mean the duration of a project is short**
- It produces a “unique and verifiable” product, result or capability to perform a service
- Deliverable may be tangible or intangible
  - **Repetitive elements may be present in some projects, but repetition does not change its unique characteristics**

Definition of a Project

Which one may be/not be considered a project?

- **Building a bridge on the Panama Canal**
- **Conducting routine maintenance on electronic equipment, like computers or printers.**
- **Repairing a household appliance, such as a microwave or refrigerator.**
- **Designing and constructing an electronic device prototype**
- **Conducting daily operations of an electronic repair shop, such as fixing smartphones or tablets.**
- **Developing content for a new course**
- **Creating a software application for a specific purpose**

A project can create..

Unique Product

- A unique product that can be either a component of another item, an enhancement or correction to an item, or a new end item itself

Unique Service

- A unique service or capability to perform a service (e.g a business function that supports production or distribution)

Unique Result

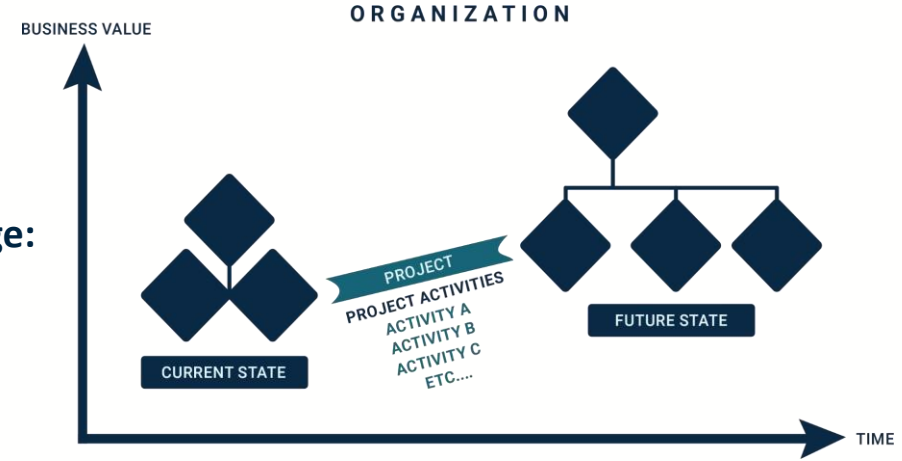
- A unique result such as an outcome or document (e.g a research project that develops knowledge that can be used to determine whether a trend is existing, or a new process will benefit society)

Unique Combination

- Combination of one or more products, services, or results (e.g. A software application, its associated documentation, and help desk services)

Projects

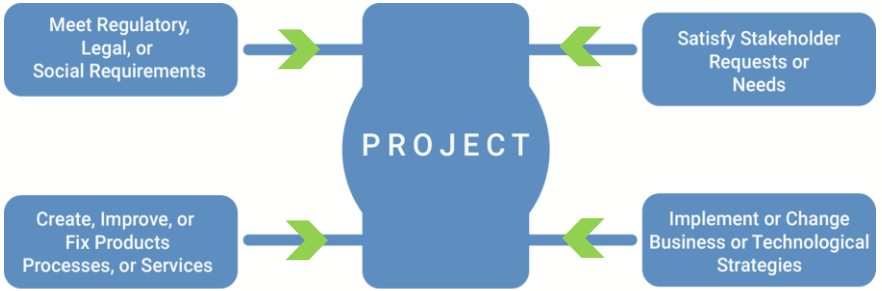
- **Projects drive change:**



- **Projects enable business value creation:**

Tangible	Intangible
Monetary Assets	Goodwill
Stakeholder Equity	Brand recognition
Utility	Public benefit
Fixtures	Trademarks
Tools	Strategic alignment
Market Share	Reputation

- **Projects initiation context:**



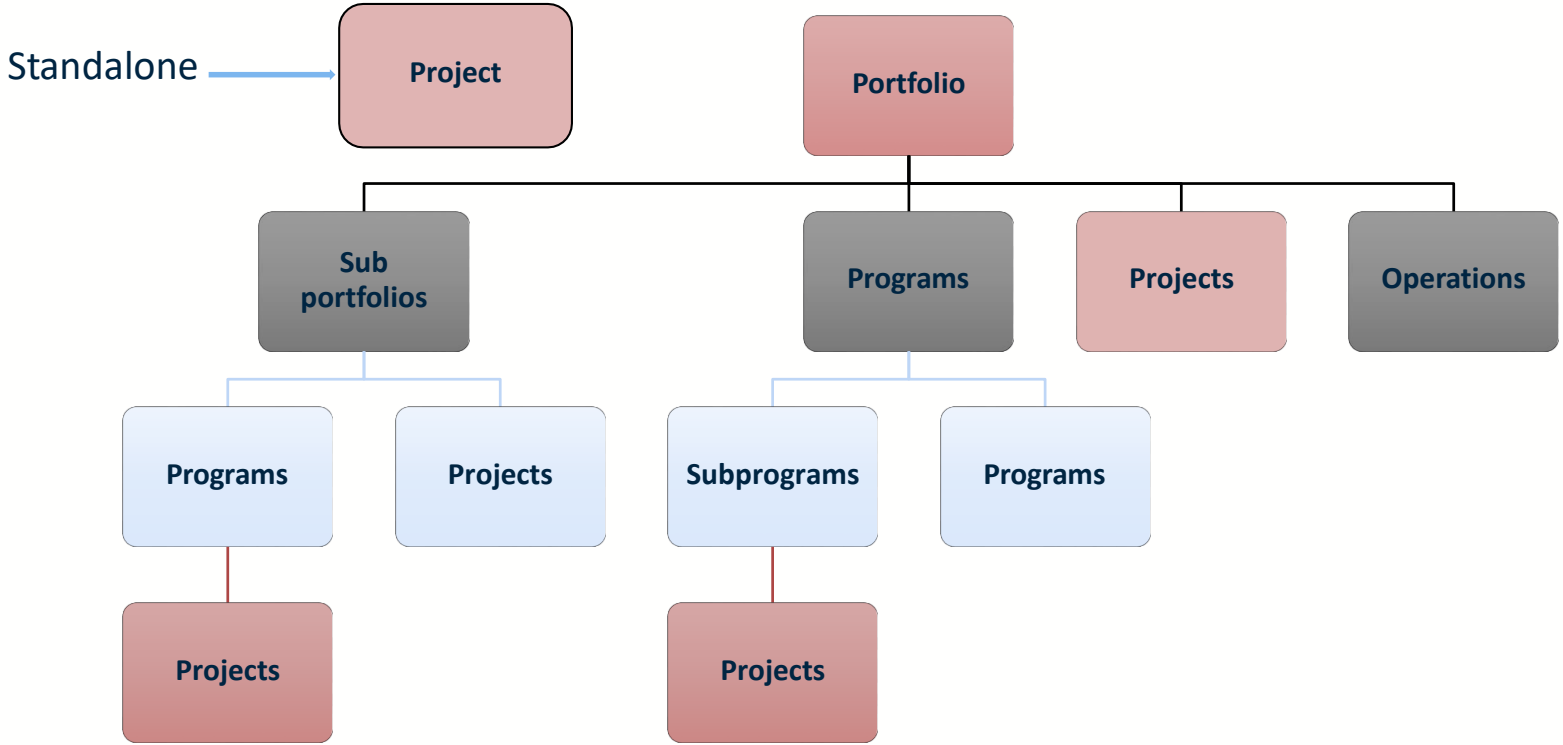
Factors that Lead to the Creation of a Project

