



ABUBAKER SAMI ALI

PfMP, PgMP, PMP, PMI-RMP, PMI-SP, Project+, MPM,  
CIPM, PRINCE2 Practitioner, MSP Practitioner,  
M\_o\_R Practitioner, P3O Practitioner,  
MoP Practitioner

PRESENTS

SIXTH  
EDITION

BASED ON THE



A large, abstract graphic on the left side of the slide features a circular design composed of several concentric and overlapping colored bands. The colors include various shades of orange, yellow, green, blue, and grey. In the center of this circle is a compass rose icon, which is a circular emblem with a red center, a white circle around it, and a blue star-like shape with four points and a red dot at the top.

*Introduction  
to Project  
Management*



# Eng. Abubaker Sami

## Academic

Bsc ,Civil Engineering      Omdurman Islamic University , Sudan

## Professional certificates

|                      |   |             |
|----------------------|---|-------------|
| PfMP                 | Portfolio Management Professional       | PMI – USA   |
| PgMP                 | Program Management Professional         | PMI – USA   |
| PMP                  | Project Management Professional         | PMI – USA   |
| PMI - RMP            | Risk Management Professional            | PMI - USA   |
| PMP - SP             | Scheduling Professional                 | PMI – USA   |
| MPM                  | Masters Project Manager                 | AAPM- USA   |
| CIPM                 | Certified International Project Manager | AAPM- USA   |
| Project +            | Project Plus COMPTIA                    | COMPTIA-USA |
| PRINCE2 Foundation   | Projects In Controlled Environments     | APMG – UK   |
| PRINCE2 Practitioner | Projects In Controlled Environments     | APMG - UK   |
| MSP Foundation       | Managing Successful Programme           | APMG – UK   |
| MSP Practitioner     | Managing Successful Programme           | APMG – UK   |
| M_o_R Foundation     | Management Of Risk                      | APMG – UK   |
| M_o_R Practitioner   | Management Of Risk                      | APMG – UK   |
| P3O Foundation       | Portfolio, Programme & Project Office   | APMG – UK   |
| P3O Practitioner     | Portfolio, Programme & Project Office   | APMG – UK   |
| MoP Foundation       | Management of Portfolio                 | APMG – UK   |
| MoP Practitioner     | Management of Portfolio                 | APMG – UK   |



# Eng. Abubaker Sami

## **Work Experience**

7 years

2 Years

2 Years

13 Years

Now

KSA

Kenana Sugar Company-KETS.

DAL – DAL Property Development. Co. Ltd

Milestone Management Consultancy and Training

Method Corp. KSA

## **Projects**

CRC

KSA

Dammam AirPort

KSA

SWCC

KSA

King Faisal University

KSA

King Fahad University

KSA

WNSP

Sudan

CAPO II

Sudan

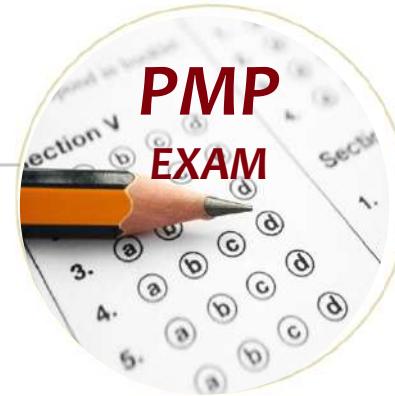
Liquid Air II

Sudan





# Introduction to Project Management

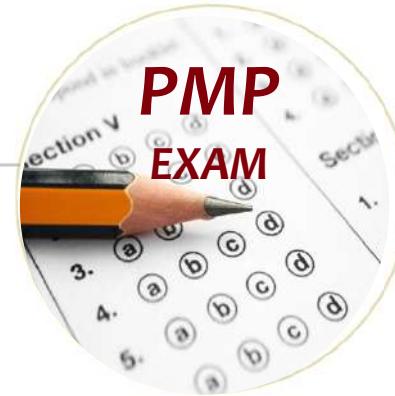


Some important points about PMP exam

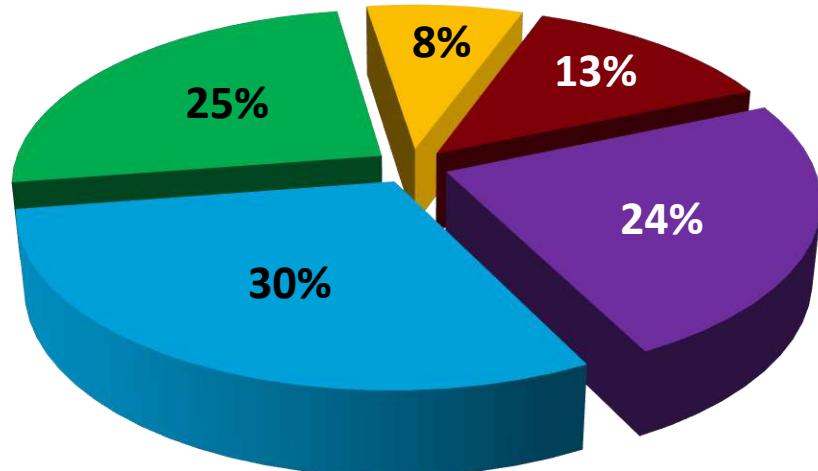
- **61%** is required to pass the exam
- Exam contains **180** questions
- 20 questions are pretest questions, which don't count towards your score. They are scattered throughout the exam.
- five basic domains contribute to exam questions



# Introduction to Project Management



Some important points about PMP exam



**Initiating** (23 questions)

**Planning** (42 questions)

**Executing** (53 questions)

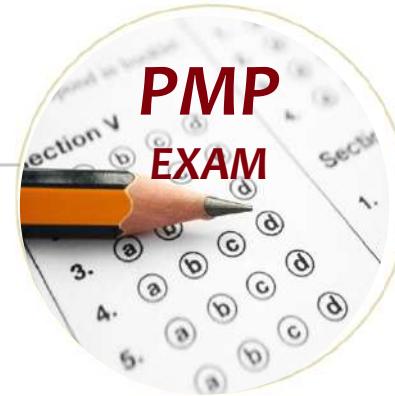
**Monitoring & Controlling**  
(43 questions)

**Closing** (14 questions)





# Introduction to Project Management



Some important points about PMP exam

In addition to:

- Professional Responsibility
- Number of questions may vary  $\pm 5\%$  from each domain



# Introduction to Project Management



so  
**LET'S GET  
STARTED !**



# Defining a Project



## What is “a Project” ?

Temporary

Unique products or services

So Project is

a **temporary** endeavor  
undertaken to create **unique**  
products, services or result.



# Defining a Project



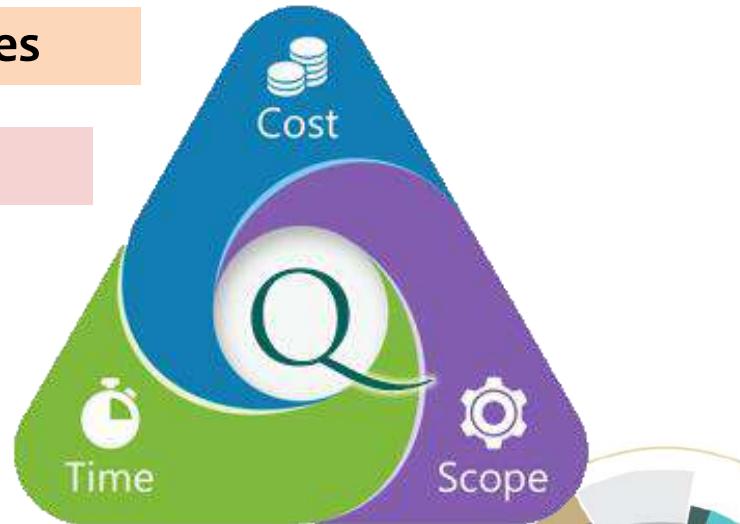
What does “Managing a Project” means ?

Identifying Requirements

Setting Clear and Achievable Objectives

Balancing The TRIPLE Constraints

*The TRIPLE  
CONSTRAINTS are SCOPE, TIME,  
COST, QUALITY, RISK & CS*





# Project Management

- Application of
  - Skills
  - Tools and Techniques

*Project Management is the application of knowledge, skills, tools and techniques to project activities.*



# Defining Program Management



## What does “Program Management” means ?

*The application of **Knowledge, skills, and principles** to a program to achieve the program objectives and to obtain benefits and control **not available by managing program components individually.***

*Focuses on: **Interdependencies between projects and between projects and the program level to determine the optimal approach for managing them.***





# Defining Portfolio Management



**What does “Portfolio Management” means ?**

*Defined as **Projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives***

*It is also defined as: **the centralized management of one or more portfolios to achieve strategic objectives.***

# Project-Program-Portfolio





# Why Projects are undertaken?



- Market demand
- Organizational need
- Customer request
- Technological advancement
- Legal requirement



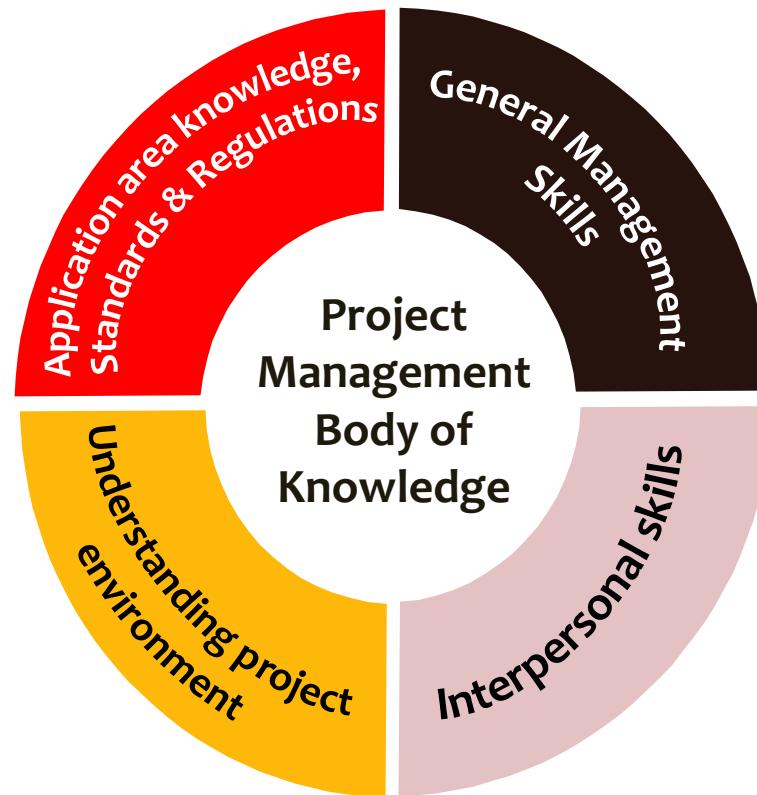
PMO

# Project Management Office



- Coordinates resources
- Develops Project management methodologies, best practices and standards
- Repository of project templates and documents
- Monitoring quality of projects

