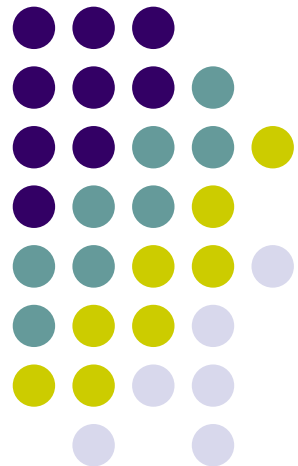
Performance Measurement

Earned Value



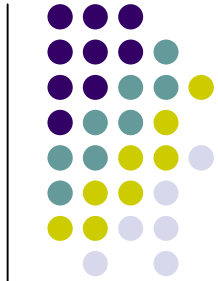
Measuring with Earned Value

- Advantages
  - Analysis can be done at multiple levels
  - Allows point-in-time measurement
  - Provides trend analysis capability
  - Provides predictive potential
  - It is objective

Measuring with Earned Value

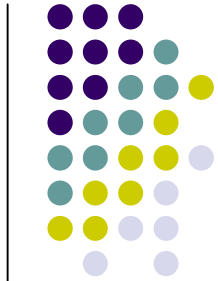
- Disadvantages
  - Requires learning a new approach
  - Mathematically complex

Earned Value Terminology



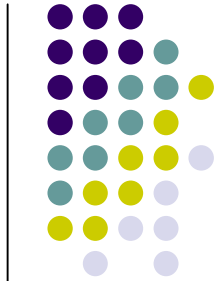
- Planned Value (PV or BCWS)
  - Value of the work you expected to complete at the given point in time
- Earned Value (EV or BCWP)
  - Value of work actually accomplished at the given point in time
- Actual Cost (AC or ACWP)
  - Expenses incurred to accomplish the work completed at the given point in time

Cost & Schedule Variances



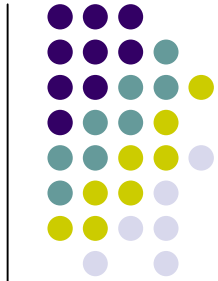
- Cost Variance (CV) $ = EV – AC
  - The difference between the estimated cost of an activity and the actual cost of that activity
- Schedule Variance (SV) ($) = EV – PV
  - The difference between the actual completion of an activity and the scheduled completion of that activity.

Example



- Module A is estimated to cost $100,000 and take 10 months.
  - 6 months into development, the costs incurred are $75,000
    - PV = $100,000
    - EV = $ 60,000
    - AC = $ 75,000

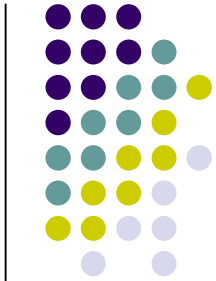
Calculation/Interpretation



- Calculation
  - **CV** = EV – AC { $60,000 – $75,000 = - $15,000}
  - **SV** = EV – PV { $60,000 – $100,000 = - $40,000}

- Interpretation
  - Project is
    - Over Budget
    - Behind Schedule

Take Away



- Requires a Project Plan
- Monitoring of the Plan
- Measuring Performance of the Plan
- Understanding Indicators
  - Negative = Over/Behind
  - Positive = Under/Ahead