- New Technology
- Competitive forces
- Material issues
- Market demand
- Economic changes
- Customer request
- Stakeholder demands
- Legal requirements
- Business process improvement
- Strategic opportunity or business need
- Social need
- Environmental consideration

Project Management

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.

- Project management is accomplished through the appropriate application and integration of the project management processes identified for the project.
- Effective project management helps individuals, groups, public, and private organizations to meet business objectives, to satisfy stakeholder expectations, to manage constrains (e.g., Scope, Quality, Schedule, Costs, Resources)



Relationship of Project, Program, Portfolio, and Operations

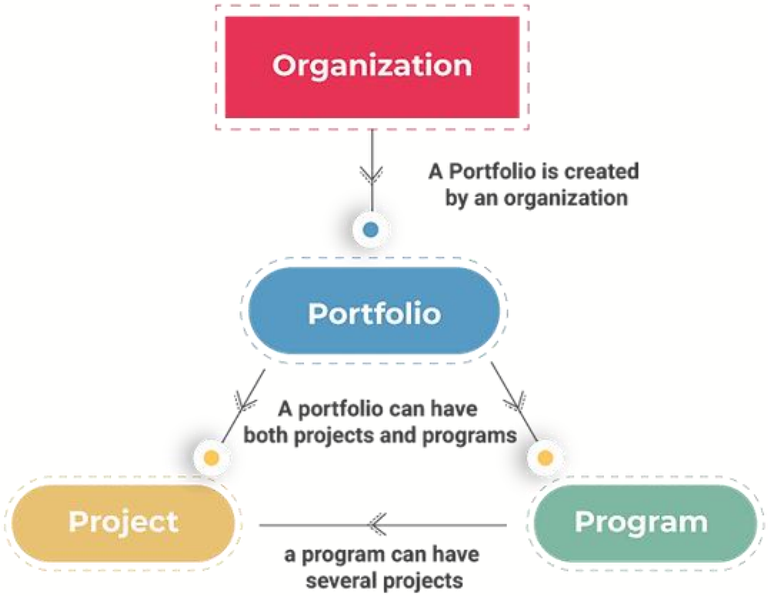
Relationship between Portfolio, Program, and Project

Example

Portfolio: New product development, market expansion, manufacturing process improvement, customer support enhancement.

Program: Development and launch of a new generation of smart communication devices.

Projects (within Program): Hardware design, software development, testing, and marketing strategies.

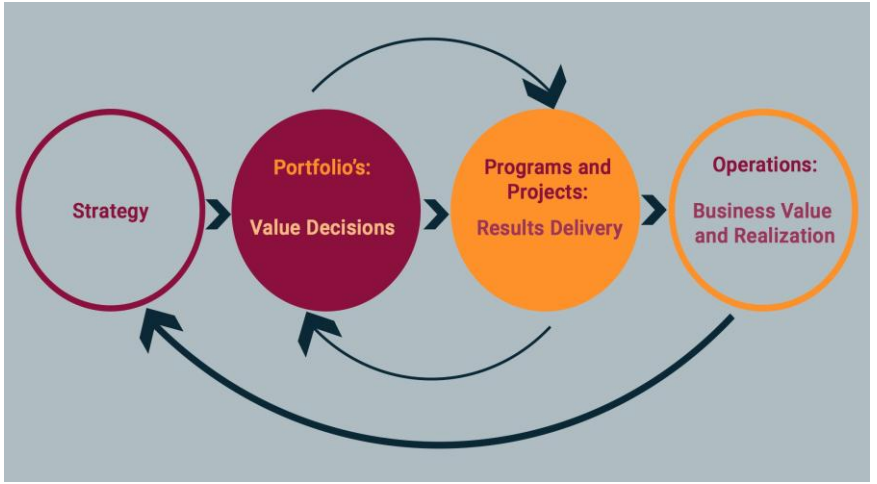


Organizational Project Management (OPM) and Strategies

- Strategic business goals can be achieved through the systematic management of portfolios, programs, and projects through the application of OPM

- A framework in which portfolio, program, and project management are integrated to achieve strategic objectives

