

Objective

This activity is designed to teach students how to use Trello with the Costello Power-Up for project management. Students will apply project management metrics to track and manage costs and progress within a project board.

Scenario and Data

A project named "*Website Development Project*" is assigned with the following details:

- **Budget at Completion (BAC):** 100,000
- **Planned Completion:** 6 months
- **Data after 3 months:**
 - Planned Work Completed: 50%
 - Actual Work Completed: 40%
 - Actual Cost (AC): 60,000

Steps to Complete the Activity Using Trello with Costello

Step 1: Set Up the Project Board in Trello

1. Create a new Trello board named "*Website Development Project*."
2. Add three lists to represent the project stages:
 - **To Do** (Tasks yet to start)
 - **In Progress** (Tasks currently being worked on)
 - **Done** (Completed tasks)
3. Add the following task cards to the **To Do** list:
 - Task 1: Requirements Gathering
 - Task 2: Design
 - Task 3: Development Sprint 1

Step 2: Add the Costello Power-Up

1. Open the Trello board.
2. Click on the **Power-Ups** button at the top of the board.
3. Search for *Costello* in the Power-Ups directory.
4. Click **Add** to enable Costello for your board.

Step 3: Assign Costs to Task Cards

1. Open each task card and use the Costello section to assign costs:
 - Task 1: 20,000
 - Task 2: 30,000
 - Task 3: 50,000

2. Save the costs in each card.

Step 4: Update Progress

1. Move cards between lists to reflect progress:
 - Planned progress: Move tasks to **In Progress** or **Done** based on the planned schedule (e.g., 50% of work planned).
 - Actual progress: Update card placement to reflect actual work completed (e.g., 40% of work completed).

Step 5: Perform Calculations

1. Use the provided formulas to calculate:
 - Planned Value (PV): 50,000
 - Earned Value (EV): 40,000
 - Actual Cost (AC): 60,000
 - Schedule Performance Index (SPI): 0.8
 - Cost Performance Index (CPI): 0.67
2. Document the calculations in the **Description** or **Comments** section of the Trello task cards.

Step 6: Analyze Performance

1. Use the SPI and CPI values to evaluate the project:
 - If $SPI < 1$, the project is behind schedule.
 - If $CPI < 1$, the project is over budget.
2. Add comments on task cards summarizing the performance analysis.

Step 7: Suggest Corrective Actions

1. Create a new list in Trello named **Corrective Actions**.
2. Add cards for each proposed action, such as:
 - Adjusting timelines.
 - Reallocating resources.
 - Optimizing spending.
3. Assign team members to these cards and set due dates using Trello.

Outcome

By completing this activity, students will:

- Learn how to use Trello with Costello for cost and schedule tracking.
- Gain practical experience in applying project management metrics.
- Develop skills to analyze and improve project performance.