



12 MONTHS IN - 8 MONTHS LEFT

An Update on Secretary Carter's Innovation Agenda

Ben FitzGerald and Loren DeJonge Schulman

About the Authors



Ben FitzGerald is the Director of the Technology and National Security Program at the Center for a New American Security (CNAS). His work focuses on the relationship between strategy, technology and business as they relate to national security. Mr. FitzGerald's recent projects have included analysis of the future of the global defense industry, U.S. military technology superiority strategies, cyber security collaboration and innovation within the Department of Defense. Prior to CNAS, he founded and led the U.S. subsidiary of an Australian strategy firm, Noetic, leading their work with the Pentagon, military services and the UN. Earlier in his career, Mr. FitzGerald worked with information technology companies IBM, Rational Software, and Unisys. His work and commentary have been featured in the media from C-SPAN to Vice.



Loren DeJonge Schulman is the Deputy Director of Studies and Leon E. Panetta Senior Fellow at CNAS. Ms. Schulman left the White House in 2014 after serving as Senior Advisor to National Security Advisor Susan Rice. She has also worked as Chief of Staff to the Assistant Secretary of Defense for International Security Affairs, Director for Defense Policy and Strategy on the National Security Council Staff, and as a special assistant to Secretary of Defense Robert Gates.

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As always, this report would not be possible without the expertise and professionalism of Shawn Brimley, Melody Cook, Maura McCarthy, Alexandra Sander, and Jacqueline Parziale at the Center for a New American Security. Thank you.

About the Technology and National Security Program

The Technology and National Security program explores the nexus of strategy, technology, and business to develop practical ideas that capitalize on opportunities and mitigate risks associated with the rapid pace of technological change. The program advances new ideas associated with cybersecurity, identifies innovative ways to generate technological advantage, and builds better connectivity between the commercial sector and the U.S. national security establishment. Leveraging strong relationships across government, technology, and industry organizations, the program brings together disparate stakeholders to help ensure emerging technologies are effectively employed to support U.S. national security strategy.

Cover Photo

Secretary of Defense Ash Carter delivers remarks at the at the Manufacturing Innovation Institute event held at the National Full Scale Aerodynamics Complex in Moffett Field, California, in August 2015, during a visit to the Defense Innovation Unit - Experimental (DIUx). The DIUx was created as part of Carter's innovation agenda, which challenges the Department of Defense to "think outside of [its] five-sided box."
(Ash Carter, Flickr/Master Sgt. Adrian Cadiz)



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MEMORANDUM FOR SECRETARY OF DEFENSE

**SUBJECT: STATUS OF DEFENSE INNOVATION AGENDA ONE YEAR
AFTER DRELL LECTURE**

It is one year since you unveiled your vision for “rewiring the Pentagon.”¹ In that time you have launched new organizations like the Defense Innovation Unit Experimental (DIUx) and Defense Digital Service (DDS), made creative bets in areas such as flexible technology,² and continued groundbreaking outreach to Silicon Valley, all while simultaneously supporting innovation on extant military capability through organizations like the Strategic Capabilities Office (SCO).³ Your FY17 budget translates these initial efforts into financial reality with \$45 million for the DIUx, \$40 million for the Department’s In-Q-Tel pilot, and \$902 million for SCO. Your recent announcement of a “bug bounty” program shows a willingness to push the Pentagon bureaucracy out of its comfort zone in meaningful ways, and your appointment of a Defense Innovation Advisory Board demonstrates a real commitment to building lasting partnerships with external innovators. You clearly have made significant investments in pushing the Department of Defense to “think outside of [its] five-sided box.”⁴

Since that initial announcement at Stanford University, innovation has hit peak buzzword within the Pentagon. But 12 months in (and with 8 months left), what is the status of your innovation agenda, and do your innovation efforts have the potential to affect the reform you are seeking? Whether driven by senior leaders or empowered individuals, the concept and practice of innovation is initiating thoughtful conversation both on how to ensure the U.S. military fully benefits from radical technological shifts taking place in Silicon Valley and around the world, as well as on how to work around or reboot the Pentagon’s bureaucratic inertia. Over the next several months, you have an opportunity to fully capitalize on this desire to innovate, to inform and shape the Pentagon in meaningful ways, and to establish a sustainable culture of innovation that persists beyond this administration.



