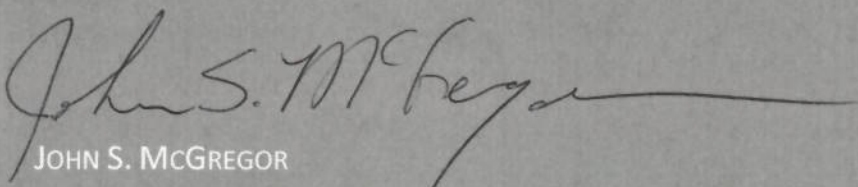# AGILE AND EARNED VALUE MANAGEMENT: A PROGRAM MANAGER'S DESK GUIDE

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Performance Assessments and Root Cause Analyses

Contents

This document is intended as informative resource for Department of Defense (DoD) personnel who encounter programs on which Agile philosophies and Earned Value Management (EVM) are applied. It is not an official policy, nor is it a step-by-step handbook for Agile implementation or the application of EVM.

Foreword

The DoD acquisition process supports the procurement and production of large, strategic, and deployable systems to address specific threats. Per the DoD Defense Acquisition System Directive 5000.01, an acquisition system is "a directed, funded effort that provides a new, improved, or continuing materiel, weapon or information system, or service capability in response to an approved need… [t]he primary objective…is to acquire quality products that satisfy user needs with measurable improvements to mission capability and operational support, in a timely manner, and at a fair and reasonable price." Constantly evolving threats have presented a demand for an acquisition process that is able to respond quickly to emerging requirements and rapidly changing environments. To address this, the DoD has encouraged the following characteristics in acquisitions:

1. Flexibility: tailoring program strategies and oversight
2. Responsiveness: rapid integration of advanced technologies
3. Innovation: adapt practices that reduce cost and cycle time
4. Discipline: use of program baseline parameters as control objectives
5. Effective Management: decentralization to the extent practicable[1]

These characteristics have led to an increased focus on flexible development approaches that include Agile philosophies and integrated program management tools such as Earned Value Management.

Background

Agile philosophies promote rapid incremental product deliveries, provide flexibility to respond to changing requirements, and advocate close customer collaboration. A major aspect of Agile is that changes to requirements, design details, or functional capabilities can be incorporated based on customer value, at any stage of the development cycle. While Agile is primarily used on software development projects, Agile methods are being used for complex system and hardware developments as well.

Agile for software development in the DoD is still an emerging product development approach. To be effective, the adoption of Agile methodologies must be integrated with existing DoD program management (PM) and system engineering (SE) processes. EVM is a disciplined integrated program management tool used to provide joint situational program awareness. EVM is used to measure technical progress against a baselined plan, independent of the consumption of resources. EVM is not tied to any specific development methodology and provides decision-makers with objective cost at completion forecasting as well as dollarized values of accomplishments and variances to the baseline plan. The requirement for EVM demands that performing contractors maintain an EVM System (EVMS) consistent with the 32 guidelines contained in the Electronic Industries Alliance Standard-748 (EIA-748) document. For DoD programs, EVMS implementations are evaluated in accordance with the DoD Earned

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[1] DoDI 5000.01, "The Defense Acquisition System," May 2003

Value Management System Interpretation Guide (EVMSIG)[2]. As a result, a contractor's EVMS provides the structure to establish and maintain a credible Performance Measurement Baseline (PMB), which is the plan to accomplish a given contractual scope of work.

Agile and EVM are complementary when properly implemented together, and help enable a robust overall management process. In order to be effective, Agile must be evaluated for its applicability on a program-specific basis and tailored to best align with programmatic and contractual requirements.

Introduction

The origins of Agile Development can be traced back to 1957 to the incremental development of a large simulation by IBM's Service Bureau Corporation for Motorola.[3] By the mid-1980s the DoD formally recognized the value of "adaptive software development" in the DoD's Military Standard for Software Development (DOD-STD-1679A). Throughout the 1990s, several other "lightweight" iterative development methods emerged including Dynamic Systems Development Method (DSDM), Scrum, and eXtreme Programming (XP). These methods, along with others, became collectively known as Agile methodologies. The tenets of Agile were codified with the creation of the Agile Manifesto in 2001. The Manifesto emphasizes the following major concepts:

- "Individuals and interactions over processes and tools

- Working software over comprehensive documentation

- Customer collaboration over contract negotiation

- Responding to change over following a plan.

