Incrementally Deploying Capabilities Accelerates Mission Success

Overview

In the U.S. intelligence and defense communities, the traditional model for developing, verifying and deploying new mission capabilities to the field centered on a linear approach, with each of these activities beginning and ending before the subsequent phase was initiated. Also, a 100 percent solution was a prerequisite for production. This approach involves a substantial investment of time and resources, and precludes efficient and timely delivery of technologies and tools that are critical to national security. The intelligence and defense communities are moving toward more agile and flexible processes, and DigiFlight is at the forefront of helping them develop and implement innovative solutions.

Challenge

A leading U.S. intelligence agency approached DigiFlight for help in maximizing the value and extending the reach of technology developments generated by internal Cyber Operations departments. These silos of development activity, lacking enterprise life cycle support and awareness of similar efforts elsewhere in the agency, were resulting in duplication of effort, inefficient use of resources, and delayed deployment to the field.

A related and equally important challenge was the agency's responsibility to report periodic progress on the U.S. Executive Branch Comprehensive National Cybersecurity Initiative (CNCI)—a series of objectives designed to guide government entities in developing technology capabilities and solutions to secure America's digital information and communications infrastructure in cyberspace.

Incremental Deployment

Rather than relying on the traditional model that required 100 percent development and verification of mission capabilities prior to production, DigiFlight helped to implement a modular approach that enables simultaneous development, verification and deployment. While engineers are developing new capabilities, others are testing tools introduced 90 days ago, and software in development 180 days ago is now in production. Capabilities are delivered to the field faster, and lessons learned result in enhancements in future releases. Also, this agile life cycle enables the agency to report mandated 90-day progress toward CNCI goals.

Approach

DigiFlight applied its systems engineering and test and evaluation expertise to the task of migrating and integrating the agency's existing Cyber Operations technologies and future developments into the enterprise framework in order to produce desired mission capabilities and achieve CNCI goals.

A transformational culture shift required internal departments to sacrifice some control over their developmental efforts in the interest of developing more sophisticated capabilities to serve the needs of a broader user community.

Doing business in a dramatically different way demanded substantially improved communication and collaboration between internal departments to ensure success. DigiFlight plays an instrumental role in managing and coordinating the agency's developmental and operational test and evaluation processes, helping internal organizations:

- Adapt existing and implement new systems engineering processes
- Define, introduce and deliver requirements management process

- Decompose user needs and capabilities into system level requirements
- Negotiate and track progress toward mission capability delivery commitments
- Establish best practices to identify, develop, inspect, demonstrate, analyze, test and deploy mission capabilities
- Verify performance and functional elements against defined requirements
- Evaluate operational effectiveness, suitability and survivability of mission capabilities
- Capture and analyze metrics data for trending and modeling to help define capacity demands based on mission scalability requirements

Accelerating Mission Success

Since entering the first increment of capability delivery approximately five years ago, DigiFlight continues to play a pivotal role in helping its intelligence community customer accelerate the success of this acquisition program as it enters the third increment.

This innovative approach to capabilities development, verification and deployment enables the agency to accomplish CNCI goals, while delivering multiple benefits, including:

- Agile life cycle
- Faster delivery to the field
- Repeatable design for scalability
- Standardized modular framework
- Enhanced Secure Capabilities
- Integrated and efficient use of resources

As a result of excellent performance throughout this customer engagement, DigiFlight has been awarded several peripheral contracts that rely on the company's systems engineering expertise to accelerate mission success.

To find out more about how DigiFlight can help you accelerate mission success, please contact us at dfihr@digiflight.com or 703.774.1080/866.DIGI.FLT (866.344.4358).

ABOUT DIGIFLIGHT

DigiFlight helps government and commercial customers accelerate mission success with technology solutions that protect our national security. Our unique core competencies enable us to deliver integrated support services for all critical phases of acquisition and technology management—Aerospace Technical & Acquisition Solutions, Compliant Solution Architectures, Cybersecurity, Integrated Acquisition & Technology Management, Systems and Software Development, Systems Engineering & Technical Assistance and Test & Evaluation. Highly skilled DigiFlight teams apply a holistic mindset to ensure that our customers' capabilities interoperate securely and effectively in operations and warfare environments.