



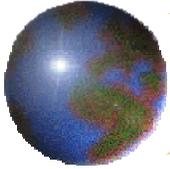
Earned Value Management Systems



James A. Wrisley, President

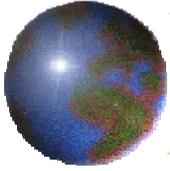
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Why EVMS?

- *OMB Circular A-11, Part 7:*
 - “All major acquisitions with development effort will include the requirement for the contractor to use an Earned Value Management System (EVMS) that meets the guidelines in ANSI/EIA Standard—748 to monitor contract performance.”
 - “EVMS is normally used on Fixed-Price Incentive contracts and Cost Reimbursement contracts for major acquisitions. EVM shall also be used on Firm-Fixed Price and any other type of contract or task order that meets the major acquisition threshold if that contract or task order contains a significant amount of development effort.”
 - “Agencies should have well documented thresholds clearly disseminated and implemented across the organization. Earned Value is required on all of these contracts because of their inherent risk. ”



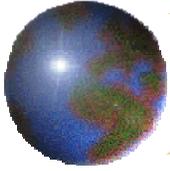
What is EVMS?

● It's not:

- ❑ A reporting requirement
- ❑ A software system
- ❑ A panacea for project problems
- ❑ Just the EV metric, or the ability to generate the data elements

● What it is:

- ❑ A **systematic PM process** that results in an integrated plan against which performance is measured objectively
- ❑ A systematic approach for **calibrating the health of a project**
- ❑ A tool for establishing meaningful **cost and schedule forecasts**

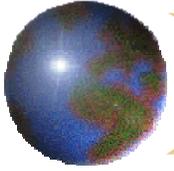


Earned Value Management Systems

*Management
Processes*

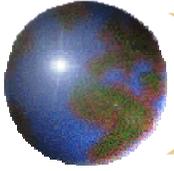
*Management
Information
System*

*People and
Culture*



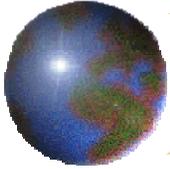
Fundamental EVM Objectives

- Plan all project work
- Objectively assess progress at performance level
- Summarize data for progressively higher levels of project management
- Analyze significant deviations from the baseline plan
- Forecast impacts on cost and schedule
- Maintain the baseline



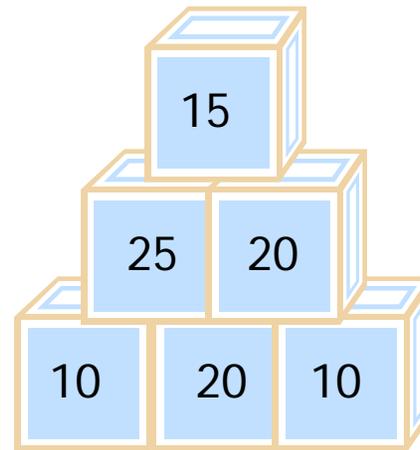
The 8 Key Data Elements of EVMS

- Budgeted Cost for Work Scheduled **(BCWS)**
 - Aka **"planned value" (PV)**
- Budgeted Cost for Work Performed **(BCWP)**
 - Aka **"earned value" (EV)**
- Actual Cost of Work Performed **(ACWP)**
 - Aka **"actual cost" (AC)**
- Budget At Completion **(BAC)**
- Estimate At Completion **(EAC)**
- Cost/Schedule Variances **(CV & SV)**
- Variance At Completion **(VAC)**