…while there is value in the items on the right, we value the items on the left more."[4] For example, though the ability to respond to change is valued over following a plan, having and adhering to a plan remains essential for project completion.

In March of 2009, the Defense Science Board Task Force on DoD Policies and Procedures for the Acquisition of IT recommended that "The USD (AT&L) should lead an effort in conjunction with the Vice Chairman, Joint Chiefs of Staff, to develop new, streamlined, and agile capabilities (requirements) development and acquisition processes and associated policies for information technology programs."[5] On October 28, 2009 Congress enacted the National Defense Authorization Act for Fiscal Year of 2010 which required the "Secretary of Defense [to] develop and implement a new acquisition process for [IT] systems."[6] This included several principles of Agile development such as early and continual involvement of the user, multiple rapidly executed increments or releases of capability, early successive prototyping to support an evolutionary approach, and a modular open-systems approach. In 2013, the Deputy Assistant Secretary of Defense for Systems Engineering stated in a briefing that DoD military systems must be "designed explicitly to have capacity to adapt and adjust to maintain relevance and operational advantage in an environment of change."[7]

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[2] *Department of Defense Earned Value Management System Interpretation Guide,* 2015.
[3] C. Larman and V. R. Basili, "Iterative and Incremental Development: A Brief History," Computer, pp. 47-56, 11 June 2003.
[4] http://www.agilemanifesto.org/
[5] Defense Science Board, "The Report of the Defense Science Board Task Force on Department of Defense Policies and Procedures for the Acquisition of Information Technology," OUSD (AT&L), Washington, DC, 2009.
[6] National Defense Authorization Act for Fiscal Year 2010, 2009.
[7] S. Welby, Deputy Assistant Secretary of Defense for Systems Engineering, "Thinking About Agile in DoD," *AFEI Agile for Government Summit*, November 2013,

The origin of EVM can be traced back to the 1967 issuance of DoDI 7000.2 "Performance Measurement for Selected Acquisitions."[8] Since that time, EVM has been acknowledged by both Industry and the Federal Government as one of the most effective tools for planning, executing, maintaining, and reporting integrated cost, schedule, and technical status of an executing contract. EVM is a method for developing, baselining, and tracking a plan throughout execution and is based on pre-determined objective criteria. Although EVM is imposed as a contractual requirement, it does not mandate or prevent the use of other disciplined integrated program management methodologies.

In 2009, DoD established the Performance Assessments and Root Cause Analyses (PARCA), a directorate in the Office of the Assistant Secretary of Defense for Acquisition, to serve as the DoD focal point for all policy, guidance, and competency relating to EVM.[9] In July of 2014, PARCA met with representatives from various DoD Services and Agencies to discuss the implementation of both EVM Agile development practices together on DoD programs. As a result, PARCA launched an initiative to explore the joint applicability of the two methodologies with stakeholders from the Office of the Secretary of Defense (OSD), the Services, the Intelligence Community (IC), Defense Acquisition University (DAU), and the National Defense University (NDU). This initiative included an action to examine issues, synergies, challenges, and best practices in the utilization of both Agile and EVM in industry.

Agile and EVM System Compliance

The DoD EVMSIG, provides the overarching DoD interpretation of the 32 Guidelines where an EVMS requirement is applied. It serves as the authoritative source for EVMS interpretive guidance and is used as the basis for the DoD to assess EVMS compliance to the 32 Guidelines. The DoD EVMSIG provides the flexibility for contractors to utilize a disciplined development methodology. Agile, as a product development methodology, can exist within the disciplines required for EVMS compliance. However, certain considerations must be addressed in order for Agile and EVM to coexist.

