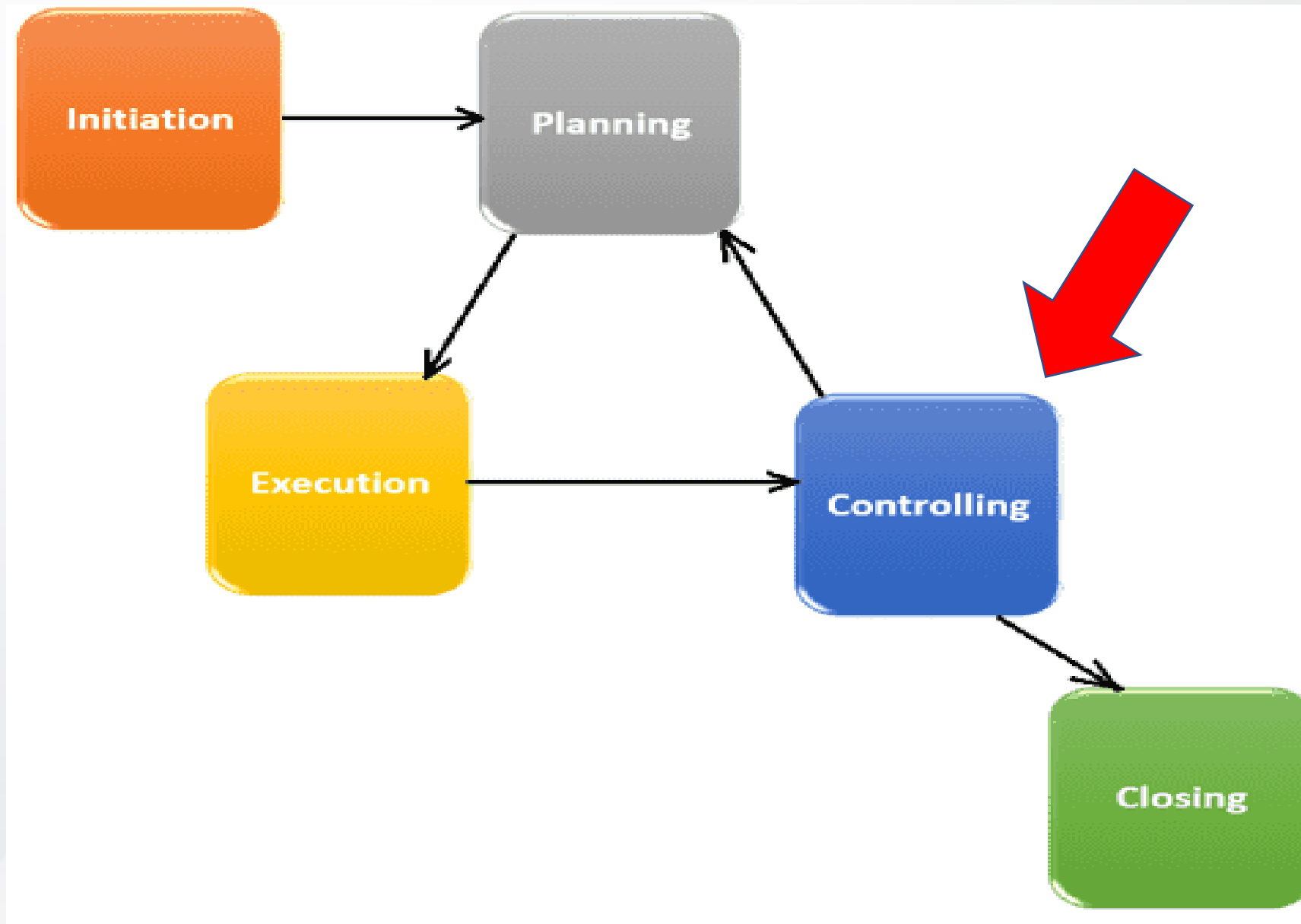


Project Planning

Lecture 9

PMG202
Monitoring & Controlling

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In this lesson, we'll:

- Learn the **steps, methodology, and processes** that lead to successful Project Monitoring and Controlling Phase.
- Find **Project Monitoring and Controlling Steps and Processes**, the helpful tools to support your Project's next success, and the importance of both Monitoring and Controlling along all the phases of the Project Life Cycle .