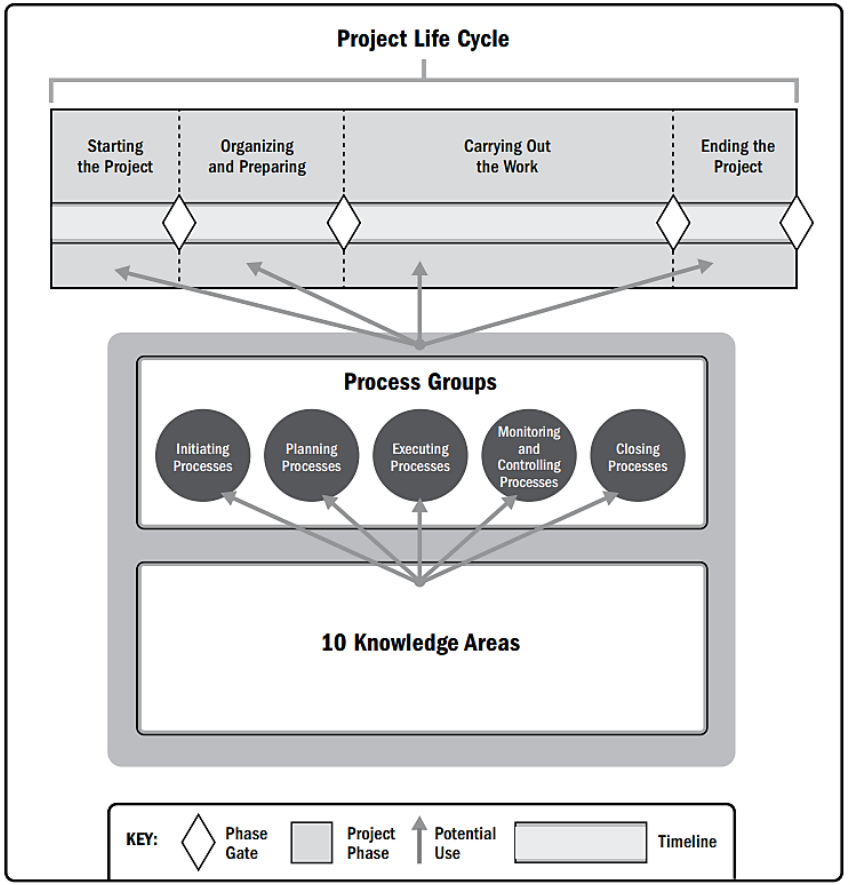
- Purpose is to ensure that the organization undertakes the right projects and allocates critical resources appropriately



Components of the Guide

- **Project Phase:** Collection of logically related project activities that concludes in the completion of project deliverable
- **Project Life Cycle:** Series of one or more phases a project passes through from start to completion
- **Phase Gate:** A review at the end of a phase in which decision is made to continue to the next phase (or modify or end the project)
- **Project Management Processes:** A systematic series of activities directed towards causing an end result where one or more inputs will be acted upon to create one or more outputs
- **Project Management Process Groups:** Logical grouping of project management inputs, tools and techniques, and outputs. Project Management Process Groups are **not** Project Phases.
- **Project Management Knowledge Areas:** An identified area of project management by its knowledge requirements

Interrelationship of PMBOK Guide Key Components in Projects

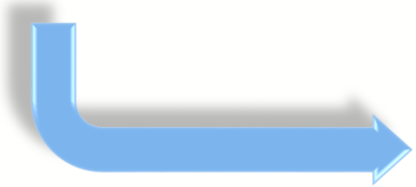


Project Management Institute, A Guide to the Project Management Body of Knowledge, (*PMBOK® Guide*) – Fifth edition, Project Management Institute, Inc., 2013, Figure 1-5, Page 18.

Project Management Processes

A process is a set of interrelated actions and activities performed to create a ..

- Pre-specified product
- Service
- Result



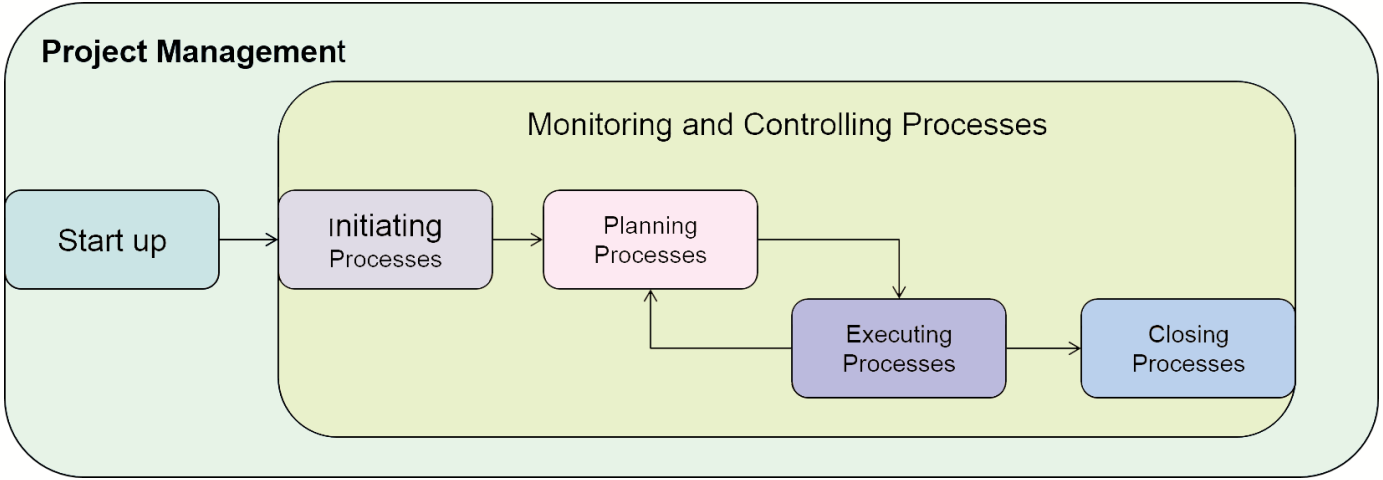
Each process is characterized by its..

