Earned Schedule Book Review

Earned Schedule by Walter Lipke, Lulu Publishing

Depending on who you ask Earned Schedule (ES) has been around for a few years or since EVM was created. The graphical analysis of finding the point in time where the current EV meets the PMB (PV) has been practiced for years as a means to determine how many weeks or months the project is ahead or behind schedule. But it was Lipke who defined a common terminology and analysis equations in 2003. Research has validated his ES analysis tools as being superior to most other methods of estimating project completion date most of the time. Earned Schedule is the first book to fully explain ES, but the concept can be explained in less than 1000 words. What Lipke has produced is a graduate level book on the subject of EVM, new analysis tools, and very interesting concepts!

This is not an entry level discussion of EVM. There are many books that cover basic EVM. This book is unique in the theories and concepts it addresses and the reader should have a deep understanding of EVM to appreciate what Lipke has done. At only 170 pages, it looks like a weekend read, but I got bogged down in some of the formulas and concepts and had to put the book down and let my brain cool a while. There is much to understand and lots to learn.

ES helps us know where the project sits in the time line and answers the question, "What is the effective date of our progress to date?" Are we 150 days into the project, but completed only 125 days of work, or 167 days of work? That is the first product from ES. But Lipke takes us further. Now that we know where we really are in the project timeline (the ES date), we can examine the schedule and see what tasks should have been started, underway, or complete. We should be following the project plan and doing work in the proper sequence. Thus all the EV at the ES date should be produced from work up to but not beyond our ES date (not our status date). But often project teams start other work because (1) they can, (2) it's more interesting, (3) it's easier, (4) they're stuck, or (5) to get ahead of schedule. Doing work out of sequence means not completing prerequisite work. Lipke claims that this just generates rework since some of the expected knowledge is missing. Lipke's defines Schedule Adherence as an index (0-1.0) showing how much of the work done to date is per the project plan. He has named the index the P-Factor and it shows the ratio of work done that should have been done; 1.0 shows the plan is being followed perfectly. It helps the PM know if the EV (BCWP) is the right EV or just EV. Lipke then creates an effective EV, EV(e) that considers the amount of rework that might be encountered so that forecasts of funds and time consider the amount out of sequence work.

Not to fear, Lipke includes examples of his theories if terms like "exponential" and "derivative" cause you to recall bad memories of high school algebra you will still appreciate his ideas.

Of course, like basic EVM you have to start with a sound plan and reasonably accurate EVM performance data. If you have that then Lipke's ideas will allow you to extract much more insight into your project and its likely outcome. He makes note that the first item of importance is a good estimate of EV. Lipke has provided free downloadable spreadsheets to do all the analysis. I'd put a link here, but you really need to read his book before you try to apply his ideas.

- Ray Stratton / Management Technologies / February 2010