Project Governance and Control Symposium
Canberra, Australia Capital Territory
2-4 May, 2017

Evolution

Earned Value Management, Earned Schedule, and Science

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Managing Schedule

- "Engineering problems will first manifest themselves in a schedule slip someplace. Generally, as I have learned since then, if you have a technical problem someplace, or some kind of a problem, it will manifest itself first as a schedule slip. Then, it will eventually become a cost problem. If you wait to see the cost problem, something has already happened over which you have long since lost control (emphasis added). I always believed in the old adage, 'Time is money'; but if you could control the schedule, you could in fact control the cost ultimately in what was going on."

  Lt Gen "Whitey" Driesnack, USAF

  GAO Expert Meeting Minutes, 29 Sep 2015

- "We need to maintain our attention on schedule delivery. Data tells us that since July 2003, real cost increase in projects accounted for less than 3 percent of the total cost growth. …Therefore, our problem is not cost, it is SCHEDULE."

  Dr. Steve Gumley, CEO

  Defence Materiel Organization (Australia)

  DMO Bulletin, July 2006, Issue 61

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"Schedule Is Different"

Schedule Is Different

By Walt Lipke, Software Division, Oklahoma City Air Logistics Center

Abstract

*Earned Value Management (EVM) is a wonderful management system, integrating, in a very intriguing way, cost ...schedule ...and technical performance. It is a system, however, that causes difficulty to those just being introduced to its concepts. EVM measures schedule performance not in units of time, but rather in cost, i.e. dollars. After overcoming this mental obstacle, we later discover another quirk of EVM: at the completion of a project which is behind schedule, Schedule Variance (SV) is equal to zero, and the Schedule Performance Index (SPI) equals unity. We know the project completed late, yet the indicator values say the project has had ...**perfect schedule performance**!! A senior executive receiving the project performance report, minimally knowledgeable of EVM, cannot understand why he has an angry customer screaming, "Your product delivery is late!" This paper discusses the dilemma with the EVM schedule indicators, SV and SPI. A method we are using to resolve the problem is presented in the paper. It is shown that the result from the method is schedule indicators having the same behavior as those for cost.*

Within the Software Division at Tinker AFB we have used Earned Value Management (EVM) for several years. It has proven to be a tremendous aid to our project planning, tracking, and decision-making. And, the reporting methods of EVM serve as a good tool for communicating with management. Over the years, we have evolved our application of EVM. We now apply statistical techniques to predict project outcomes, and are using historical data for new project planning.