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We started this project with the question of “Can Silicon Valley and DoD collaborate on innovation?” The answer to this question is simple on the surface: Yes, but only if both parties are properly incentivized and the costs do not outweigh the benefits. However, among the experts we spoke with there was a wide divergence of opinion on the extent to which they believed DoD would be able to do this. The bigger question became how to most effectively implement an innovation agenda for – and within – DoD to enable the kinds of collaboration it desires.

This memo therefore assesses the current state of the innovation debate within DoD, forecasts the likely progress of your agenda, and makes recommendations to maximize the impact of your efforts over the remaining months of this administration. We developed these findings and recommendations based on engagements in Washington and Silicon Valley,⁵ as well as individual discussions with leaders and experts within the department and industry. These groups, made up of active duty personnel, veterans, reservists, investors, entrepreneurs, executives, and current and former senior defense officials with a foot in both worlds, were simultaneously hopeful and skeptical. Four key findings are detailed further in this paper:

- *Talking and walking innovation:* Your innovation initiatives have caught attention within and outside the Pentagon, but there is a perception of an inverse relationship between the amount of discussion about innovation and actual innovation being accomplished.
- *Mapping innovation:* The launch of multiple high profile offices, initiatives, and strategies to advance innovation, reform, and technological superiority makes for the beginnings of a strong legacy. But though each has their own valid objectives, their proliferation is generating confusion over “who’s on first” for each part of your agenda and how these efforts intersect – or not.
- *Innovate to what end?* Most view the experimental “fail fast—see what sticks method” of launching multiple initiatives with varied approaches across the department as critical, both for cultural and institutional impact. But one effect of this approach is many in the department – much less the defense industry or Silicon Valley – do not fully grasp the parameters of these initiatives and lack a consistent definition of innovation or an understanding of how to seek it.



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- *Innovation in, around, or through:* The very public embrace of Silicon Valley and launch of several partnership-building initiatives are viewed as excellent first steps to help the Pentagon get out of its comfort zone. But in order to achieve significant and lasting impact, the innovation agenda also must more deliberately address internal, mainstream DoD structures, processes, and personnel.

On this trajectory, your innovation agenda will yield some quick wins over the coming several months that we forecast in more detail below. However, the experts we spoke with also anticipate setbacks, minor and significant, and note concern as to whether these nascent efforts will survive without your personal involvement.

A recurring theme of our engagements was that consolidating your initial gains will require a more deliberate focus *inside* the Pentagon, building on your external outreach. Key to such focus is the need to communicate clearly (taking innovation beyond buzzword status), model replicable examples, and link with practical actions; we outline several opportunities for your consideration at the end of the brief. This will lay a strong foundation for achieving lasting impact for your innovation initiatives and influencing the culture of decision making inside the Pentagon.

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Status of Defense Innovation Agenda: Four Key Findings

1 Talking and Walking Innovation
Your innovation initiatives have caught attention within and outside the Pentagon, but there is a perception of an inverse relationship between the amount of discussion about innovation and actual innovation being accomplished. In parallel, near-term expectations of innovation efforts may be unrealistically high.

Based on the attention innovation has garnered, there is clearly a widespread understanding that DoD must innovate and a desire by many to do so. Your guiding framework of investing in technology, empowering people, and increasing permeability to new ideas within and outside the Pentagon resonates among the experts with whom we met. Your willingness to move beyond speeches and take rapid action has been well noted, as seen in the establishment of the DIUx as your Silicon Valley outpost and creation of the Defense Digital Service and Office of People Analytics as part of the Force of the Future initiative.

