Welcome to the new Acquisition Policy and Budget (AP&B) Spotlight Newsletter. This periodic newsletter will serve to provide updates on acquisition policy, lessons learned from program execution, and key acquisition events. We look forward to providing ready and relevant acquisition information to the workforce and address questions and concerns from the enterprise on acquisition execution. The AP&B team is here to serve the acquisition community, so please reach out to our team to help you move your programs towards expedient execution at the speed of relevance.

The Deputy Assistant Secretary of the Navy for Acquisition Policy and Budget (DASN AP&B) serves as the principal advisor and coordinator for the Assistant Secretary of the Navy (Research, Development, and Acquisition) (ASN (RD&A)) on matters pertaining to Acquisition Policy to include: Earned Value Management and Acquisition Reporting; Programming, Planning, Budgeting, and Execution (PPBE); and Corporate Operations support to the OASN (RD&A).

For more information on DASN(AP&B) and the ASN(RD&A) organization please visit:
https://www.secnav.navy.mil/rda/Pages/DASN_APB.aspx
https://www.secnav.navy.mil/rda/Pages/default.aspx

This publication was created by the DASN Acquisition Policy & Budget (AP&B) office and the Naval Center for Earned Value Management (CEVM) with contributions from the Systems Commands. For further information regarding Acquisition Policy & Budget, please contact Robert Borka at Robert.Borka@navy.mil. For further information regarding Earned Value Management, please contact Brenda Bizier at Brenda.Bzier@navy.mil.
Over the last year, the Office of the Under Secretary for Defense (Acquisition and Sustainment) has been working to reform the DoD acquisition process. Ms. Ellen Lord (OUSD(A&S)) recently signed out the DoD 5000.02, Operation of the Adaptive Acquisition Framework. The revised 5000 series includes the introduction of the Adaptive Acquisition Framework (AAF), which gives acquisition professionals six different acquisition pathways: Urgent Capability Acquisition, Middle Tier of Acquisition, Major Capability Acquisition, Software Acquisition, Defense Business Systems, and Acquisition of Services.

Ms. Lord stated the following in a recent discussion with DAU: “[The] way forward removes a longstanding system of bureaucracy and red tape by turning the procurement process into one that empowers users to be creative decision makers and problem solvers.” The acquisition workforce will choose between a set of established pathways and timelines — specifically designed for a diversity of purchases — requiring different levels of urgency. Using the new policy, acquisition professionals will be given autonomy, within legal parameters, to churn up tailored solutions. All of these revisions should allow for DoD partnerships with commercial industry in real time, enabling the DoD to keep products up to date with emerging technologies and delivering capabilities ‘at the speed of relevance.’ Figure 1 provides the OUSD(A&S) Strategic Framework that has guided the new policy development.
**Transforming the DoD Acquisition Process cont.**

The new Adaptive Acquisition Framework (Figure 2) moves the traditional one-size-fits-all approach to a choose-your-own acquisition adventure style, enabling the acquisition community to pick the best procurement pathway(s) for their particular program. Below is a short description of the six new pathways:

- **Urgent Capability Acquisition**: rapidly field new capability in less than two years.
- **Middle Tier of Acquisition**: prototype the new system in less than five years, then turn that prototype into a fielded system in less than five – but with the option to escalate to a more laborious Major Capability Acquisition if required.
- **Major Capability Acquisition**: the traditional Pentagon acquisition process, with formal Milestone Decisions (A, B, and C) to proceed from one phase to the next.
- **Software Acquisition**: a high-speed pathway with multiple “sprints” in a single year as code is repeatedly revised, tested, and revised again.
- **Defense Business Systems**: an alternative pathway tailored to the Pentagon’s extensive back-office information technology.
- **Acquisition of Services**: a seven-step process for service contracts, which have long been overshadowed by big weapons programs but actually make up about half of what the Pentagon spends on procurement every year.

![Figure 2: Adaptive Acquisition Framework](image-url)
In addition to the new Framework, OSD is also developing instructions for the functional pathways. Figure 3 provides a pictorial representation of the new structure.