1) The Project Monitoring



The Project Monitoring definition

- It is normally impossible to judge if work is going in **the right direction** without effective Project Monitoring
- Project Monitoring is defined as a process that is performed to **track the progress of Project Execution** so that **potential problems can be identified** well in time for the **taking of corrective actions** for the purpose of controlling the execution of the Project.
- It focuses on **reviewing progress** against achieving Goals

The Project Monitoring definition

- **Project Monitoring Activities**

Measuring progress of Project activities against established Schedules and indicators of success.

Identifying factors affecting the progress of Project activities.

Measuring the response of the decision taken on the Project Activities and its effect on the progress of Project Implementation.

To minimize the risks of Project failure.

Steps in Project Monitoring

Study of the project, its schedule, and costs



Selections of the parameters to be monitored



Selection of the frequency of reporting and its format



Collection of data for the parameters being monitored



Analysis of data by using appropriate monitoring technique



Presentation of the analyzed data and reporting it to the management



Review of the presented data by the management for decision making

2) The Project Control

- **Project Control** is a process that encompasses the Resources, Procedures, and Tools for the Planning, Monitoring, and Controlling of **all phases** of the capital Project Lifecycle.
 - It includes **estimating cost** and **Schedule Management, Risk Management, Change Management, Earned Value progressing, and forecasting**
 - **Developing a Risk Management** Plan and **Optimizing Project Strategies** to enable **better outcomes in the future**

3) Project Monitoring and Control Process

- The monitoring and control process **tracks performance metrics** to keep a project **on schedule, on budget, and within scope**.
- The process helps project teams **discover problems before they occur**.
- The Project Monitoring and Control Process aims at tracking and reviewing the Project and is undertaken **From the Initiation of the Project to its Closure**

- **Monitor Key Performance Indicators (KPIs):** Monitoring KPIs **keeps project deliverables on track** and performance up to date. Project managers use data **on timelines, budgets, and quality** to **enable better decisions**, make changes **to avoid problems**, and capitalize on opportunities.

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- **Monitor Change Requests:** Measuring project performance data helps reveal whether the project is **on track or if changes are necessary**. If the project is off course, then a change request will be submitted and implemented to make a course correction.

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- **Monitor Project Scope:** This step **helps ensure that any changes to the project scope are verified and documented.** You'll need to update any relevant documents, such as a project scope statement and work breakdown structure. You'll also want to determine any **Schedule and cost adjustments** that are relative to a scope increase that can cause a shift in strategy.

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- **Identify Risks:** Ideally, risk identification should occur throughout a project; when risks arise, you **have the relevant information available to make the right decision.**
 - **Communicate with Team Members, Stakeholders, and Clients:** Maintaining regular communication keeps projects on track and helps avoid misunderstandings that cost time and money. It's vital that **stakeholders and team members receive all relevant information in a timely manner.**

4) How to Create a Project Monitoring and Control Plan

- A project monitoring and control plan is developed during the project lifecycle's planning phase.

1. Outline the project.

Establish **scope**, **schedule**, and **budget** baselines for benchmarking according to the project plan. The plan defines project goals, resources, and milestones.

2. Break down the project into subtasks or units of work.

A **work breakdown structure** is a useful tool that project managers can use to **create subtasks and manage work**. This visualization helps project managers track and simplify performance and deliverables.

3. Execute the project plan, and report and analyze to identify variances.

Determine if **variances are acceptable** and **continue to monitor** them.

Find the **cause of unacceptable** variances and **make adjustments**.

5) How to Implement Project Monitoring and Control

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1. **Monitor Project Parameters:** The project plan will include the scope of the project and measurements for success. **Project managers use KPIs to track schedule, effort, and cost and to ensure they align with the project plan.**
 2. **Monitor Stakeholder Involvement:** By positioning and **communicating** with the project team, management, and clients, **you keep everyone engaged and on task.**
 3. **Monitor Risk:** When you complete **risk assessments** throughout the life of the project, **you avoid issues and enable mitigating negative impacts** on the project timeline and budget.