To confidently apply EVM data for outcome prediction and project planning, the

CPM-*The Measurable News*
March 2003

Kym Henderson

Belgian Research

Stephan Vandevoorde

Dr. Mario Vanhoucke

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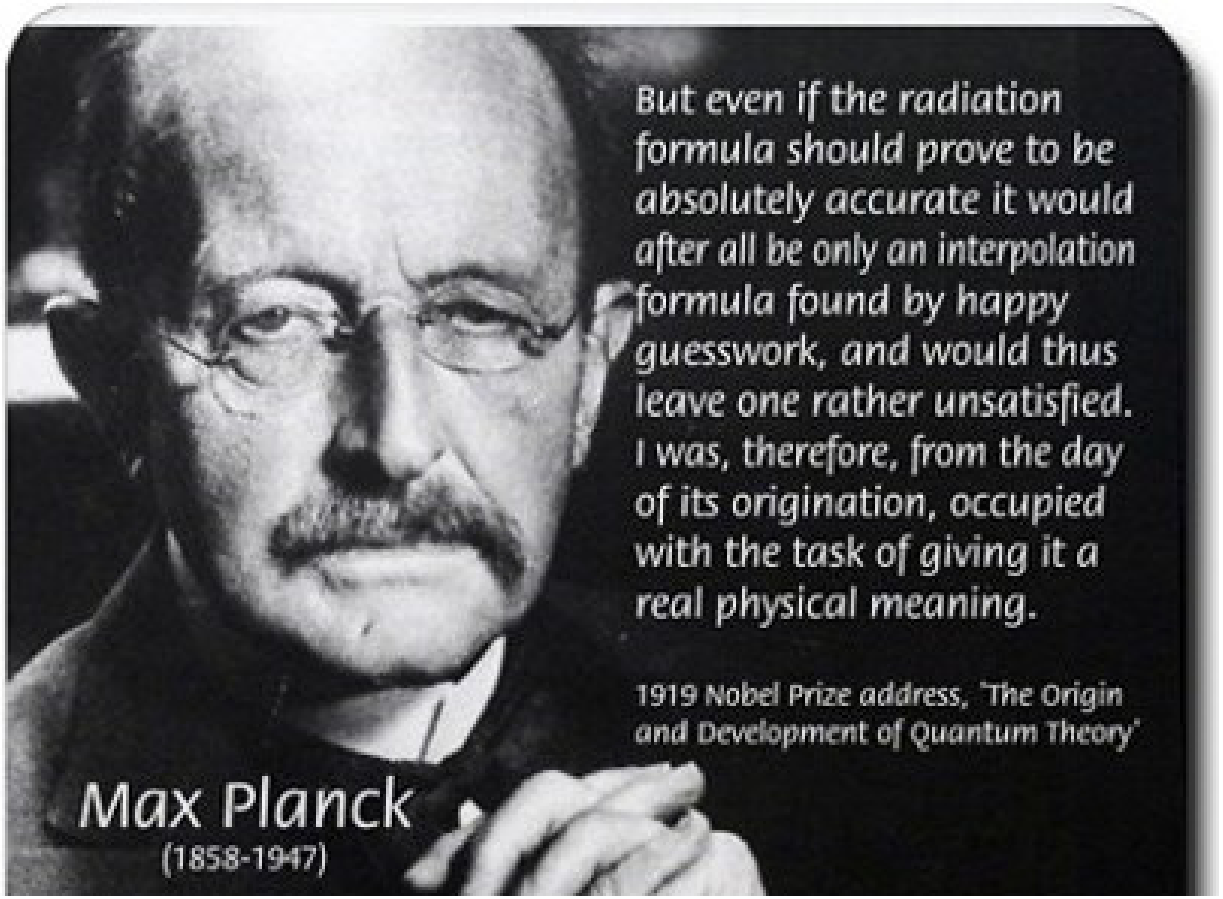
Science History