# A Project Manager should know

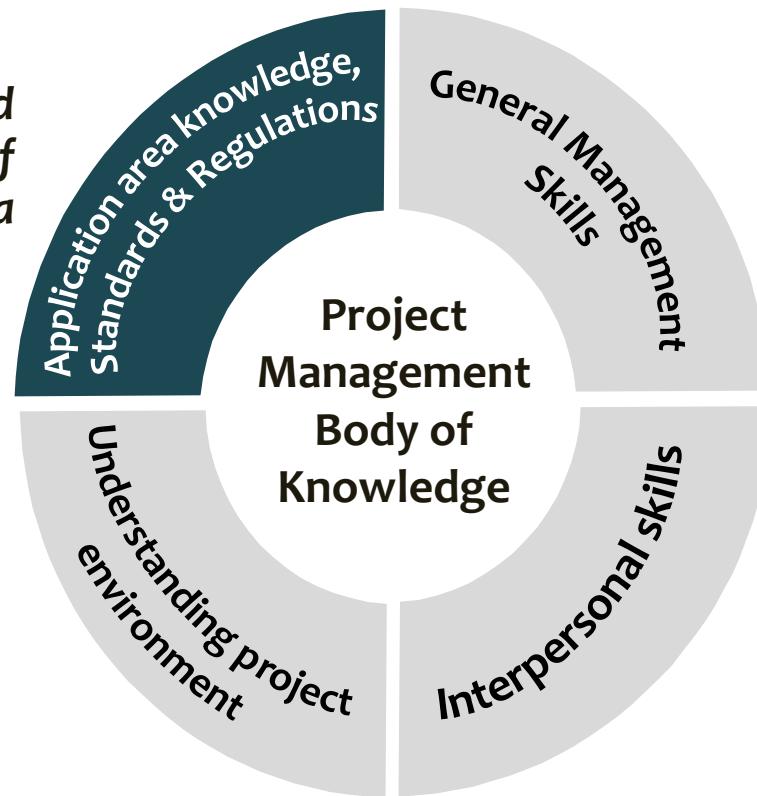




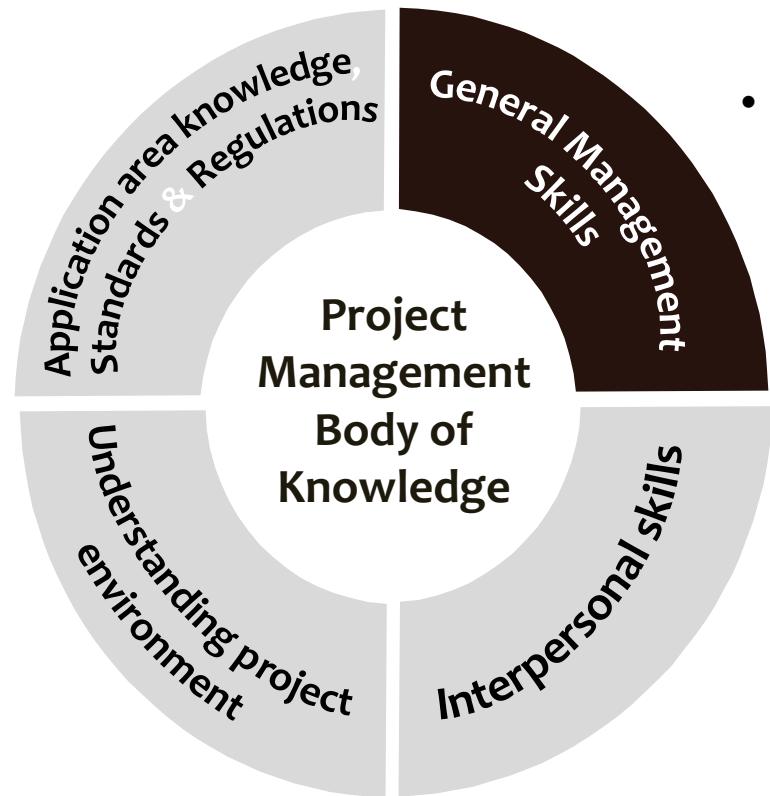
# A Project Manager should know



- *Standards and Regulations of the Area*



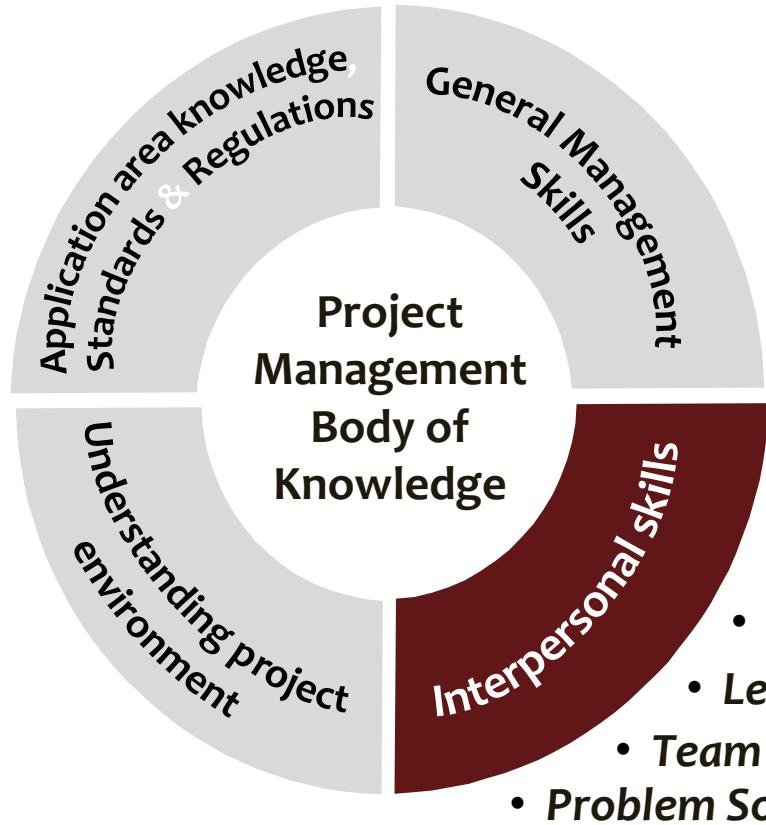
# A Project Manager should know



- *IT skills*
- *Budgeting Skills*



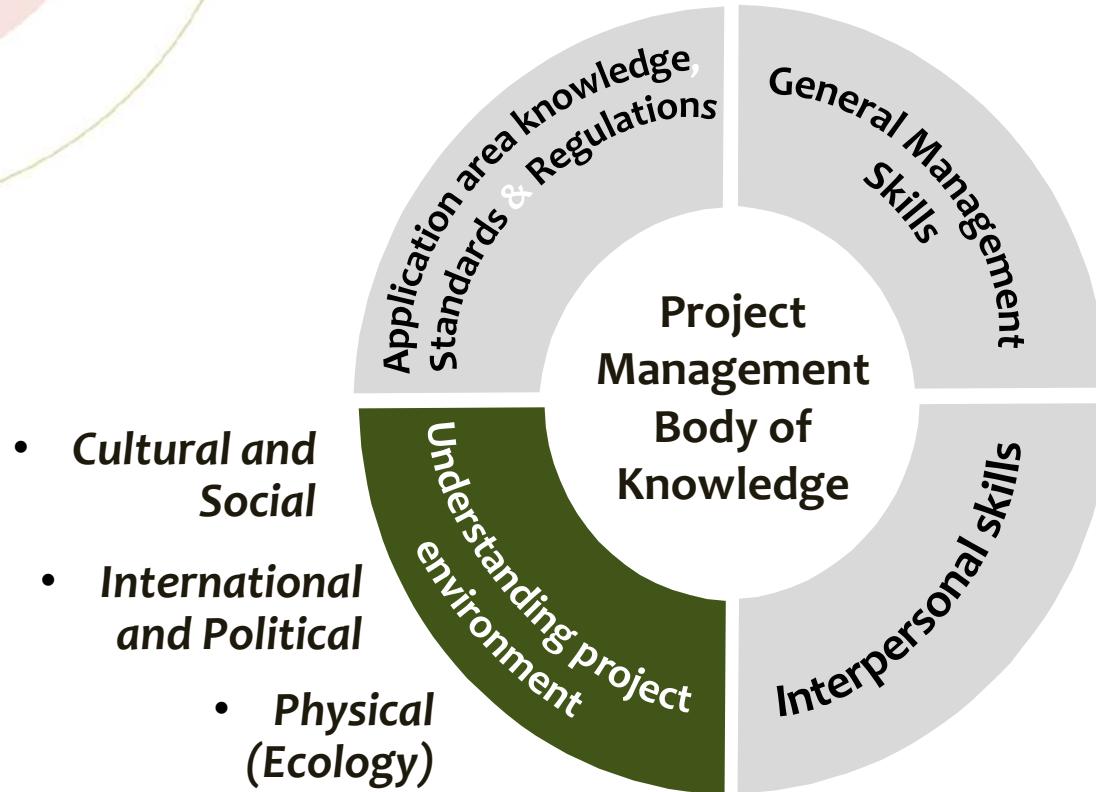
# A Project Manager should know



- Communication
- Organizational & Planning
- Conflict Management
- Negotiating & Influencing
- Leadership & Motivating
- Team Building
- Problem Solving

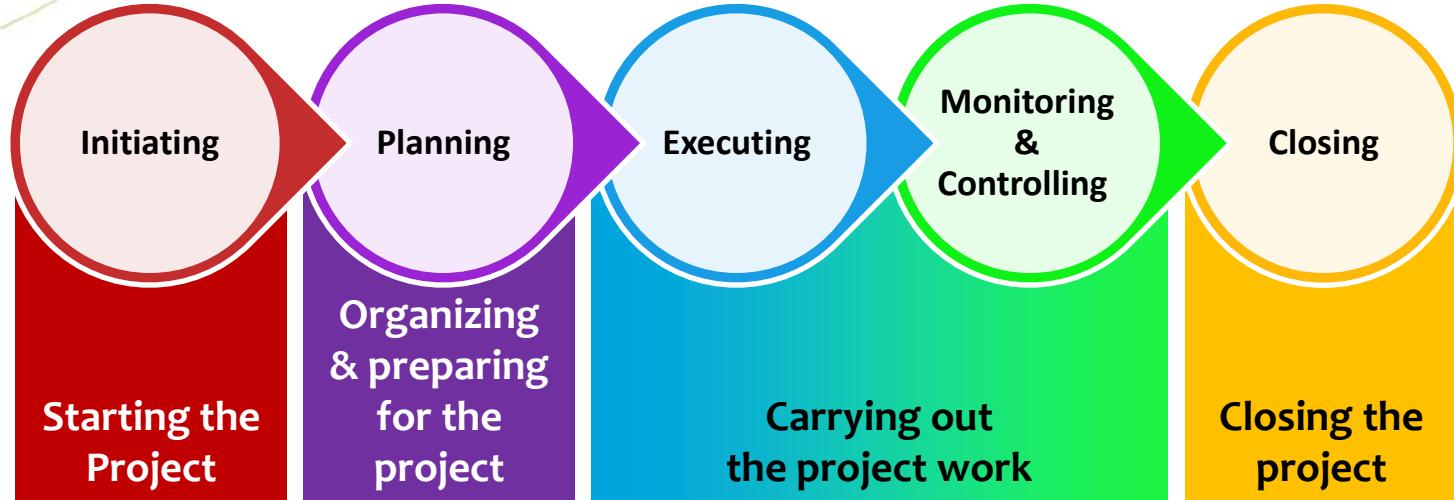


# A Project Manager should know



# Project Life Cycle

Project life spans through



# Projects Vs Operations



Both

- ◆ Performed by people
- ◆ Constrained by limitations
- ◆ Planned, executed and controlled

Differ by

- ◆ Temporary
- ◆ Unique

**Project**

- Temporary
- Unique

**Project - Operation**

- Performed by people
- Constrained by limitations
- Planned, Executed & controlled

**Operation**

- Ongoing
- Repetitive

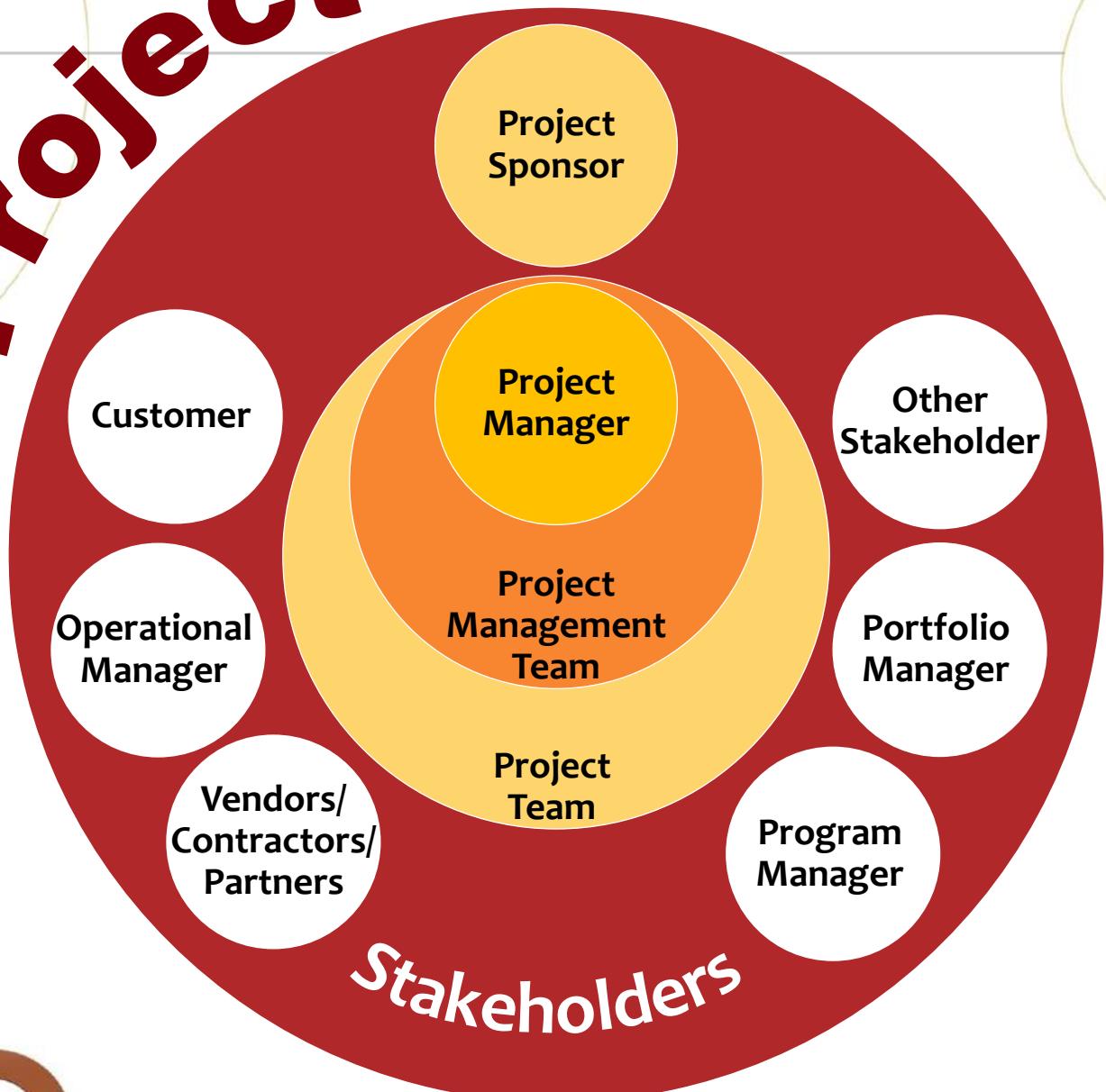
# Project Stakeholders



## Stakeholders

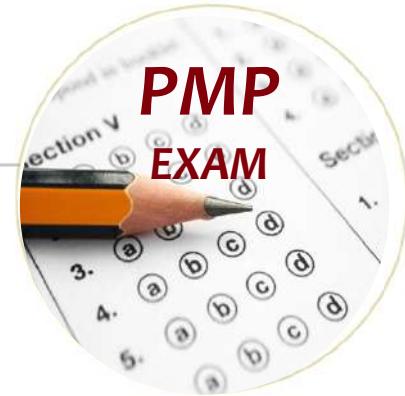
Project Stakeholders are individuals and organizations who are **actively involved** in the project, or whose **interests may be positively or negatively affected** as a result of project execution or successful completion

