

Executive Summary:

- Build on the support for the Defense Advanced Research Projects Agency (DARPA), the Strategic Capabilities Office (SCO), the Defense Innovation Unit Experimental (DIUx), Defense Digital Service (DDS), rapid equipping units, and other small, agile, innovation-focused organizations within DoD
- Establish activities to improve communication and coordination between them and to educate DoD leaders and the workforce about their efforts to drive innovation as a way to enhance the Department's capabilities

Full Recommendation 7:

Proposal: Increase investment in and support for the Defense Advanced Research Projects Agency (DARPA), the Strategic Capabilities Office (SCO), the Defense Innovation Unit Experimental (DIUx), Defense Digital Service (DDS), rapid equipping units, and other small, agile, innovation-focused organizations within the DoD. Establish activities to improve communication and coordination between them and to educate DoD leaders and the workforce about their efforts to stimulate innovation as a means to enhance the Department's overall capabilities. An annual Innovation Synchronization Conference should be held semi-annually to increase information exchanges between these groups. One potential theme for this conference could be Third Offset technologies where each organization brings forward current challenges and potential technological solutions in fields that are relevant to the Third Offset.

Comment: The Department has made significant strides in innovation over the last decade by adding several new offices, initiatives, and approaches to its "innovation portfolio," such as DIUx. Simultaneously, the Department continues to support long-established, successful drivers of innovation, such as DARPA. There is a tendency to dismiss activities labeled as "innovation" as a fad and an equally misguided temptation to disguise conventional acquisition programs or research projects with "innovation" branding. The Department's leaders should take care to avoid both traps; nevertheless, the next year will be crucial for sustaining the current focus and intensity on innovation because these new activities are likely to encounter additional resistance.

Many of these new innovation or technology acceleration efforts, particularly the proliferating number of rapid equipping offices and processes that have cropped up as an adaptation to the operational demands of a decade at war, would be correctly perceived as the Department's efforts to disrupt itself. Because the Department's processes are optimized to reduce risk and enhance stability, the need for subversion and disruption is still increasingly urgent, perhaps more so, as the Department is likely to experience a countervailing tendency to eliminate workarounds as the Department resets. This will be exacerbated by budget pressures. Leaders should compensate for the institutional pressure to restore the status quo ante by seeking opportunities to lock in the progress and support current efforts even more aggressively. Incoming leaders should look to maintain current funding levels, sustain management focus, and, insofar as there is clear evidence that additional resources could be absorbed, look to increase resources.

The next step in advancing the Department's innovation agenda is to increase communication and coordination between the various nodes in the innovation network, and the various offices that have been established. Variation, planned redundancy, and competition are healthy for innovation in an ecosystem as large as DoD; however, there are too many missed opportunities for sharing information and

best practices among groups working on complementary activities. Promoting more dialogue will accelerate innovation, particularly on emerging technologies that are crucial for the Department's continued competitive advantage, such as Third Offset. Working to lend greater coherence and information sharing through regularly schedule "synch" activities would be productive.

Background: Information sharing and coordination in large companies is not just a way to increase efficiency – it's a fundamental building block for success and mission achievement. DoD is a notoriously diffuse enterprise, with millions of employees around the world engaging in myriad jobs. Connecting them – particularly the pockets of innovation located in every corner of DoD but rarely in touch with or even aware of one another – is an important step in achieving mission success.

A few examples in the private sector underline that communication platforms are not only about connecting employees to share best practices, but also challenging one another. These platforms include opportunities for information sharing, knowledge management, crowdsourcing, competitions, and more:

Slack: cloud-based team collaboration tool. Companies that use Slack include Airbnb, Pandora, BuzzFeed, Pinterest, LinkedIn, Samsung, Ebay, Autodesk, and Ticketmaster

Socialcast: a social networking and collaboration platform; bought by VMWare in 2011. Companies that use Socialcast include 3M, Humana, Philips, Siemens, and SAS

Yammer: a social network for companies' internal use; bought by Microsoft in 2012. This was one of the earliest information sharing and collaboration platforms, so fewer companies use it now, particularly as other platforms have been launched, but some major companies, such as Xerox, still rely on it

Some large companies have developed their own collaboration platforms that are available as a service that other companies can purchase. One example is Cisco's Collaborative Knowledge, a "digital workplace" solution that helps employees access information and experts, train and update their skills, build social communities, and solve challenges collaboratively.