NOLIJ CONSULTING

Client: Defense Health Agency (DHA), Program Executive Office (PEO)

Business Problem: Erasing Doubts in Test Program Development

Without measurable product quality benchmarks that align with QA policies, leadership cannot make informed decisions about software due to the inability to compare the quality of software systems or quantify the value of software QA.

Challenges: DHA as a Model for Transformation

- T&E activities are constrained by a lack of governance over product quality.
- Vendors and product owners have no guidance on industry best practices.
- Disparate approaches to quality assurance fill the void, which further undermines the client's ability to determine whether software is fit for use.
- As T&E value diminishes, stakeholders view the process as a schedule bottleneck.

Solution: Total Product Quality Model

Total product quality is an industry-standard process based on Institute of Electrical and Electronics Engineers (IEEE) Standard 982.1, *IEEE Standard Dictionary of Measures to Produce Reliable Software*. Using new technologies, eliminating overlapping roles and responsibilities, and defining overarching QA standards, Nolij developed a full-service approach to software T&E, comparable to a platform service.

Nolij QA evaluators assess product quality against eight pillars, each one an evaluation area comprised of multiple KPIs. We score KPIs according to DoD 5000 Series acquisition documentation standards, and calculate final product scores on a scale of 0 to 100.

Benefit: Success Metrics

Our accomplishments include the reduction of security vulnerabilities, increased speed of site acceptance for released software, and budget and time savings thanks to fewer defects. Our streamlined processes and automated frameworks improved the reliability and accuracy of test and evaluation, and empowered leadership by:

- Reducing test cycle durations by 50%
- Doubling the number of defects identified and managing to over 2,900
- Successfully managing over 3,200 test events in our centralized test lab
- Absorbing a 30% increase in year-over-year demands using the same number of FTEs
- Reducing the test execution timeline by 55% per program, on average