# Project





# Project Management Process



## What is “a Process” ?

Activities in  
pre-defined  
sequence

Inter-related

Expected  
deliverables

**A PROCESS is set of interrelated activities that are performed to achieve pre-specified set of products, services or results.**





# Project Management Processes



- **How do we accomplish ?**
  - ◆ **Set of Processes**
    - To achieve preset deliverables

**Project Management Processes are categorized into:**

Project  
Management  
Processes

Generally applicable  
processes irrespective of  
product of the project

Product Oriented  
Processes

Very specific to  
product of the  
project



# Project Management Processes



Project Management Processes are grouped into





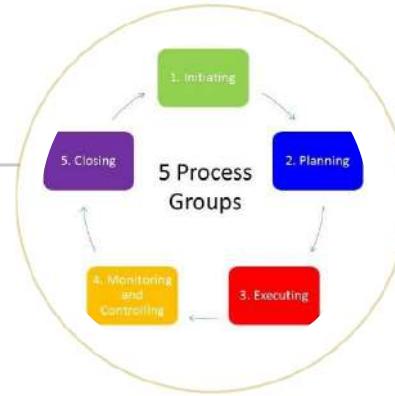
# Project Management Processes



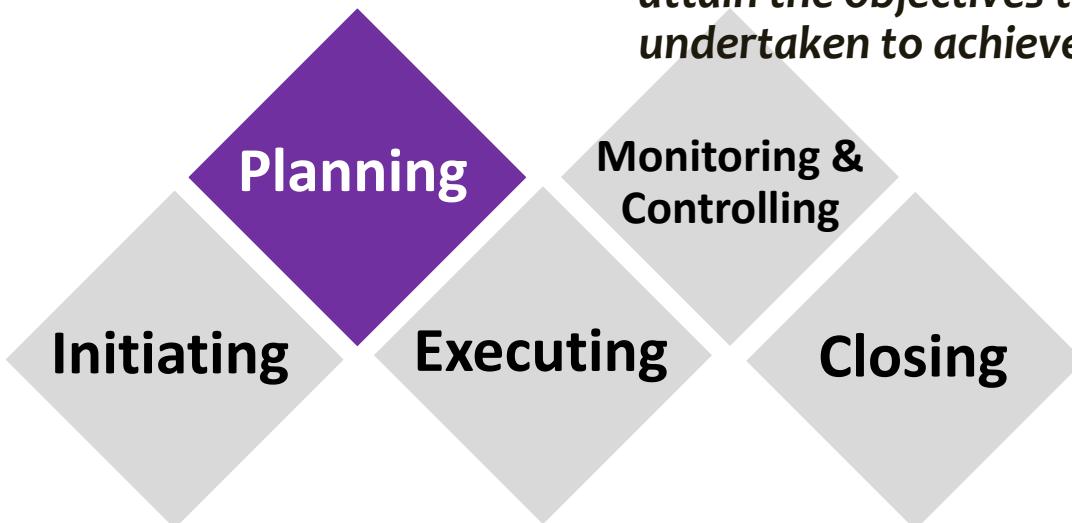
*Those processes performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase*



# Project Management Processes



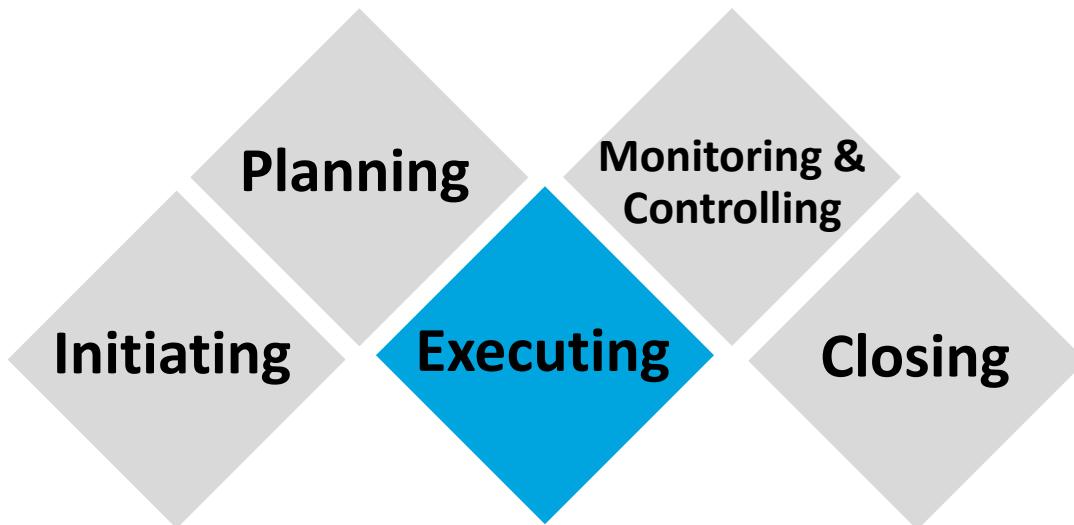
*Those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve*





# Project Management Processes

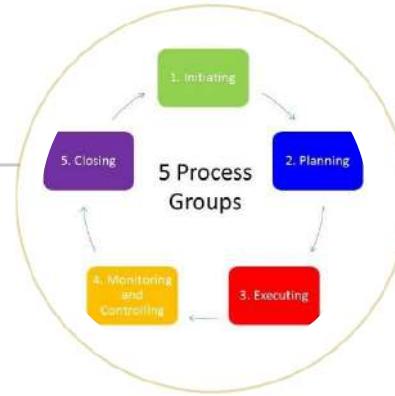
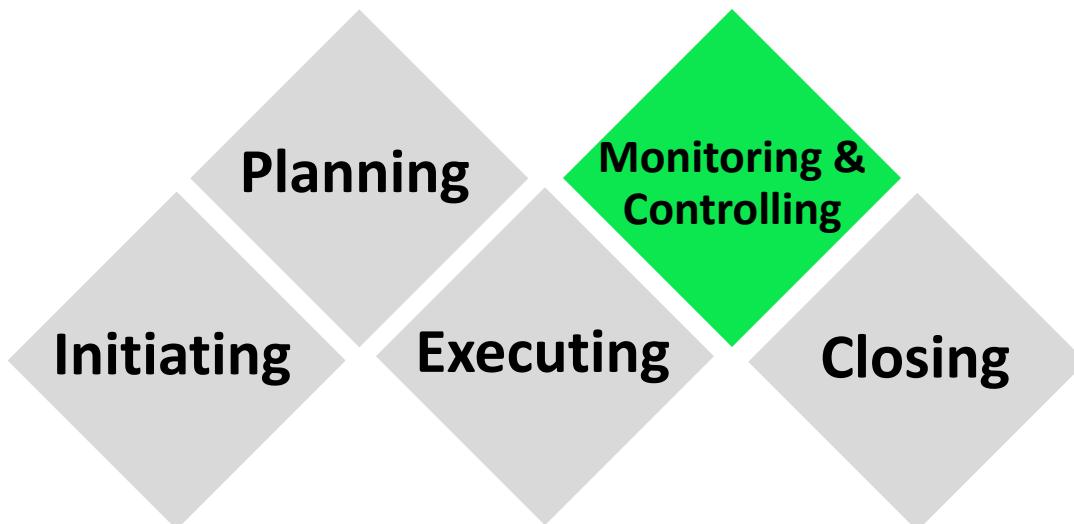
*Those processes performed to complete the work defined in the project management plan to satisfy the project requirements*





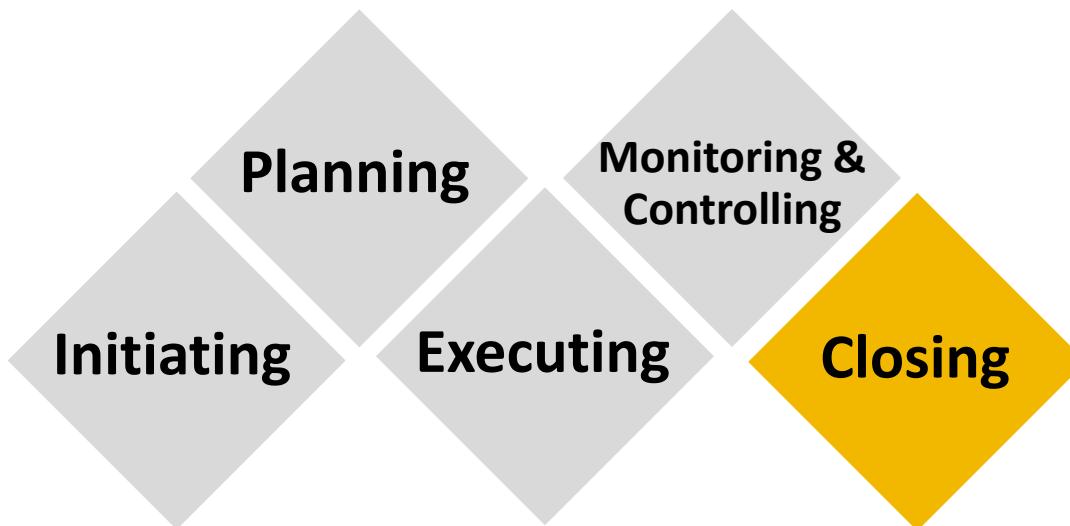
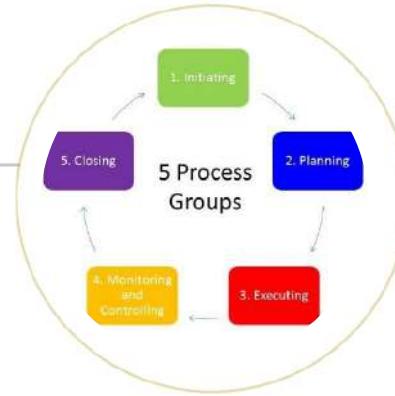
# Project Management Processes

*Those processes required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes.*



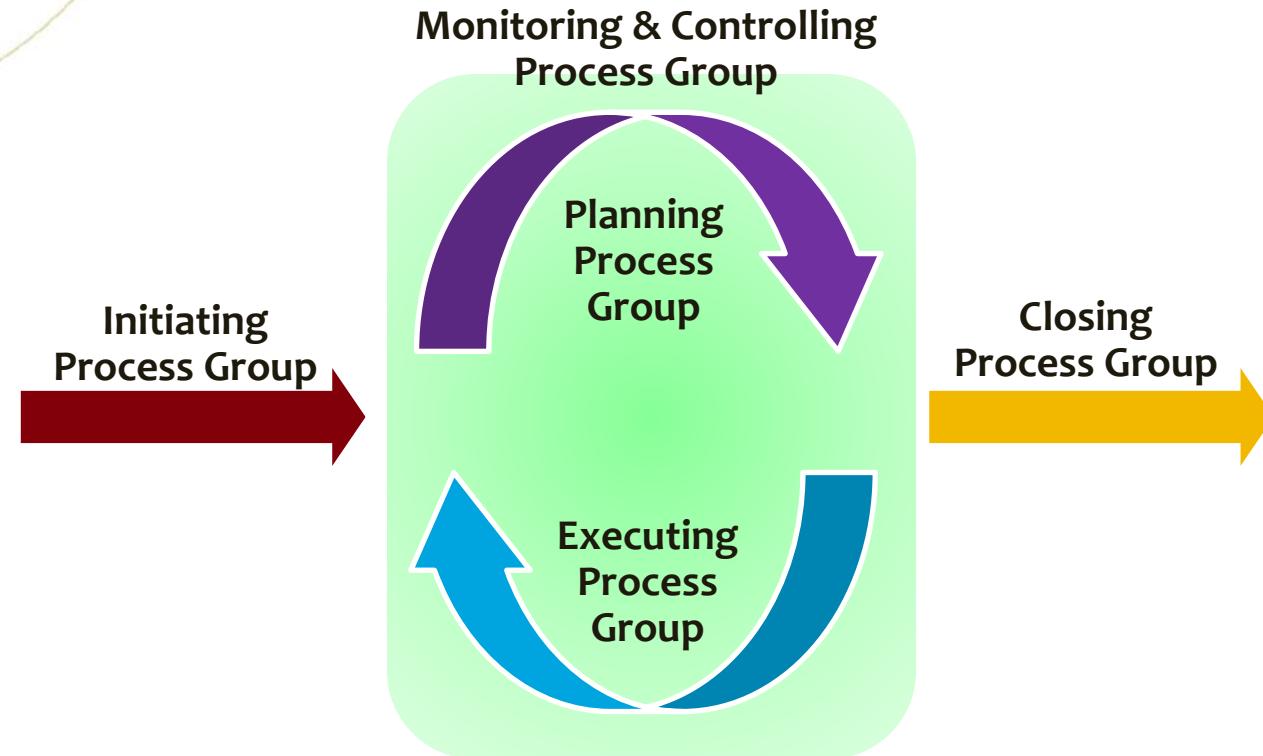


# Project Management Processes



*Those processes performed to formally complete or close the project, phase, or contract*