1. **Organization and the WBS**

    Within DoD, a Work Breakdown Structure (WBS) is an organized decomposition of a project's work scope into manageable, product-oriented elements. The WBS facilitates communication between the government and the contractor and allows for the assignment of resources and subsequent tracking of progress. The DoD uses the MIL-STD-881C[10] to pre-define the top-level program WBS, and provides for a common structure across product lines to allow for effective Cost and EVM reporting.[11] The primary purpose of the 881C WBS templates is to support standardized, historical data across similar program platforms.

    a. *WBS and 881C:* The WBS reported for EVM can align to a workflow-based waterfall development oriented hierarchy as found in MIL-STD-881C[12] (see **Figure 1**). However, an outcome-based Agile structure that focuses on customer driven deliverables (see **Figure 2**) is also acceptable. Both WBS hierarchies are product-based and supported by the DoD EVMSIG and MIL-STD- 881C.

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[8] W. Abba, "How Earned Value Got to Prime Time: A Short Look Back and Glance Ahead," *Measurable News* , p. 4, 1 March 2001.

[9] http://www.acq.osd.mil/parca/

[10] "DEPARTMENT OF DEFENSE STANDARD PRACTICE WORK BREAKDOWN STRUCTURES FOR DEFENSE MATERIEL ITEMS," October 2011

[11] Cost and Software Data Reporting (CSDR) requires strict adherence to 881C (see the DoD 5000.04–M–1. Cost and Software Data. Reporting (CSDR) Manual. April 18, 2007)

[12] The waterfall model is a sequential design process in software development in which progress is seen as flowing steadily towards completion through the phases of design and development

1.1		Prime Mission Subsystem		
1.1.1		Computer Software Configuration Item A		
1.1.1.1		CSCI Requirements Analysis		
1.1.1.2		CSCI Design		
1.1.1.3		CSCI Code and Unit Test		
1.1.1.4		CSCI Integration and Test		
1.1.2		Computer Software Configuration Item B		
1.1.3	High level Integration, Assembly, Test, and Checkout			
1.1.4	...			

Figure 1 - SW Development MIL-STD-881C Appendix K WBS breakout

1.1	Prime Mission Subsystem			
1.1.1	Capability A			
1.1.1.1		Feature A1		
1.1.1.2		Feature A2		
1.1.1.3		Feature A3		
1.1.1.4		Feature A4		
1.1.2	Capability B			
1.1.3	High level Integration, Assembly, Test, and Checkout			
1.1.4	...			

Figure 2 - Possible Agile SW Development MIL-STD-881C WBS breakout. Not prescriptive.

b. *The product backlog and the WBS*: Agile projects often utilize the product backlog to create the WBS. The product backlog contains 100% of the contract scope and is commonly defined as "…a list of features or technical tasks which the team maintains and which, at a given moment, are known to be necessary and sufficient to complete a project or a release."[13] In the product backlog hierarchy, a capability[14] directly relates to the Control Account level. To understand the relationship of the WBS to the backlog, the contractor should document the linkage of the WBS to the capabilities in both the backlog and EVM System Description.

c. *Requirements traceability*: As system requirements are decomposed into capabilities and features,[15] the derivation should remain traceable and integrated with the contractor's proposed and extended Cost WBS, control accounts, work packages and planning packages, as applicable. Each hierarchical level of decomposition should have a

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[13] Agile Alliance , "Guide to Agile Practices," 2015. [Online]. Available: http://guide.agilealliance.org/guide/backlog.html.
[14] The term "capability" refers to a group of features that are traceable to the technical and operational requirements of the product being delivered

set of clear and documented completion acceptance criteria to ensure that the basis of performance measurement in the EVMS is consistent and traceable.

2. Planning and Scheduling

The EVMSIG states that "The focus of…Planning, Scheduling, and Budgeting…is to develop plans and strategies to achieve the desired program cost, schedule, and technical objectives." This focus includes how contractual work scope is decomposed and how the integrated master schedule (IMS) is developed. The establishment of a time-phased Program Performance Measurement Baseline (PMB) is a critical aspect of EVM. The PMB is the foundation for integrating scope, schedule, and budgets into a plan against which accomplishments will be measured. The IMS establishes and maintains the relationship between technical achievement and progress status. EVM requires establishment of the baseline for all authorized work within the full period of performance, although detailed planning is only required for the near-term work.

The use of Agile tools or systems for this purpose is supported by the tailoring and system concepts allowed by EVM. In an Agile environment, a product roadmap[16] generally is the basis from which a plan (IMS/PMB) is established.

