

Week 3 Blog “Estimating Techniques”

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Welcome to my week 3 Blog!

This week, I've decided to describe estimating techniques from the Project Management Institute (PMI)® Practice Standard for Estimating, Figure 4-2. The video training provided on Eric really opened my eyes to the differences between each of the three estimating techniques, and how much information is needed to provide each type of estimate. From a project point of view, the easiest estimate to provide is the Analogous estimate, in which the estimate is based on a previous project of the same type or at least a very close version. The benefit of this type of estimate is that it can be done very quickly, however the downfall is the lack of accuracy. For that reason, analogous estimates are given as a range of costs, such as between \$150K and \$200K. Our previous use of PERT analysis was merely a method for estimating under the analogous technique. Since the optimistic, most likely, and pessimistic values are used, the further apart the optimistic and pessimistic values are, the broader the estimate range and likelihood this method will be of value (PMI, 2011, p. 30).

The second type of estimate, indicated in figure 4-2, is the Parametric estimate in which a little more detail is understood during the estimation. Figure 4-2 represents this level estimation to be based on data known for levels 1, 2, & 3 of the work breakdown structure (WBS). This technique utilizes known relationships between costs and activities performed. If it takes "x" amount of labor and "y" amount of material to perform 1 given task, then it can be calculated that it would take twice that amount to estimate the cost of performing a task twice that size. This level of historical cost understanding makes it possible to plug known data into projects of any size.

The third type of estimate is the bottom-up-technique. This technique estimates the value of a project based on a complete WBS, activity list, and known resources. It is the most accurate estimating technique, but not the easiest to employ during early stages of a project; especially projects with little known historical data to draw upon. Figure 4-2 indicates that this level of estimation includes all information down to the work package level. I realize the more detail, the more accurate the estimate, but I wonder how often this level of detail is known early in the project estimation phase. Perhaps utilizing each of these techniques in combination with one another would provide the best possible result. Either way, understanding which technique applies to each level of the WBS is certainly helpful to know.

Reference

Project Management Institute (PMI) (2011), *Practice Standard for Project Estimating*, Newtown Square, PA., Project Management Institute, Inc.