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4. **Take Corrective Action to Control Progress:** Project managers use the **project plan** as a baseline to **control progress and track changes** until resolution or the project enters the closure phase.
 5. **Monitor and Manage Data Documentation:** **Documenting performance and changes** in the project keeps stakeholders involved, mitigates issues, and informs future projects

6) Project Monitoring and Control Best Practices

- **Define Project Management Team Roles:** Make sure that **team members** know the **expectations and the timelines** to meet.
- **Identify a Point of Contact:** When problems arise, there should be a dedicated **person** who is responsible **for tracking, documenting, and monitoring any issues**.
- **Determine the Frequency of KPI Reporting:** When developing the project plan, decide **how often you'll conduct KPI reporting** and stick to that schedule. This data is **essential for monitoring and control performance**.

- **Define Variance Thresholds for Schedule, Budget, and Cost:** Decide what **percentage of change is acceptable** and the variance threshold figure that requires change.
- **Determine if Variance Cause Is Common or Unique:**
 - **Work continues** without change under **expected and acceptable variance**.
 - If the variance is caused by the **unexpected**, identify **and implement the proper change**.



- **Scrutinize Change Orders:** Review documented change requests with the project team to approve or reject them.
- **Monitor and Control Scope Creep:** Mitigate scope creep to maintain project parameters and recognize that project change may impact outcomes.
- **Conduct a Rigorous Approval Process at Completion:** Make sure to document and file all approvals appropriately.

7) Project Monitoring and Control Techniques

- Project **Plan** Monitoring → critical path method (CPM).
- Project **Budget** Monitoring → earned value management (EVM).
- Project **Status** Monitoring → Project Status Reports



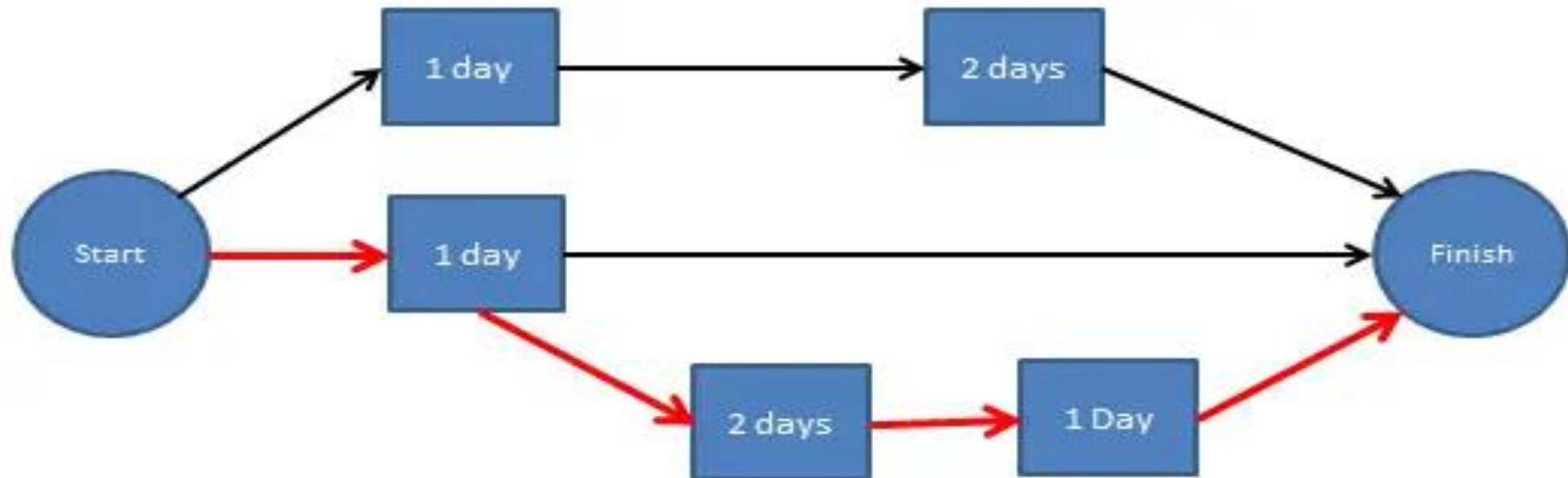
Project monitoring and control techniques address three areas in project management:

1. Project **Plan** Monitoring:

- Use the critical path method (CPM) to identify essential project milestones and keep deliverables on schedule.
 - The critical path method (CPM) is a technique where you **identify tasks that are necessary** for project completion and **determine scheduling flexibilities**.

1. Project **Plan** Monitoring:

- The critical path method (CPM)

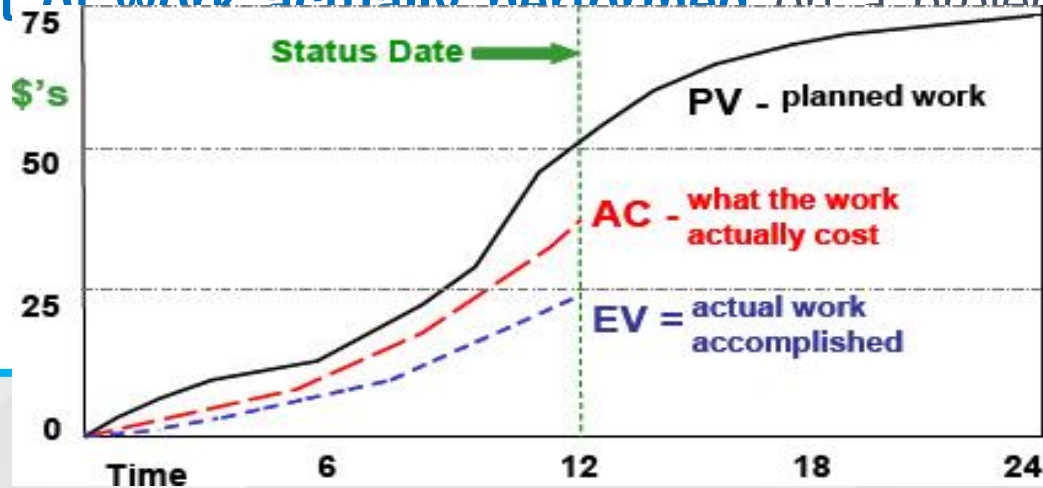


Critical Path = 4 Days

Project monitoring and control techniques address three areas in project management:

2. **Project Budget Monitoring:** Use **earned value management (EVM)** to assign project tasks according to their cost.

- **Earned Value Analysis (EVA)** is a method that allows the project manager to measure the **amount of work actually performed** on a project beyond **the basic review of cost**





Project monitoring and control techniques address three areas in project management:

3. **Project Status Monitoring:** Use **project status reports** to standardize the reporting process and **identify completed tasks, key takeaways, risks, and real-time progress.**

