

The following email was sent to Dep. Sec. Defense Stephen Feinberg, DOGE and others with the cited white paper on April 13.

The revised white paper, *Integrating the Embedded Software Path, Model-Based Systems Engineering (SE), MOSA, and Digital Engineering (DE) with Program Management*, dated April 13, is attached. It incorporates the revised *DoD Program Management (PM) Functional Competencies* (PM Competencies) which was released by the Office of the Asst. Sec. Def on December 16, 2024. The revised PM Competencies includes the following new information:

Technical Management sub-competencies: digital engineering, digital twins, agile software development, best practices in software engineering, and aligning software development efforts with broader program objectives.

PM Competencies does include the sub-competency, Earned Value Management (EVM) within Business Management, as follows:

A PM should “recognize the value and benefits of EVM in the defense acquisitions process.”

However, *PM Competencies* does not refer to any EVM or program management standard.

Additional Information

Additional guidance is in my article in Defense Acquisition Magazine, ***Better Program Management Through Digital Engineering***, page 32, May/June 2022. The article concludes:

If the DE Strategy is successfully implemented, and if the status of the digital artifacts in the ASOT is used to inform the PM of schedule performance and the degree of product quality, the PM will be able to take corrective actions more quickly. If the schedule performance data is automatically transferred to the PM’s scheduling system instead of being manually entered, program costs will be reduced and the accuracy of that data will increase.

So, *PM Competencies* leaves it to the PM to determine if EVM has any management value or benefits. It is telling that the NDIA EVM System Standard, EIA-748, is not cited. Compliance with the EIA-748 guidelines is incompatible with the objectives of using DE and digital twins. Here are some excerpts from the white paper:

the exchange of schedule status information via model exchanges and *automated transformations will eliminate the manual entry of estimated schedule performance such as the percent of work complete used with EVM*. The estimated percent of work complete, such as drawings or code, may fail to be an indicator of the true status of validating requirements, completing the preliminary design, meeting the weight targets, or delivering software and may fail to properly account for rework.

The *schedule and technical performance data* collected from DE modeling tools is recorded in the schedule without manual intervention, manipulation, or elimination, as compared with earned value, thus preserving its truth and management value.

Per SE Guidebook, “software development activities should *employ automation* across all aspects of the software factory and *project management components to eliminate tedious, manual steps to the maximum degree practicable*, enabling higher velocity, consistency, and overall better-quality software components.”

Automation: The core of digital transformation starts by *automating mundane tasks* involved with configuration and connection and then automating aspects such as *report* and requirement development.

...pursue a MBSE-first approach in all acquisition pathways, strategies, and contracts. Key actions include *capturing data systematically* across the life cycle including *evidence of cost, schedule, performance*, and agility of MBSE.

Finally, schedule performance should be based on progress towards completing artifacts that are authoritative sources of truth of achieving technical performance objectives, verified requirements etc., not on the percent of work performed.

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