



Understanding the Valleys of Death

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Research Question

- Technologies can be a driving force and accelerate competitive advantage but many attempts to transition them in the DoD fail
- The “Valley of Death” is a commonly used term to describe the bureaucratic process within the DoD that impedes technology transition, but seldomly are further explanations or insights offered
- What are the “valleys of death” and how should we approach them?



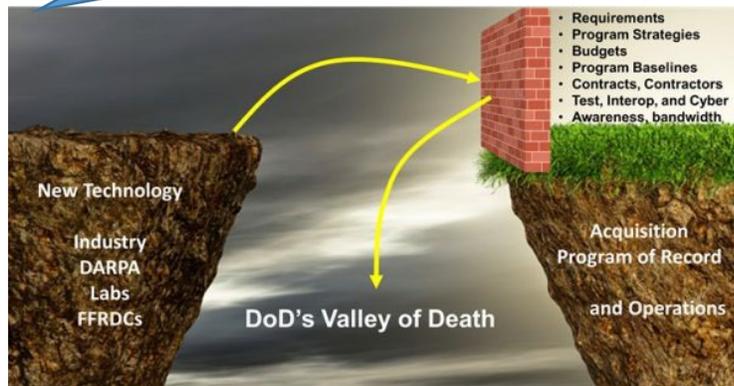
Research Issue

- Primary focus of difficulty transitioning technology in the DoD has been with DoD “bureaucracy” and aversion to new technology
 - Critics have offered little in terms of specificity
 - What are the issues and can we address them?

I have a great new idea and really really really look forward to working with you



...but, I have a great new idea

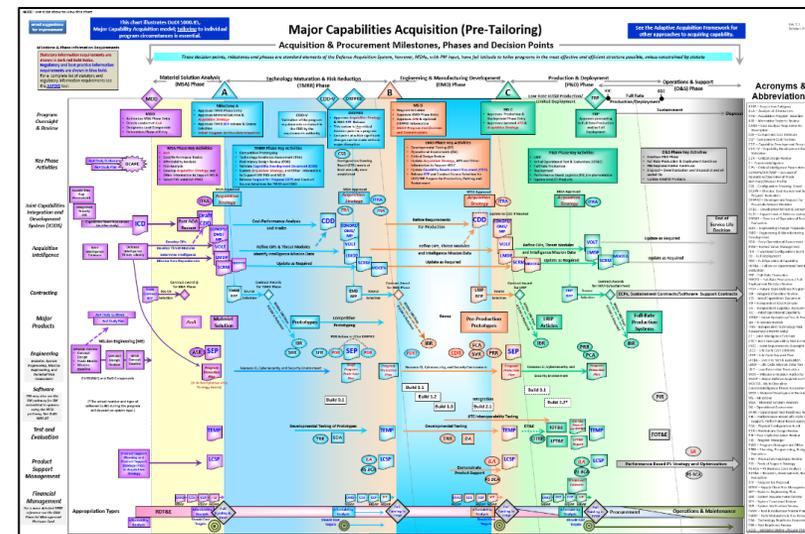


#bureacracy



Methodology

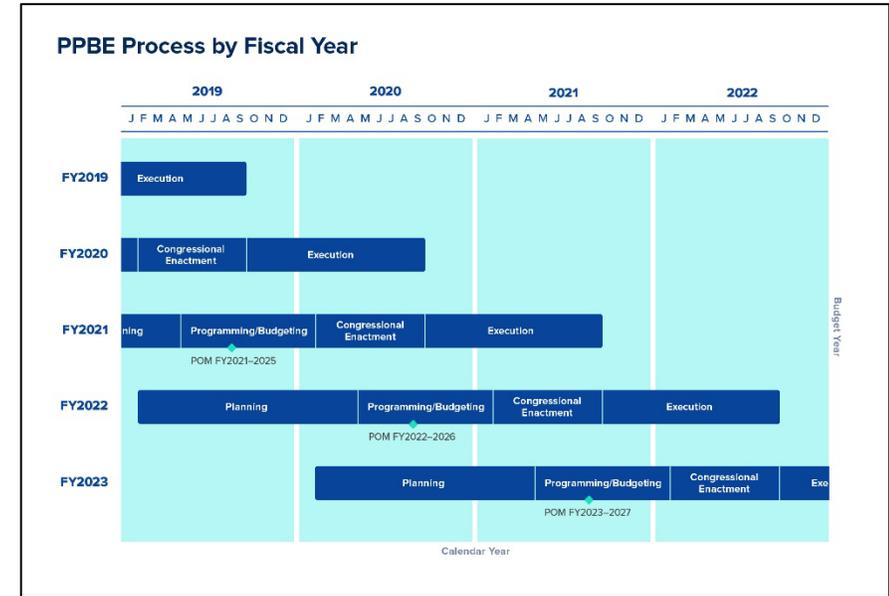
- Two primary methods used
 - Define reasons why “bureaucracy” and DoD’s ‘aversion to technology’ are default explanations for so many (retrospective)
 - Evaluate “the system” for how new tech is introduced at various stages (prospective)
- Document the steps in the process from tech ideation through maturation and eventual transition
- Document observations
- Additional analysis where able





Observations

- Common issues inserting technology
 - Funding – availability and total investment
 - Use Case(s) and Impacts - priorities
 - Where are we and what is needed?
- Considerations when introducing tech
 - Roadmap and funding – at what cost and when
 - Who to talk to and for what?
 - Tech Maturity – dependencies across domains in relevant environment
- How well are successes and failures captured?
- Were technologies recapitalized elsewhere?





Results

- “Bureaucracy” is, at least in part, the DoD Acquisition process
 - Funding for Programs and adaptability is difficult
 - Competing priorities – acquire, sustain, improve
 - How does the tech fit in and what are the ‘delta’ outcomes?
- DoD Acquisition is a monolith and does require at least some modifications to facilitate technology across the “valleys of death”
- Examples
 - PPBE is a necessary process, but streamlining coupled with the right insight and oversight must be considered
 - Technology Readiness Levels offer guidance but government must own the technical baseline and reconcile technical debt
 - Engagement options and opportunities must be socialized from both the government and industry perspective
 - Workforce considerations – how well do we know our processes?

Recommendations

- Back to basics
 - What are the missions?
 - What are the gaps?
 - What problem is being solved?
 - What are our options?
- For DoD
 - Have a better, more comprehensive plan with off/on ramps
 - Increase accountability and leverage dynamic resourcing
- For Industry
 - Understand the challenges, both technological and structural
 - Know who and where to engage



'come with me if
you want to live,
and not succumb
to the valleys of
death'

"If you can link your product, your technique, your process towards a delta outcome across capability, affordability, availability, you'll get across that valley" - VADM Chebi, COMNAVAIRSYSCOM

"You can't push it through the valley of death, you have to pull it through" - RDML Hash, COMNAWCWD