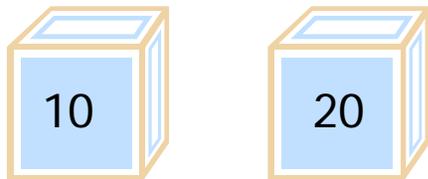
The Earned Value Metric

Project Objective

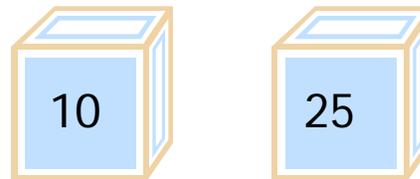


Total Planned Value (BAC) = 100

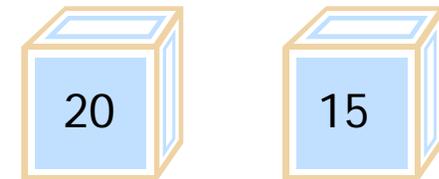
Day 1 = 30

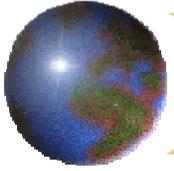


Day 2 = 35

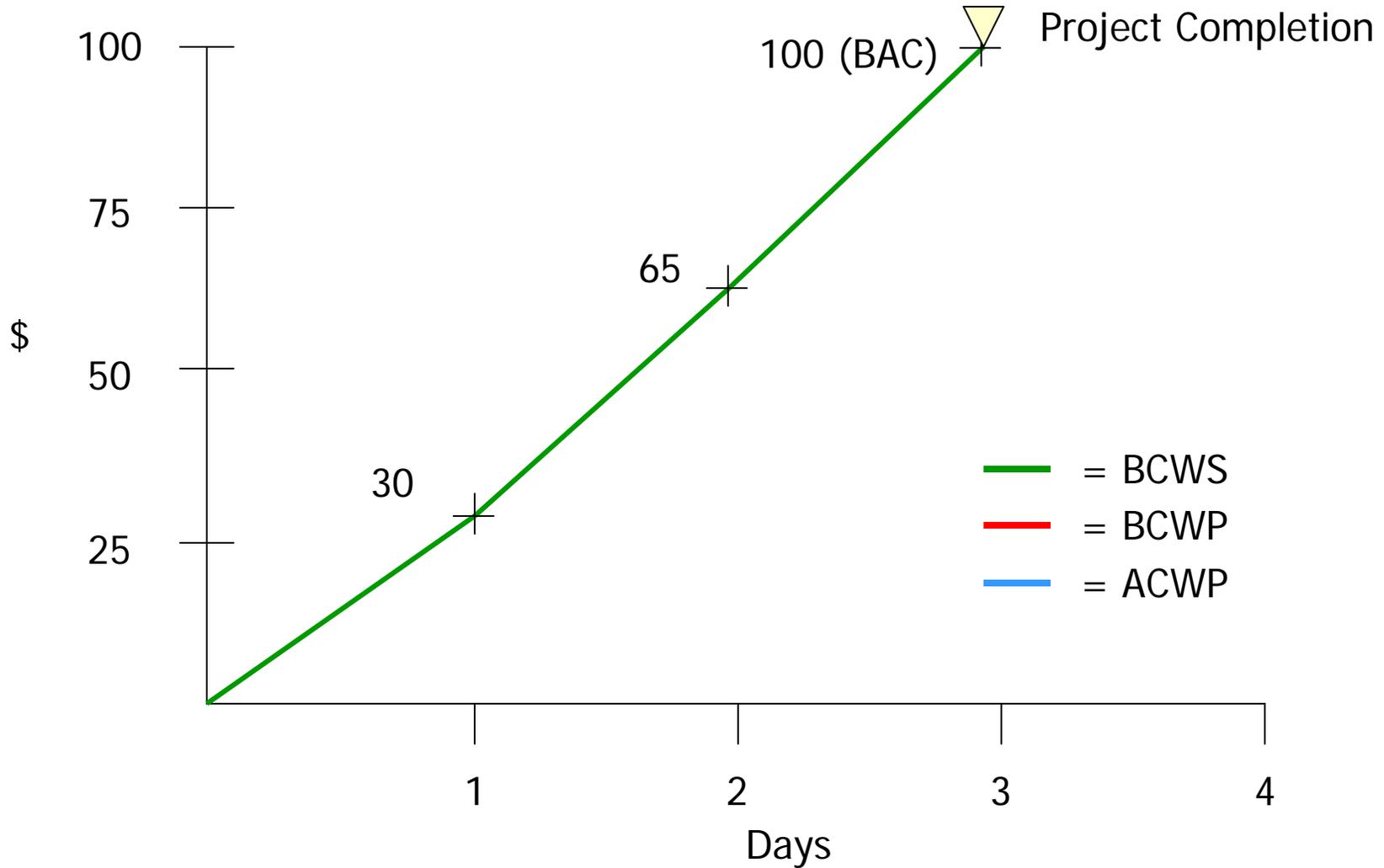


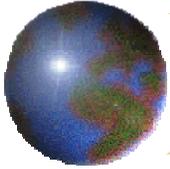
Day 3 = 35





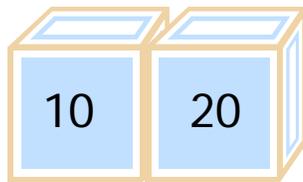
Baseline Plan



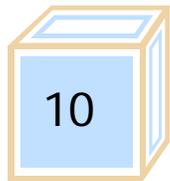


The Earned Value Metric

Day 1 Results



Work Planned
(BCWS) = 30



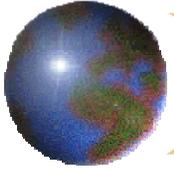
Work Performed
(BCWP) = 10

Schedule
Variance = (20)