$$h = 6.62607004 \times 10^{-34}\ m^2\ kg\ /\ s$$

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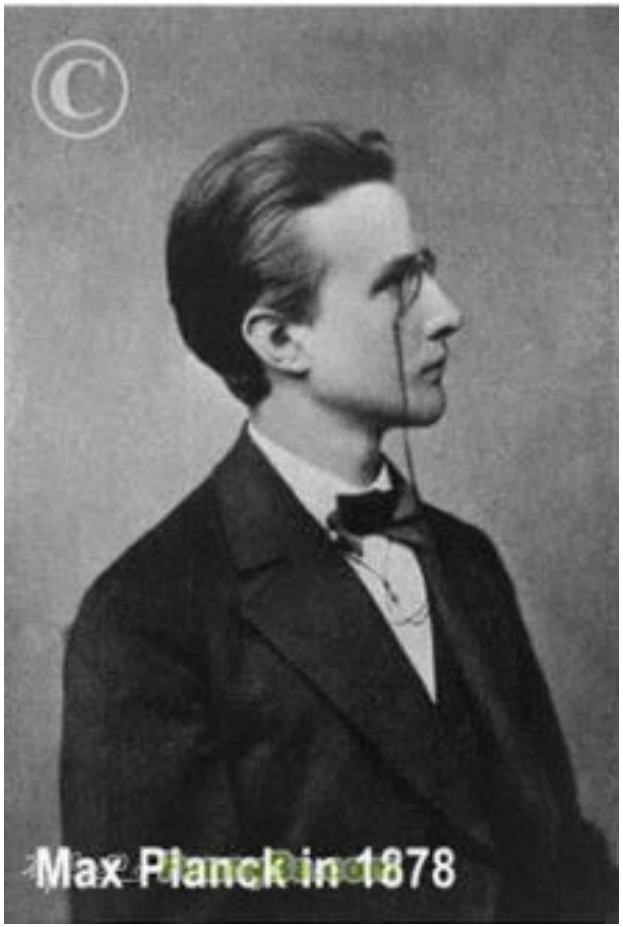
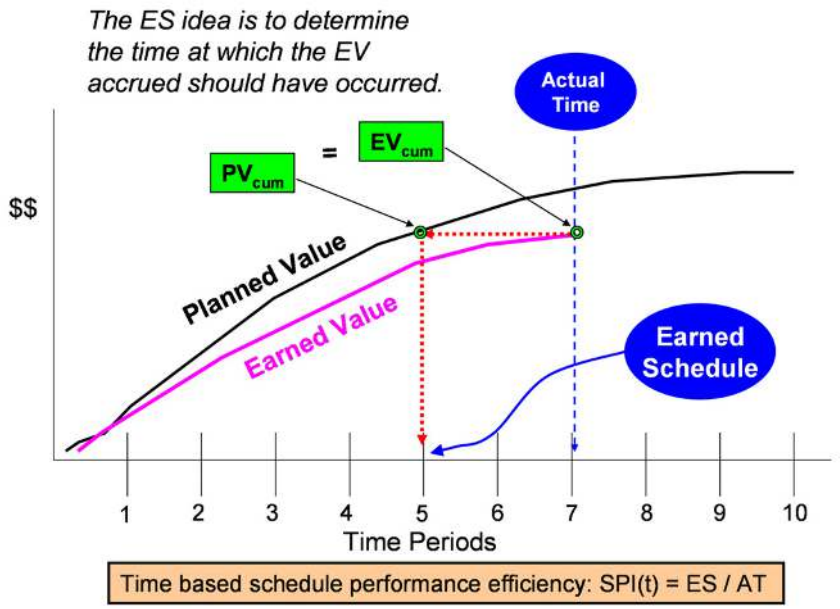
Planck's Constant and ES™





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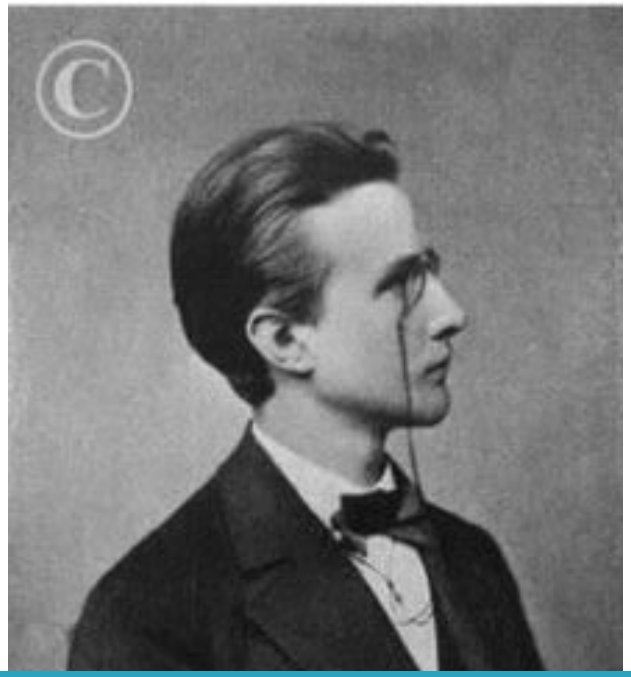