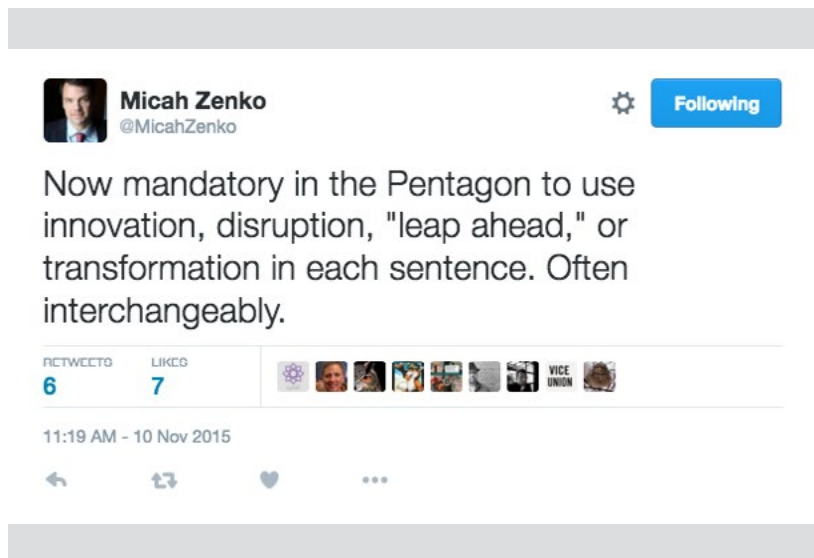
But the constant innovation drumbeat has set high expectations inside and outside the Pentagon for what “innovation” is truly ongoing, what results the department can bring in the remainder of this administration, and what momentum will be carried forward into the next administration. Innovation is increasingly prevalent in the language of senior defense officials and strategic documents; the *2014 Quadrennial Defense Review (QDR)* used the word innovate or innovation 33 times (as an

ends, ways, means, or what one participant described as “innovation pixie dust”). This expectation mismatch frequently arose in discussions of the DIUx. Several individuals were concerned that the emphasis on the DIUx – a small startup organization, and only one of a number of innovation efforts – would result in DoD audiences expecting the DIUx to act as the conduit of *all* innovation into DoD while lacking the formal authority, resources, or flexibility to fulfill its intended mission as a technology scout and facilitator of relationships.⁶ These concerns have been mitigated by your subsequent innovation initiatives, the DIUx’s ability to start executing on its mission,⁷ and by your willingness to commit additional funding to the organization in the FY17 budget.⁸

There is a perception of an inverse relationship between the amount of discussion about innovation and actual innovation being accomplished.

At the same time, the dynamic – perceived or real – of an inverse relationship between the amount of discussion on innovation and investments, inventions, or systemic change creates opportunity for cynics who believe change is not possible and for recalcitrants committed

to the status quo to undermine your work. Innovation can survive as more than Pentagon jargon, but will require continued and tailored communication from you to specific stakeholder groups across the defense establishment to make your intent clear and drive practical implementation of your innovation agenda.



Micah Zenko, 10 November 2015, 8:19AM, Tweet.

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Mapping Innovation

The promotion of multiple high profile offices, initiatives, funding lines, and strategies to advance innovation, reform, and technological superiority makes for the beginnings of a strong legacy. But though each has their own valid objectives, their proliferation is generating confusion over “who’s on first” for each part of your agenda and how these efforts intersect – or not.

There is a tremendous amount of new energy and opportunity within the Pentagon between major new technology strategy initiatives (Defense Innovation Initiative, Third Offset Strategy); near-term capability innovation funding (e.g., Strategic Capabilities Office); rapid procurement cells across the services and within the Office of the Secretary of Defense (OSD); new funding lines for nontraditional partners (In-Q-Tel, direct investments in flexible technology); the enablement of process reforms (Better Buying Power series); new technology liaisons and scouts (the DIUx and its counterparts among the services and throughout the interagency, such as the Department of Homeland Security); classical DoD programming and acquisition over the FYDP, to include a number of investments announced with the FY17 budget proposal; longer-term research and development initiatives (Long Range Research and Development Planning Program, DARPA); and front office-led umbrella projects in both personnel

and process (e.g., Force of the Future). But even the savvy insider needs a map to locate the right forum for her proposal or request (and imagine the confusion of a West Coast startup for the same).