Figure 3 provides a representation of the product backlog hierarchy for planning and scheduling. The capabilities and features define scope and have an assigned budget which is under baseline control.
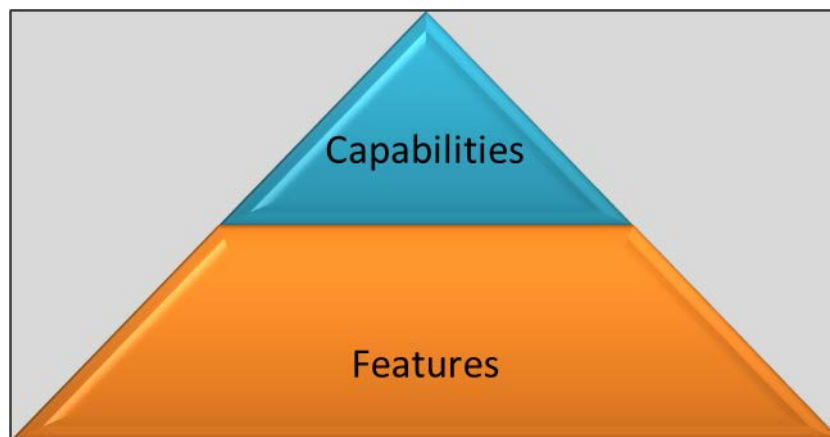
Figure 3 - Features support the completion and delivery of Capabilities. In the product backlog, Capabilities directly relate to the Control Account level of the WBS.

In **Figure 4**, the stories[17] (and any other hierarchical elements) below the dotted line describe the detailed means of accomplishing the scope of a feature (see section 2.b).

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[15] The term "feature" in Agile refers to a pre-determined functionality set that delivers value to the customer (see reference section for more information).

[16] The product roadmap is a high-level plan for when capabilities/features will be accomplished over time (see http://scaledagileframework.com/roadmap/)

[17] The term "story" is often used to refer to activities that contribute to the completion of a Feature
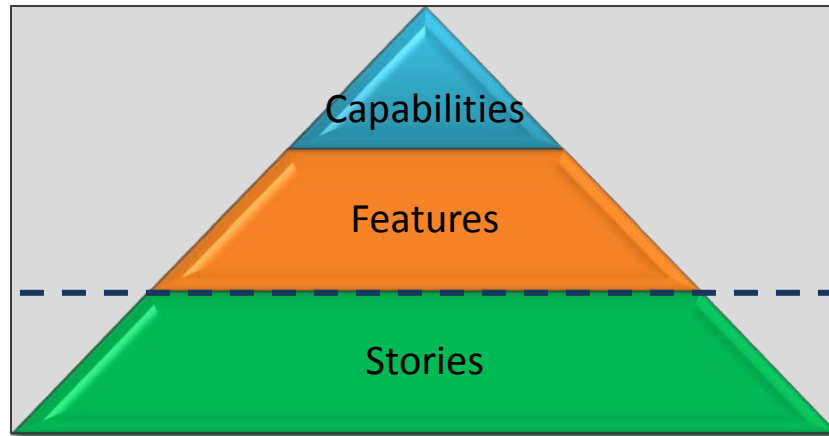
Figure 4 - A potential representation of an Agile product backlog hierarchy

a. *Decomposition of work scope*: In an Agile environment, contractual program requirements are broken down into capabilities, which in turn are further decomposed into features (Features generally represent the point at which Agile execution and EVM progressing align). The product backlog also breaks down the feature into lower-level work items which are often referred to as stories. The completion of stories often contributes to the completion of a feature. It is a hierarchical relationship. The product roadmap identifies the sequence in which features and capabilities are completed and is the tool generally used as a mechanism to assist in the development of the baseline to accomplish the scope of work. The product roadmap supports and should be traceable to the work packages, planning packages, and summary level planning packages in the program Performance Measurement Baseline (PMB)[18], IMS, and the Control Account Plan (CAP).

