

THE STANDARD FOR PROGRAM MANAGEMENT



## COURSE STRUCTURE

INTRODUCTION

Module 1

PROGRAM MANAGEMENT PERFORMANCE DOMAINS Module 2

PROGRAM STRATEGY
ALIGNMENT
Module 3

PROGRAM BENEFITS
MANAGEMENT
Module 4



## COURSE STRUCTURE

PROGRAM STAKEHOLDER
ENGAGEMENT
Module 5

PROGRAM
GOVERNANCE
Module 6

PROGRAM LIFE CYCLE MANAGEMENT Module 7

PROGRAM ACTIVITIES Module 8



## **COURSE OBJECTIVE**

At the end of this course, you will understand what Program Management is all about, its concepts and why it is essential to the success of any Program and how to perform it on your Programs...





# INTRODUCTION TO PROGRAM MANAGEMENT

**MODULE 7** 





## **MODULE OBJECTIVE**

Program Life Cycle Management

**The Program Life Cycle** 



Program Activities and Integration Management

## PROGRAM LIFE CYCLE MANAGEMENT

Program Life Cycle Management is the performance domain that manages program activities required to facilitate effective program definition, program delivery, and program closure.

These components may include projects, subsidiary programs, and additional program-related activities that are necessary to achieve the specified goals and objectives.

Since programs, by nature, involve a certain level of uncertainty, change, complexity, and interdependency among the various components, it is useful to establish a common and consistent set of processes that can be applied across phases.

Program Life Cycle Management spans the duration of the program, during which it contributes to and integrates with the other program domains as well as the supporting program activities.



## THE PROGRAM LIFE CYCLE

Programs function similarly to projects in that the program is defined, benefits are delivered, and the program is closed.

However, unlike projects, programs involve the coordination and sequencing of multiple components above what is required at an individual project level.

During program delivery, components are authorized, planned, and executed, and benefits are delivered.

Program closure is then approved by the program steering committee when the desired benefits or program objectives have been realized or the steering committee has determined that the program should be terminated.

Reasons for early termination may be a change in organizational strategy with which the program is no longer aligned or an assessment that the planned benefits may no longer be achievable.

## PROGRAM LIFE CYCLE PHASES OVERVIEW

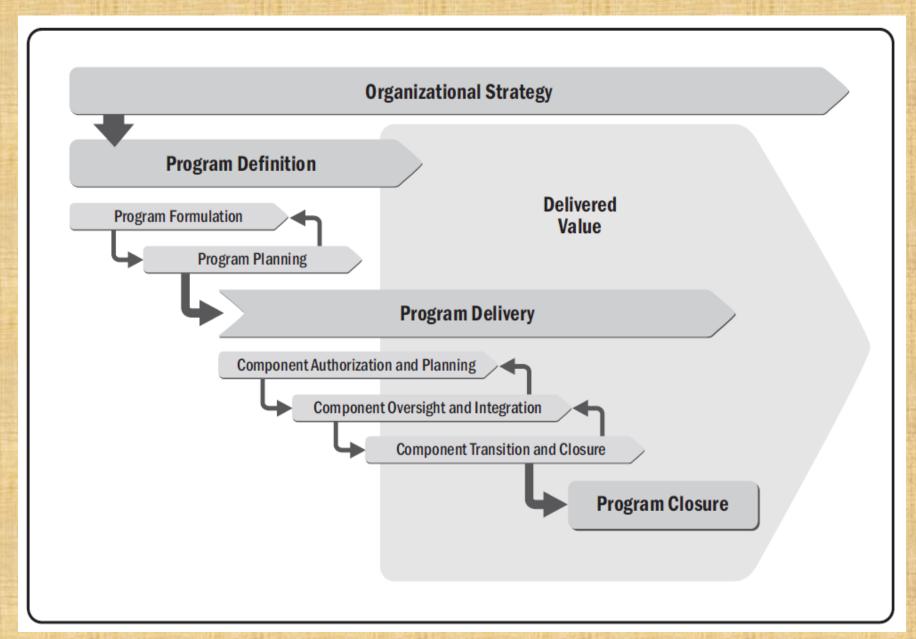
To successfully deliver benefits to an organization, programs are implemented using three major phases, which include:

- Program Definition Phase. This phase consists of program activities conducted to authorize the program and develop the program roadmap required to achieve the expected results.
- Program Delivery Phase. Program delivery comprises the program activities performed to produce the intended results of each component in accordance with the program management plan.
- Program Closure Phase. 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 Life Cycle Phases**





### PROGRAM DEFINITION PHASE

The program definition phase includes program activities conducted to authorize the program and develop the program roadmap required to achieve the expected results

There may be a number of activities executed by a portfolio management body prior to the start of the program definition phase.

The primary purpose of the program definition phase is to progressively elaborate the goals and objectives to be addressed by the program, define the expected program outcomes and benefits, and seek approval for the program.

Program definition generally falls into two distinct but overlapping subphrases: program formulation and program planning.

The program manager is selected and assigned during program formulation.



## 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.

To demonstrate how the program will deliver the desired organizational benefits, the sponsor, sponsoring organization, and the program manager work closely together to:

- Initiate studies and estimates of scope, resources, and cost;
- Develop an initial risk assessment; and
- Develop a program charter and roadmap.

Studies of scope, resources, and cost are also performed to assess the organization's ability to deliver the program.

At this time, the candidate program is compared with other organizational initiatives to determine the priority of the program under consideration.

This analysis helps determine the probability of the program's successful delivery of organizational benefits and helps identify risk response strategies and plans.



## PROGRAM FORMULATION

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

- Justification. Why is the program important and what does it achieve?
- Vision. What is the end state and how will it benefit the organization?
- Strategic alignment. What are the key strategic drivers and the program's relationship to the organizational strategic objectives and any other ongoing strategic initiatives
- Benefits. What are the key outcomes required to achieve the program vision and benefits?
- Scope. What is included within the program and what is considered to be out of scope at a high level?
- Components. How are the projects and other program components configured to deliver the program and the intended benefits?
- Risks and issues. What are the initial risks and issues identified during the preparation of the program roadmap?
- Timeline. What is the total length of the program, including all key milestone dates?
- Stakeholder considerations. Who are the key stakeholders, who are the most important stakeholders,
- Program governance. What is the recommended governance structure to manage, control, and support the program?



### **PROGRAM PLANNING**

Program planning commences upon formal approval of the program charter by the program steering committee.

This plan is the key output created during program planning and may be combined into one plan or multiple plans that include the following subsidiary documents:

- Benefits management plan
- Stakeholder engagement plan
- Governance plan
- Change management plan
- Communications management plan
- Financial management plan
- Information management plan
- Procurement management plan
- Quality management plan
- Resource management plan
- Risk management plan
- Schedule management plan
- Scope management plan
- Program roadmap



## **PROGRAM DELIVERY PHASE**

The program delivery phase includes program activities performed to produce the intended results of each component in accordance with the program management plan.

The program manager is also responsible for managing this group of components in a consistent and coordinated way in order to achieve results that could not be obtained by managing the components as stand-alone efforts.

# Each program component will progress through the following program delivery subphases:

- Component authorization and planning,
- Component oversight and integration, and
- Component transition and closure.

Program delivery ends when program governance determines that the specific criteria for this phase have been satisfied or a decision is made to terminate the program.

## PM tuto 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. The Program Governance Performance Domain provides guidance for processes leading to component authorization.

#### **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. Throughout this activity, components provide status and other information to the program manager and to their associated components so their efforts may be integrated into and coordinated with the overall program activities.



## **TOT 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.

Prior to the end of the program delivery phase, all component areas are reviewed to verify that the benefits were delivered and to transition any remaining projects and sustaining activities.

#### **PROGRAM CLOSURE PHASE**

phase includes program activities necessary to transition program benefits to the sustaining

organization and formally close the program in a controlled manner.

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 ACTIVITIES AND INTEGRATION MANAGEMENT

Program activities and integration management are concerned with collectively utilizing the resources, knowledge, and skills available to effectively deploy multiple components throughout the program life cycle.