[The proliferation of innovation initiatives] is generating confusion over “who’s on first” for each part of your agenda and how these efforts intersect – or not.

Participants judged that these innovation efforts are not generally in competition and align reasonably well. However, the “small bets” approach of undertaking or expanding these multiple initiatives simultaneously creates the opportunity for some to claim that the Pentagon is incoherent on innovation or that this strategy is unsustainable in the long term. This perception of competition or confusion on innovation objectives and forums adds some risk that defense innovation efforts will not progress from rhetoric to reality. Greater clarification of your intent for innovation and a true “mapping” effort of your methods – including how winning “bets” will transition and scale – will help address lingering misunderstandings on the part of the wider defense establishment.

WHAT’S IN A NAME: DEFINING INNOVATION

Woven throughout our four findings is a principle issue: competing definitions and philosophies of innovation. Almost everyone we spoke to had a slightly different understanding of what innovation meant, why DoD should seek to innovate, how it should seek to do so, and what areas should be prioritized. Often these beliefs were strongly held but loosely articulated. Concomitantly, we saw a widespread desire for you, as secretary, to formally define innovation for the department and lay out your innovation agenda in a directive manner.

Tightly focused concepts and clear, prioritized plans are ordinarily the difference between success and failure for change management efforts in the Pentagon. However, that may not be true in the case of your innovation agenda. Different theories and practices of innovation are required across the enterprise for myriad reasons, necessitating a wide variety of approaches from broad-based to highly specific. We must innovate for multiple reasons: to save money, to become more efficient, to become more effective, to stay ahead of adaptive enemies, and to maintain our military technical superiority. This means that you face the challenge of simultaneously needing to address longstanding cultural matters, like the ways in which DoD collaborates with external partners, while also directing specific issues such as investment in high-end weapons systems.

You therefore will need to provide clear guidance, through high-level direction and practical examples, without overly defining innovation or seeking to implement all innovation efforts personally. Your innovation agenda will not be successful if your constituency sees a zero-sum game of innovation or if you inadvertently disenfranchise longstanding centers of innovation within the department or industry. The fact that you are, rightly, championing an innovation agenda does not mean that there is currently zero innovation in the department. Such an approach is a significant opportunity but widens the aperture for risk of failure, which not all are comfortable with.



Secretary of Defense Ash Carter speaks with Reid Hoffman, co-founder of LinkedIn, at the company's headquarters during a 2015 visit. While the embrace of Silicon Valley and partnership-building initiatives such as these are important steps to move the Pentagon out of its comfort zone, the innovation agenda also must deliberately address mainstream DoD structures, processes, and personnel. (Ash Carter, Flickr/Master Sgt. Adrian Cadiz)

3 Innovate to What End? Despite confusion about various initiatives, most view the multi-experiment “fail fast – see what sticks” approach of your innovation agenda as critical, both for cultural and institutional impact. But many in the Pentagon lack a consistent understanding of what sort of innovation they want and how to get it. There are three divergent risks that flow from this lack of understanding: doing little while talking about innovation in the absence of specific direction; creating independent definitions of innovation with associated bureaucratic baggage; or attempting to execute initiatives without understanding the culture and requirements of the entrepreneurial community, inadvertently burning bridges. This dynamic prompted one former officer, now a Silicon Valley entrepreneur who regularly meets with innovation-seeking West Coast pilgrims from the Pentagon, to demand, “Innovate to *what end?*”

What does DoD want from Silicon Valley and other sources of innovation, and are those wants realistic? Is innovation just about Silicon Valley startups? What, specifically, should the services and defense agencies do to support the secretary’s call to action? Is innovation

a means or an end? Across the working group, dinner, and various conversations we hosted, no one had consistent answers to these questions.