b. *Time-phasing of work:* EVM requires the time phasing of all work so that the Government and performing contractors have a common understanding of how the work is will be performed. The mechanism for developing the PMB may include the use of documented Agile techniques for plan creation. However, the PMB must capture all work scope and meet the intent of the EVMSIG. A typical Agile environment calls for a backlog of capabilities with an associated Agile roadmap that lays out the strategic delivery of the capabilities over time. Release timeframes are often determined from the roadmap and represent the time box to accomplish a given set of features[19]. Capabilities and features for future releases are placed in planning packages, per the contractor's EVM System Description. The government customer reviews the plan at an Integrated Baseline Review and during various events throughout the life of the contract.

c. *Underpinning the IMS*: The EVMSIG allows for other tools, such as enterprise resource planning (ERP) or manufacturing resource planning (MRP) systems, to support higher level/summary tasks and milestones in an IMS. These MRP/ERP systems manage the

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[18] A PMB is a time-phased resourced plan against which the accomplishment of authorized work can be measured.

[19] Agile planning and execution periods, often referred to as releases, do not necessarily correspond to the formal contractual delivery milestones. Though the term release has been used in the past to identify these delivery milestones, the delivery of functionality is now commonly referred to as a deployment.

finite details of labor assembly and material resourcing while balancing the timing of purchases to satisfy just-in-time principles. An Agile tool or system, in conjunction with the backlog, provides similar detailed task maintenance. Progress in the IMS can be summarized from status in the Agile management tools. The Agile process for statusing and forecasting, which supports IMS status updates, should be documented by the contractor in their EVM System Description. Note, the IMS must maintain a level of detail that provides the Government with actionable information and is sufficient to determine critical and/or driving paths through selected milestones.

d. *Rolling wave planning:* EVM allows for an incremental planning process often referred to as rolling wave planning[20]. The planning window is documented in the contractor's EVM System Description and the duration of the planning window is typically three to nine months. When rolling wave planning occurs, planning packages (and summary level planning packages) are detail-planned and the IMS is updated to reflect that detail planning. Agile release planning is similar to EVM rolling wave planning. The release cadence window is generally determined based on the nature of the work but is often three to six months in duration. During release planning, future capabilities are detail planned into features that can be accomplished during the subsequent release. The methods and timeframe for Agile planning activities should be documented in the EVM System Description and program procedures if applicable.

e. *Freeze period*: The EVMSIG states that, "In order to solidify the PMB for accurate performance measurement, it is necessary to establish a freeze period. During the freeze period, changes to the PMB are limited to maintain its integrity. At a minimum, detail planning of planning packages must occur prior to the commencement of that work within the freeze period." The definition of a contractor's freeze period, including the mechanics and rules for controlling baseline changes during that timeframe should be documented in the contractor's EVM System Description.

3. Measuring progress

Work scope should have clearly defined, objective, technical completion criteria that is documented prior to starting any specific effort. This is true regardless of the use of EVM and/or Agile. The criteria should be established either before or during the detail planning/release planning process at the appropriate level of the WBS.

a. *Progress tied to scope completion*: In Agile, progress of a capability is based on the technical completion of each of its features, which in turn is based on the accomplishment of the feature's acceptance criteria. It is imperative that progress is tied to the completion of scope (technical progress) and not the completion of time boxed events such as sprints. As with EVM, the mechanism/technique used for taking performance against completion of a specific scope of work must be documented. To claim work as completed, the Agile system must support the EVM system in demonstrating that all of the objective technical completion criteria for that work has been met. Agile procedural documentation, particularly addressing processes that occur below the feature level, is an essential part of providing the trace that shows how Agile processes support or generate the EVM performance status reported to the Government program office.

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[20] The continuous process of converting planning packages into control accounts and control account planning packages into work packages.

b. *Claiming performance*: EVM guidelines emphasize the use of appropriate performance measurement techniques based on the nature of the work. The EVMSIG states that the contractor must have information (Quantifiable Backup Data, or QBD) that supports the EV performance claims for each work package/control account. Similarly, Agile programs utilizes QBD to substantiate performance claims. Stories are often assigned value based on size, complexity and/or risk. These values become the necessary underpinning QBD for claiming performance. The usage of stories to measure progress must be disciplined and consistent while following certain guidelines: all stories reflect technical accomplishment towards a feature; once established, story point values do not change; stories can be added or removed from the QBD through the development process to support technical completion of a feature. The process by which stories are used to in conjunction with the selected EVT must be documented and must not conflict with the contractor's EVM System Description.

