

## ***Earned Value and Agile<sup>1</sup>***

### **Agile Terminology**

**By Howard Zillman**  
Northrup Grumman

1. **Feature/Epic/User Story** – based on the information from the internet and in discussions with some of the AGILE users I know, these terms are interchangeably and represent a requirement (scope) that needs to be accomplished. They are things that can be estimated, tested, tracked and measured. These terms are the equivalent to Work Packages or Planning Packages. A User Story may also be a subset of a Feature or EPIC. The User Story is scope that can be delivered inside one Sprint. User Stories together may form larger systems (Features, EPICs)
2. **Story** – A Story seems to be synonymous to a User Story in AGILE. Stories are sometimes utilized as inch stones or Quantifiable Backup Data (QBD) for EVM tracking.
3. **Story Points** – AGILE describes Story Points as the scale of effort required to implement a User Story. I equate it to the budget (BCWS) associated with the effort defined by the Feature/Epic/User Story. Story Points relate to scale or complexity of a User Story – it can be used to allocate budget to a User Story (but might be team dependent). Story Points can also be the basis for BCWP % Complete.
4. **Iteration/Sprint** – In AGILE terms, these are defined as a Period of Performance (PoP). That typically spans approximately 1-4 weeks.
5. **Spiral** - In AGILE terms, these are defined as a Period of Performance (PoP). We define that time span as approximately 3 months. This would imply that an Iteration/Sprint is a subset of the Spiral. Sometimes referred to as a Release. A Release or Spiral represents a body of scope with a 'formal' delivery at the end. Due to the possible confusion with Spiral Development, it may make more sense to use the term Release instead of Spiral.
6. **Velocity** – In AGILE it represents how much work a team can accomplish within an Iteration/Sprint. I'm not sure there is an EVM equivalent. Velocity can be utilized to forecast schedule or ETC (estimate to complete) by comparing achieved team velocity to the remaining backlog in the work package or control account. (Ed: The EVM term SPI {Schedule Performance Index} may be analogous to velocity as it measures the amount of work completed versus planned {BCWP/BCWS}, for example 400 staff-hours of work completed in 300 staff-hours {SPI = 400/300 =

---

<sup>1</sup>The College of Performance Management (CPM) published a Compendium of articles on Earned Value and Agile based program management in *The Measureable News* in late 2014. The articles are now being republished in the *PM World Journal*, as agreed with CPM and the authors. An introduction by Ray Stratton launched the series in the April 2015 edition of the *PMWJ*. This is the 2<sup>nd</sup> article in the series. For information about CPM, visit their website at <https://www.mycpm.org/>

1.33}. This value can be used to forecast how long it may take to complete remaining work.)

7. **Backlog/Product Backlog** – In AGILE, this represents work still to be done. It is typically a collection of User Stories (see above) that the team will work at some point in the future based on some priority. This looks like the EVM equivalent to a Control Account. Backlog is the scope of work to be done – tasks in the schedule, the scope of a work package or control account. Remaining backlog is the uncompleted work. If backlog is the scope of the control account (BAC) then the remaining backlog is the scope of work yet to be done (BCWR).

8. **Burnup Chart** – This represents the number of Stories that have been completed within the current Sprint. Could be thought of as completed milestone tracking; the basis for BCWP % Complete.

9. **Burndown Chart** – This displays where the team stands regarding the completion of the task/Stories in the current Sprint. Could be thought of as missed milestone tracking.

10. **Sprint Backlog** – This represents a list of Stories or tasks that were pulled from the Backlog/Product Backlog for inclusion in the next Sprint cycle.

## About the Author



### **Howard Zillman**

Northrop Grumman Electronics Systems



**Howard Zillman** is the Western Region Manager for Earned Value Management and Program Assessment for Northrop Grumman Electronic Systems Sector. Howard has 30 years of experience in both earned value management and program financial control management. Howard is responsible for developing and providing EVM training, program guidance and all aspects of support related to program EVM implementation and Government EVM audits. Howard is recognized as an EVM subject matter expert for NGES. Howard holds a Bachelor of Science Degree in both Accounting and Finance from California State University Northridge, USA.