

Abstract

Speed Wins: Fixing the Bottleneck in Capability Development

Naval Special Warfare (NSW) must adapt faster to keep pace with modern threats. Our research targets a major slowdown in the acquisition pipeline: the DOTmLPF-P analysis process. It’s slow, manual, and burdens decision-makers with low-tech tools. We interviewed over 20 stakeholders, ran a design workshop, and partnered with DIU and JIFX to reimagine how this analysis could work. The result: a proposed digital tool that accelerates decisions, connects teams, and supports warfighter-focused innovation. Our research blended operator interviews with industry exploration to ensure our solution is both mission-aligned and technically feasible.

Methods

Human-Centered, Mission-Focused:

- Interviewed operators, program managers, and acquisition leaders across NSW, DIU, and SOCOM
- Explored industry and defense innovation spaces to assess current tools and understand what’s feasible for digital transformation
- Partnered with DIU and JIFX to observe real-world innovation workflows
- Facilitated a 5-hour stakeholder design workshop using warfighter-centered design principles
- Analyzed DOTmLPF-P workflows to identify bottlenecks and opportunities for digital intervention



Results & Impact

What We Learned — and Why It Matters

- ✓ DOTmLPF-P is one of the most time-consuming steps in capability development (60+ days)
- ✓ Current process is disconnected from operator intent and lacks digital tools
- ✓ Critical decisions are made with limited traceability and stakeholder input
- ✓ NSW needs faster, smarter, and more connected methods of analysis

Operational Impact

- Enables faster fielding of mission-critical capabilities
- Improves transparency, alignment, and collaboration across NSW teams
- Supports the shift from a rigid “Kill Chain” to a dynamic “Kill Web” acquisition model

Future Research

1. Prototype the digital DOTmLPF-P analysis tool with real user input
2. Integrate mission engineering tools like mission threads into requirements planning
3. Use PME and workshops to educate future planners on agile capability development
4. Scale this approach to other SOF or conventional units looking to accelerate acquisitions
5. Further collaboration with tech developers and digital engineering teams.



Jason Mariscal, LCDR, USN
Jeff Cornish, LCDR, USN
Advisors: Dr. Leo Blanken
Dr. Nick Dew