Failing to clarify your objectives and purpose for innovation, and to set clear examples, creates the potential for misguided efforts to “innovate.” One way this manifests itself is the recent rise of “tech tourism” to Silicon Valley. Described in detail by participants at our Silicon Valley working group, the phenomenon involves military personnel and defense civilians seeking generic meetings with technology companies and venture capital firms, often without well-defined objectives (“What can you do for me?”). Perhaps worse, they will occasionally arrive with extremely well-defined, Joint Capabilities Integration and Development System-tailored requirements in acronym laden, 20-page documents only appropriate for military specific command and control systems and the like.⁹ While ostensibly acting in line with your objectives, these “tech tourists” often lack clear purpose or the funding and authority to transact business – or, if they have it, they are not prepared to execute on a timeline consistent with startup expectations. Though well-intentioned attempts at partnership, such efforts damage DoD’s reputation and make collaboration with Silicon Valley businesses and others more difficult.

Similarly, we have held informal conversations with officers looking to establish an innovation initiative for their service or component. Their initial instinct was to propose a formal definition for innovation and potentially even develop an “Innovation Concept.” While well intentioned and supportive of your desire to inspire innovation across DoD, this type of approach easily could lead to the bureaucratization of innovation, with services and agencies creating innovation officers who seek to centralize or control innovation through process or doctrine – the opposite of what you wish to achieve.

No participants concluded that DoD efforts to innovate and partner with the startup community are not worth it, simply that DoD needs to be better prepared and focused for such efforts. It therefore will be vital for you to make clear and consistent both the *why* and *how* of effective innovation for DoD as you communicate with various stakeholders.



Innovation In, Around, or Through

The very public embrace of Silicon Valley and launch of several partnership-building initiatives are seen as excellent first steps to help the Pentagon get out of its comfort zone. But in order to achieve significant impact, the innovation agenda also must more deliberately address mainstream DoD structures, processes, and personnel.

Many current innovation activities – those announced by you as secretary, like the DIUx and investments in flexible technology,¹⁰ as well as bottom-up efforts like Hacking for Defense or the Defense Entrepreneurs Forum – make a concerted effort to create space for innovation *around* or *away from* core DoD processes. While this strategy will establish momentum and create advocates, such efforts by definition lack the institutional backing required to sustain and execute over time. Further, this approach does not explicitly promote buy-in from within OSD and the services – many of whom are eager to participate. Stakeholders inside the Department will be necessary supporters to establish longevity, critical enablers of long-term innovation, and potential spoilers if new innovations challenge their extant equities. Focusing purely on innovation *around* the bureaucracy also sends an implicit, if unintended, message that the majority of the Pentagon is incapable of innovation and meaningful institutional change is not possible.

Focusing your innovation agenda primarily outside the mainstream bureaucracy and core processes also misses an opportunity to convince key stakeholders in DoD to make better use of authorities they already have but

do not adequately take advantage of. While it is convenient to blame congressional dysfunction or the Federal Acquisition Regulation (FAR) for constraining acquisition reform or flexibility, DoD has yet to fully capitalize on such flexible procurement opportunities as Other Transaction Authorities, exemptions for “offered for sale,” and “of a type” commercial items.¹¹ For innovation to scale and persist within DoD will require buy-in from front-line contracting officers as well as general officers. As it stands, anecdotes from our Silicon Valley workshops indicated the acquisition community is incentivized to pursue the path of least risk and resistance – generally the traditional path they know – and often faces real or perceived barriers to doing otherwise. If innovation initiatives are to have any longevity, your outreach must extend to those charged with executing and governing Pentagon processes (e.g., those who oversee testing, contract management, or legal and regulatory practice, all potential roadblocks to innovation-driven reforms and capabilities. Just as important are those that recruit and train those communities). “Failing fast” and pursuing nontraditional options is not only counter-cultural but is rarely rewarded and likelier to prompt negative effects, such as investigation.

For innovation to scale and persist within DoD will require buy-in from front-line contracting officers as well as general officers.

