



# Module 5

## Integration Phase

The integration phase is where things actually come together. Once the project has been appropriately defined with activities, it is necessary for the team to begin meting out processes to various group members, which is the focal point of this module.

## Learning Outcomes

1. Learn about cost, price, and tailoring objects to meet the needs of the project as the project reaches fruition.
  2. Describe key concepts for project resource management.
  3. Evaluate relationships and dependencies among tasks in the project.
  4. Examine the direction of work in the creation of the project management knowledge base.
  5. Apply change management process steps.
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## Readings

- Lecture
- Chapters 6 & 7 in *Engineering project management*
- Project Management Institute. (2017). Part 1: A guide to the project management body of knowledge (PMBOK® guide): 4. Project integration management. In *A guide to the project management body of knowledge® (PMBOK® guide)*. (6th ed.). (pp. 69-128). PMI Publications.

## Lecture

### ▼ What is a resource?

Resources include the people you're working with, stakeholders, equipment, materials, and other supplies on the site that will be worked with during the length of the project.

### ▼ Before any resource can be allocated and tasked, you must... know the scope of the project.

### ▼ Why identify appropriate resources?

It is important to know what is available (people, equipment, etc.) so that you can have an accurate picture of the resources that need to be purchased and who is going to be assigned to what task within the project.

### ▼ What should be included in a resource dependency plan?

Bottlenecks can trap resources and cause shortfalls.

### ▼ What is a contingency plan?

A plan in case team members become bogged down in a specific area or in case a risk happens and you run low on needed resources.

Having this redundancy ensures that your plans are not overly developed on a single process that could become a single point of failure.

### ▼ How to tailor project processes?

Consistently review and modify project data, and to continually take stock of the situation and resources to make sure that a project is performed in accordance with the work breakdown structure (WBS) in the organization.

### ▼ What are common tailoring processes?

Common processes that are part of tailoring within project management include the addition and removal of specific tasks or work projects (Whitaker, 2014). In addition, the changing of timelines, state of completion, and responsibilities for individual stakeholders and resources are all part of ensuring that the procedures are customized to meet project objectives.

### ▼ Who can administer these processes?

A governing body that can assist with altering the WBS and provide assistance in approving changes that may alter the scope of the project.

▼ What are the phases of the tailoring process?

1) The best way to start this tailoring process off is to assess where the organization is, where the project is, and where they would like to be.

This provides a benchmark for future change and showcases an ability for measurement to see how much has actually changed.

2) The next phase in the process is to identify basic inputs, like template software processes and other supporting material for things similar to what is being taken on.

It is also necessary to identify appropriate constraints. Any financial, industry, or legal entanglements need to be identified so that they can be worked through.

▼ How does tailoring involve customization?

It has a customer-oriented focus, and the needs of the client become the most important factor in the development of the project

▼ What is the biggest reason for using a product knowledge base?

It provides consistent and standardized service metrics.

There is no need for detailed research as answers are readily available.

It also reduces the overall training budget because the latest information and consistent guidance is available through the product knowledge base.

▼ What is the reason for the implementation of integrated change control?

To ensure that changes can be accepted or rejected based upon project impact and an evaluation of the change control board.

A change submitted to the board should be reviewed for estimated cost, risk, quality of change, resource usage, scope, and satisfaction upon delivery.

Integrated change control also helps reduce the number of changes. The more changes there are, the greater the probability that the project will be delayed and over budget.

- ▼ Why should a project manager try to adhere to the identification of requirements as early as possible?

This helps to integrate an appropriate scope and work breakdown structure and will minimize change processes on integration.

- ▼ Why should a project manager seek to identify risks and establish time and cost factors associated with a project?

The earlier these are established, the easier it is to put templates in place for change control management.

- ▼ What should the change control board do?

The change control board should actively handle the change management process and produce clear roles and responsibilities to approve associated changes.

The change control board facilitates decisions and can review and analyze requests for change.

Typically, they just approve or reject change requests.

- ▼ What is the role of the project manager in regards to change?

The key role of the project manager is to do everything they can to eliminate the need for change.

When the project manager is able to leverage information from the team, management, customers, and stakeholders, it is possible to decrease the impact of changes and assist in the change request process rather than reacting to it.

- ▼ Where are changes updated?

In the work breakdown structure.