#### This process also involves making decisions regarding:

- Competing demands and priorities,
- Risks,
- Resource allocations,
- Changes due to uncertainty and complexity of the program scope,
- Interdependencies among components, and
- Coordination of work to meet the program objectives.

#### **PROGRAM ACTIVITIES OVERVIEW**

All work performed in a program for the purpose of overall program management is collectively known as program activities.

It is important to note that program activities directly support the individual components to ensure the component activities help achieve the program objectives.



## PROGRAM INTEGRATION MANAGEMENT

This section focuses on the following activities and when they are performed throughout the program life cycle phases:

- Program infrastructure development
- Program delivery management
- Program performance monitoring and controlling
- Benefits sustainment and program transition
- Program closeout

#### PROGRAM INFRASTRUCTURE DEVELOPMENT

The primary purpose of program infrastructure development is twofold. It establishes both the management and

technical resources of the program and its components. This infrastructure refers to both personnel and to program specific tools, facilities, and finances used to manage the program.

Although the program manager is assigned during program definition, the program management core team is designated as part of establishing the program infrastructure.



### PROGRAM INFRASTRUCTURE DEVELOPMENT

For many programs, the program management office (PMO) is a core part of the program infrastructure.

It supports the management and coordination of the program and component work.

An effective PMIS incorporates the following:

- Software tools;
- Documents, data, and knowledge repositories;
- Configuration management tools;
- Change management system;
- Risk database and analysis tools;
- Financial management systems;
- Earned value management activities and tools;
- Requirements management activities and tools; and
- Other tools and activities as required.

These resources are separate and distinct from the resources required to manage the individual components within the program.



### PROGRAM DELIVERY MANAGEMENT

Program delivery management includes the management, oversight, integration, and optimization of the program components that will deliver the capabilities and benefits required for the organization to realize value.

These activities are performed throughout the program delivery phase and relate to the initiation, change, transition, and closure of program components.

During the course of program delivery, change requests that fall within the program manager's authority level will be approved or rejected to manage performance and any changes to the program management plan.



# PROGRAM PERFORMANCE MONITORING AND CONTROLLING

Monitoring and controlling activities are performed by both program- and project-level components during delivery management.

These activities include collecting, measuring, and disseminating performance information to track progress against the program objectives and assess overall program trends.

Typical outputs of this ongoing activity include program performance reports and forecasts. Program performance reports include a summary of the progress of all program components.

#### BENEFITS SUSTAINMENT AND PROGRAM TRANSITION

Some program components produce immediate benefits while others require a handoff or transition to another organization in order for the ongoing benefit to be realized.

Benefits sustainment may be achieved through operations, maintenance, new projects, or other initiatives and efforts.

This activity transcends the scope of individual program components since this work is typically performed as the program is closed.



## PROGRAM CLOSEOUT

As part of the program governance plan, a final program report may be required to document critical information that can be applied to improve the success of future programs and component projects.

#### This final report may consist of:

- Financial and performance assessments,
- Lessons learned,
- Successes and failures,
- Identified areas for improvement,
- Risk management outcomes,
- Unforeseen risks,
- Customer sign-off,
- Reason(s) for program closeout,
- History of all baselines, and
- Archive plan for program documentation.

Upon program completion, knowledge transfer is performed when the program management team assesses the program's performance and shares lessons learned with the organization.



# Mapping of Program Management Life Cycle Phases to Supporting Activities

Supporting Program	Program Life Cycle Phases		
Activities	Program Definition	Program Delivery	Program Closure
Program Change Management	Program Change Assessment Program Change Management Planning	Program Change Monitoring and Controlling	
Program Communications Management	Program Communications Assessment Program Communications Management Planning	Program Information Distribution Program Reporting	
Program Financial Management	Program Initial Cost Estimation Program Cost Estimation Program Financial Framework Establishment Program Financial Management Planning	Program Cost Budgeting Component Cost Estimation Program Financial Monitoring and Controlling	Program Financial Closure
Program Information Management	Program Information Management Planning	Lessons Learned	Program Information Archiving and Transition
Program Procurement Management	Program Procurement Assessment Program Procurement Management Planning	Program Contract Administration	Program Procurement Closure
Program Quality Management	Program Quality Assessment Program Quality Management Planning	Program Quality Control	
Program Resource Management	Program Resource Requirements Estimation Program Resource Management Planning	Resource Interdependency Management	Program Resource Transition
Program Risk Management	Program Initial Risk Assessment Program Risk Management Planning	Program Risk Monitoring and Controlling Program Risk Identification Program Risk Analysis Program Risk Response Management	Program Risk Transition
Program Schedule Management	Program Schedule Assessment Program Schedule Management Planning	Program Schedule Monitoring and Controlling	
Program Scope Management	Program Scope Assessment Program Scope Management Planning	Program Scope Monitoring and Controlling	



