



# Strategic Project Management

## Unit 6

# Course Layout and Overview

- Seven units
  - Unit One: What is Project Management
  - Unit Two: The Project Lifecycle
  - Unit Three: Initiating Projects
  - Unit Four: Planning Projects
  - Unit Five: Executing Projects
  - **Unit Six: Monitoring and Controlling Projects**
  - Unit Seven: Closing Projects



# Unit 6 Learning Outcomes



- plan various communication requirements during project execution
- compare actual progress to plans, update information, monitor implementation of project and changes
- apply metrics and reporting techniques to monitor and control a project
- identify variances and tolerances to set the boundaries for acceptable results
- evaluate the use of earned value analysis to complete work performance reports
- determine if a project is on schedule or on budget using project software reporting features

# Why Are Learning Outcomes Important?

- Every learning outcome ties back to course materials and content.
- Assessments are tied to each learning outcome.
- Test Preparation



# Unit Six Overview Topics

- Definitions
- Progress plans
- Metrics and reporting techniques
- Project software

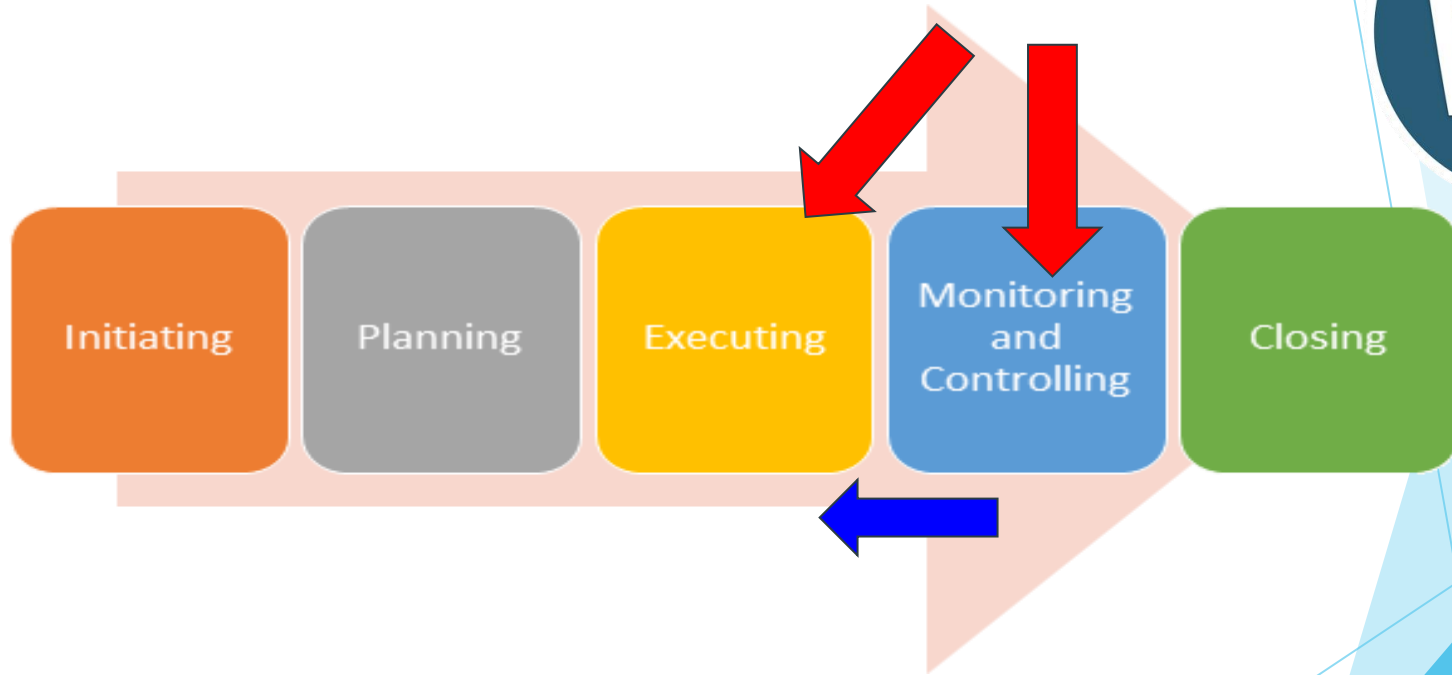


# Project Management Definitions

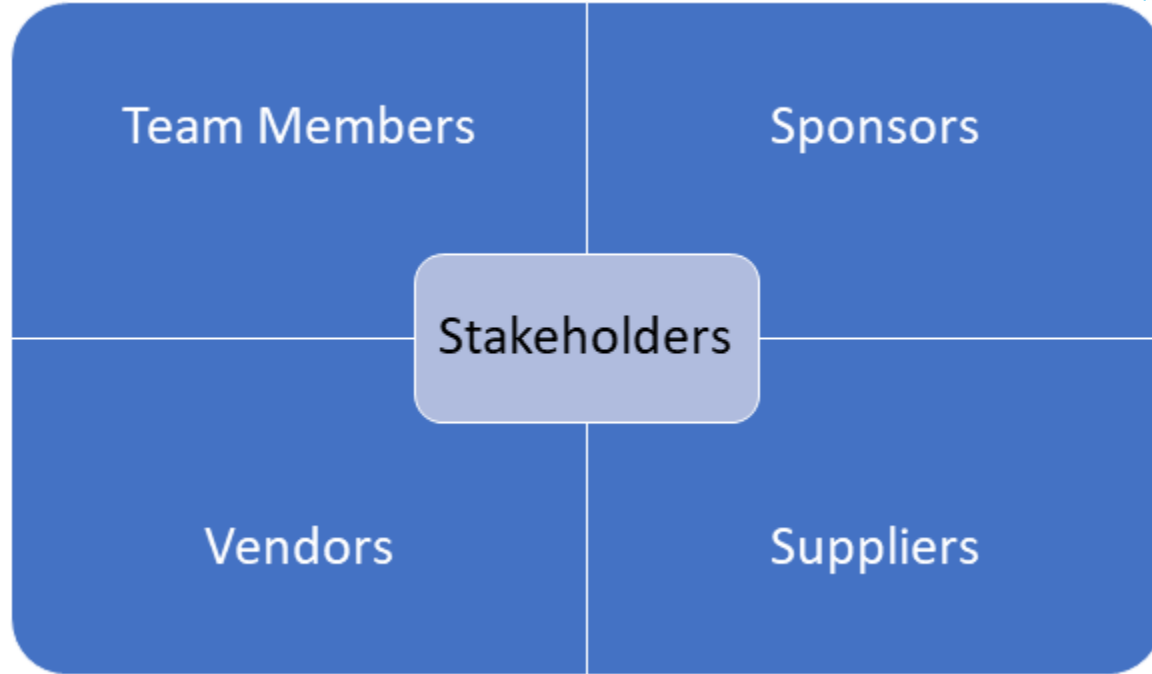
- Earned Value Management
- EVM
- Project software
- CPI
- KPI
- SPI



# Project Management Life Cycle



# Communication





# Communication – how often



	Daily updates	Milestone Updates	Individual element information	Ordering
Team Members	✓	✓	✓	✓
Sponsors		✓	✓	
Vendors			✓	✓
Suppliers				✓

# Communication - format



	Synchronous	Asynchronous
Team Members	✓	✓
Sponsors	✓	✓
Vendors	✓	✓
Suppliers	✓	✓

# Monitoring - comparison

- Change control board
- Manage constrained resources
- Resource loading



# Monitoring - KPI

- **Key performance indicators**

- Budget
- Time spent vs time planned
- Resource conflict
- Number of errors
- Project milestones
- Number of Change requests



# Monitoring - Metrics and Reporting

- Key performance indicators
- **What metrics**



# Monitoring – Boundaries – cost variance

- **Cost Variance**
- Schedule variance