# Project Management Processes Groups





# Initiation Process Group



## Two (2) Processes

1. Develop Project Charter
2. Identify Stakeholders

# Develop Project Charter

## Inputs

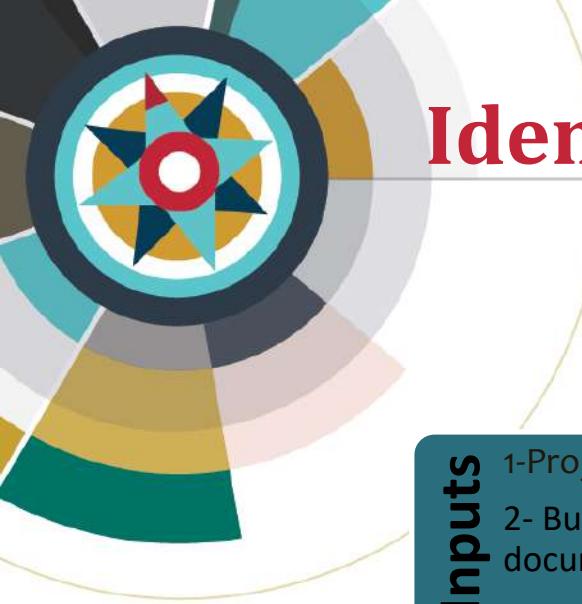
- 1- Business Documents
- 2- Agreements
- 3- Organizational Process Assets
- 4- Enterprise Environmental Factors

## Tools & Techniques

- 1- Expert Judgement
- 2- Data Gathering
- 3- Interpersonal and team Skills
- 4- Meetings

## Outputs

- 1- Project Charter
- 2- Assumptions Log



# Identify Stakeholders



START

## Inputs

- 1-Project Charter
- 2- Business documents
- 3-Project management plan
- 4-Agreements
- 5-Project Documents
- 6-Enterprise environmental factors
- 7-Organizational process assets

## Tools & Techniques

- 1- Expert judgment
- 2- Data gathering
- 3- Data analysis
- 4- Data representation
- 5- Meetings

## Outputs

- 1- Stakeholders register
- 2- Change requests
- 3- Project management plan Updates
- 4- Project documents updates



# Planning Process Group



## Twenty Four (24) Processes

1. Develop Project Management Plan
2. Plan Scope Management
3. Collect Requirements
4. Define Scope
5. Create WBS
6. Plan Schedule Management
7. Define Activities
8. Sequence Activities



# Planning Process Group



## Twenty Four (24) Processes

9. Estimate Activity Duration
10. Develop Schedule
11. Plan Cost Management
12. Estimate Costs
13. Determine Budget
14. Plan Quality Management
15. Plan Resource Management
16. Estimate Activity Resources
17. Plan Communications Management



# Planning Process Group



## Twenty Four (24) Processes

18. Plan Risk Management
19. Identify Risks
20. Perform Qualitative Risk Analysis
21. Perform Quantitative Risk Analysis
22. Plan Risk Response
23. Plan Procurement Management
24. Plan Stakeholder Engagement



# Executing Process Group



## Ten (10) Processes

1. Direct and Manage Project work
2. Manage Project Knowledge
3. Manage Quality
4. Acquire Resources
5. Develop Team
6. Manage Team
7. Manage Communications
8. Implement Risk Responses
9. Conduct Procurements
10. Manage Stakeholder engagement



# Monitoring & Controlling Process Group



## Twelve (12) Processes

1. Monitor and Control Project Work
2. Perform Integrated Change Control
3. Validate Scope
4. Control Scope
5. Control Schedule
6. Control Costs
7. Control Quality
8. Control Resources
9. Monitor Communications
10. Monitor Risks
11. Control Procurements
12. Monitor Stakeholder Engagement



