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# Facilitating Usage of New Tech in Defense Systems: Issues and a Way Forward

INCUBATOR EXECUTIVE SUMMARY

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## EXECUTIVE SUMMARY

This project contributes to the acquisition and sustainment process for new technology by identifying critical issues in the socialization of new technologies from the end-user perspective. Understanding that the definition of an end user varies greatly by the technology and purpose in question, but there is a fundamental knowledge gap between how to best acquire and test a new technology versus how to domesticate and use the technology within the relevant Department of Defense (DoD) culture, function, and processes.

Previous research points to convenience as a factor. If it is easy to make sense of it in a person's day-to-day workings, then incorporating a new technology is easier (Sokol, 1994). However, in cases where an individual or group within an organization must make moderate to substantial changes to their daily routine and practices, the pushback is much stronger.

This pushback—and other processes and systems that slow the progress of the implementation of a new technology—is called friction. In our initial research, the following areas of friction were identified as concerns within the DoD:

- Reassignment of critical military personnel.
- User ownership and accountability.
- Poor communication of emerging and ongoing user issues.
- Unintended consequences of neighboring protocols and inter-branch relations.
- Lack of clear, holistic, and consistent metrics for tracking end-user sustainment.

Recent examples, such as the challenges in the Military Health System (MHS) GENESIS electronic health-records system initial roll out,<sup>1</sup> shine a light on the potential issues that can arise when the domestication of a new technology or platform are placed without sufficient consideration or processes that promote end user buy-in.

We note that due to the complexity, scale, and unknown factors within the DoD, establishing clear metrics to track and improve new technology socialization practices or identify areas of friction unique to different project types is a major undertaking.

To that end, we recommend continued research focusing on the complexity barrier to creating cardinal metrics. The best place to begin is by focusing on identifying blind spots in the process of technology socialization within and across organizational branches. The goal is to paint as clear and comprehensive a picture for one specific type of technology and then repeat the study for other technology categories and adjust as necessary.

<sup>1</sup> [DOD Healthcare Management System Modernization \(DHMSM\) – DOT&E](#)

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