Additional details on each pathway can be found at [https://www.dau.edu/aaf](https://www.dau.edu/aaf). A table identifying references that provide additional policy direction, applicable to the pathways is available at [https://www.dau.edu/mdid/Pages/Default.aspx](https://www.dau.edu/mdid/Pages/Default.aspx). DAU is also hosting multiple webcasts on the AAF, details which are provided below. Please reach out to DASN AP&B for any questions on the new policies, training opportunities, and lessons learned as we implement this new direction on the acquisition portfolio.
Update on the New EVM
IPMDAR DID
Written By: Brenda Bizier—CEVM

The Depart of Defense’s Office of Acquisition, Analytics and Policy (AAP) Earned Value Management (EVM) Division is now targeting the release of the new Integrated Program Management Data and Analysis Report (IPMDAR) Data Item Description (DID) for April 2020. In addition to a new name, the updated EVM DID will improve data efficiencies, cost/schedule integration, level and time-phasing detail for both analysts and Program Managers. With phased delivery options, the IPMDAR also provides opportunities to reduce reporting latency. Accompanying the new DID is an IPMDAR Implementation Guide which will contain EVM definitions and tailoring guidance as well additional guidance and examples to enhance the relevance of the data being put into the hands of PMs, facilitating earlier situational awareness and risk mitigation.

The AAP Working Group comprised of representatives from Industry and all Service agencies worked through an extensive list of comments and requests for clarification, pushing the start of the IPMDAR Implementation Guide. AAP decided to hold off releasing the updated DID until the associated Implementation Guide is complete so that both updated documents will be released in tandem. An initial adjudication review of the first draft Implementation Guide was conducted on 28 January 2020 with a multi-day review slated for the first week in March. Depending on additional public comment, the final release of the updated IPMDAR DID and Implementation Guide is likely to be in the April to May 2020 timeframe.

Requests for Proposal (RFPs) initiated after the release of the new DID will be required to implement the IPMDAR. The existing contracts and RFPs already in process are not required to use the new IPMDAR DID but have the option of changing. Additional information on training and tools will be forthcoming.
In the DoD, Earned Value Management (EVM) is generally applied to Cost- or Incentive-based contracts over $20M (there are exceptions). Simply put, there are many project controls methodologies applied in a variety of risk-based combinations to control project cost and schedule outcomes; EVM is applied to the riskiest part of the Navy’s portfolio. Before dismissing this effective project controls approach, ask whether you are able to accurately answer the Six Fundamental Questions of Project Management:

1. Is my project on time?
2. Am I getting the expected product?
3. Am I tracking to my budget?
4. How much more time do I need?
5. Will I need a technical deviation?
6. How much more money do I need?

If you are not able to answer those questions quickly and confidently, you are in need of a project controls discipline.

This is the first article in a new series targeted for PMs which will endeavor to break down the discipline of Earned Value Management (EVM) into practical tips and resources for understanding and improving the use of EVM in the Program Management community. Let’s start by providing some context to understanding the role EVM plays within the many responsibilities covered by the broad function of Program Management.

According to the Project Management Institute (PMI), “A program is a group of related projects managed in a coordinated manner to obtain benefits not available from managing them individually. Program Management is the application of knowledge, skills, tools, and techniques to meet program requirements.” PMI defines Project Management as “the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. Project management processes fall into five groups: Initiating, Planning, Executing, Monitoring and Controlling, and Closing”.

To get to the heart of defining EVM’s place within Program Management, we also need to distinguish between the project management and the project controls functions. Project Management concerns itself with controlling the quality or monitoring and managing people in a project. Project Controls is focused on two primary factors in a project - cost and schedule - addressing questions such as: How much is the project going to cost and are we going to finish within the budget? How long is the project going to take? Where are we now in our project? Are we going to finish on time or not? If not, what can we do about it? Earned Value Management is a very specific technique within the domain of project controls for answering those questions.

Stated another way, the Project Manager is the individual in charge of optimizing the project’s outcome within the constraints of Technical Performance (Scope / Quality), Cost (Budget), and Time (Schedule) - also known as the “project performance triangle”. As a key advisor to the PM, the Project Controller provides the information (data, reports, graphs, etc.) to help make decisions that keep the Cost, Schedule and Technical challenges in the Project Performance Triangle in balance.