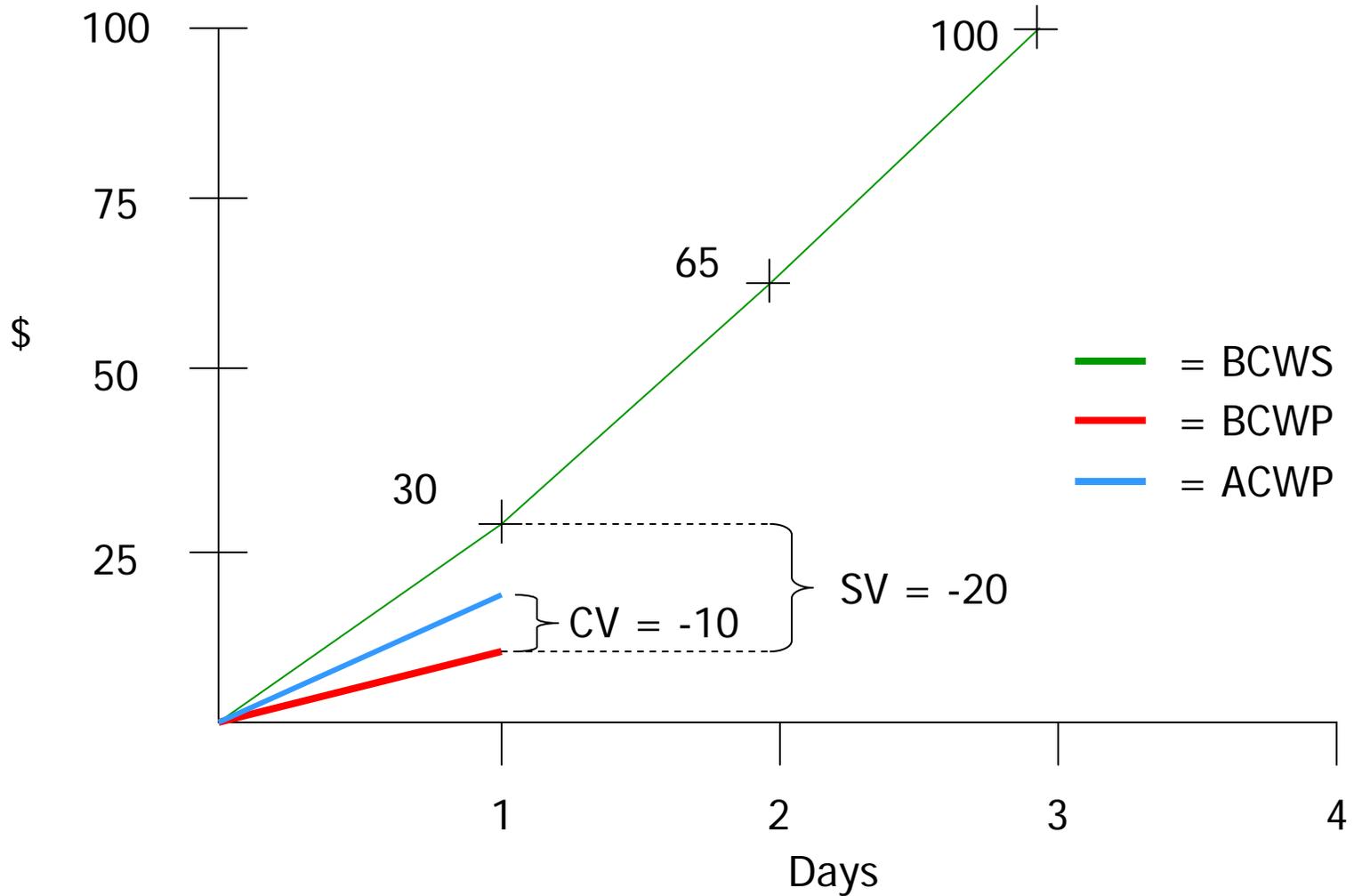


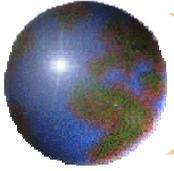
Cost to Perform
(ACWP) = 20

Cost
Variance = (10)