- Inputs
- Tools and Techniques
- Outputs

Project Management Process Groups

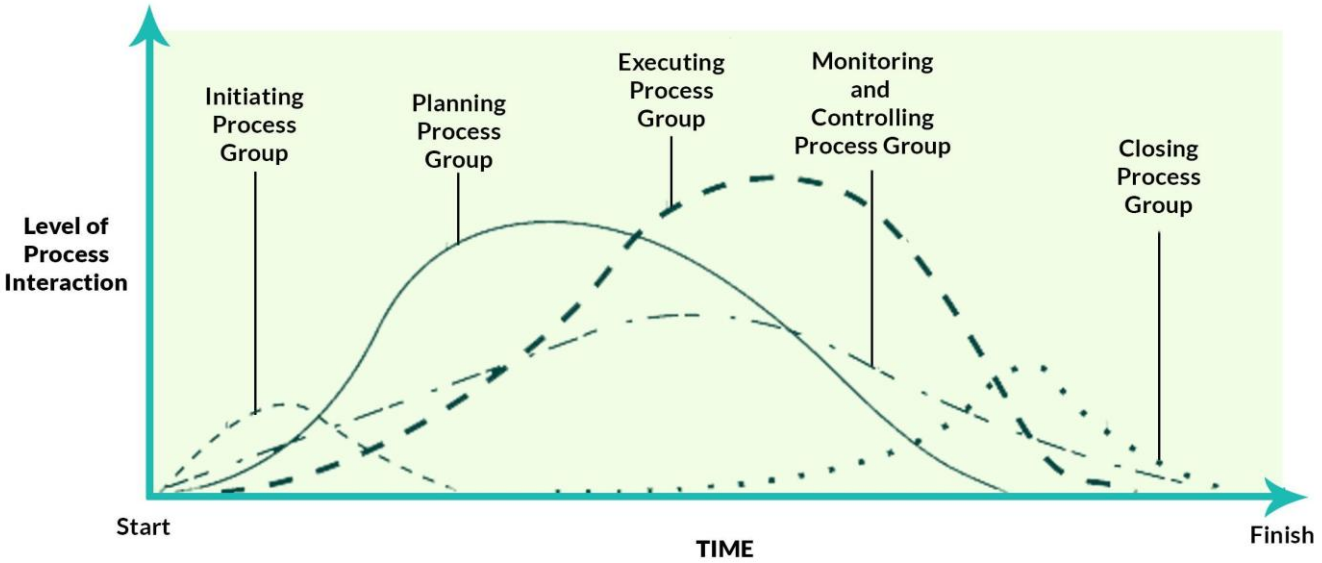
- The processes in each Process Group are connected by the outputs from the other processes.

  Process groups are overlapping activities that occur throughout the project.



Project Management Process Groups

- The Five Process Groups are shown in terms of the level of interaction over the lifespan of a project
- If the project is divided into phases each of the five process groups comes into play in during each phase



Project Management Institute, A Guide to the Project Management Body of Knowledge, (*PMBOK® Guide*) – Fifth edition, Project Management Institute, Inc., 2013, Figure 3-2, Page 51.

Initiating Process Group

- Consists of those processes performed to define a new project or a new phase
- Initial scope is defined, and initial financial resources are committed
- Project Manager is selected
- Project Charter is created, and Project is authorized

Purpose of the Initiating Process Group:

- Align the stakeholders' expectations with the project's purpose,
- Give them visibility about the scope and objectives,
- Show how their participation in the project and its associated phases can ensure that their expectations are achieved

Planning Process Group

- Consists of the processes performed to establish the total scope of the effort, define and refine the objectives, and develop the course of action required to attain those objectives
- Planning processes develop the project management plan
- As more information or characteristics are gathered and understood through repeated feedback loops, plans evolve through the Project Lifecycle – this progressive detailing of the plans is known as **Progressive Elaboration**

Purpose of the Planning Process Group:

- Outline the strategy and tactics to successfully complete the project
- Identify risks that are not visible upfront
- Document *how* to execute the other processes in the project

Executing Process Group

- Consists of those processes performed to complete the work defined in the project management plan to satisfy the project specifications
- This is where most of the project resources will be consumed

Purpose of the Executing Process Group:

- Produce the deliverables as per the plan by:
  - Coordinating people and resources
  - Managing stakeholder expectations
  - Integrating and performing the project activities

Monitoring and Controlling Process Group

- Consists of those processes required to track, review, and score the progress and performance of the project
- These processes identify any areas in which changes to the plan are required and initiate the corresponding changes

Purpose of the Monitoring and Controlling Process Group:

- Controlling changes and recommending corrective or preventive action
- Monitoring the ongoing project activities against the project management plan
- Only approved changes are implemented

Closing Process Group

- Consists of those processes performed to conclude all activities across all Project Management Process Groups to formally complete the project, phase, or contract

Purpose of the Closing Process Group:

- Verify that the defined processes are completed within all of the Process Groups
- Obtain acceptance by the customer or sponsor to formally close the project or phase
- Conduct post-project or phase-end review and document lessons learned
- Update organizational process assets

Knowledge Areas - a cross-sectional view of the processes

- Project Integration Management
- Project Scope Management
- Project Schedule Management
- Project Cost Management
- Project Quality Management
- Project Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management
- Project Stakeholder Management

Project Information

- Throughout the life cycle of the project, a significant amount of data and information is collected, analyzed, transformed, and distributed
- It is important to get the terms right to prevent confusion and misunderstanding among stakeholders.

Project Information

Work Performance Data

- Raw observations, measurements identified
- Examples include reported percent of work physically completed, number of change requests, number of defects, actual costs, durations, etc.