- a cost variance means there is a difference between the planned cost and actual cost of the project. This can mean that the project has cost more or less than anticipated.



# Monitoring – Boundaries – schedule variance

- Cost Variance
  - **Schedule variance**
- a schedule variance means that there is a difference between the amount of work that was planned to be complete and the actual amount of work complete.



# Monitoring - Boundaries

- Cost Variance
- Schedule variance
- **Corrective action**





# Monitoring - Earned Value Analysis

- Earned value compares the actual work completed with what should have been completed at a given point in time to determine if the project is on schedule or on budget.



# Monitoring - Earned Value Analysis - SPI

- Schedule performance index (SPI)

Formula:

$$(SPI) - SPI = EV / PV$$



# Monitoring - Earned Value Analysis - CPI

- Cost performance index (CPI)

Formula:

$$(CPI) - CPI = EV / AC$$



Using Project Software



Microsoft Project

SmartSheet

# Using Project Software - types

- **Burndown chart** - will show the planned work, completed work, and remaining work left for the project.
- **Cost Flow** - shows a project total costs, planned, costs, and remaining costs.
- **Cost Overruns** - shows both task cost variances and resource cost variances.
- **Resource Cost** - shows the total costs of resources to date.
- **Earned Value Management** - provides earned value indices.
- **Critical Tasks/Late Tasks/Slipping Tasks** - shows tasks that are critical to the project and need to be monitored, tasks that are late and/or slipping and need to be addressed.



## Controlling

- Using KPIs,
- EVA,
- project software



## Conclusion - Unit 6



- plan various communication requirements during project execution
- compare actual progress to plans, update information, monitor implementation of project and changes
- apply metrics and reporting techniques to monitor and control a project
- identify variances and tolerances to set the boundaries for acceptable results
- evaluate the use of earned value analysis to complete work performance reports
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# What's next?