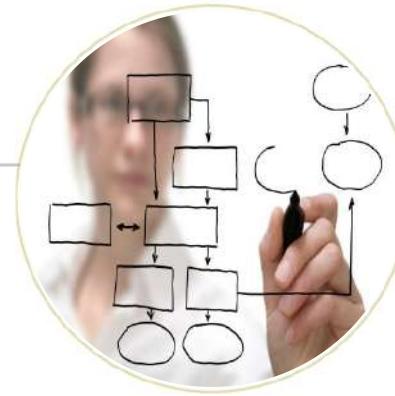
# Closing Process Group



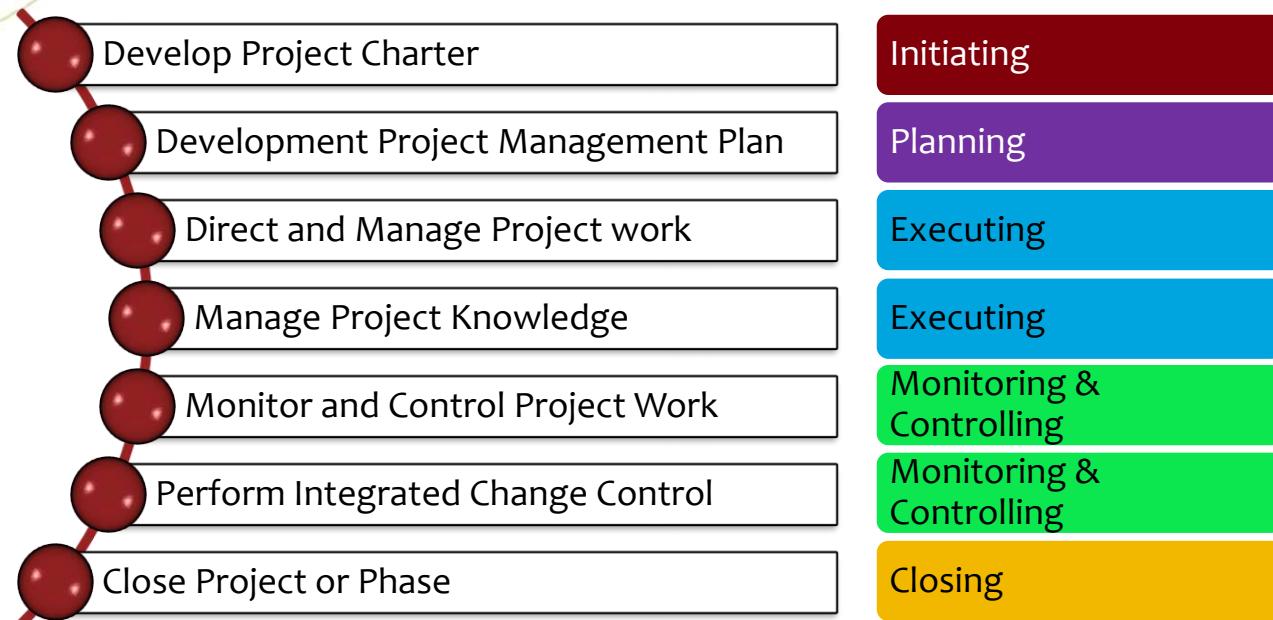
## One (1) Process

1. Close Project or phase

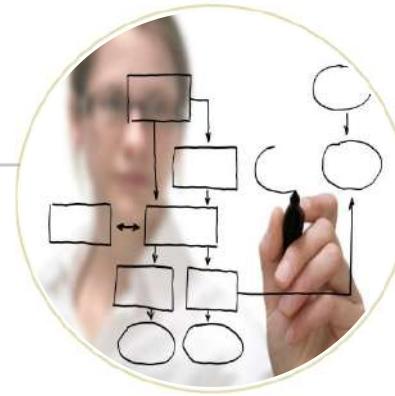
# Processes Mapping



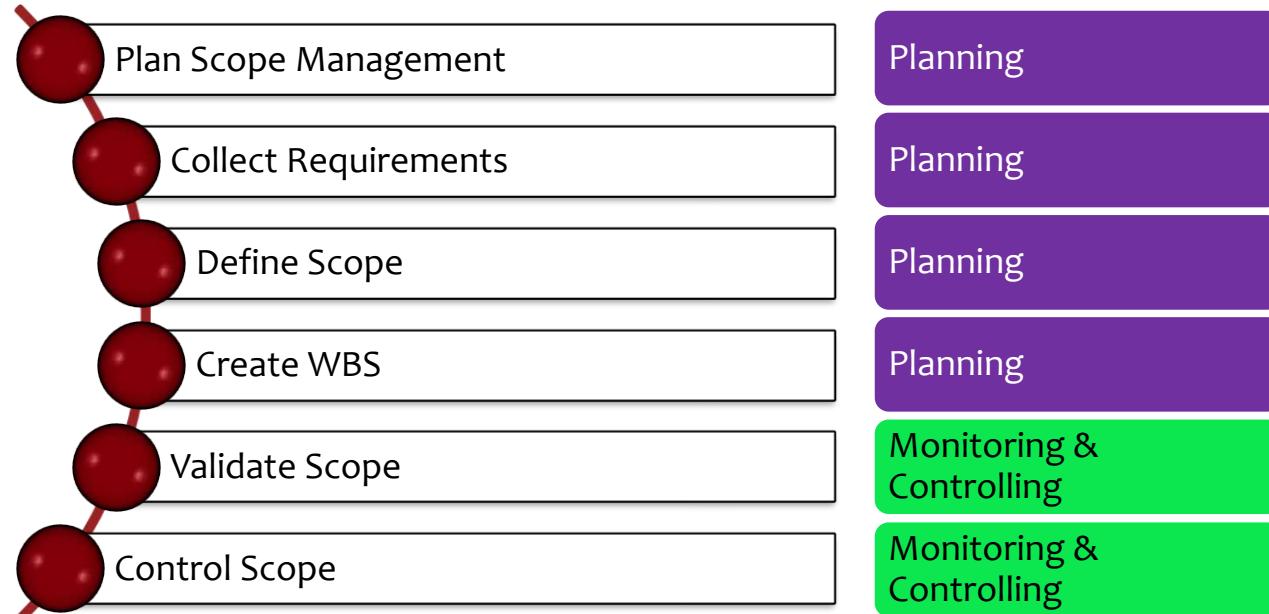
## Project Integration Management



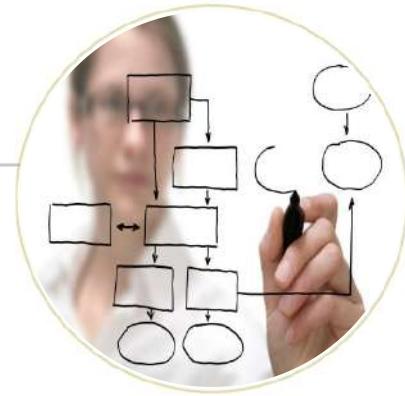
# Processes Mapping



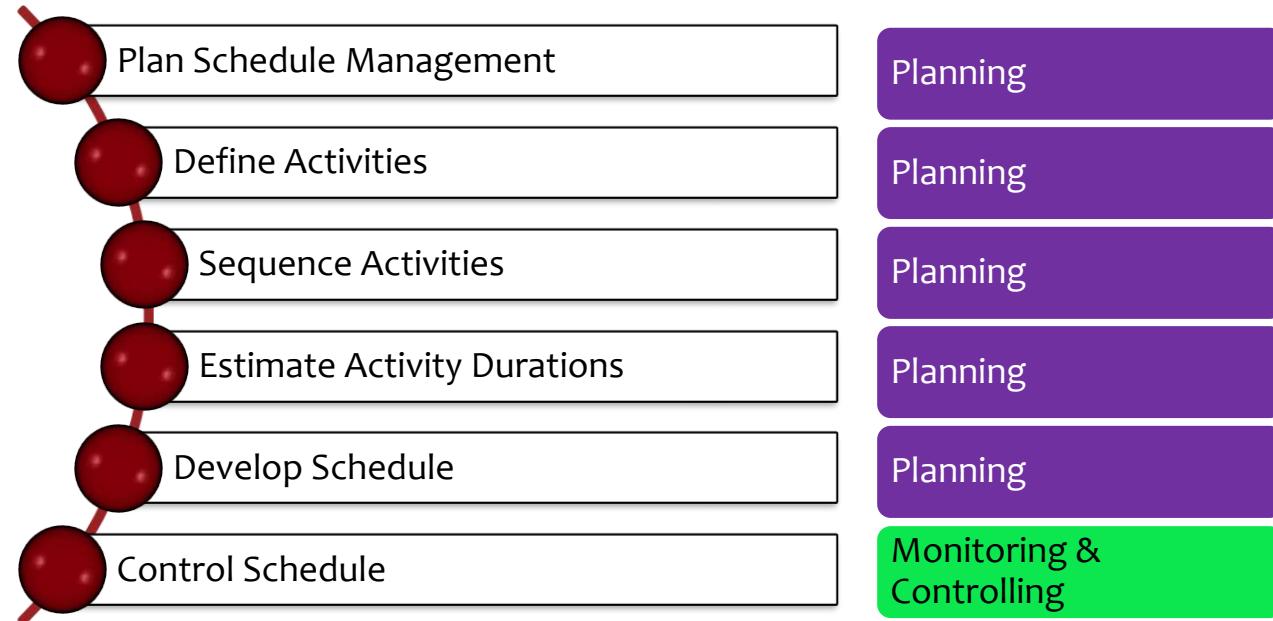
## Project Scope Management



# Processes Mapping

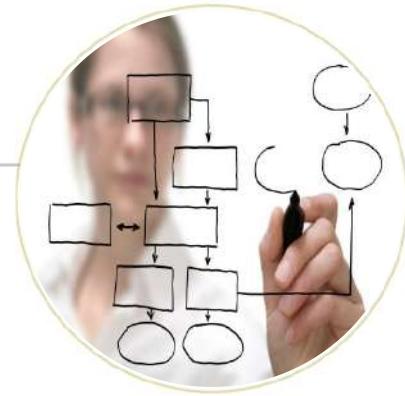


## Project Schedule Management

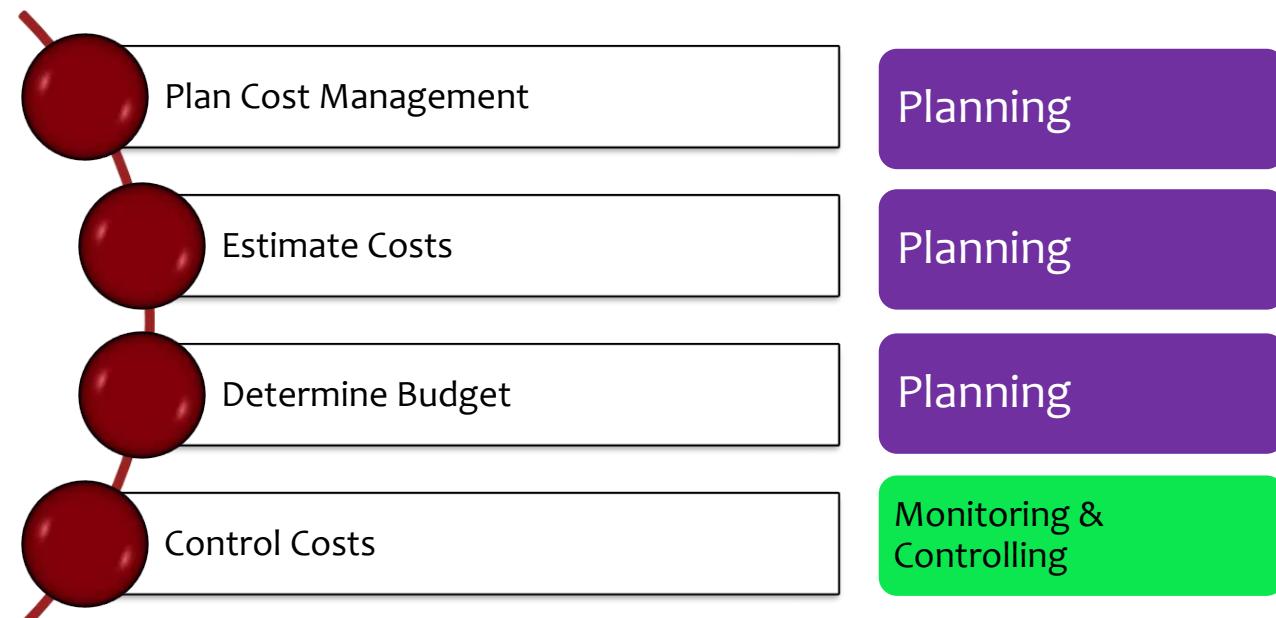




# Processes Mapping

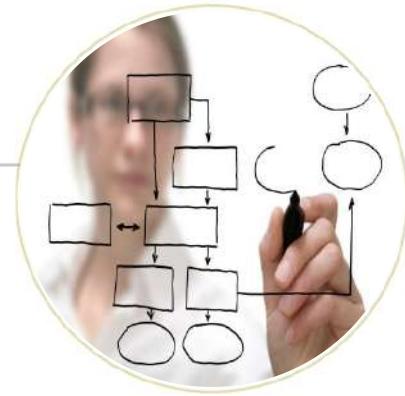


## Project Cost Management

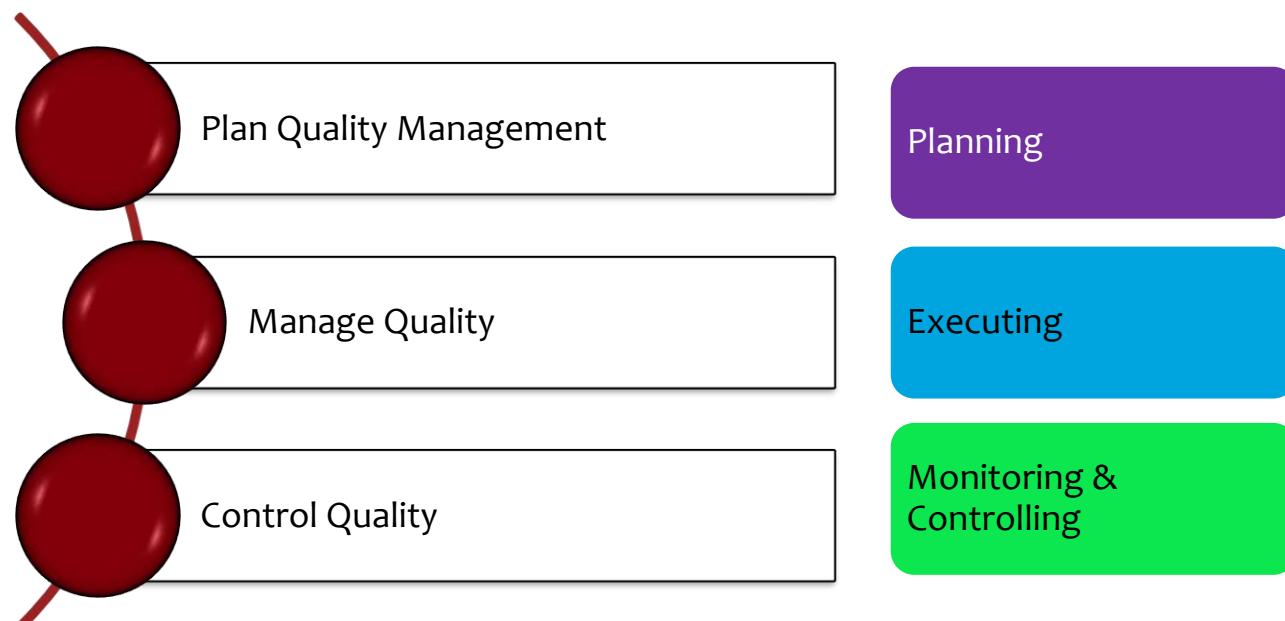




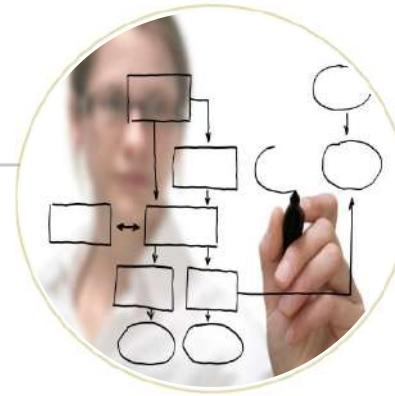
# Processes Mapping



## Project Quality Management



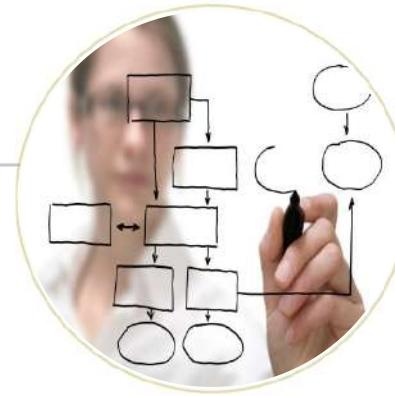
# Processes Mapping



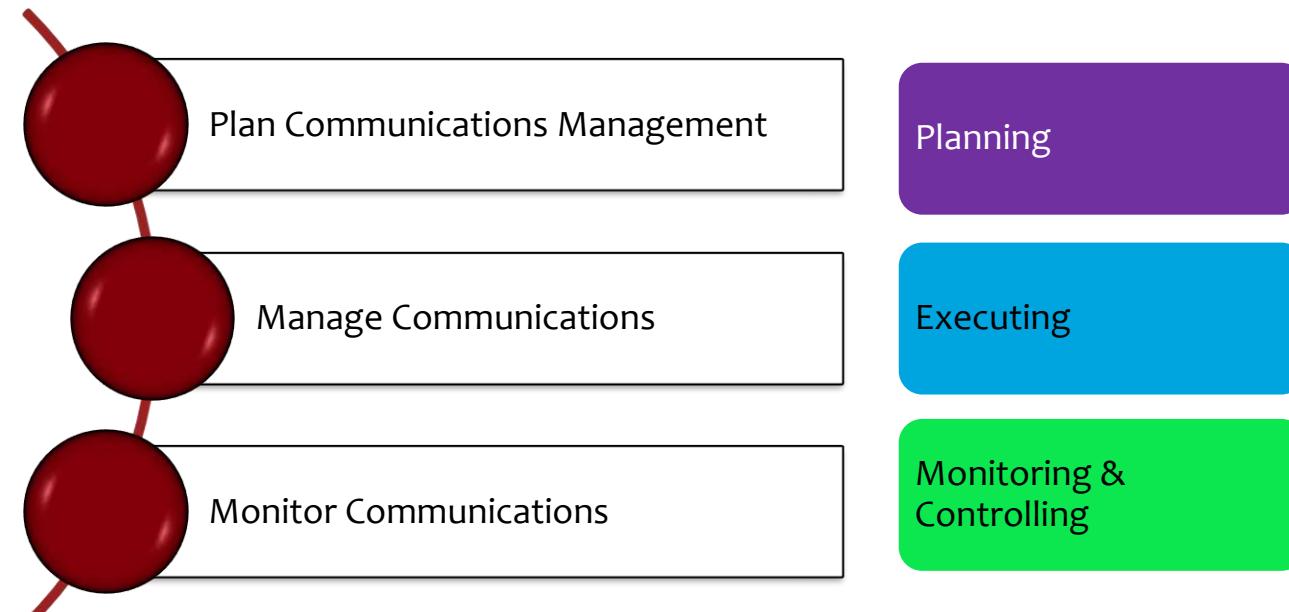
## Project Resources Management



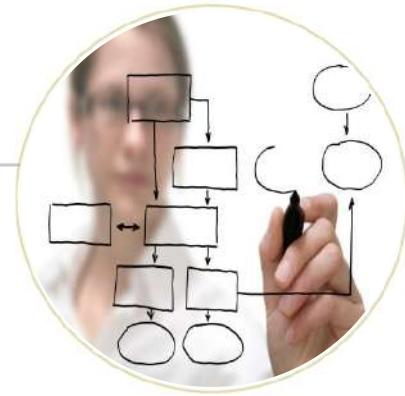
# Processes Mapping



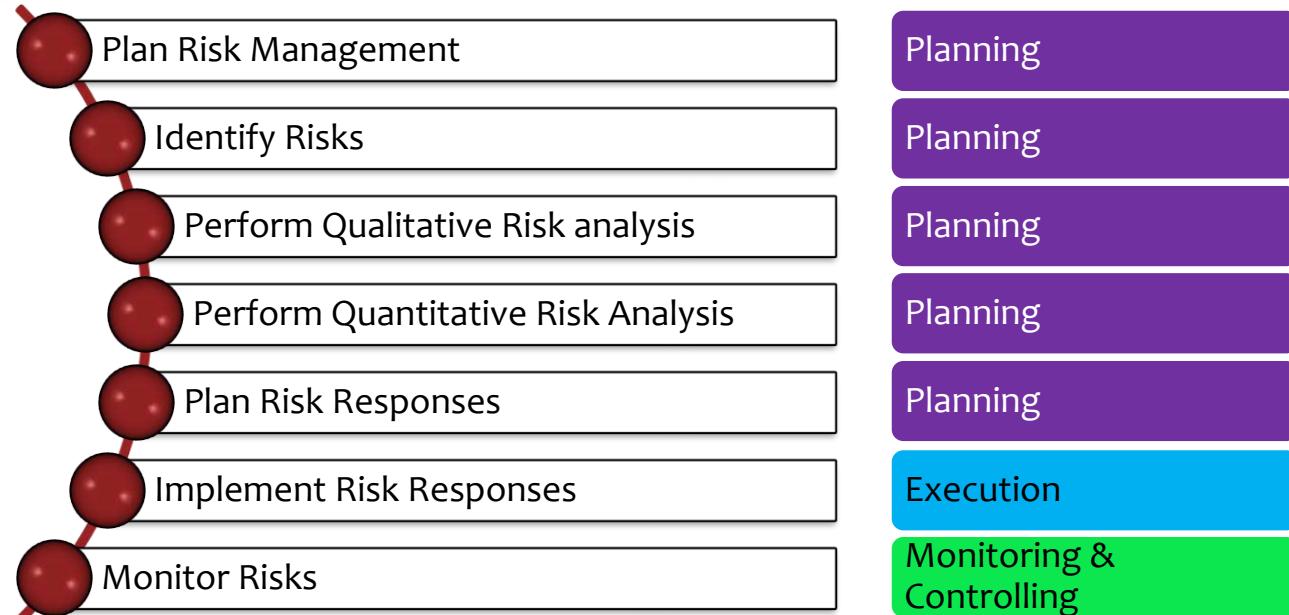
## Project Communication Management



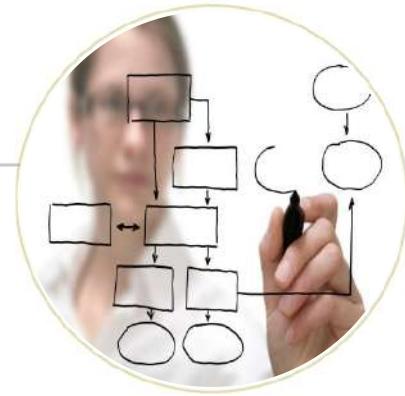
# Processes Mapping



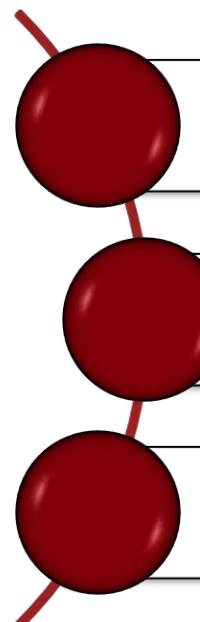
## Project Risk Management



# Processes Mapping



## Project Procurement Management



Plan Procurement Management

Conduct Procurements

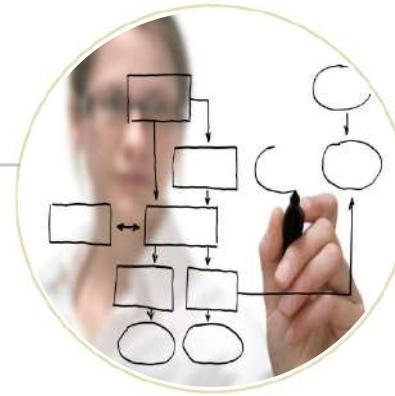
Control Procurements

Planning

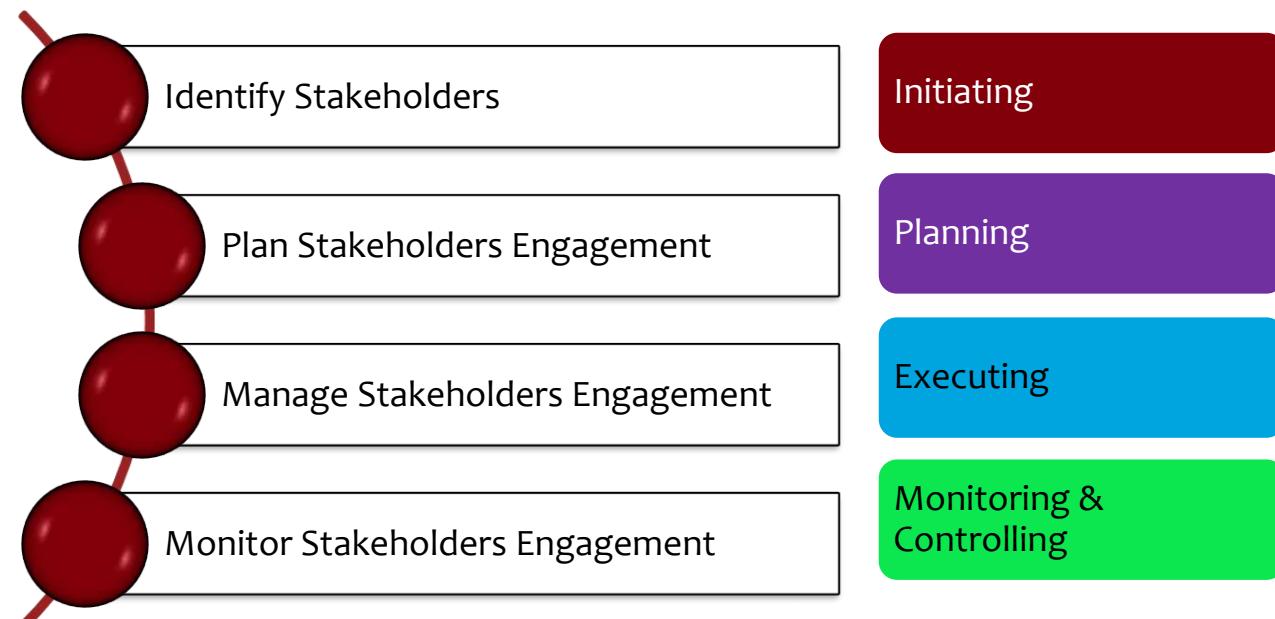
Executing

Monitoring & Controlling

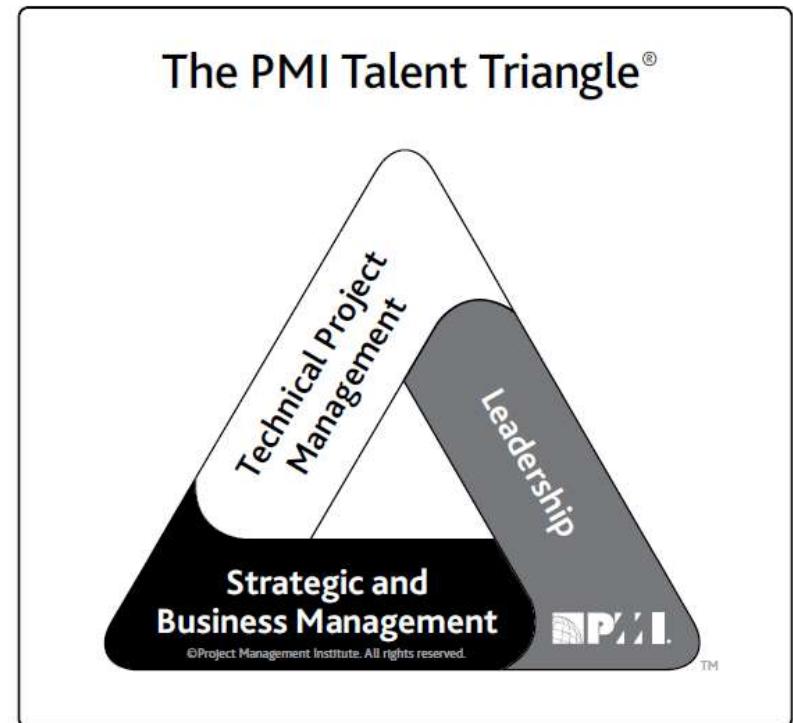
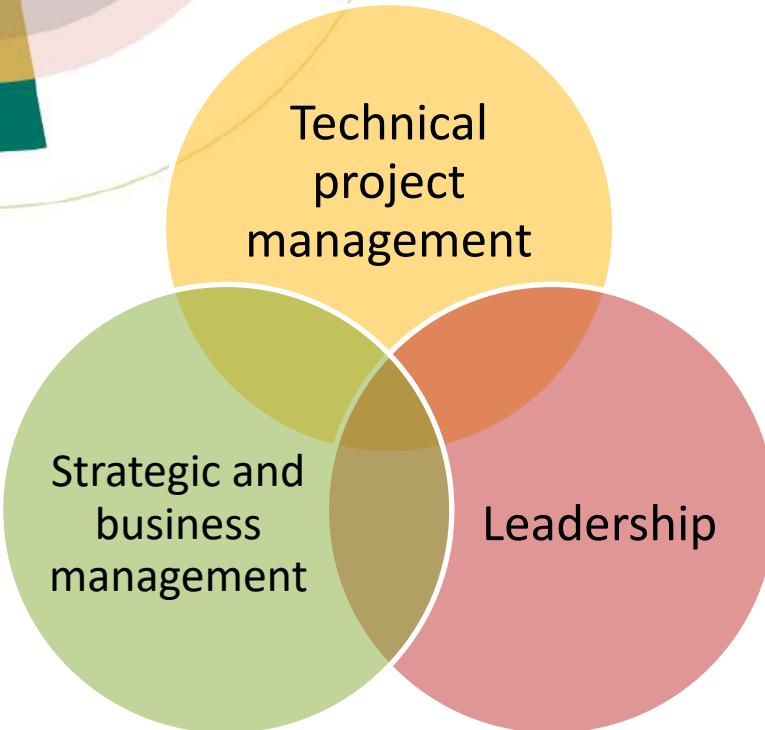
# Processes Mapping



## Project Stakeholders Management



# Project Manager Competences





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# Role of the Program Manager

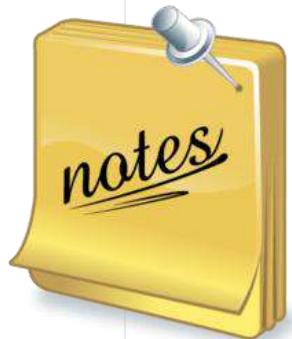


## Definition

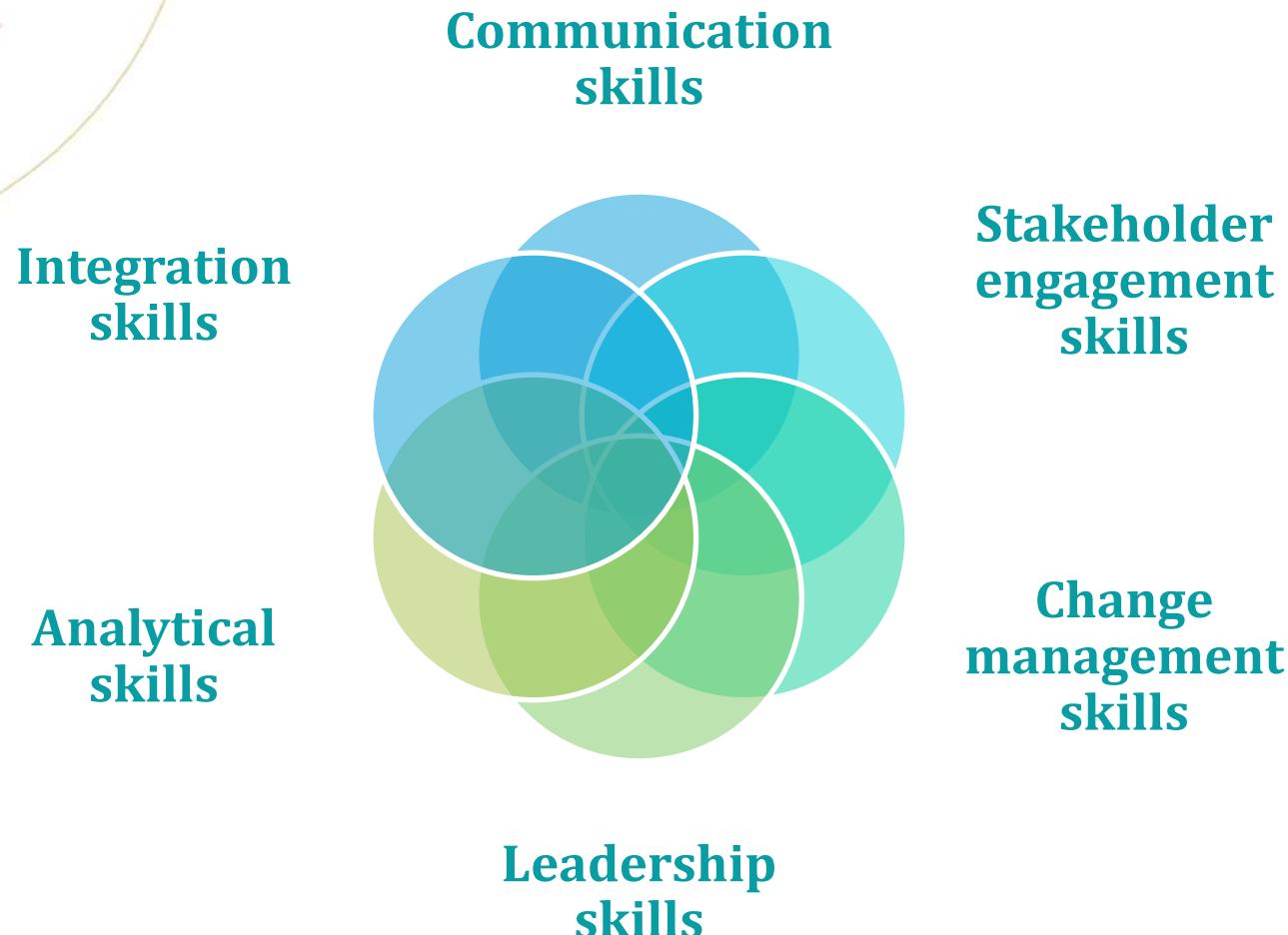