Work Performance Information

- Performance data collected from various controlling processes, analyzed in context
- Examples include status of deliverables, implementation status for change requests, and forecasted estimates

Work Performance Reports

- Work performance information compiled documents, intended to generate decisions, raise issues, and awareness
- Examples include status reports, memos, justifications, information notes, and recommendations

Tailoring

Adjustment or selection of relevant processes, tools, inputs, outputs & phases

- Influenced by projects constraints, governance, culture, customer
- A collaborative effort by the PM
- Can be at an organization level also for the overall project management methods with additional tailoring guidelines for individual projects

Project Management Business Documents

Project sponsor is generally responsible for the development and maintenance of the project business case document

Project Business Case: A documented economic feasibility study, and is used as a basis for authorization of further project management activities

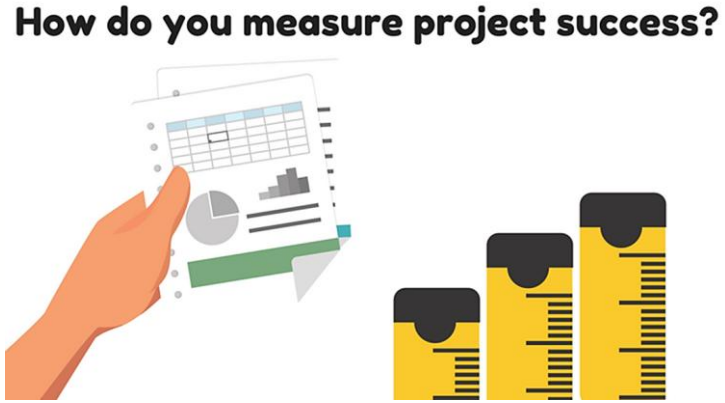
It contains information on Business needs, evaluation documentation, analysis of the situation etc.

Project Benefits Management Plan: The documented explanation defining the processes for creating, maximizing, and sustaining the benefits provided by a project

It contains information about Target benefits (Expected tangible and intangible value), Timeframe for realizing benefits, Benefits owner, Metrics etc.

Project success measures

- Can be project objectives (benefits)
- Benefits may be financial & non-financial, state changes, meeting the contract, customer satisfaction, operational integration, quality, process success, etc.
- Stakeholders define what is success, how it is measured & what impacts it
- Closely linked to organizational strategy & business results
- Traditionally project was adherence to scope, cost & time only
- A project should always match the goals and needs of the company or organization. If it doesn't, it may not be useful or successful.



Project Selection Methods

Idea Generation Methods

- Constrained Brain-writing
- Benchmarking
- Assumption Busting

Mathematical approach

- Linear programming
- Integer programming
- Dynamic programming
- Multi-objective programming

Economic models

- Present value
- Net present value
- Internal rate of return
- Cost-benefit analysis

Project Selection: Present Value

Present value means the value today of future cash flow.

- Project evaluation usually requires comparing costs and benefits from different time periods

$$PV = \frac{FV}{(1+r)^n}$$

$$FV = PV\,(1+r)^n$$

Where, FV = Future Value

PV = Present Value

r = Interest Rate

n = Number of Time Periods

- If you have $1000 today and deposit it in your savings account, you will have $1,100 in one year, assuming the savings account interest rate is 10%.
- Key takeaway is to understand that a dollar today is worth more than a dollar tomorrow.

Project Selection: Cost Benefit Analysis or Benefit Cost Analysis

A ratio attempting to compare the total expected costs against the total expected benefits of each option.

- In this type of analysis, the benefits and costs are expressed in monetary value and the monies are adjusted for the **"Present Value"**. This is often done by converting the future expected streams of costs and benefits into a present value amount using suitable interest rates.

$$\text{BCR} = \frac{\text{Total Benefits}}{\text{Total Costs}}$$

BCR Benefit Cost Ratio

Benefit cost ratio > 1 → Benefits are greater than costs; project is worth pursuing

Benefit cost ratio < 1 → Benefits are lesser than costs; project isn't worth pursuing unless there is an intangible benefit

Benefit cost ratio = 1 → Benefits are equal to costs; project isn't worth pursuing

Project Selection: Cost Benefit Example (Practice)

	Year	Future Value	Interest Rate	Present Value	Total
Project Cost	1	$500,000	10%	$454,545	
Operation Cost	2	$280,000	5%	$253,968	
Operation Cost	3	$175,000	8%	$138,921	
Total Project Cost after 3 years					**$847,434**
Project Benefit	3	$900,000	9%	$694,965	
Total Project Benefit after 3 years					**$694,965**
Benefit Cost Ratio		Total Project Benefits/Total Project Cost			0.82
Net Benefit		Total Project Benefits – Total Project Cost			**($152,469)**

Project isn't worth pursuing as costs outweigh benefits!

For convenience the interest rate for the benefit is taken as 9% over a period of 3 years instead of annual rates for the 3 years

THE ROLE OF THE PROJECT MANAGER

Session Overview

- Overview
- Definition of a Project Manager
- The Project Manger's sphere of influence
- Project Manager competencies
- Performing Integration

Overview

Roles of a Project Manager:

Responsibility for Team:

- Project manager is responsible for what the team produce.
- Project manager reviews the vision, mission, and objectives of the organization to ensure alignment with the products.
- Project manager motivates the team towards the successful completion of the objectives.

Knowledge and Skills:

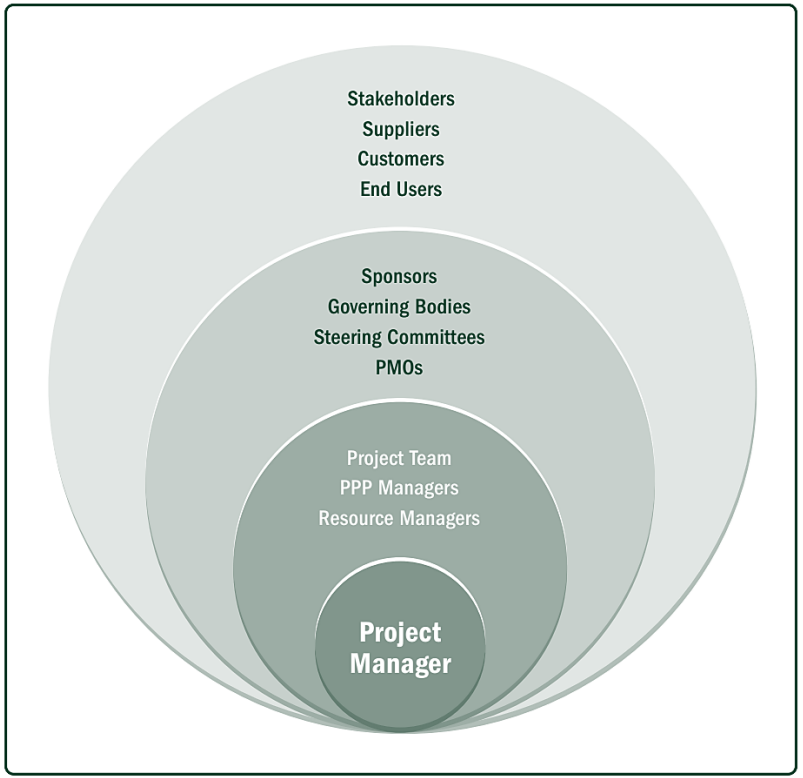
- Project manager should posses project management knowledge, technical knowledge, understanding, and experience.
- The project manager provides the project team with leadership, planning, and coordination through communications.