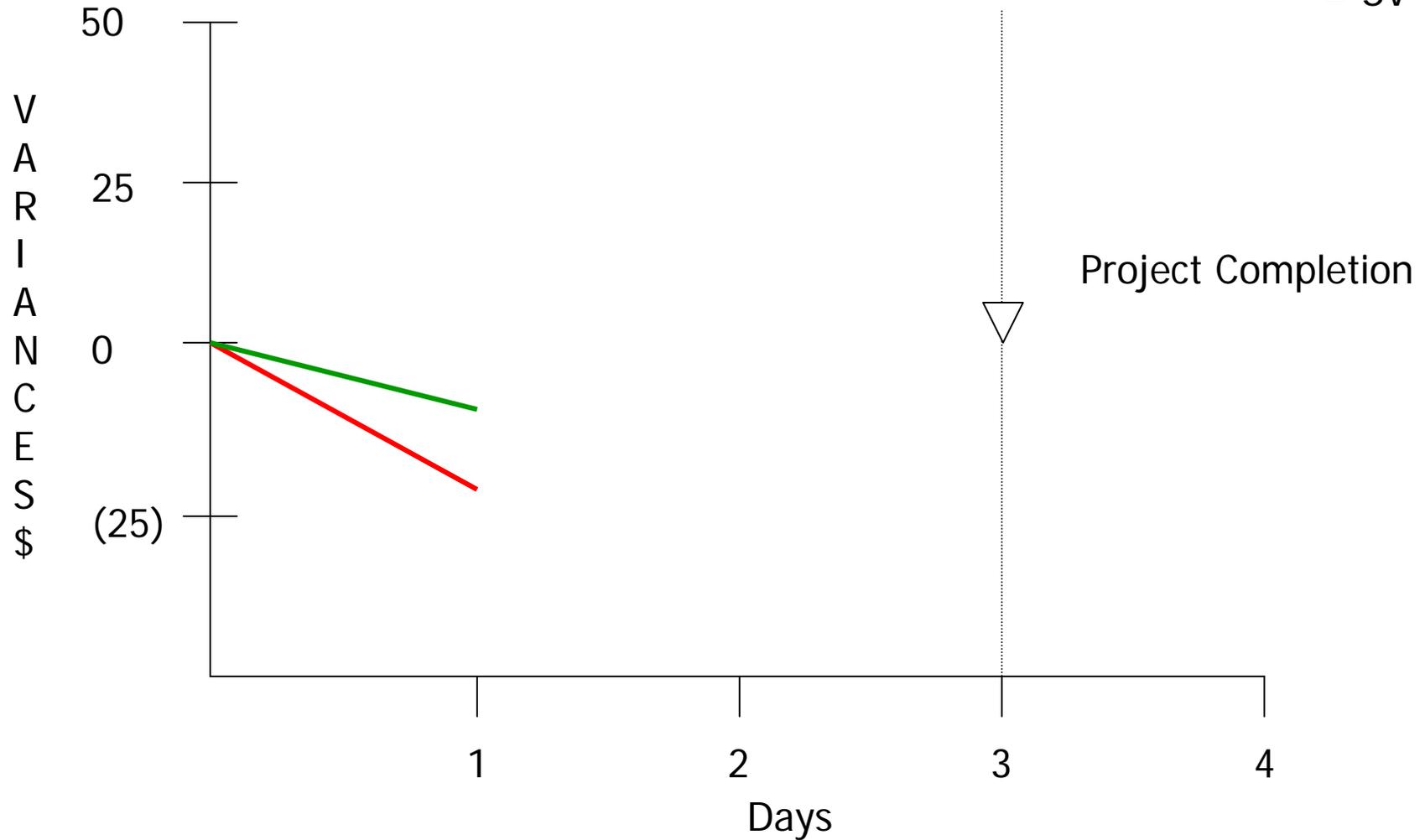
Performance Chart

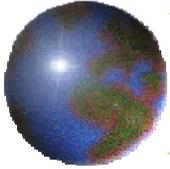




Variance Trend Chart

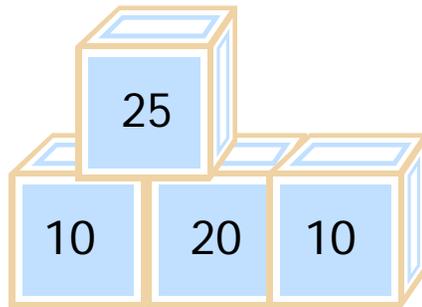
— = CV
— = SV



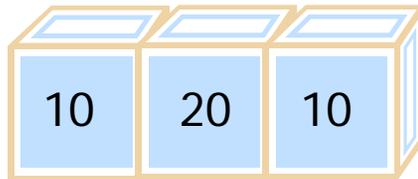


The Earned Value Metric

Day 2 Results