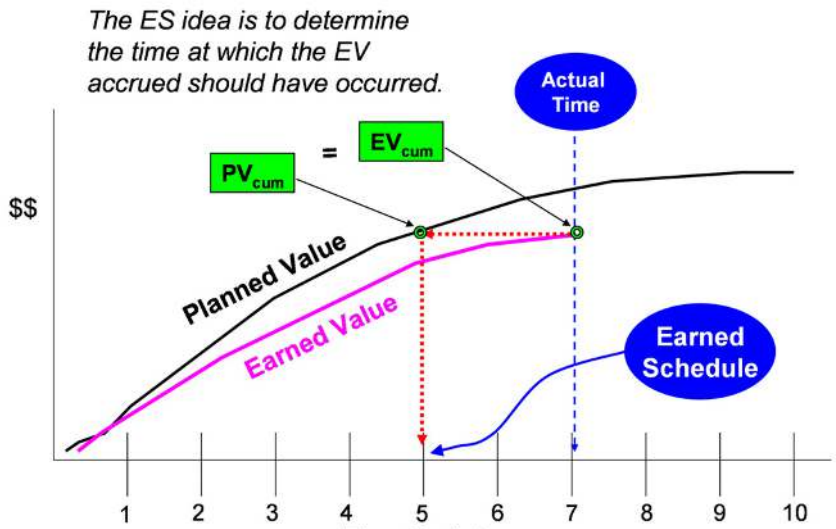

"A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it." - Max Planck

Capabilities

- Schedule Measure & Performance Indicators
- Duration & Completion Date Forecasting
- Critical Path/Milestone Analysis
- Schedule Adherence …rework analysis
- Stop Work & Down Time
- Longest Path
- Statistical Forecasting
- Outcome Prediction
- Period of Opportunity
- Probability of Recovery

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Assistance

- Website ➡ www.earnedschedule.com
- Book ➡

Paperback
E-book
Kindle
pdf

Japanese
Portuguese
Spanish

- Email ➡ waltlipke@cox.net

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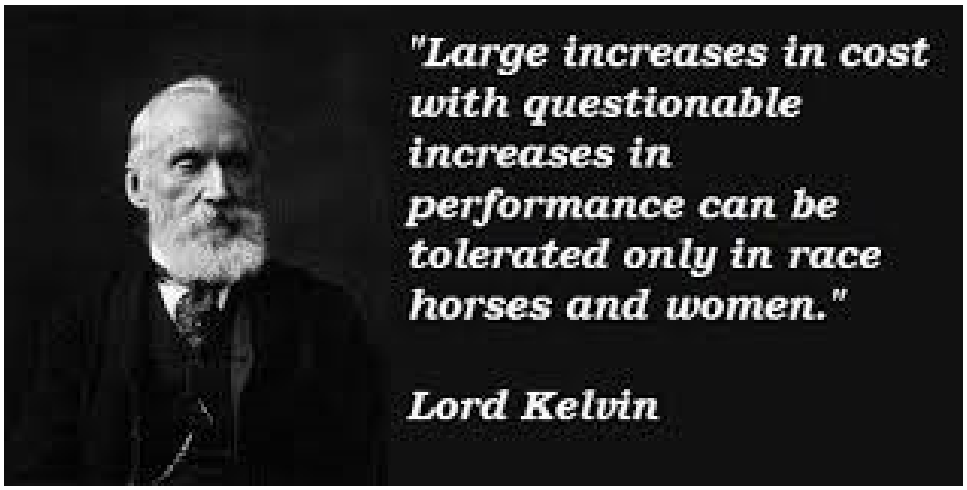
Measures



“I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind.”

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SEI/IEEE Software Process Award

It's a Wrap!

- is an extension to EVM
- Measures are important
- EVM & measures ➡ project control
- Measure rework
- Improve organizational behavior
- Initiate an improvement!!

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Thank You!!
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