Earned Value Management is the only project management technique that effectively integrates all three aspects to project performance problems and, more importantly, accurately forecasts project cost and schedule impacts to identify and prioritize mitigating actions. EVM, if implemented appropriately, is the right tool help manage the trade space of project constraints. See ‘EVM Fundamentals’ for more on how EVM does this.
Earned Value Management (EVM) Fundamentals

Written By: Melissa Gudger—CEVM

The purpose of this article is to demystify EVM and show its practical value by answering these questions:

- What is Earned Value Management (EVM)?
- How does EVM Integrate Cost, Schedule and Technical performance?
- Why the emphasis on EVM?
- What can EVM do for me?

What is Earned Value Management (EVM)?

EVM is a Project Controls technique used to quantitatively assess and manage a project’s performance. It provides objective data that is especially useful when deviations arise. The key to the EVM discipline is that cost, schedule and scope (technical accomplishment) are inextricably linked and when one factor changes, all three factors must be reassessed. In short, EVM is a way to objectively manage project performance.

How does EVM Integrate Cost, Schedule and Technical performance?

Most projects require some level of cost, schedule and technical progress monitoring. The difference with EVM is that it accomplishes this in one, integrated “tool” which facilitates the early identification of problems, thereby providing the opportunity for proactive course corrections.

Imagine a project manager is assigned to oversee a project to deliver 10 widgets in 10 weeks at a cost of $10,000 per widget. A spend plan is laid out with the assumption that 1 widget is produced each week. Costs are tracked against the plan with the following results:

At the end of Week 10, the project has completed $20K underspent to plan (Plan – Costs Incurred).
EVM Fundamentals cont.

With this typical method of tracking project performance, the project appears to be underspending over the entire execution of the effort and seems to complete with a $20K underrun. In this portrayal of project performance, there is a question that needs to be addressed: what was accomplished for the costs incurred?

By adding technical accomplishment (Widgets Built) - or, in EVM terms, “Earned Value (EV)” - a different story emerges.

Even more powerful is EVM’s ability to identify emerging performance issues for targeted risk mitigation.

As early as the end of the first week, there are indications that the project is off track. By the end of Week 3, it is clear that the project is in trouble and must seek to understand the root causes of the cost and schedule underperformance.
EVM Fundamentals cont.

Why the emphasis on EVM?

EVM is utilized as the project control standard for the riskiest projects in many industries, including the Department of Defense, because it:

- is easy to understand
- sets expectations (scope) early on
- integrates cost, schedule and technical performance
- simplifies and standardizes reporting
- is scalable – same metrics for roll-up / roll-down
- is well-proven
- has low overhead relative to project risk for companies already using it
- provides an early warning system for emerging problems
- includes principles broad enough to accommodate new metrics

There are some limitations of EVM, as it is not a magic potion but rather one tool in the Project Management toolbox. Some argue that EVM does not cover quality, and while there is not a specific metric for quality, it is inherent in the delivery of value (taking credit or Earned Value). There is also no denying that the effectiveness of EVM is reliant on the accurate generation of the Earned Value at every level of planning. However, if the data is accurate, EVM provides the PM with the information necessary to understand project performance and allocate resources to keep the project on course.

What can EVM do for me?

EVM can provide transparency by defining scope, and therefore expectations, of all involved both internally and externally. If a project is working on something that doesn’t correlate to a value in the budget, work is being performed out of scope and potentially at risk.

For the Project/Program Manager, the main benefit of EVM is to constantly know how much the project is really going to cost and when will it actually be completed. Which projects or portions of a project need attention? Where is the project not disclosing what is really going on? Historical data allows for better future cost and schedule estimates. Cost and schedule are integrated which allows the PM to have time-based cost forecasts.

EVM facilitates reporting between subcontractors as the same standards are used to show when revenue is earned, when costs are incurred, when profit can be recognized, etc. It also provides resource requirements in advance, which is especially critical if the same contractor is active on multiple projects or programs.