Work Planned
(BCWS) = 65



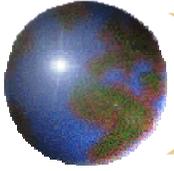
Work Performed
(BCWP) = 40



Cost to Perform
(ACWP) = 60

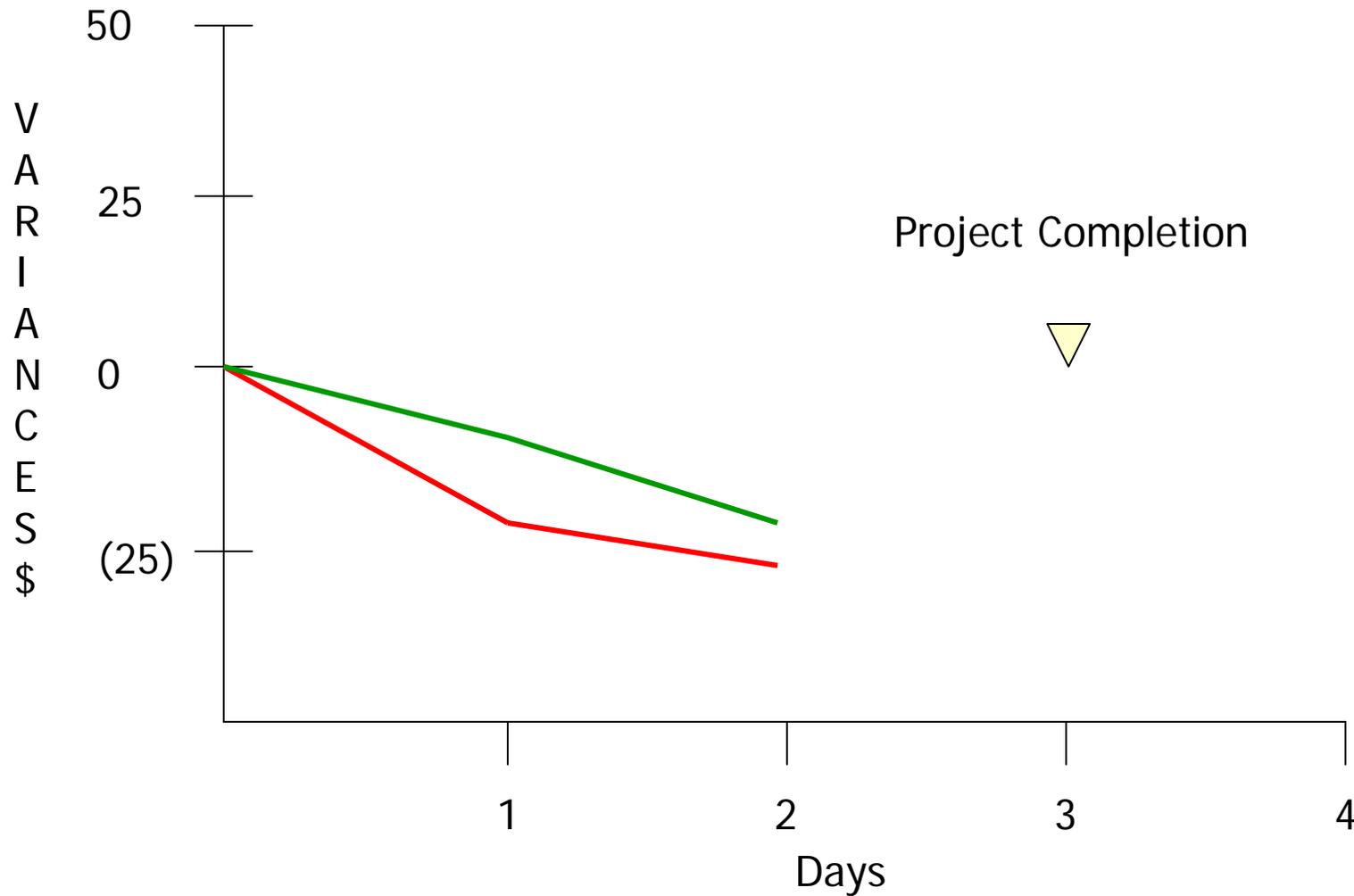
Schedule
Variance = (25)

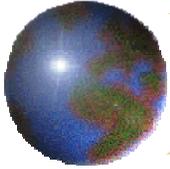
Cost
Variance = (20)



