DIUx Quarterly Report

Q3 2017

DIUx Results to Date

June 30, 2017, Mountain View, CA: Since June 2016, Defense Innovation Unit Experimental (DIUx) has awarded roughly **$71 million in contracts for 37 pilot projects** in the key areas of autonomy, artificial intelligence, human systems, information technology, and space.

DIUx usually awards pilot contracts within three months of receiving responses to a specific Department of Defense (DoD) problem. The majority of funding to date has come from DIUx's DoD customers: for each $1 DIUx invests in a pilot project, the customer typically invests $4-$5. More importantly, DIUx is optimizing taxpayer dollars by leveraging private sector scouting, due diligence, and financial investment. **The 37 companies DIUx has on contract account for roughly $1.8 billion in venture capital funding**.

While DIUx's processes and relationships represent a meaningful shift in how DoD innovates, Silicon Valley is also undergoing a culture shift when it comes to pursuing DoD and the government as a viable business opportunity. As one indicator of this shift, **seven DIUx portfolio companies have been able to raise roughly $720 million in subsequent rounds of funding**, partially due to their work with DoD.

From Pilot Contract to Follow-on Production

By the end of the fiscal year 2017, DIUx expects to transition its first pilot contracts into follow-on production, marking the first time DoD has ever done this under the Other Transaction (OT) authority. Congressionally-granted authorities allow successful OT pilot projects to serve as justification for follow-on production contracts without the need for further competition. This enables commercial innovation to survive the "valley of death" that often separates newer capabilities from the men and women in uniform, allowing anyone in DoD to purchase at scale a capability successfully piloted through DIUx.

Awards - Q3 2017

The following includes select pilot projects, categorized by focus area that have been awarded in the period between April 1, 2017 through June 30, 2017.

AUTONOMY

Mobile Counter-Unmanned Aerial Systems (UAS)

Customers: Marine Corps Warfighting Laboratory, Joint-Improvised Threat Defeat Organization (JIDO)
Companies: Sensofusion (New York, NY), Skysafe (San Diego, CA)

The Marine Corps and JIDO are testing Sensofusion and SkySafe in a mobile system to passively identify, track, and defeat threats posed by UAS during day, night, and all weather conditions. Sensofusion can automatically detect, locate, track, and take over UAS controls, as well as locate a UAS operator with pinpoint accuracy in real-time. SkySafe offers airspace security through detailed event history, real-time notifications, and the ability to take control of a rogue drone over the air and safely land it.

Acoustic Counter-UAS

Customers: Air Force Life Cycle Management Center
Company: Squarehead (Oslo, Norway)

To protect assets, the Air Force is augmenting electro-optical/infrared detection technologies with Squarehead's DiscovAir, an acoustic drone detection system.

Trimodal Underwater Communications

Customer: Office of Naval Research (ONR)
Company: Wireless For Subsea (San Diego, CA)

ONR is augmenting an acoustic and optical communication system by integrating Wireless for Subsea's underwater radio frequency device. The integration will enable the system to seamlessly switch between acoustic, optical, and radio communications modalities based on transmission rates that vary with changing environmental conditions under the water.

HUMAN SYSTEMS

Command and Control Situational Awareness
Customer: DoD
Company: Research Innovations (Alexandria, VA)
Research Innovations is developing a dashboard that provides commanders with situational awareness of U.S., partner, and adversary activities, as well as collaborative mission management across geographies.

Tandem and Tethered Bundle Recovery System
Customer: Special Operation Forces. Company
Company: United Parachute Technologies (Deland, FL)
DIUx is working with United Parachute Technologies to develop a tandem and tethered bundle recovery system that will enable operators to suspend additional substantial weight during all phases of parachuting (i.e., exit, drogue deployment, free fall, parachute opening, flight, and landing).

INFORMATION TECHNOLOGY

Endpoint Security
Customer: DoD Chief Information Officer (CIO)
Company: Digital Authentication Technologies (DAT) (Boca Raton, FL)
DoD is using Digital Authentication Technologies' Contextual Location Fingerprints, a technology for location-based authentication, to reduce the risk of external threats.

Multifactor Authentication for Network Access
Customer: DoD Chief Information Officer (CIO), Defense Information Systems Agency (DISA), and U.S. Army Network Enterprise Technology Command (NETCOM)
Company: Plurilock (Victoria, BC)
DoD CIO is using Plurilock to prevent credential sharing and provide continuous authentication based off of various factors including user behavior and device telemetry.

Agile Systems Development Environment
Customer: U.S. Transportation Command (USTRANSCOM)
Company: REAN Cloud (Herndon, VA)
USTRANSCOM is using REAN Cloud to modernize and transition their IT infrastructure from on-premises architectures to cloud-based solutions.

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