For individuals or groups working on only a part of a project, EVM can show the overall picture, helping to keep the goal in mind for all involved. It can provide insight into what tasks are to be performed when and what the consequences are if the plan is not followed.

The advantages of EVM for upper management include the standardization of information across all projects and programs. It is the same format to review the same metrics, and a quick response is possible if data is standardized. EVM also allows for management by exception – only projects outside of given parameters require extra attention.

Conclusion

The main principles of EVM are actually intuitive – effective PMs use EVM in some form or another to answer the Six Fundamental Questions for Controlling Project Outcomes, even if they call it something else. EVM provides one of the most effective and proven methodologies to get a project done on time and within budget.
PART I: Integrated Baseline Review (IBR) Control Account Manager (CAM) Selection

In the previous article—“Integrated Baseline Reviews, Changing with the Times” (The Baseline, October 2019) — we discussed NAVAIR’s Integrated Baseline Review (IBR) and the CAM interview selection processes based on work identified on the program Critical Path and in the program’s Risk Management Plan.

Research for this article included reviewing the “National Defense Industrial Association (NDIA) Integrated Program Management Division (IPMD) PM’s Guide to the IBR”, the “US Air Force IBR Process” and the “Earned Value Management Interpretation Guide (EVMIG)”. In addition to discussing the process for CAM selection, it was recommended to interview Program Management staff “to establish an understanding of the program baseline, current performance, future performance projections, functional processes, and program risks.” The NDIA IPMD guidance indicates, “Control account manager discussions are key events of the IBR. These discussions focus on key risk areas and management processes. These discussions should address topics identified during IBR preparation.” The US Air Force IBR Process suggests, “The selection criteria recommended are high dollar value control accounts, control accounts on the critical path, and control accounts associated with high-risk events.” The EVMIG recommends selecting elements with high to moderate technical risk, specifically: control accounts of high to moderate value, elements on the Critical Path, and elements already identified in the program risk plan.

As noted in my prior article, NAVAIR’s CAM selection process is consistent with the aforementioned Government and Industry IBR guides. Specifically, CAM selection is based on work identified both on the program Critical Path and in the Risk Management Plan. CAMs associated with risk areas are incorporated into the list of potential CAM discussions. The list is provided to the Program Management Air (PMA) IBR Lead for review and approval. Typically, the lead adjusts the list by removing or adding additional CAMs to the list, if desired. The CAM selection process is part of an approach for increased tailoring and streamlining the IBR process to align with program risk. NAVAIR’s IBR selection process also addresses the benefits of reducing travel expense, and providing more time to deliver products to the warfighter by allowing more flexibility in executing requirements.

By focusing on more than just the dollar value of the Control Account, we are confident that the NAVAIR IBR assessment approach is significantly improved. Incorporating risk-based Control Account Selection also aligns more with the Industry and Government stakeholders by tackling concerns of NDIA (understanding program risk, PM’s Guide to the IBR “discussions focus on key risk areas”), US Air Force (high-risk events), and EVMIG (high to moderate technical risk, Elements on the Critical Path, and elements already identified in the program risk plan).

NAVAIR’s revised CAM selection process has demonstrated that by selecting CAMs by risk, we are averaging review of 70-75% of the baselined contract dollar value.
Improving the Impact of the IBR cont.

PART II: IBR Data Reviews

An important aspect of organizing for an IBR is preparation. This process includes planning that identifies key responsibilities, requires Government program office technical expertise, training, review dates, scope review, risk evaluation criteria development and, most importantly, documentation needs. At NAVAIR, these areas and expectations are addressed in joint IBR training with the government team and their contractor counterparts.

NAVAIR goes a step further by training EVM analysts on the “why’s” and “how’s” of performing data traces using the IBR documents received from the contractor. This data represents a particular month-end view of the contractor’s performance. The data is used to evaluate and ascertain the effectiveness of its EVM System (EVMS), provide practical understanding of the EVMS, and use an application of that system in conjunction with the contractor’s corporate systems description.