- 1. As you work to develop a new washer and dryer that will not require any electricity and also will decrease your monthly water bill by 50% assuming you use the washer at least once per week, you have a complex program to manage. Thus far, even though you are still in the early phases of your program, you have six separate projects in it. Now, you are developing the schedule for your program. Typically the first step is to—
- a. Use the schedules from the six projects
- b. Determine the component milestones
- c. Determine the interdependencies between the components
- d. Use the scope management plan

d. Use the scope management plan



- 2. Working as Company A's program manager for the development of an on line banking system for your community bank, you have been asked to provide a list of deliverables and the success criteria for the program and its products, services, and results that must be included in the procurement documentation that is provided to potential suppliers. This list is derived from an analysis of the—
- a. Benefits realization plan
- b. Project work breakdown structure (WBS)
- c. Contract WBS
- d. Program scope statement
- d. Program scope statement



- 3. You are managing a program to establish a new distribution center. The facility's location was selected because labor costs were low, but it is in a remote area. Now gasoline prices have increased 30 percent and are forecasted to rise another 20 percent in the next six months. In planning for the procurement of transportation services, you need to—
- a. Prepare a competitive analysis of service providers
- b. Recommend to your sponsor that the program be terminated and the distribution center be moved to a more urban area
- c. Prepare a contract management plan
- d. Encourage bidders by providing simplified legal requirements in the form of standard terms and conditions
- a. Prepare a competitive analysis of service providers



- 4. As the program manager for the annual construction program for a large government agency, you prepared the program management plan and scope statement that were approved by all stakeholders. Nine months later, a small group of influential stakeholders wants to increase the program's scope by including all maintenance and operations of the buildings. You should—
- a. Demonstrate the return on investment to the organization for increasing the scope of the program
- b. Reject the proposal because maintenance and operations typically are outside of the scope of programs
- c. Respond favorably because programs have a wide scope that may need to change to meet and exceed the organization's benefits expectations
- d. Ask a sponsor to make the business case to approve this new component
- d. Ask a sponsor to make the business case to approve this new component



- 5. As program manager for a global payroll application, you have project teams in Bangalore, Singapore, London, and Washington, D.C. Currently, each team is following its own time-reporting process, which seems to be working well. From the perspective of global program management, you should—
- a. Define and apply a mandatory common time-reporting process
- b. Allow each location to use its own process in consideration of its unique cultural norms and local holiday schedule
- c. Define a common time-reporting process that each location has the option to use
- d. Do nothing because the current approach appears to be working well, and there are other more important issues on which to focus

a. Define and apply a mandatory common time-reporting process



- 6. An audit of your program has just been completed. The audit report claimed that a new process that had been implemented was receiving strong resistance from the users, thus indicating that a change impact review had not been conducted early enough in the program to detect potential barriers to adoption. Ensuring that such a review is conducted is clearly the responsibility of the—
- a. Program manager
- b. Program sponsor
- c. Program office
- d. Benefits manager

a. Program manager



- 7. You are meeting with the team member who is responsible for the program management information system (PMIS) for your program. Because the data that will be captured are of a scientific and medical nature, the PMIS will generate more than eight terabytes (8,000 gigabytes) of data. Given the critical importance of the PMIS, you and the PMIS team member agree that the first order of business is to—
- a. Consolidate existing data to maximize storage capability
- b. Integrate all financial data
- c. Produce timely and valid inter-project information
- d. Define the program data naming conventions

d. Define the program data naming conventions

