

Planning Process Group Artifacts

6.4 Estimate Activity Resources

6.4.2 Bottom-up Estimating

PMGT 690, ERAU, Prof. Sherman

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6.4.2 Bottom-Up Estimating (Tools and Techniques): This was a blog that was taken from PMGT 613 describing the different estimating techniques.

Describe estimating techniques from the Project Management Institute (PMI)®

Practice Standard for Estimating, Figure 4-2

Analogous techniques: or top-down estimating, used when little information is available about the project or the new project is very similar to previous projects. This technique results in a total project estimate and is the technique of choice for early estimates where detailed information is not available (PMI, 2006). This is when there is not a lot of details about what the actual work will be done. You can use lessons learned to get 'ball park' figures. **Parametric technique:** this technique is used to make estimates of the total duration, as well as estimating the cost and resource utilization. Once details of the project become more readily available and the WBS is broken down into further levels, the **bottom-up technique** can be utilized. Expenditures of every resource can be estimated with more accuracy. This will result in more transparency and a structured estimate for the project as a whole.

The techniques described here in relating to estimating costs depends what is known on hand. When the project is in its early stages and information is somewhat limited, it is not as imperative that estimates be very accurate. It starts off with broad strokes using the analogous techniques. As the project develops and more information is collected, the estimating technique will change as well. Parametric estimating uses statistical relationships between relevant historical data to calculate costs. Again, this can only work when more information presents itself. Finally, when project managers can estimate each component of work, they can summarize or roll up costs and present to top management. This is the bottom up technique and presents the most degree of accurate estimating.

Reference List

Project Management Institute (2006) *Practice Standard For Work Breakdown Structure*.
Newton Square, PA: PMI Inc.