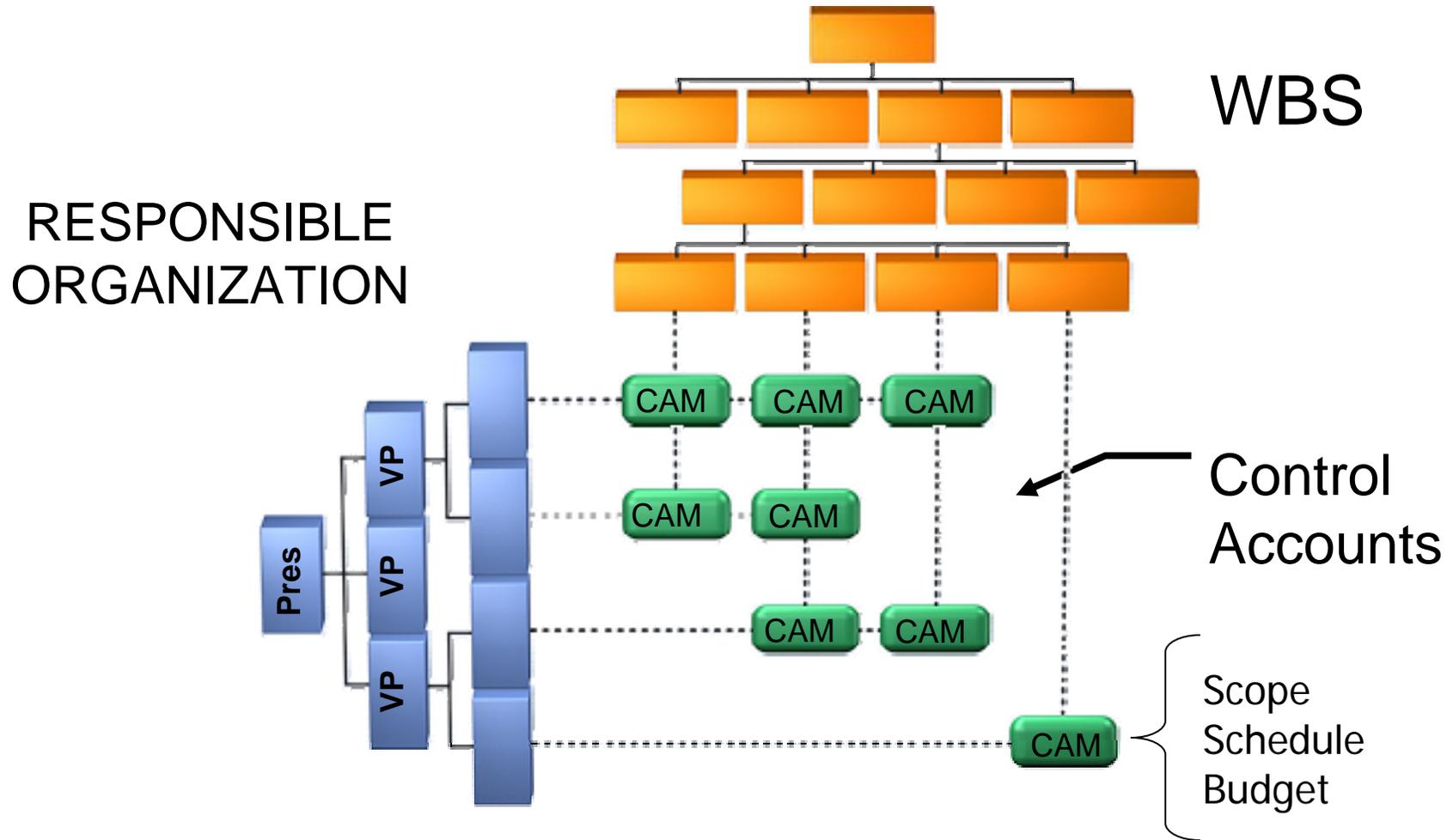
Variance Trend Chart

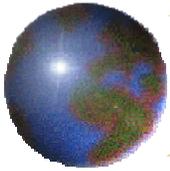
— = CV
— = SV





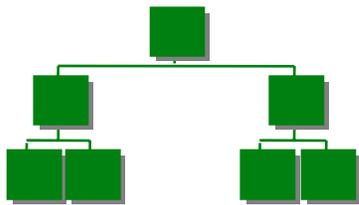
Integrating The What With The Who – Matrix Environment



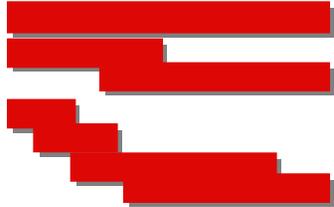


Establish the Baseline – With Risk in Mind!

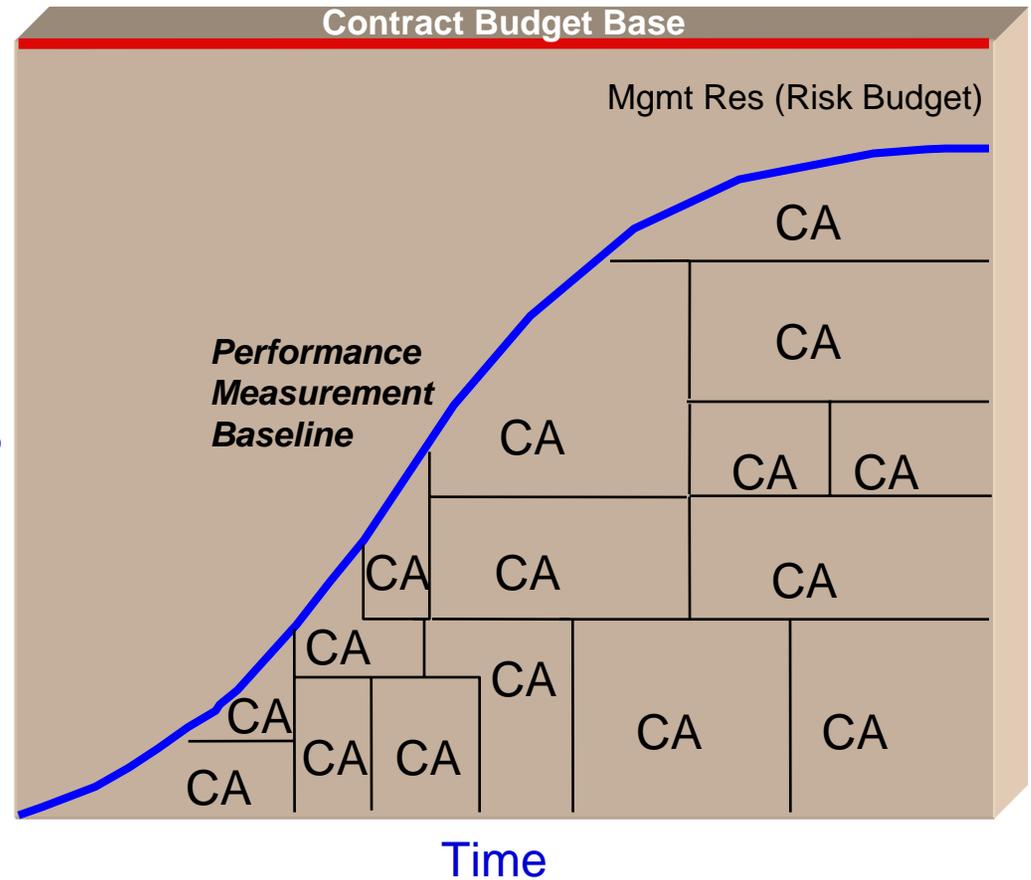
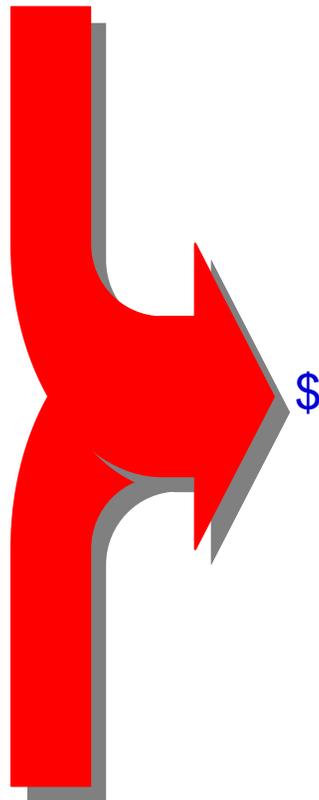
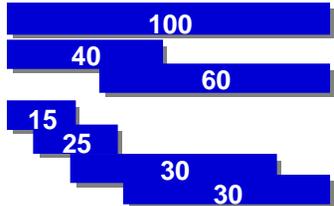
1. Define The Work