Guidance that NAVAIR provides in IBR training is the data traces allowing program management teams to more thoroughly understand the program plan (a.k.a. Performance Measurement Baseline or PMB) and its risks by allowing the team to target their attention to understanding program challenges. Data traces also provide increased confidence in the program cost, schedule, and performance data, providing a powerful tool for proactive program management as a key enabler for timely and reliable cost and schedule projections.

Data traces focus on identifying abnormalities in the data. NAVAIR analysts are trained on data trace techniques and to question if the abnormalities in the data could preclude leadership from using the Integrated Program Management Report Contract Deliverable Requirements List to identify performance issues and from making management decisions on the overall program.

NAVAIR’s training also provides detailed instruction on EVM regulations, policies and guidance, informing the analyst that regulations require federal government agency contractors to establish, maintain, and use an EVMS that is compliant to the 32 EVM Guidelines in the Electronic Industries Alliance 748. The EVMS is one of the business systems covered by the business contract clause that allows for a 5% withhold of payments to the contractor until a finding of a Significant Deficiency is resolved. Effective data traces identify potential EVMS weakness and enable resolution before they rise to a level requiring contractual intervention.

In NAVAIR’s IBR process, all issues, findings or actions are captured and analysts are encouraged to forward these to the program contractor prior to the government team arriving to the contractor site for IBR CAM discussions. This allows the contractor time to adjudicate anomalies prior to the actual IBR event. This process, along with the adjustments discussed above in IBR CAM Selection has allowed our IBR teams to be better prepared and focused on issues of significant importance to the PMB and PMA management.
EVM Tools Symposium

The Naval Center for Earned Value Management (CEVM) recently hosted a two-day EVM Tools Symposium on January 14-15, 2020 at the Lincoln Properties Conference Center in Crystal City, VA. The goals of this conference were to:

- Gain a better understanding of the tools and methods used across various EVM stakeholders
- Demonstrate how these tools are utilized and the potential for collaboration
- Explore the tools-related challenges and issues currently facing the EVM community
- Allow for vendors to present and demonstrate their products
- Discuss the upcoming events on the horizon for EVM

The first day of this symposium involved presentations and discussions with the various EVM government stakeholders. These included: Naval Sea Systems Command (NAVSEA), Naval Air Systems Command (NAVAIR), Naval Information Warfare Systems Command (NAVWAR), Naval Engineering Logistics Office (NELO), Strategic Systems Programs (SSP), and the CEVM. Various commercial and internally developed tools and methodologies were presented, discussed, and demonstrated, including: Estimate at Completion (EAC) Models, Schedule Analysis Models, Automated Metrics Tools, Integrated Master Schedule (IMS) Tools, Performadex EVM data repository, MetLite schedule health assessment tool, NAVAIR’s DREAM Enterprise tool development efforts, Integrated Baseline Review (IBR) Database, @Risk, and Contract Performance Report (CPR) Viewer. Allowing all of these EVM users to gather in one place and discuss their methods and challenges provided for a stimulating discussion and enhanced future collaborative efforts.

The second and final day of the symposium entailed presentations from various vendors to demonstrate the products that they feel could best assist the EVM community. In total, eight vendors were provided an hour each to discuss their company, demonstrate their products, and field questions from the various EVM stakeholders. The vendors provided an expansive look at the various products and options for future beneficial use within the EVM community.

Overall, the Tools Symposium proved to be a success, and there will be significant follow-up to the discussion topics presented and future options for EVM tools.

EVM Events
3-5 March IPMDAR Implementation Guide Comment Adjudication Meeting, Crystal City, VA
28-29 April NDIA Spring 2020 IPM Division Meeting, McLean, VA

Acquisition Key Events
10 March DAU Webcast on Software Acquisition Pathway
16 March LHD 1 Class Gate 7 Sustainment Review
17 March ASN RD&A Stem to Stern
17 March DAU Webcast: Urgent Capability Acquisition Pathway
24 March Ask Me Anything with ASN RD&A

24 March DAU Webcast on Adaptive Acquisition Framework Overview
28 March LENA HUTCLIFFE HIGBEE (DDG 123) Christening
31 March DAU Webcast on Middle Tier of Acquisition Pathway Acquisition Stem to Stern

Note: Red font indicates Federal Holiday

Calendar

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