Definition of a Project Manager

- The role of a Project Manager is distinct from that of a functional manager or operations manager
- Functional manager focuses on providing management oversight for a functional or business unit
- Operations manager is responsible for ensuring that the business operations are efficient
- Project manager is the person assigned by the performing organization to lead the team that is responsible for achieving the project objectives

The Project Manager's Sphere of Influence

- Project managers fulfill numerous roles within their sphere of influence
- Roles reflect project manager's capabilities and are representative of the value and contributions of the project management profession
- Project manager works to balance the competing constraints on the project with the resources available
- Project manager performs communication between sponsor, team members, and other stakeholders
- In order to achieve consensus, project manager uses soft skills to balance the conflicts and competing goals of the stakeholders



PPP = Project, Program, Portfolio

Project Management Institute, A Guide to the Project Management Body of Knowledge, (*PMBOK® Guide*) – Sixth edition, Project Management Institute, Inc., 2017, Figure 3-1, Page 55.

The Project Manager's Sphere of Influence

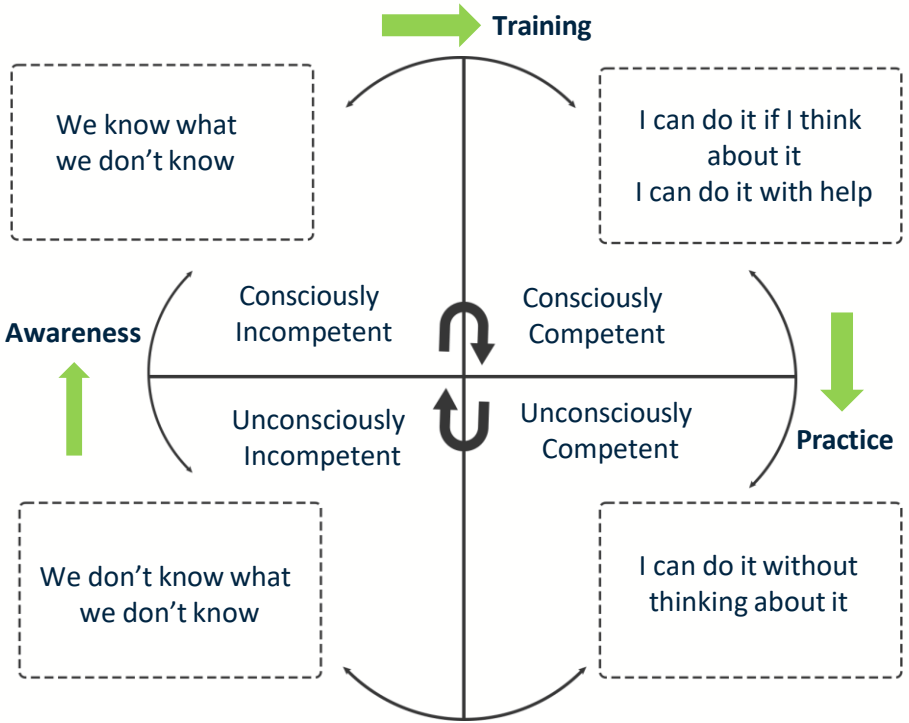
- Other projects may impact a project due to demands on the same resources, priorities of funding.
- Interacting proactively with other project managers helps to create a positive influence for fulfilling various needs of the project
- Project manager works closely with all relevant managers (organizational managers, subject matter experts, business analysts) to achieve the project objectives and to ensure project management plan aligns with program or portfolio plan

The Project Manager's Sphere of Influence

- Project manager stays informed about current industry trends such as
  - ✓ Product and technology development
  - ✓ New and changing market vocations
  - ✓ Standards (ex: project / quality / information security management)
  - ✓ Technical support tools
  - ✓ Economic forces that impact the project
  - ✓ Influences affecting the project management discipline
  - ✓ Process improvement and sustainability strategies

- Continuing knowledge transfer and integration is very important for the project manager
  - ✓ Contribution of knowledge and expertise to others within the profession at the local, national, and global levels
  - ✓ Participation in training, continuing education, and development

Project Manager Competencies



Project Manager Competencies

- Project manager should have three key skill sets (Talent Triangle):

✓ **Technical project management**: Technical aspects (knowledge, skills and behaviors) related to specific domains of project, program, and portfolio management

Project Manager Competencies

- ✓ **Strategic and business management:** Knowledge, and expertise in the industry and organization that enhanced performance and better delivers business outcomes

Project Manager Competencies

- ✓ **Leadership:** Knowledge, skills, and behaviors needed to guide, motivate, and direct a team, to help organization to achieve its business goals

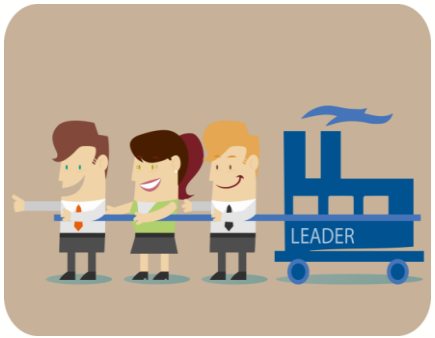
Project Manager Competencies

- **Leadership skills:** They involve the ability to guide, motivate, and direct a team. These skills include capabilities such as negotiation, flexibility, communication, problem solving, critical thinking, and interpersonal skills.

