



Earned Value Management from a Behavioral Perspective

ARMY

Henry C. Dubin
May 24, 2000
dubinh@sarda.army.mil

REPORT DOCUMENTATION PAGE

Form Approved OMB No.
0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY) 24-05-2000	2. REPORT TYPE Briefing	3. DATES COVERED (FROM - TO) xx-xx-2000 to xx-xx-2000
--	-----------------------------------	---

4. TITLE AND SUBTITLE Earned Value Management from a Behavioral Perspective Unclassified	5a. CONTRACT NUMBER
	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S) Dubin, Henry C. ;	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME AND ADDRESS US Army XXXXX XXXXX, XXXXXXXX	8. PERFORMING ORGANIZATION REPORT NUMBER
---	---

9. SPONSORING/MONITORING AGENCY NAME AND ADDRESS OUSD(AT&L) Acquisition Resources & Analysis/Acquisition Management Washington, DCXXXXX	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT A PUBLIC RELEASE
--

13. SUPPLEMENTARY NOTES

14. ABSTRACT See report.

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF: a. REPORT b. ABSTRACT c. THIS PAGE Unclassified Unclassified Unclassified	17. LIMITATION OF ABSTRACT Public Release	18. NUMBER OF PAGES 7	19. NAME OF RESPONSIBLE PERSON http://www.acq.osd.mil/pm/paperpres/paperpres.htm (blank) lfenster@dtic.mil
--	---	---------------------------------	--

		19b. TELEPHONE NUMBER International Area Code Area Code Telephone Number 703767-9007 DSN 427-9007
--	--	---



Outline

- **Earned Value from a behavioral perspective**
 - **Risk Management Challenge**
 - **Motivation & Constraints**
 - **Improving Earned Value**



EVM in a TQM Context

- **Hank's view of the problem with EVM**
 - **Plan** - Establish the Performance Measurement Baseline
 - **Do** - Perform the work
 - **Check** - Measure performance (CPI / SPI)
 - **Act** - React to performance
- **Planning**
 - Identification of risk
 - Assessing risk
 - Insertion of risk mitigation
 - Resourcing
 - Scheduling
- **Reacting to performance**
 - Resources largely committed
 - Schedules are tight
 - Problems often not understood
 - Punitive impact of response
 - Budget cuts
 - Rebaseline

Planning & Reacting to performance are hard



Risk Management Challenge

- Process **encourages risk** taking but **punishes failure**
 - no mechanism to account for risk without punishment
- The combination of increased risk and pressure to minimize resources is a significant problem
- **Resource adequacy confounded by:**
 - New ways of doing business
 - Understated technical risk
 - Market forces
 - Requirements & funding instability
 - Task misunderstanding
- **Resource adequacy is a judgement call**
- **Tools/skills to facilitate planning**
 - DSMC training has improved ... but
 - Lack of discipline in risk mitigation/identification / management
 - Criteria for “good” plan are unclear
- **Walls are created before PMB is established**
 - Cost / schedule / performance established months before PMB
 - Development of realistic PMB exposes inadequacy too late



Motivators

- **Government**

Program definition priorities

- #1 - Performance**
- #2 - Cost (funding profile)**
- #3 - Schedule (dependent variable)**

Program execution priorities

- #1 - Maintain schedule**
- #2 - Fight for dollars**
- #3 - Performance (dependent variable)**

- **Industry**

Interests

- **Reputation (past performance)**
- **Customer satisfaction**
- **Profit**
- **Future market**
- **Technical capability**
- **Resource utilization**



Behavior Outcome

- **Government**

Readiness dilemma

- Driven to keep program alive
- Wanting to believe contractor can “pull it off”

- **Industry**

Buy-in dilemma

- Hoping to solve the problem before failure declared
- Likelihood of “bail-out”

Outcome

No one can let go until it's too late!



Keys to Improved Value

- **Increase the PMB's ability to absorb change**
 - Resource bounds determined before risks are understood
 - Risk assessment is a skill not easily taught; not often supported by tools
- **Potential improvements**
 - Develop PMB prior to contract definitization or as input to source selection
 - Adopt modular contracting approach to enable planned break points to assess risk
 - Increased training and guidelines in IBR goals & conduct
 - Provide better risk and scheduling mitigation tools