THE IMPACT OF GIVING WARFIGHTERS A VOICE IN EARLY TECHNOLOGY DEVELOPMENT

Utilizing Development Security Operations (devsecops) Platforms To Support Science And Technology (s&t) Collaboration With A Focus On "shift-left" Portfolio And Capability Set(s) Insight

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Department of Defense (DoD) Science and Technology (S&T) analysis, experimentation, prototyping, and development should lead to ideas, concepts, and potential capabilities (and their constraints and limitations) that can inform Doctrine, Organization, Training, materiel, Leadership, Personnel, Facilities, and Policy (DOTmLPF-P). The ultimate beneficiaries are the people of the United States, and their allies and partners. However, the ultimate customers are the Warfighters and their supporting cast of Government Civilians and their supporting organizations. In some cases, what Warfighters need are obvious. In many cases, those needs are not obvious, and collaboration is required where S&T informs customers on the art of the possible (e.g. before showing people a car in the age of horses, if I asked them what they wanted, they may have said a faster horse) and S&T is informed by Warfighters on their most pressing and evolving needs. Early-stage S&T is intended to be very open ended, with a fail often and fail fast approach being preferred so we can more rapidly focus on advances that have the potential to move to more advanced development – without upfront and on-going Warfighter involvement the Acquisition process is more cumbersome, less efficient, and more costly, and the likelihood of producing a relevant and useful capability is at risk. Warfighter time is very valuable, and we believe that by employing some standard state of the art, easy to use network-based collaboration and experimentation environments we can make it easier for Warfighters to participate; providing a consistent platform to capture their needs and look for trends across a variety of potential S&T solutions and assist in the evaluation of the readiness of a given capability to augment or replace an existing capability or capability set. This platform also provides a consistent portfolio view (capabilities, cost, utility, technology readiness) of S&T that decision makers can use to inform investment decisions and to recognize common S&T components and capabilities that can be leveraged across many efforts. We will describe and demonstrate a platform that can support this type of collaboration and portfolio view to support Warfighters and S&T developers. And, we will discuss how early involvement has dramatic positive ramifications throughout the entire Acquisition lifecycle with a focus on “shift-left” and the criticality of Warfighter involvement in Development Security Operations (DevSecOps) from concept to fielding and sustainment.

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