

<p>Forward Pass</p> <p>ES = EF of the predecessor node</p> <p>EF = ES + Du</p> <p>Backward Pass</p> <p>LF = LS of the Successor</p> <p>LS = LF – Du</p>	<table border="1" data-bbox="971 128 1239 268"> <tr> <td>ES</td> <td>Du</td> <td>EF</td> </tr> <tr> <td colspan="3">Node</td> </tr> <tr> <td>LS</td> <td>Float</td> <td>LF</td> </tr> </table> <p>Slack = LF – EF = LS – ES</p> <p>Free Float = ES(Successor) - EF(Predecessor)</p>	ES	Du	EF	Node			LS	Float	LF
ES	Du	EF								
Node										
LS	Float	LF								
<p>CoQ = ((Review Efforts + Test Efforts + Training Efforts + Rework Efforts + Efforts of Prevention) / Total Efforts) x 100 %</p> <p>PERT = $\frac{O + 4ML + P}{6}$</p>	<p>MEAN → Average</p> <p>MODE → The “most found” number</p> <p>RANGE → Largest - Smallest Measure.</p> <p>MEDIUM → No in the middle or avg. of 2 middle Nos</p>									
<p>STD. DEV. OF TASK = $\frac{P - O}{6}$</p> <p>TASK VAR. = $\left(\frac{P - O}{6}\right)^2 = \text{Std. Dev}^2$</p> <p>CP STD. DEV. = $\sqrt{\sigma^2 + \sigma^2 + \sigma^2}$</p>	<p>SIGMA 1 = 68.26</p> <p>2 = 95.46</p> <p>3 = 99.73</p> <p>6 = 99.99</p> <p>Channels of Communication</p> <p>COMM = $(N^2 - N) / 2 = (N \times (N - 1)) / 2$</p>									
<p>PROJECT SELECTION</p>										
<p>PV = $\frac{FV}{(1+r)^n}$</p> <p>FV = PV x (1+r)</p> <p>NPV = $\sum \left(\frac{PV}{(1+r)^n} + \frac{PV}{(1+r)^n} + \frac{PV}{(1+r)^n} + \frac{PV}{(1+r)^n} \right)$</p>	<p>Cash Flow = Cash Inflow – Cash Outflow</p> <p>Discounted Cash Flow = CF x Discount Factor</p> <p>ARR = $\Sigma \text{Cash Flow} / \text{No. of Years}$</p> <p>ROI = (ARR / Investment) * 100 %</p> <p>BCR = Benefits / Cost</p> <p>Exp. Value = Probability % x Consequence \$</p>									
<p>Class of Estimates</p> <p>Definitive +5%</p> <p>Capital Cost +10-15%</p> <p>Appropriation +15-25%</p> <p>Feasibility +25-35%</p> <p>Order of Magnitude > +35%</p>	<p>Contract Incentives</p> <p>Savings = Target Cost – Actual Cost</p> <p>Bonus = Savings x Percentage</p> <p>Contract Cost = Bonus + Fees</p> <p>Total Cost = Actual Cost + Contract Cost</p>									
<p>EARNED VALUE ANALYSIS</p>										
<p>PV (Present Value) = BCWS (Budgeted Cost of Work Schedule)</p> <p>EV (Earned Value) = BCWP (Budgeted Cost of Work Performed)</p> <p>AC (Actual Cost) = ACWP (Actual Cost of Work Performed)</p>										
<p>CV = EV – AC</p> <p>CPI = EV / AC (efficiency)</p> <p>SV = EV – PV</p> <p>SPI = EV / PV</p>	<p>ETC = BAC – EV or (BAC – EV) / CPI</p> <p>EAC = AC + ETC</p> <p>EAC = BAC / CPI</p> <p>VAC = BAC – EAC</p>									
<p>% COMPLETE = EV / BAC x 100</p> <p>% SPENT = AC / BAC x 100</p>	<p>CV% = CV / EV x 100</p> <p>SV% = SV / PV x 100</p>									