Summary

①

②

③



1

Initiation

2

Planning

3

Execution

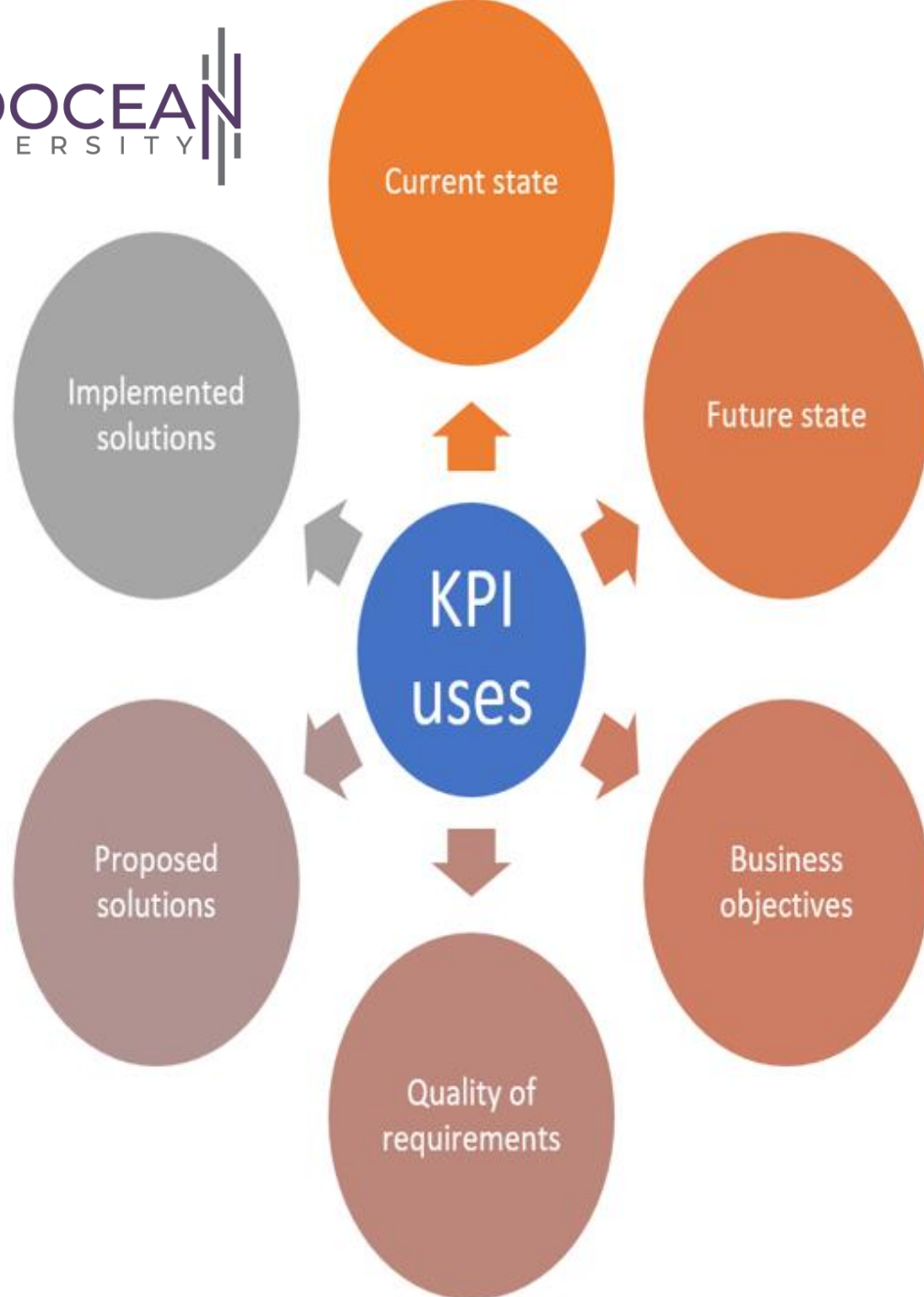
4

Monitoring & Control

5

Closure

- 
- **The Project Monitoring: definition, activities, steps**
 - **The Project Control**
 - **Project Monitoring and Control Process**
 - **How to Create a Project Monitoring and Control Plan**
 - **How to Implement Project Monitoring and Control**
 - **Project Monitoring and Control Best Practices**
 - **Project Monitoring and Control Techniques**





Questions

Without effectiveit is normally impossible to judge if work is going in the right direction.

Monitoring

Controlling
Planning
Execution

----- includes estimating cost and Schedule Management, Risk Management, Change Management, Earned Value progressing, and forecasting.

Controlling

Monitoring
Planning
Execution

Questions

Developing a Risk Management Plan and Optimizing Project Strategies to enable better outcomes in the future are activities.

Controlling

Monitoring
Planning
Execution

The KPIs are the:

Key Performance Indicators

Key Planning Interests
Key Programming Indicators
Key Performance Interests

Questions

The Project Monitoring and Control Process aims at tracking and reviewing the Project and is undertaken. from:
the Initiation of the Project to its Closure.

the Planning of the Project to its Closure.

the Initiating of the Project to its Execution.

the Planning of the Project to its Execution.