A program manager is **the person authorized by the performing organization to lead the team or teams responsible for achieving program objectives.**

# Role of the Program Manager

**The program manager maintains responsibility for the leadership, conduct, and performance of a program, and for building a program team that is capable of achieving program objectives and delivering anticipated program benefits.**



# Program Manager Competences



# Program Manager Competences

## Communication skills



Integration skills

Stakeholder engagement skills

Communication skills that enable effective exchange of information with a wide variety of program stakeholders, including program team members, sponsors, customers, vendors, and senior management, whether individually or in groups or in committees.

Leadership skills



# Program Manager Competences

Communication  
skills

Integration  
skills



**Stakeholder  
engagement  
skills**

to support the need to manage the complex issues that often arise as a consequence of stakeholder interactions. The program manager should recognize the dynamic aspects of managing individual and group expectations.

Leadership  
skills



# Program Manager Competences

Skills that enable effective engagement with individual stakeholders and governance and review committees, to gain the necessary agreements, alignment, and approvals when program strategies or plans need to be adapted.

Communication skills

Stakeholder engagement skills



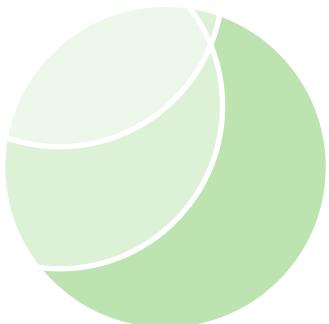
Change management skills

Leadership skills



# Program Manager Competences

Leadership skills to guide program teams through the program life cycle. Program managers work with component managers and often with functional managers to gain support, resolve conflicts, and direct individual program team members by providing specific work instructions.