More broadly, many we engaged with emphasized that DoD lacks clear examples of what “good” failure means and a clear understanding that good failure not only will not be punished, but can be rewarded. Secretary-initiated public cancellations of niche acquisition platforms, costing billions, have not set the replicable example for prototyping-associated failure. As you have long emphasized, managing and empowering human capital within the acquisition community is as critical as or more critical than any other part of the department. One participant at our Silicon Valley working group pointed out that innovation must be pursued outside the mainstream DoD but can only be executed within. Sustaining your innovation agenda will require building, incentivizing, and creating models for the acquisition workforce specifically, but also their close counterparts up- and downstream from personnel management to auditing.

Forecasting the Future of Innovation

Given their understanding of what DoD thinks about innovation and how this understanding is being acted on within the department, we asked experts at our events to offer predictions on what might happen, positive or negative, within your innovation agenda over the next several months. A sampling of those responses shows a mix of positive and negative outcomes, with the key determinants being clarity of purpose and alignment of incentives.

POSITIVE	NEGATIVE
Increased internal appetite for innovation leads to practical solutions for some longstanding DoD pain points, e.g., the Defense Travel System.	Standard bureaucratic process slows what should be high-profile “quick wins.”
Energy and focus from senior leaders at the end of an administration generates meaningful traction on innovation.	Cynics, skeptics, and those invested in the status quo delay or micromanage innovation efforts while waiting for the next administration.
Senior leader public support creates top cover for bottom-up innovation throughout DoD.	Speeches about innovation create unrealistic expectations that are not met with concomitant resources or execution, ultimately creating frustration.
Small bets placed via the DIUx or flexible technology succeed, showing the potential for DoD innovation.	Institutional antibodies slow the progress of these small bets, inadequately resourcing the transition of pilot programs to fielded, scalable solutions.
Technology scouting from new sources leads to new and more effective solutions for DoD challenges.	Well-intentioned external engagement efforts misjudge their audience; bring technical requirements; arrive with no understanding of how or when they would be able to offer funding; or otherwise burn bridges. This and other forms of “technology tourism” by senior officials waste time, damaging DoD’s reputation and discouraging further collaboration.
Leaders across DoD are inspired to seek innovative solutions outside traditional defense resources and identify challenging problems in need of disruptive solutions.	
DoD commits significant funds to specific innovation projects, programs, or organizations in the FY17 budget proposal and in FY16 budget execution.	DoD takes years to figure out how to spend or move money for innovation.

Leading Defense Innovation

On its current trajectory, the experts with whom we engaged judged that the prognosis for impactful defense innovation remains positive in the short term, but they were skeptical that these efforts would lead to large-scale change or persist over the medium to long term. However, significant demand for innovation, combined with openness to direction, presents an opportunity for you as secretary. To capitalize on this opportunity, you should commence a second phase of your leadership on defense innovation. Building on your existing outreach outside DoD, you should refine and communicate your intent within DoD, empowering change agents and creating converts in the system to implement your vision now and into the next administration.

Relatedly, you must establish and reinforce that your role as secretary is to be the catalyst of DoD innovation, rather than the implementer, and that the success of the department is also your success. An early and high impact action will be to explicitly articulate your vision for and theory of DoD innovation in order to empower and guide the actions of others. You should make clear

that the department will not benefit from formal definitions of innovation and that innovating at scale requires multiple initiatives, big and small. Beyond communication, you will need to continue to take rapid practical actions to lead by example, show seriousness of purpose, and create incentives for others to innovate.

There are myriad actions you might undertake to achieve these objectives, but the *how* and *what* are less critical than the *why*. The following offers several options for your consideration:

Aggressively communicate your DoD innovation agenda to new audiences

Objective: defuse debates on definitions and your intent while making clear what innovations you expect from your organization.

- Similar to Secretary Gates’ speeches in 2011, speak directly to each of the services, as well as to the acquisition community (to the lowest level possible) and defense industry, in their preferred venues, with

We're counting on you -- keep experimenting!
Ash Carter

The role of secretary of defense should be as the catalyst of DoD innovation, rather than the implementer. In March 2016, Carter wrote this message to the DIUx team. (DIUx)

specific messages on how each community can support your innovation agenda.