   EVM measures progress against the detailed planned activities for a given reporting period (i.e. accounting month). In Agile, Features often span several months and the measure of progress is relative to the technical completion of a feature and not to the completion of a reporting period.

c. *Agile and dollarization*:   The contractor should define, within its EVM System Description, the level at which dollarization occurs in the system. This is true whether or not Agile is implemented and should be testable during routine surveillance.   The relationship between Agile performance metrics and EVM status should be understood by all stakeholders.

d. *Forecasting and Estimates at Complete:*   The EVMSIG states that programs will maintain an Estimate at Complete (EAC) by developing "revised estimates of cost at complete based on performance to date ... and estimates of future conditions." This periodic reassessment of remaining requirements contributes to program success for both the Government and the contractor. The development of an EAC on a program that employs Agile philosophies is similar to the process required for traditional software programs and projects. The remaining work is analyzed to provide an assessment of the effort required to deliver the remaining capabilities and features.

   The metrics generated from an Agile tool are typically used to establish a forecast Estimate to Complete (ETC). An Agile forecast reflects the attributes of a properly maintained EAC because it is continuously adjusted to reflect program progress. It enhances management value by tying projected costs for the remaining work to credible sources and ensures any decision regarding the allocation of future resources is based on valid data. Although it is not explicitly stated, the use of Agile tools for the estimation process is supported by the EVMSIG. The methods for the identification of forecasts and estimates between Agile tools and the EVMS should be documented in the EVM System Description.

4. **Baseline Maintenance**

a. *Maintaining the backlog*: Backlog maintenance is critical to the effective management of an Agile program. It is a best practice to review the backlog and product roadmap during an Integrated Baseline Review (IBR) and periodically with the Government customer throughout the duration of the contract. It is imperative that the Government

remain actively involved in the release planning process because of its potential to affect the PMB. Changes to work scope must follow the established rules for work authorization, baseline management, and change control as described in the EVMSIG. Items within the Agile product backlog, at the feature level (i.e., work package) or higher, have an assigned budget under baseline control. Removal or addition of any feature-level or higher item from or to the backlog should be documented and performed in accordance with system baseline change processes.

b. *Scenarios for consideration:*

    i. *Work toward the completion of a particular feature is ongoing and is scheduled to finish at the end of the current sprint. Once the sprint ends, one of the planned stories for that feature has not been completed and the feature has not met its completion criteria.*

    The team forecasts the story to complete in a future sprint. The result is the work package would have a negative schedule variance because the scope of work (feature) associated with the work package did not complete within the baselined period (assuming no other variances are affecting the work package).

    ii. *A feature will be moved from the current release to a subsequent release.*

    A feature is part of the baseline and therefore if it changes, it must adhere to the baseline change control process. Baseline change could be processed in accordance with the contractor's approved change control process, taking into consideration whether the change is contractual or an internal management decision. If work has already begun, then the work package should be shut down by the generally accepted practice of setting BCWS to BWCP, and replan the remaining work package budget (BCWS) in the subsequent release identified.

    iii. *The team will need to complete additional stories in order to meet the completion criteria of a particular feature (i.e. there is no contractual scope change).*

    If the additional stories are still consistent with the acceptance criteria of the feature, and simply provide greater granularity to how work will be performed, then no re-baselining/replanning is required. The originally planned scope (at the feature/work package level) is unchanged and the likely result will be a negative schedule variance as the work would be considered more complex than originally thought. The amount of performance claimed would remain the same, but the percent complete would change with an increase in the amount of effort required to complete the same scope of the feature.

    iv. *The team will be able to meet the objective technical completion criteria for a particular feature without having to complete all the planned stories.*

    This discovered efficiency results in no change to the work scope, as the work would be seen as being less complex than originally thought. The likely result would be a positive schedule variance during the completion of the work scope and a positive float for the IMS upon completion. Also, with the associated hours not expended, a positive cost variance may occur.

v. *A need for a new feature is identified and it must be completed in order to satisfy the completion criteria for a particular capability. It is an addition to the baselined work scope.*

If the added feature is not within the scope of the contract, the contractor shall receive contractual direction, and the associated contract modification with contract value and budget from the customer to begin work on the new feature. The new scope adds to the total amount of budget and performance that can be claimed, but does not affect the performance taken on already completed work. The Control Account where the feature was added and the overall contract percent complete value will decrease due to the added scope, but the amount of performance previously claimed does not change.