Analytical  
skills

Change  
management  
skills

**Leadership  
skills**



# Program Manager Competences

Integration skills

Analytical skills

Communication skills



Leadership skills

Skills that enable a program manager to assess whether the outputs and outcomes of program components will contribute as expected to the delivery of program benefits, or to assess the potential impact of external events on the program's strategy or plans.





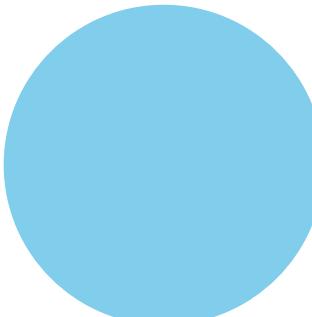
# Program Manager Competences

## Integration skills

## Analytical skills

## Communication skills

## Leadership skills

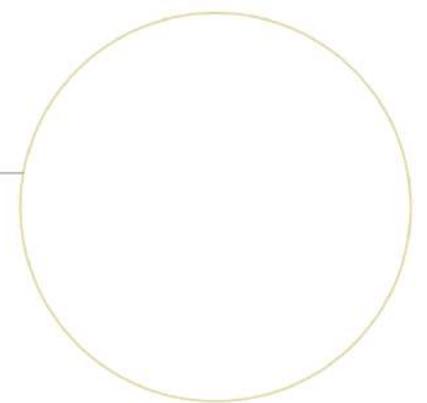


A program manager should possess the ability to describe and present a program's strategic vision and plan holistically. It is the program manager's responsibility to ensure the continuous alignment of the program component plans with the program's goals and pursuit of organizational benefits.



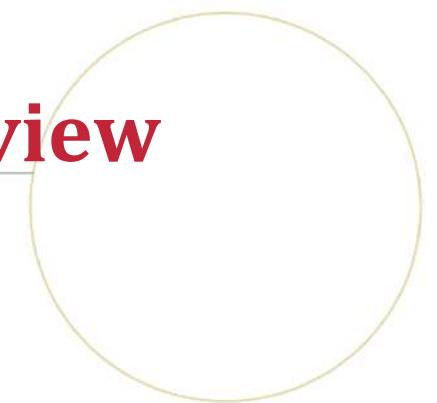


# Program Management Performance Domain





# Program life cycle phases overview



To successfully deliver benefits to an organization, programs are implemented using three major phases, which include:





# Program life cycle phases overview

## Program Definition Phase



## Program Delivery Phase



## Program Closure Phase

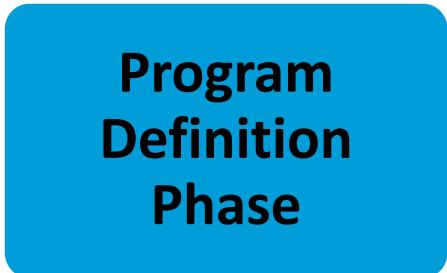
- This phase consists of program activities conducted to authorize the program and
- develop the program roadmap required to achieve the expected results. As part of program definition, the program
- business case and program charter are formulated. Once approved, the program management plan is prepared.

- Program delivery comprises the program activities performed to produce the intended results of each component in accordance with the program management plan. Throughout this phase, individual components are initiated, planned, executed, transitioned, and closed, while benefits are delivered, transitioned, and sustained.

- This phase includes the program activities necessary to transition the program benefits to the sustaining organization and formally close the program in a controlled manner. During program closure, the program is transitioned and closed or terminated early, or work is transitioned to another program.



# Program definition phase



## Program Definition Phase

The program definition phase includes **program activities** conducted to:

- 1. Authorize the program**
- 2. Develop the program roadmap required to achieve the expected results;**

it typically includes activities that are performed as the result of an organization's plan to fulfill strategic objectives or achieve a desired state within an organization's portfolio.



# Program formulation

- **Program formulation** involves the **development of the program business case** which states the overall expected benefits to be addressed by the program in support of the strategic initiatives.
- **The program charter** serves as the **primary document** that is reviewed by the program steering committee to decide if the program will be authorized.



- The contents of the program charter generally consist of the following questions and their answers:

|                  |                             |                     |                    |          |
|------------------|-----------------------------|---------------------|--------------------|----------|
| Justification    | Vision                      | Strategic alignment | Benefits           | Scope    |
| Benefit strategy | Assumptions and constraints | Components          | Risks and issues   | Timeline |
| Resources needed | Stakeholder considerations  |                     | Program governance |          |



# Program Planning

## When Should Program Planning Commence?

**Program planning commences upon formal approval of the program charter by the program steering committee.** In this phase, a governance structure is established, the initial program organization is defined, and a team is assembled to develop the program management plan.



# Program Planning

The **Program Management Plan** is the document that:

1. **integrates the program's subsidiary plans**
2. **establishes the management controls**
3. **overall plan for integrating and managing the program's individual components**



# Subsidiary Plans





# Program Delivery phase



## Program delivery Phase

The program delivery phase includes **program activities** performed to:

- 1. produce the intended results of each component in accordance with the program management plan;**

This phase is considered iterative instead of linear, as the capabilities produced by each component are integrated into the overall program to facilitate delivery of the intended program benefits.



# Program Delivery phase

Each program component will progress through the following program delivery sub-phases:

## Component authorization and planning,

- Component authorization involves the initiation of components based on the organization's specified criteria and individual business cases developed for each component. These criteria are generally included in the program governance plan.

## Component oversight and integration

- In the context of a program, some components may produce benefits as individual components, while other components are integrated with others before the associated benefits may be realized. Each component team executes its associated plans and program integrative work

## Component transition and closure

- After the program components have produced deliverables and coordinated the successful delivery of their products, services, or results, these components are typically scheduled for closure or transition to operations or ongoing work. Component transition addresses the need for ongoing activities such as product support, service management, change management, user engagement, or customer support from a program component to an operational support function in order for the ongoing benefits to be achieved



# Program Closure Phase

## Program Closure Phase

The program closure phase includes **program activities** performed to:

1. transition program benefits to the sustaining organization and formally close the program in a controlled manner.



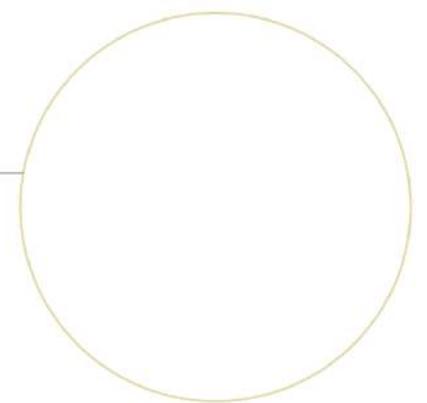
# Program Closure Phase

## Program Closure Phase

During program transition, the program steering committee is consulted to determine whether: (a) the program has met all of the desired benefits and that all transition work has been performed within the component transition, or (b) there is another program or sustaining activity that will oversee the ongoing benefits for which this program was chartered.



# Program Management Performance Domain



Program  
Strategy  
Alignment

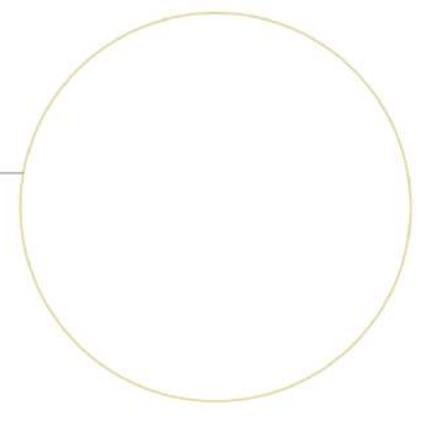
**Program Strategy Alignment**—Performance domain that identifies program outputs and outcomes to provide benefits aligned with the organization's goals and objectives.



Program  
Stakeholder  
Engagement

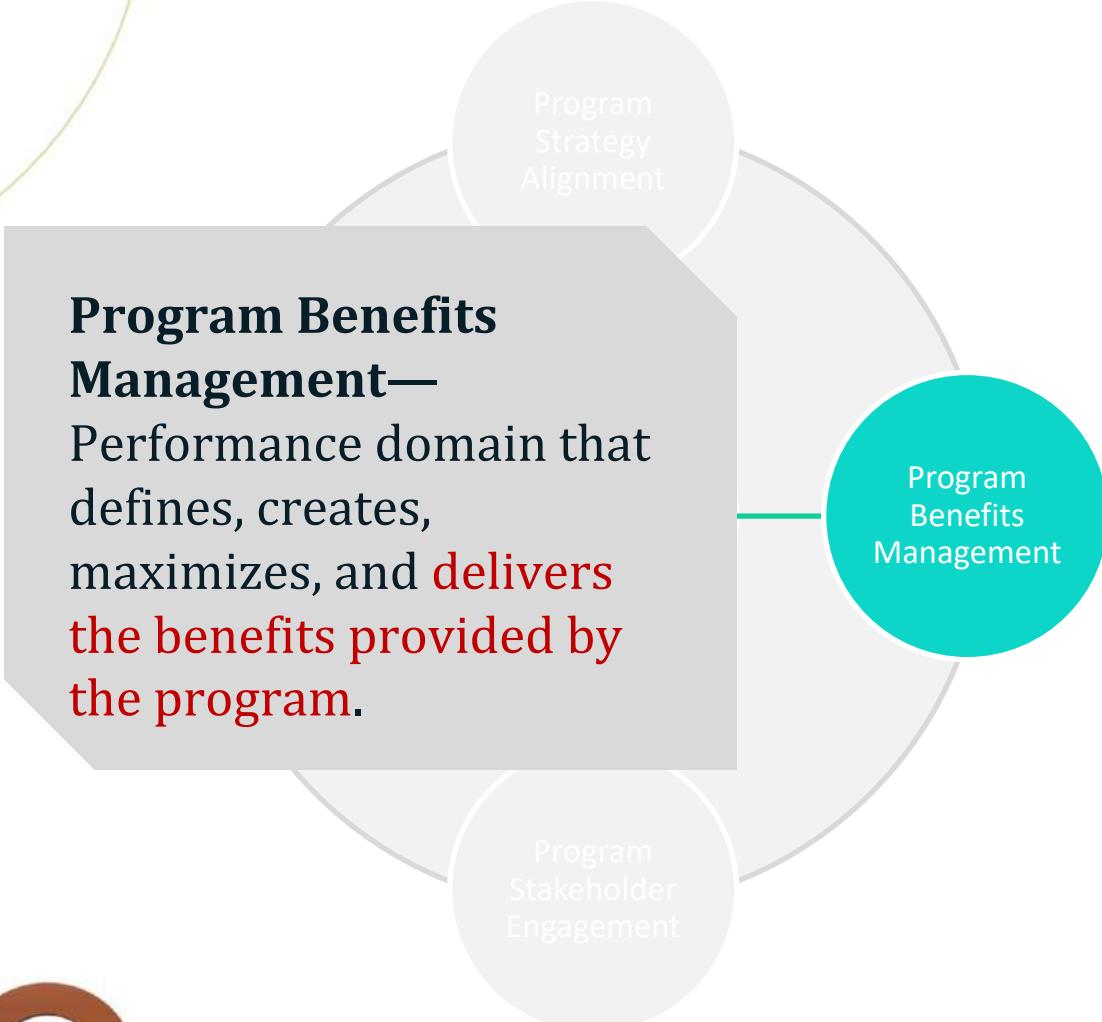


# Program Management Performance Domain



## Program Benefits Management—

Performance domain that defines, creates, maximizes, and **delivers** the benefits provided by the program.



Program Benefits Management

Program  
Stakeholder  
Engagement

Program  
Strategy  
Alignment



# Program Management Performance Domain



## Program Governance

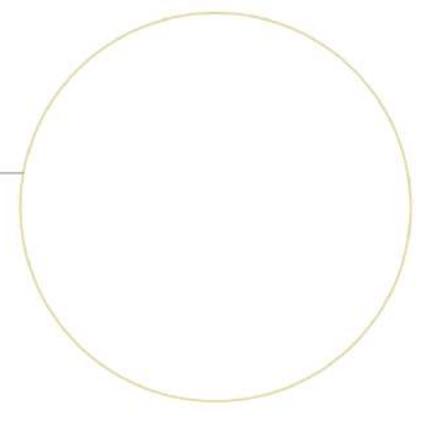
**Program Governance—**  
Performance domain that  
enables and performs  
program decision  
making, **establishes**  
practices to support the  
program, and maintains  
program oversight.

Program  
Stakeholder  
Engagement





# Program Management Performance Domain



Program  
Strategy  
Alignment

**Program Stakeholder Engagement**—  
Performance domain that identifies and analyzes stakeholder needs and manages expectations and communications to foster stakeholder support.