- Publicly map and de-conflict the Defense Innovation Initiative, Better Buying Power, DIUx, and Third Offset with the Deputy Secretary and Under Secretary for Acquisition Technology & Logistics (AT&L), describing how these efforts support each other and enabling stakeholders to engage in relevant initiatives. Show examples of positive cross-pollination between these efforts.
- Be clear that in addition to seeking the “next stealth,” you are pushing for organizations, personnel, partnerships, and systems that are empowered and resourced to find the next 30 stealth 2.0s, as well as deploy these game changers affordably and in sufficient numbers.

Celebrate specific successes, positive failures, and opportunities

Objective: further clarify your intent through practical examples and clear incentives.

- Model what you mean by successful innovation partnerships by insisting that all your future engagements – and those of other senior staff – with Silicon Valley should be problem focused, rather than relationship building, and that they be supplemented with clear and time-bound options to commit investment.

- Use your perch to highlight and proselytize existing authorities and programs that enable DoD innovation partnerships (e.g., Other Transaction Authorities, Major Force Program-11, use of FAR Part 12, and various rapid acquisition methods), as well as the resources and opportunities that could incentivize entrepreneurs to want to work with DoD.
- Take regular opportunities to describe “good failure,” identifying and publicly commending leaders who have “failed” in line with your innovation principles.
- Cancel a failing program early, explain why you did it and how you want the department to learn from it, and recognize the individuals who helped justify why the program needed to end early.
- Cancel a late-failing program, explain why you did it and how you want the department to learn from it, and hold accountable the individuals who let the program wastefully survive for so long.
- Publicly promote or provide additional resources to leaders or organizations that pursued innovation in line with your intent to both incentivize further actions and to communicate what good innovation looks like.

Manage specific incentives

Objective: enable and shape the behavior you want to see across DoD.

- Allocate meaningful and sustainable funding and freedom of action to programs, projects, or organizations that best represent your vision of DoD innovation, balancing focus on those operating outside and within mainstream DoD bureaucracy.
- Incentivize core departmental and service buy-in by rewarding – through additional funding, responsibility, or public praise – services and agencies that actively utilize existing innovation agents (e.g., AT&L’s Deputy Assistant Secretary of Defense for Emerging Capability and Prototyping, the Asymmetric Warfare Group, Strategic Capabilities Office and, of course, DARPA) or create their own self-sustaining innovation efforts (like the Chief of Naval Operations’ Rapid Innovation Cell).

Technology & National Security Program

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- Ensure the DIUx receives appropriate resources and flexibility to execute them rapidly as its mission evolves during its startup phase, and that its mission, resources, and expectations are effectively communicated to the rest of DoD. Require DoD personnel to liaise with the DIUx prior to visiting Silicon Valley to assist in setting outreach timing, objectives, parameters, and resourcing, and potentially allow the DIUx to deny travel if necessary.
- Engage regularly with contracting officers and program managers at all levels, as well as with the associated personnel, training, testing, legal, and audit communities, and encourage your subordinates to do the same. Initiate internal conversations with these groups on cost, performance, and schedule risks and how these personnel are incentivized to manage these risks, formally and informally. Empower them, create top cover, and explain how to take risks in line with their authorities without fear of retribution; create incentives in performance reviews rewarding “outside the box” efforts.
- Continue to ease broad restrictions on travel and conferences to allow DoD personnel to more easily meet and collaborate with innovators from outside DoD. Simultaneously, establish approval requirements or general principles to avoid the pitfalls of technology tourism.
- Publicly curtail efforts to overly bureaucratize innovation if they should arise (e.g., innovation concepts, doctrinal definitions, or program review boards).
- Clear the way to bring a high-profile innovation to the Pentagon – for example, implementing a car hailing service such as Uber or Lyft.
- Provide visible bureaucratic support for the DIUx, both personal and from other leaders, to negotiate impediments to their mission, particularly efforts that may run afoul of standard bureaucratic processes regarding personnel, office setup, and information technology.

