



Costing Techniques



The optimistic estimate of number of lines of code LOC for a given function is based upon the analyst's previous experience. So are the most likely estimate and pessimistic estimate of LOCs. Based upon these, the expected number of lines of code L_e , and the Deviation L_d , can be derived as follows: $L_e = (a + 4m + b)/6$ and $L_d = (b - a)/6$ ($L_d = (\sum((b_i - a_i)/6)^2)^{0.5}$ for multiple entries in a table).

The \$/line is the cost per line, and the Line/month is the productivity for a particular function. From the expected LOC and the \$/line we can estimate the cost. From the expected LOC and the Line/month we can estimate the person-months of the project.

The Deviation L_d enables us to give a range of estimates. for example,

Expected LC = 33360
Deviation = 1100

Therefore

68% range = 32260 to 34460 LOC
99% range = 26760 to 39960 LOC