✓ **Dealing with people:**

✓ **Qualities and skills of a leader**

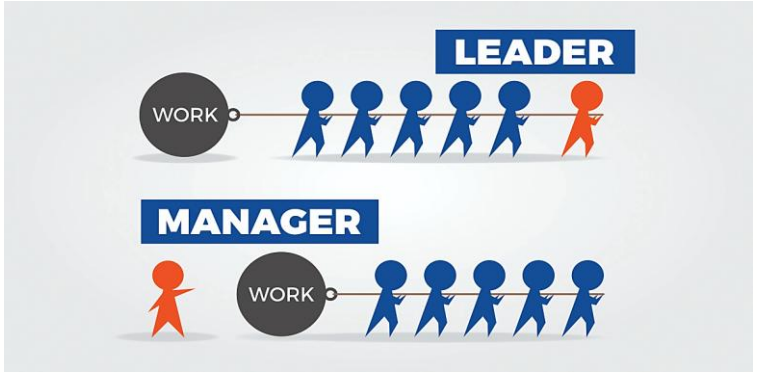
- ➢ Being a visionary, optimistic & positive, collaborative
- ➢ Manage relationships
- ➢ Accepting feedback graciously, giving feedback constructively
- ➢ Asking and listening
- ➢ Being respectful, courteous, friendly, kind, honest, trustworthy, loyal, and ethical
- ➢ Giving credit to other where due
- ➢ Focus on important things



Comparison of Leadership and Management

Leadership Vs Management

Leadership	Management
Leading people	Managing work
Guiding and influencing people	Depending on positional power
Proactive	Reactive
Leading to vision	Setting goals
Doing right things	Doing things right
Developing people	Using people
Working towards achievement	Working towards getting results
Having followers	Having subordinates
Saying "Let us work"	Saying "Work"
Giving credit to those who deserve	Taking credit




Q
A

1. Which of the following is not a project ?

A. A bridge on a Panama Canal
B. Developing content for a new course
C. Environmental awareness campaign
D. Running a cab

1. Which of the following is not a project ?

A. A bridge on a Panama Canal
B. Developing content for a new course
C. Environmental awareness campaign
D. Running a cab ✓

Explanation: Running a cab is day to day operation and not a project. Project must produce a unique product, service, or result.

2. Scope, Schedule, Budget, Quality, Resources , Risks are called

A. Important knowledge areas
B. Process groups
C. Competing project constraints
D. Business objectives

2. Scope, Schedule, Budget, Quality, Resources , Risks are called

A. Important knowledge areas

B. Process groups

C. Competing project constraints ✓

D. Business objectives

Explanation: One of the important functions of the project manager is balancing competing project constraints

3. The collection of generally sequential and sometimes overlapping project phases is known as_____.

A. Project Management Office

B. Project Management Information systems

C. Project Life Cycle

D. Project Management methodology

3. The collection of generally sequential and sometimes overlapping project phases is known as_____.

A. Project Management Office

B. Project Management Information Systems

C. Project Life Cycle

D. Project Management methodology

Explanation: Knowing the project life cycle and how projects and project management fit gives you the context and provides a basic framework for managing a project, regardless of the specific work involved.

4. Which process group authorizes the project?

A. Initiating

B. Planning

C. Executing

D. Monitoring and Controlling

4. Which process group authorizes the project?

A. Initiating

B. Planning

C. Executing

D. Monitoring and Controlling

Explanation: "Authorizes" means officially start a project. That occurs during the initiating process group.

5. Which of the following is not true about the initial phase of a project?

A. The cost associated at the beginning of the project is highest.

B. Stakeholders have maximum influence during this phase.

C. The highest uncertainty is at this stage of the project.

D. All the above statements are correct.

5. Which of the following is not true about the initial phase of a project?

A. The cost associated at the beginning of the project is highest.

B. Stakeholders have maximum influence during this phase.

C. The highest uncertainty is at this stage of the project.

D. All the above statements are correct.

Explanation: There is a minimum requirement of personnel and hence minimum cost at the project initiation stage.

6. Which of the following would be the MOST appropriate thing to do during the planning process group?

A. Work with stakeholders to determine their communication preferences

B. Determine the initial project organization

C. Refine control limits

D. Verify Scope

6. Which of the following would be the MOST appropriate thing to do during the planning process group?

A. Work with stakeholders to determine their communication preferences

B. Determine the initial project organization

C. Refine control limits

D. Verify Scope

Explanation: Choice A is the most appropriate.

7. Project A has a BCR of 1.4. What can we infer from this?

A. That Breaking distance is 140 percent of the cornering radius in a standardized performance test

B. That benefits are forty percent above costs

C. The costs exceed benefits by 40%

D. That Project A should be cancelled immediately, and all investments should be viewed as sunk costs

7. Project A has a BCR of 1.4. What can we infer from this?

A. That Breaking distance is 140 percent of the cornering radius in a standardized performance test

B. That benefits are forty percent above costs

C. The costs exceed benefits by 40%

D. That Project A should be cancelled immediately, and all investments should be viewed as sunk costs

Explanation: BCR stands for Benefit-to-Cost Ratio. A BCR of greater than one is 'GOOD', as it means benefits exceed costs. Choice B is correct.

8. Project D has an IRR of 13%. What can we infer from this?

A. Project D is a money loser

B. Project D is rather profitable

C. Thirteen percent of the implemented risk response plans in Project D have resulted in the manifestation of secondary risks.

D. With an Integrated Risk Register of 13 percent, Project D is experiencing thirteen percent of the risks identified in the Risk management plan.

8. Project D has an IRR of 13%. What can we infer from this?

A. Project D is a money loser

B. Project D is rather profitable

C. Thirteen percent of the implemented risk response plans in Project D have resulted in the manifestation of secondary risks.

D. With an Integrated Risk Register of 13 percent, Project D is experiencing thirteen percent of the risks identified in the Risk management plan.

Explanation: IRR stands for Internal Rate of Return. A positive IRR is good - it means the project is profitable to the degree that a discount rate would have to be raised to 13 percent (in this case) to make the project just break even. The simple fact you need to remember for the test, is that larger IRRs are better than smaller IRRs.

