Project Performance Calculations

LaBita Online Shopping Site Improvement Project (LOSSI)

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I) Assumptions:

- Budget at Completion (BAC) = $300,000.00

- Our group number is 15. Hence, the number of weeks planned to complete the project is 22.

II) Assumptions:

- The project is halfway through the planned schedule (PV is at 50%)
    - Planned Value (PV) = BAC * 0.5 = $150,000.00

- Earned Value (EV) is at 45%
    - EV= PV * 0.45 = $67,500.00

- Actual Cost (AC) is 15% above plan
    - AC= PV * 1.15 = $172,500.00

Question 1: Calculate CPI.

Cost Performance Index (CPI) = EV / AC

= $67,500.00 / $172,500.00

= **0.39**

CPI<1, hence the project is less inefficient than anticipated.

Question 2: Calculate SPI.

Schedule Performance Index (SPI) = EV / PV

= $67,500.00 / $150,000.00

= **0.45**

SPI < 1, hence activity is behind schedule.

Question 3: Calculate EAC, using the influence of both CPI and SPI.

Estimate At Completion (EAC) = AC + [(BAC - EV) / (CPI * SPI)]

= $172,500.00 + [($300,000.00 - $67,500.00) / (0.39 * 0.45)]

= **$1,497,286**

Question 4: Report what percentage of over or under budget you calculate for the end of the project.

Budget Percentage = ((EAC - BAC) / BAC) * 100

= (($1,497,286 - $300,000) / $300,000) * 100

= 399.10

This implies that the project will be **399.10%** over the planned budget to complete the project.

Question 5: Calculate TCPI, using an extra 10% for your budget.

New Budget = (BAC + 10%)

= $300,000 + ($300,000 * 0.10)

= $330,000

To complete Performance Index (TCPI) = (Remaining Work) / (Remaining Funds)

Remaining Work = Total budget – Earned Value

= BAC – EV

= $330,000 - $67,500

= $262,500

Remaining Funds = Estimate at Completion – Actual Cost

= BAC – AC

= $330,000 - $172,500

= $157,500

TCPI = $262,500 / $157,500

= 1.667 → **1.67**

Since the TCPI is greater than 1, the project is **harder** to complete on the planned budget.

Acronym Reference Table

BAC	Budget at Completion
EV	Earned Value
AC	Actual Cost
PV	Planned Value
CPI	Cost Performance Index
SPI	Schedule Performance Index
TCPI	To complete Performance Index