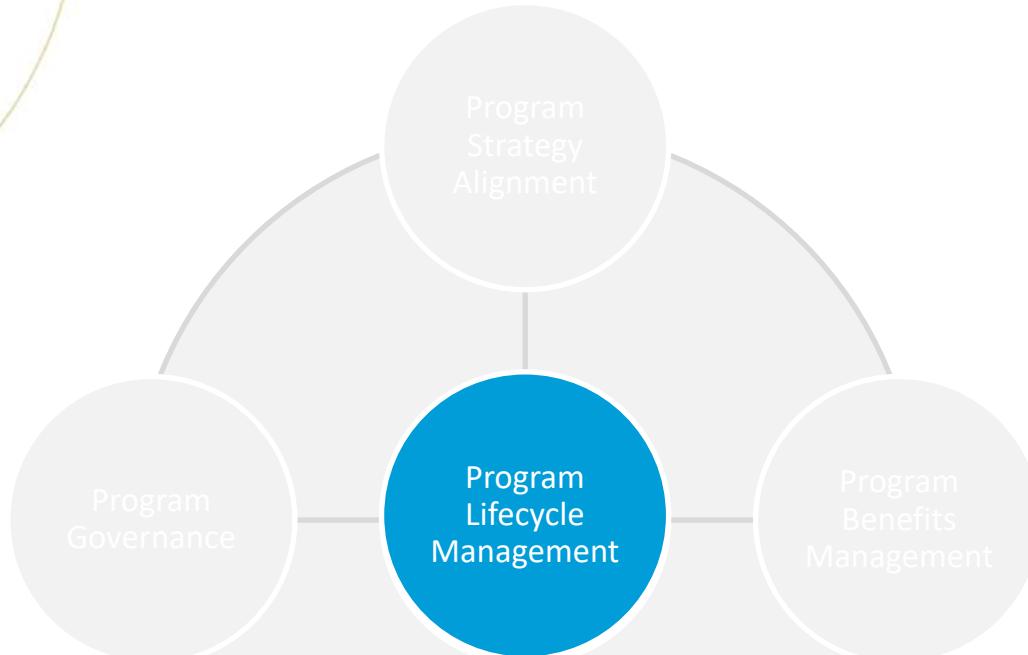


Program  
Stakeholder  
Engagement





# Program Management Performance Domain



**Program Life Cycle Management—**  
Performance domain that manages program activities required to facilitate effective program definition, **program delivery**, and program closure.

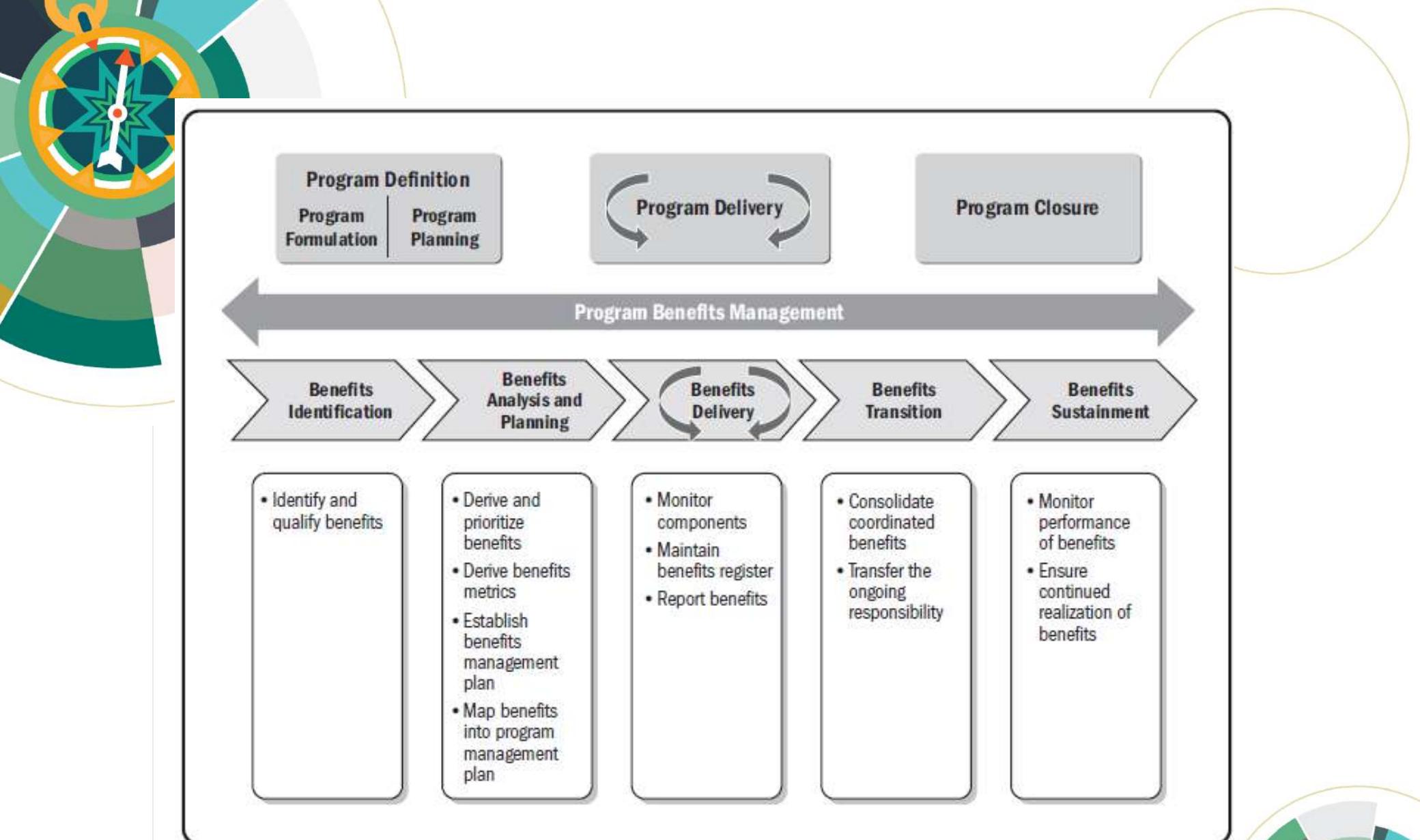


Figure 4-1. Program Life Cycle and Program Benefits Management

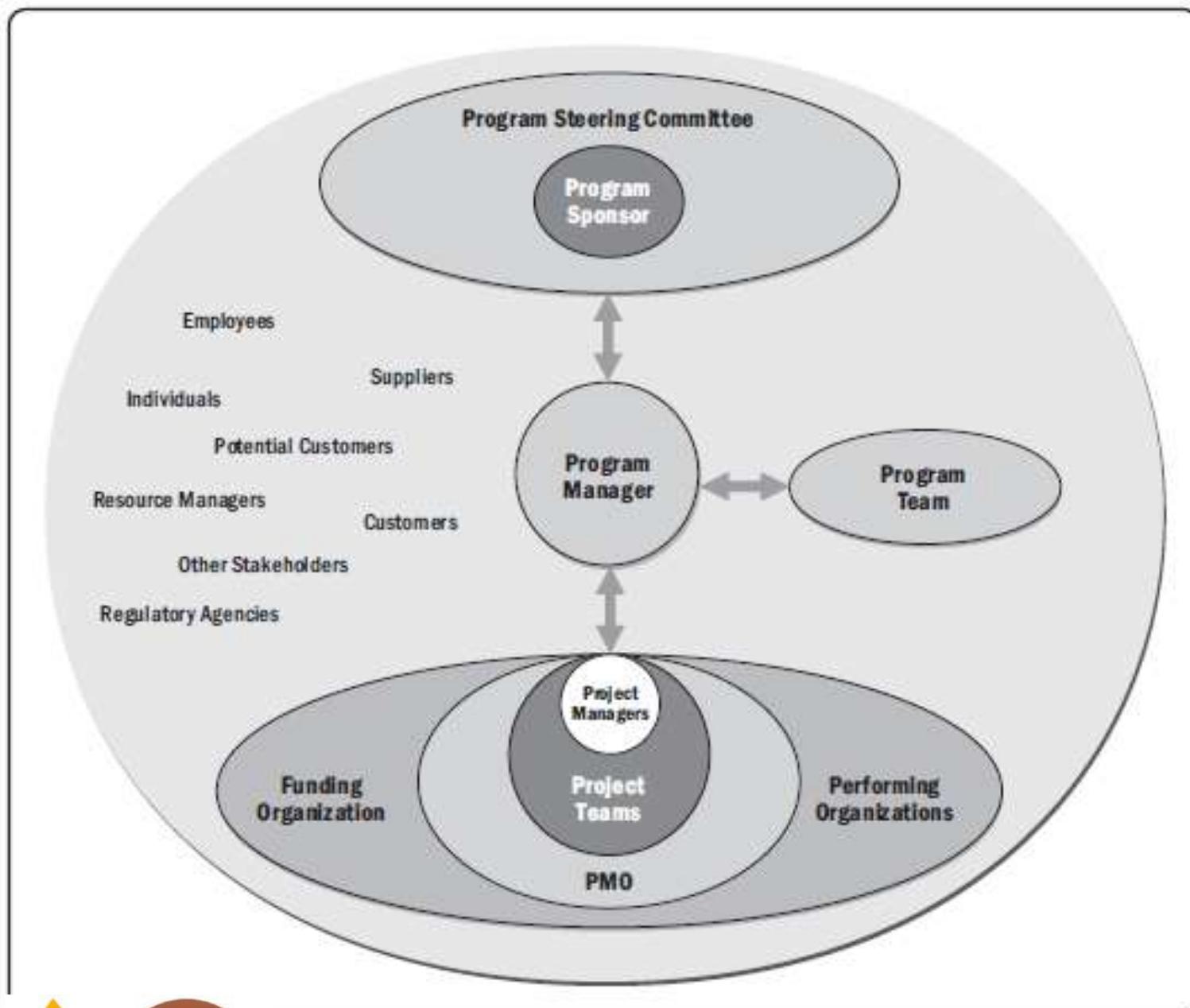


Figure 5-1. Stakeholder Environment for Programs



# Program Governance

Program Governance comprises the framework, functions, and processes **by which a program is monitored, managed, and supported in order to meet organizational strategic and operational goals.**



# Program Governance Practices

Program Governance Plan

Program Governance And Vision And Goals

Program Approval, Endorsement, And Definition

Program Success Criteria

Program Monitoring, Reporting, And Controlling

Program Risk And Issue Governance

Program Quality Governance

Program Change Governance

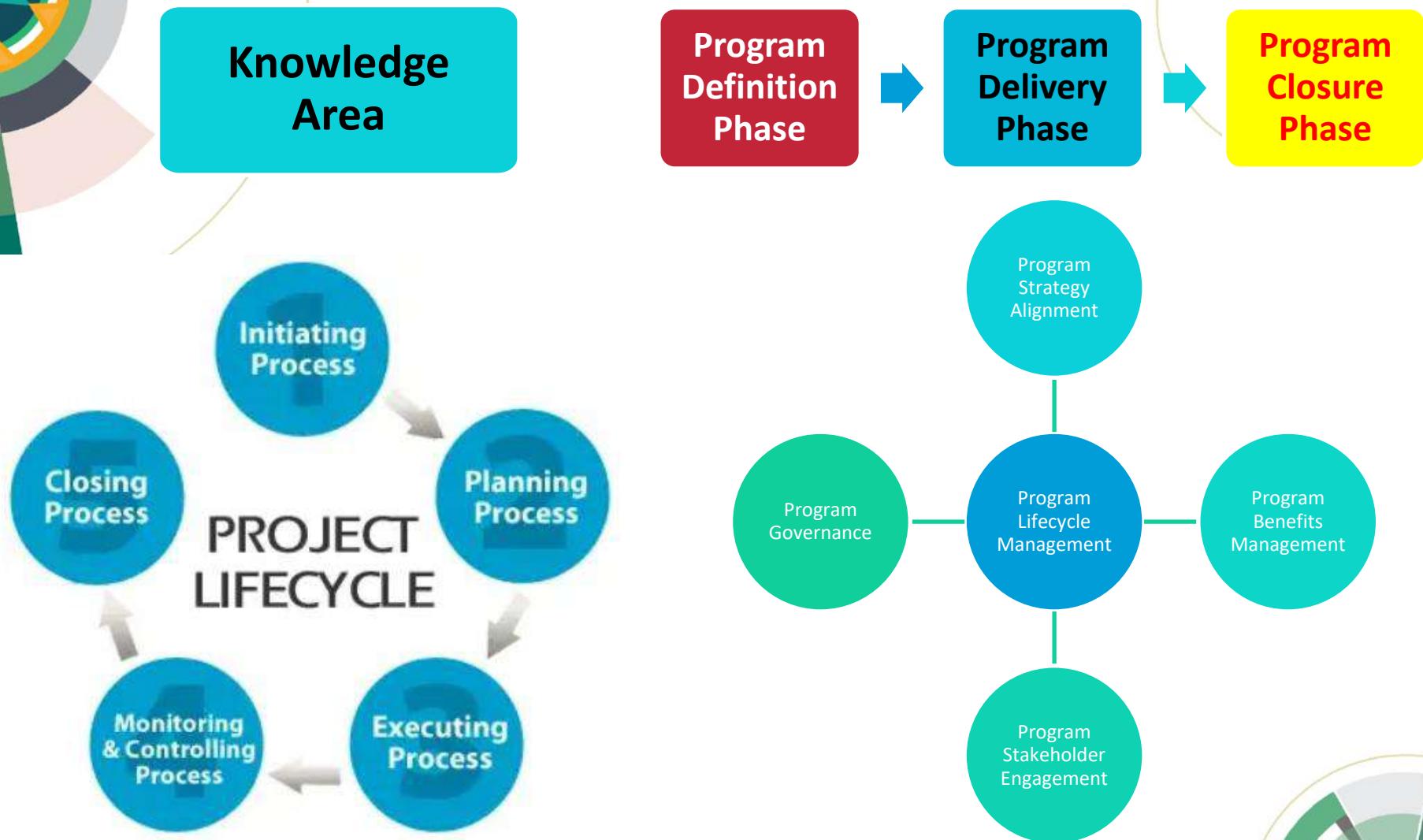
Program Governance Reviews

Program Periodic Health Checks

Program Component Initiation And Transition

Program Closure

# Project Vs Program





# Questions ?