9. Project A has an NPV of $1.2 million; Project B has a BCR of 1.035; Project C has an IRR of -0.03 percent. Which of these project appears to be most attractive?

A. Project A

B. Project B

C. Project C

D. Project C is least attractive, but we can't be sure whether A or B is most attractive

9. Project A has an NPV of $1.2 million; Project B has a BCR of 1.035; Project C has an IRR of -0.03 percent. Which of these project appears to be most attractive?

A. Project A

B. Project B

C. Project C

D. Project C is least attractive, but we can't be sure whether A or B is most attractive

Explanation: It is not possible to compare NPV, BCR and IRR figures directly except as 'good' or 'bad'. Since both Projects A and B have 'good' figures, we can't say which of the two is better than the other. It is clear that Project C has a 'bad' figure, with a negative IRR.

10. Project business case, an economic feasibility study plan is created based on

A. Target Benefits

B. Timeframe for realizing benefits

C. Determining the need for action

D. Realization of benefits

10. Project business case, an economic feasibility study plan is created based on

A. Target Benefits

B. Timeframe for realizing benefits

C. Determining the need for action

D. Realization of benefits

Explanation: Options A, B, D are elements of Project Benefits Management Plan. Option C is one of the element used to generate Business case.

11. Which of the following skills are not core competencies of a project manager ?

A. Project management skills
B. Business management skills
C. Leadership skills
D. Expert Technical skills

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Explanation: Technical project management skills, strategic and business management skills and Leadership skills are core competencies of a project manager. Even though technical skills are required, they need not be expert level. Refer PMBoK 3.4

12. In an ERP project, Project Manager is trying to balance competing constraints. Which among the following is not true ?

A. The project manager is trying to balance Scope and Budget

B. The project manager is trying to balance Resources and Quality

C. The project manager is trying to balance Schedule and Risks

D. The project manager is trying to balance Scope and Procurements

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Explanation: Scope, Schedule, Cost, Quality, Resources, Risks are competing constraints

13. Which of the following is not true about Project Manager ?

A. The role of a Project Manager is distinct from that of a functional manager or operations manager

B. Project manager is the person assigned by the performing organization

C. Project manager leads the team to achieve project objectives

D. Project manager has to authorize business case along with business analyst

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Explanation: A,B & C are the definition of Project Manager. Project Manager may manage or assist business analyst in business case development but has no authority to sign on business case.

14. You are a project manager for an electrical manufacturing company involved in developing innovative components for renewable energy solutions. You have noticed that one of your team members is lacking knowledge in electronic component design. The same was intimated to him, and you tried sending him for training. However, the team member started arguing that he is an expert in electronic component design. Which of the following best describes this situation?

A. The team member is consciously incompetent

B. The team member is unconsciously incompetent

C. The team member is consciously competent

D. The team member is unconsciously competent

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C. The team member is consciously competent

D. The team member is unconsciously competent

Explanation: Because the team member is unaware that he/she does not posses skills related to electronic component design. Make him aware that he/she is lacking that skill, so that they can move to Consciously incompetent stage.

15. During one of the standup meetings, a team member asked you the difference between standard and regulation. How would you respond ?

A. No difference. We can adopt them based on project requirements

B. Both have to be compulsorily followed based on project requirements

C. Standards are mandatory and regulations are optional

D. Regulations are mandatory and standards are optional

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D. Regulations are mandatory and standards are optional

Explanation: The difference between a standard and a regulation lies in compliance. Conformity with standards is voluntary, regulations are mandatory.

16. How much time will project managers spend their time on a project in communicating ?

A. 90 percent

B. 45 percent

C. 70 percent

D. 20 percent

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B. 45 percent

C. 70 percent

D. 20 percent

Explanation: Research shows that top managers spend about 90% of their time on a project in communicating.

17. You are assigned to an electronic product development project. You have earlier worked as a project manager for a few electronic devices and have successfully overseen their development. You have a complete understanding and knowledge of designing such electronic products. When the team is preparing detailed electronic schematics and plans, you are directing the team and correcting their mistakes. The team is modifying circuit designs as per your suggestions. Which type of power are you using here?

A. Reward Power

B. Coercive Power

C. Expert Power

D. Positional Power

17. You are assigned to an electronic product development project. You have earlier worked as a project manager for a few electronic devices and have successfully overseen their development. You have a complete understanding and knowledge of designing such electronic products. When the team is preparing detailed electronic schematics and plans, you are directing the team and correcting their mistakes. The team is modifying circuit designs as per your suggestions. Which type of power are you using here?

A. Reward Power

B. Coercive Power

C. Expert Power

D. Positional Power

Explanation: . You have complete understanding and knowledge in constructing high rise buildings. Which means you are using your expert power. Team members will respect you for your technical expertise and trust you because they think that you are an expert and know how to handle issues.

18. Which of the following is true about Leadership ?

A. The process of influencing a group toward the achievement of goals
B. A group that achieves goals
C. The function of influencing a group towards the achievement of goals
D. Directing a group towards the achievement of goals

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A. The process of influencing a group toward the achievement of goals
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C. The function of influencing a group towards the achievement of goals
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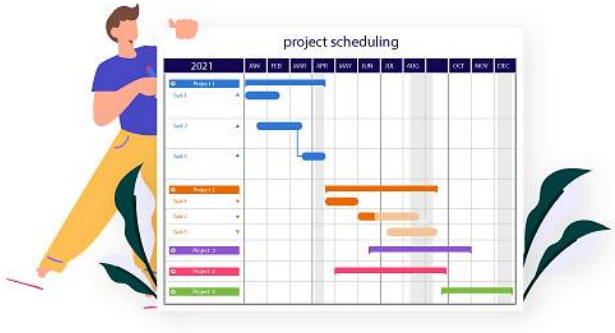
Explanation: Leadership is the process of influencing a group toward the achievement of goals

In the Next Lesson:

Project Management: Part 2

- Project Scope Management
- Project Schedule Management




thank you