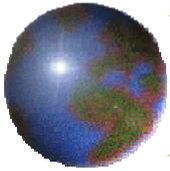


2. Schedule The Work

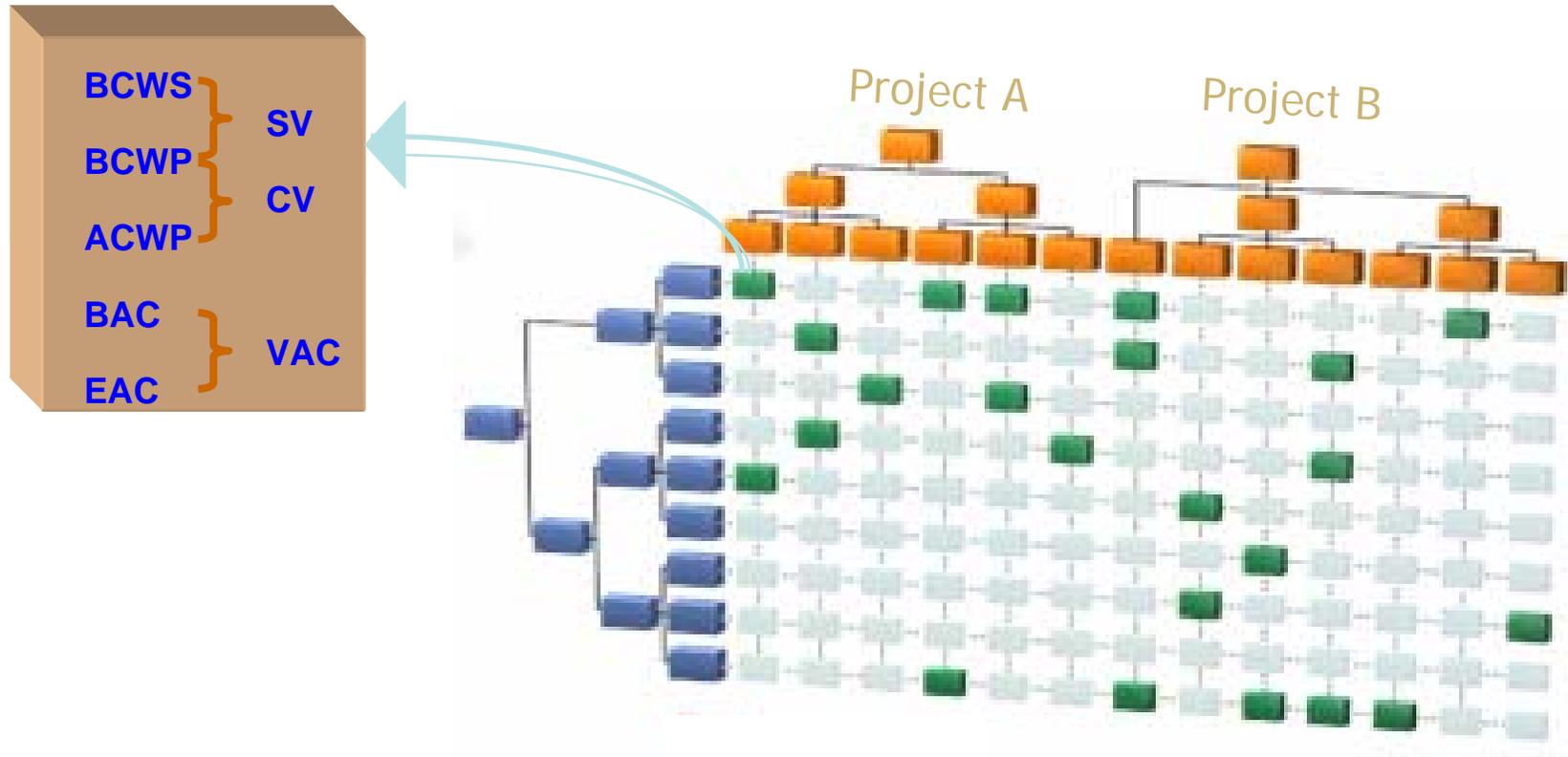


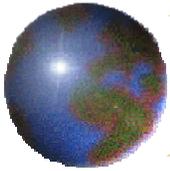
3. Allocate Resources



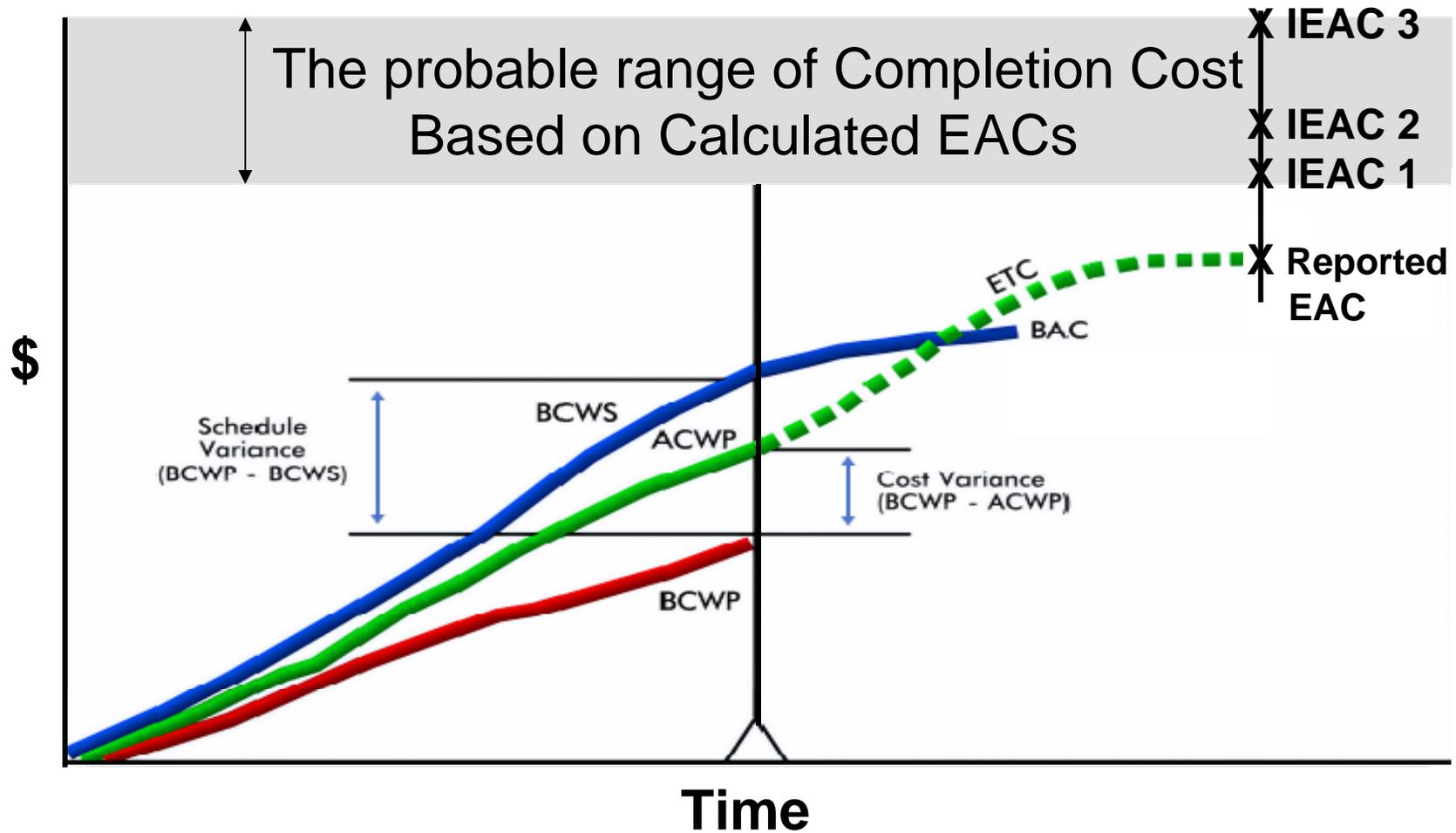


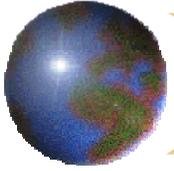
Data Accumulation





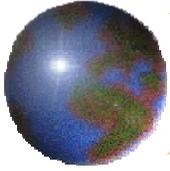
EAC Comparisons





FAR Changes – July 5, 2006

1. 43.201 requires that a bidder not having a compliant with ANSI-748A provide in the proposal a “comprehensive plan” for compliance. Further, offerors will not be eliminated from consideration because they don’t have a compliant EVMS.
2. 34.203 provides for pre-award and post-award EVMS IBR requirements.
3. 34.202 requires that an agency conduct an IBR when EVMS is required. If a pre-award IBR is to be conducted, the RFP must state whether or not the contractor will be reimbursed the costs.



Summary: EVM doesn't solve problems. If done right it will only point them out.

● EVMS Works Best if:

- Top Management Supports it
- Project Manager is a believer
- Processes are well defined
- The project team is well trained
- A capable toolset is used

● EVMS Tends Not to Work if:

- Top management is uninvolved and/or not interested
- Management doesn't understand what EVM is REALLY about
- Data-centric attitude is prevalent: "Just buy some software tools!"
- "EVMS is just a contract reporting requirement"



The End

Thank you.

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