Which element ISN'T included in the Performance measurement Baseline?

The Requirements

The Budget

The Schedule

The Targets of the Project

Questions

----- defined as a process that is performed to track the progress of Project Execution so that potential problems can be identified well in time for the taking of corrective actions for the purpose of controlling the execution of the Project

Project Monitoring

Project Control

Project Planning

Project Execution

Which statement DOESN'T describe the role of the Project Manager?

Project Manager must bring funds for the Project.

Project Manager manages the Project Team and Stakeholders to meet these Targets by the end of the Project.

The Project Manager is accountable for meeting the Performance Measurement Baseline.

The Project Manager takes actions to correct any variances.

Questions

For Project Plan Monitoring, ----- used to identify essential project milestones and keep deliverables on schedule.

critical path method

Earned value management

Project Status Reports

All answers are incorrect

For Project Budget Monitoring, ----- used to assign project tasks according to their cost.

Earned value management

critical path method

Project Status Reports

All answers are incorrect

Questions

For Project Status Monitoring, ----- used to standardize the reporting process and identify completed tasks, key takeaways, risks, and real-time progress.

Project Status Reports

Earned value management

critical path method

All answers are incorrect

Which of the following is/ are Project Monitoring and Control Techniques:

Project Status Reports

Earned value management

critical path method

All Answers are correct.

تحدد عمليات مراقبة المشروع والتحكم فيه ما إذا كان هناك أي انحرافات في النتائج الفعلية عن القيم المخطط لها.	Project Monitoring and Control Processes identify if there are any deviations in actual results from the planned values. True
خلال مرحلة المراقبة والتحكم، يكون دور راعي المشروع أكثر أهمية من دور مدير المشروع.	During the Monitoring and Controlling Phase, the role of the Project Sponsor is more important than the role of the Project Manager. False
إذا لم يتم تحديد الانحرافات ومعالجتها، فإنها تؤدي إلى نتائج غير مخطط لها وغير مرغوب فيها للمشروع.	If deviations are not identified and addressed, they result in unplanned and undesired Project outcomes. True
في دورة حياة المشروع، تحدث مرحلة مراقبة المشروع والتحكم فيه جنباً إلى جنب مع مرحلة التنفيذ.	In the Project Life Cycle, the Project Monitoring and Control Phase happens in tandem with the Execution Phase. True
طريقة المسار الحرج (CPM) هي تقنية تحدد فيها المهام الضرورية لإكمال المشروع وتحدد مرونة الجدولة.	The critical path method (CPM) is a technique where you identify tasks that are necessary for project completion and determine scheduling flexibility. T
تقارير حالة المشروع هي طريقة تسمح لمدير المشروع بقياس مقدار العمل الذي تم تنفيذه بالفعل في المشروع بما يتجاوز المراجعة الأساسية لتقارير التكلفة والجدول الزمني.	project status reports are a method that allows the project manager to measure the amount of work actually performed on a project beyond the basic review of cost and schedule reports. F
KPIs هي اهتمامات التخطيط الرئيسية.	The KPIs are the Key Planning Interests. F
تهدف عملية مراقبة المشروع والتحكم فيه إلى تتبع ومراجعة المشروع ويتم تنفيذها من تخطيط المشروع إلى إغلاقه.	The Project Monitoring and Control Process aims at tracking and reviewing the Project and is undertaken From the Planning of the Project to its Closure. F
نحن نستخدم أسلوب المسار الحرج (CPM) لمراقبة حالة المشروع.	We use the critical path method (CPM) technique for Project Status Monitoring. F
نحن نستخدم تقنية إدارة القيمة المكتسبة (EVM) لمراقبة ميزانية المشروع.	We use the earned value management (EVM) technique for Project Budget Monitoring. T
نحن نستخدم تقنية تقارير حالة المشروع لمراقبة حالة المشروع.	We use the project status reports technique for Project status Monitoring. T
مراقبة المشروع والتحكم فيه هي المرحلة الثانية من دورة حياة المشروع	Project Monitoring and control is the second phase of the project life cycle. F



Thank You