Conclusion

As secretary of defense during a period of rapid technological change, it would be tempting to measure your success in terms of technological achievements. But it’s far from certain that a new game changer is on the horizon, let alone implementable within your remaining time as secretary. More importantly, seeking a new technical solution to DoD’s woes is an iterative, rather than disruptive, approach and a continuation of thinking from the Cold War .

A more pragmatic, and more likely successful, approach to leaving the U.S. military in better shape than when you arrived is to focus the final months of your leadership on creating a platform and ecosystem for sustainable innovation within DoD to extend our military advantages into the future. Your efforts to date have raised the right issues and created demand for solutions, and all that is required now is to create the vision, incentives, and conditions necessary to implement those solutions over time.

Champion seminal/inspirational innovations

Objective: lead by example, show what’s possible, and expose DoD personnel to practical innovation in their day-to-day work.

- Sponsor or convene challenge grants that bring together the services, defense industry, and technology companies to solve specific problems on short timelines, like the Army’s CoCreate initiative.
- Support the DDS in identifying better approaches to frustrating DoD back office systems, such as the Defense Travel System, and implementing such solutions rapidly.

Endnotes

1. Secretary of Defense Ash Carter, “Rewiring the Pentagon: Charting a New Path on Innovation and Cybersecurity” (Stanford University, Palo Alto, CA, April 23, 2015), <http://www.defense.gov/News/Speeches/Speech-View/Article/606666/drell-lecture-rewiring-the-pentagon-charting-a-new-path-on-innovation-and-cyber>.
2. “DoD Announces Award of New Flexible Hybrid Electronics Manufacturing Innovation Hub in Silicon Valley,” U.S. Department of Defense, press release, August 28, 2015, <http://www.defense.gov/News/News-Releases/News-Release-View/Article/615132/dod-announces-award-of-new-flexible-hybrid-electronics-manufacturing-innovation>.
3. Colin Clark and Sydney J. Freedberg Jr., “Robot Boars, Smart Guns & Super B-52s: Carter’s Strategic Capabilities Office,” *Breaking Defense*, February 5, 2016, <http://breakingdefense.com/2016/02/carters-strategic-capabilities-office-arsenal-plane-missile-defense-gun/>.
4. Carter, “Rewiring the Pentagon.”
5. In partnership with the National Defense Industrial Association, the Center for a New American Security hosted a working-level session in Palo Alto, Calif., with representatives from such organizations as Palantir, Skybox, BMNT Partners, Endgame, Palo Alto Networks, the Copia Institute, and various DoD organizations; an executive-level dinner with representatives from such organizations as Boeing, Voyager Capital, Northrop Grumman, and McKinsey & Company; and several supplementary informal interviews to explore such questions as: What does DoD mean by innovation? What does DoD want from Silicon Valley? What are internal and external impediments to DoD’s innovation agenda (real and perceived)? What are predictions for DoD’s innovation agenda? Where should Secretary Carter focus his efforts for the innovation agenda over the next year? Unless otherwise noted, these not-for-attribution discussions are the source for the contents of this brief.
6. During the course of our research, it became increasingly apparent that many perceive that the DIUx has not yet been provided the necessary means or flexibility to succeed in Silicon Valley, and also has not been able to establish a cohesive vision and mission for its partners the DIUx to operate in startup mode and build success over time to succeed and has also not been able to establish a clear vision in California or within DoD. Many advocates for the organization believe the DIUx needs to be able to operate in ‘startup mode’ – but doing so places an even higher premium on the organization to clarify its mission, achieve early successes, and adapt regularly, if necessary.
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11. Other Transaction Authorities is a term used for “transactions other than contracts, grants or cooperative agreements.” They are not required to comply with the Federal Acquisition Regulations, making them highly flexible but also viewed cautiously by many. See Undersecretary of Defense for Acquisition, Technology and Logistics, “*Other Transactions*” (*OT*) *Guide for Prototype Projects*, (December 21, 2000), 8.

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