If the added feature is within the scope of the contract but not in the scope of the Control Account, then the contractor should follow their EVM System Description for newly identified in-scope effort, and likely distribute Management Reserve to plan and budget the resources for the new Feature. Again, the Control Account and overall contract percent complete value will decrease with the added effort, but this does not affect the amount of performance previously claimed.

vi. *The team was able to meet planned objective technical completion criteria for all planned Features in the release and have additional capacity to perform more work given their observed productivity.*

A baseline change is required to allow the team to pull work out of the product backlog (in a planning package, not yet detail planned). The contractor would initiate a Baseline Change Request (BCR) and convert the planning package into a work package in accordance with their EVM System Description. Work pulled from the product backlog would be effort the team believed could be completed under existing constraints for upcoming releases and program milestones.

If the work to be performed as a result of the additional capacity is already in the baseline plan as a work package, a BCR would not be required and the portion of that work package completed in the current Release would result in a positive schedule variance.

Agile and Maintaining EVM System Compliance

The Integrated Program Management Report (IPMR) Data Item Description (DID)[21] contains specific requirements for EVM data reporting to the Government. The IPMR allows tailoring to meet the needs of the Government program office. To enhance customer collaboration, consideration should be given for the buyer to have access to the supplier's Agile tools in the interest of transparency.

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[21] See http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=278901

1. **Standard terminology and metrics**

Currently, there is no DoD standard terminology for Agile processes and artifacts. It is imperative for the government PMO and a contractor to define the Agile terms and process at the beginning of negotiations for a contractual scope of work. The EVMSIG and the IPMR, along with other DoD and Service/Agency policies, define EVM requirements and are included in RFPs where applicable. The performing contractor should provide information to the PMO regarding how Agile processes are incorporated in the implementation of their EVMS.

2. **Agile metrics and EVM metrics**

As with the discussion on definitions, there are no DoD standards for Agile methodology metrics. Metrics such as Velocity, Burn-down/Burn-up, etc. must be agreed upon by the performing contractor and the government PMO. Agile metrics may be included in the IPMR Format 5 as supporting documentation for the status of work performed, but should not supplant the typical EVM metrics. As with the link between EVM status and technical performance, Agile metrics should provide status that supports and aligns with similar EVM metrics.

3. **Traceability**

Generally, Agile processes influence segments of work below the reporting level for the IPMR. Performance status at the level where Agile execution occurs should underpin the performance information at the level where EVM is reported (usually through the features). Since they are typically the criteria for performance, if the stories and features for a given scope of work experience favorable performance, both the Agile metrics and the EVM metrics should reflect favorable performance. The same is true for unfavorable performance as well. Format 5 variance analysis is required at the IPMR reporting level; the performing contractor should provide information from the Agile system to help support variance explanations.

Agile Reference Terms

Capability	Term frequently used interchangeably with **Epic** to describe a high level system functionality defined by the government to meet a specific required need. All Capabilities should have clearly defined objective technical completion criteria. Capabilities are typically found at or above the Control Account level of the WBS and are usually composed of multiple **Features.**
Epic	See **Capability.**
Feature	Term used to describe a discrete system functionality defined by the government to help meet the specific completion criteria of a **Capability**. All Features should have clearly defined objective technical completion criteria. Features are typically found at the Work Package level of the WBS and can typically be completed in a single **Release**.
Story	Term used to describe activities that contribute to the completion of a **Feature** and can be completed within a single **Sprint**.
Release	Term used to describe a concrete time box or cadence used to complete **Features.** Release duration can vary, but is typically three to six months. Many practitioners use the Release cadence as their rolling wave planning period.
Sprint	Term frequently used interchangeably with **Iteration** to describe a concrete time box or cadence used to complete **Stories**. Sprint duration can vary, but is typically two to four weeks.
Iteration	See **Sprint.**