

The project planning and design phases are complete.
As the project manager for ABC Corporation, you've decided to use a weighted scoring model for this hypothetical project.

Describe what the **weighted scoring model** is X
and how it applies to the integration management process. X

Evaluate the strengths and weaknesses of the scoring model. X

Use your text, research, and references to flesh out the **Cost Performance Index** and the **Schedule Performance Index** of your hypothetical project X

- Page 262 for index definitions
- See 10.3 in **textbook** for greater explanation

Hi,

A project management method for prioritizing project decisions is a weighted scoring model. To build a model the following must be determined: the project features, scoring criteria, criteria weight values (percentages), and weighted matrix. Once the matrix is created, scores can be multiplied by the weights to get the total weighted scores.

Project features can subsequently be ranked by importance. This enables a project manager to make appropriate trade-offs throughout the integration management process.

Other techniques may provide more value in making trade-offs. They can also inform scoring criteria or be used in tandem with a weighted scoring model. For instance, a balanced scorecard transforms a company's value drivers into metrics. Financial assessments like ROI or payback analysis can strongly influence trade-offs as well. A return on investment calculation can ascertain whether or not an aspect of a project

passes the threshold for the company's required rate of return. A payback analysis identifies when expenditures will recoup the monetary investment.

To establish the Cost Performance Index (CPI) and Schedule Performance Index (SPI) for a project we would first need to know the project's planned value (the budgeted cost for the scheduled work), earned value (the value of the work completed to date), and actual cost.

Each index is calculated as follows:

$$\text{CPI} = \text{Earned Value} / \text{Actual Cost}$$

$$\text{SPI} = \text{Earned Value} / \text{Planned Value}$$

e.g. If a project has a planned value of \$5000 and 80% of the work has been completed, we can calculate the earned value (\$4000). Here we can calculate SPI (0.80). If we know the actual cost spent is \$3000, we can calculate the CPI (1.33). Since the CPI is greater than 1.0 and the SPI is less than 1.0, the project is under budget and behind schedule.

References

ProductPlan. (n.d.) *Weighted Scoring*. ProductPlan.

<https://www.productplan.com/glossary/weighted-scoring/>

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