



U.S. Department of the Army

# *Army Innovation Strategy*

2017-2021



INFORMATION COMPILED BY:  
The Office of Business Transformation

The reference to commercial or nongovernmental entities or products in this document does not constitute an official endorsement or approval.

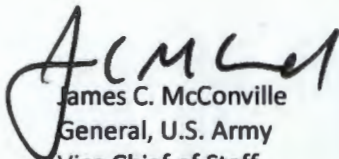
## FOREWORD

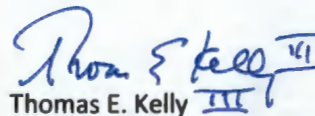
The Army has always been an innovative organization, owing past successes in large part to the indomitable spirit of the American Soldier who continuously finds new solutions to solve pressing tactical problems. However, the pace of change in the geopolitical and fiscal environments, rapid adversary adaptations, and accelerated technology capabilities demand more innovation at a faster rate to ensure the Army's ability to win in a complex world. Increasing the frequency and speed of innovation will require a structured, systematic, top-and bottom-driven approach to promoting entrepreneurship and innovation across the entire force. That is the intent of the Army Innovation Strategy (AIS).

Innovation will enable the Army to obtain capabilities ahead of competitors and adversaries; address the use of disruptive, asymmetric tools that decrease the value of U.S. conventional weapons and equipment; and streamline processes and systems within the institutional Army. When efforts toward these ends are aligned and focused through unifying, overarching strategic direction, the Army can optimize resources (time, money, technology, and manpower) dedicated toward their accomplishment.

Yet, although the AIS provides this overarching direction, Army leaders are reminded that their role in fostering a culture of innovation is pivotal and must not be grounded solely in this document. In the execution of their individual missions, leaders must unambiguously commit to promoting and encouraging innovation, thus creating the freedom to share ideas and take prudent risk. Army leaders must continuously communicate the importance of innovation to the long-term success of the Army. They must also reinforce the fact that failed innovation initiatives are learning opportunities and they must reward, recognize, and share successes.

Since the 2014 Defense Innovation Initiative, military and civilian leaders within the Department of Defense have been calling for accelerated innovation, identifying it as a component of the next offset strategy that will put competitive advantage firmly in the hands of American power projection over the coming decades. To this end, the Army will contribute by doing what it has done so well in the past by unleashing the creativity, ingenuity, and adaptability of the uniformed and civilian workforce. Innovation is part of the Army's rich tradition and will be indispensable to meeting our global mission requirements in the future.

  
James C. McConville  
General, U.S. Army  
Vice Chief of Staff

  
Thomas E. Kelly III  
Senior Official Performing the Duties of the  
Under Secretary of the Army

## The Army Innovation Vision

*The Army gains competitive advantage today and into the future by embracing an enduring culture of innovation and entrepreneurship that drives solutions to win in a changing world.*

### I. Purpose

Supporting the Department of Defense Agency Strategic Plan, the Army Plan, and the Army Vision, the Army Innovation Strategy (AIS) creates the culture, structures, and systems that will unleash the creativity of the entire force and enable the Army to obtain capabilities ahead of competitors and adversaries; address the use of disruptive, asymmetric tools that decrease the value of U.S. conventional weapons and equipment; and streamline processes and systems within the institutional Army.

*“Innovation is the result of critical and creative thinking and the conversion of new ideas into valued outcomes.”*

The U.S. Army Operating Concept, 2020-2040

### II. Strategic Intent

Until now, the Army has lacked authoritative strategic direction for the creation of a culture of innovation. A successful, sustainable innovation effort that drives key, strategic outcomes requires an approach that is grounded in the mutually dependent roles of entrepreneurship, creativity and invention, and innovation itself (figure 1), through three lines of effort that support these concepts.

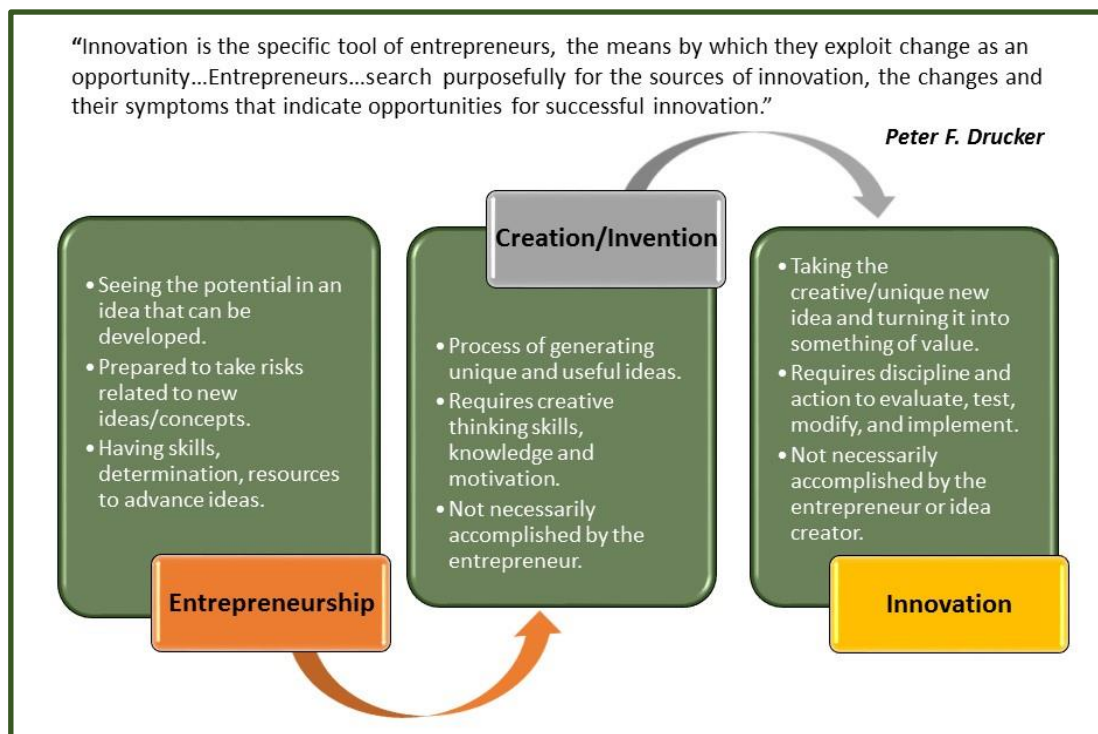


Figure 1. Entrepreneurship and Innovation

These lines of effort are Innovation Leadership and Strategy, Managing for Innovation, and Innovation Tools (figure 2).

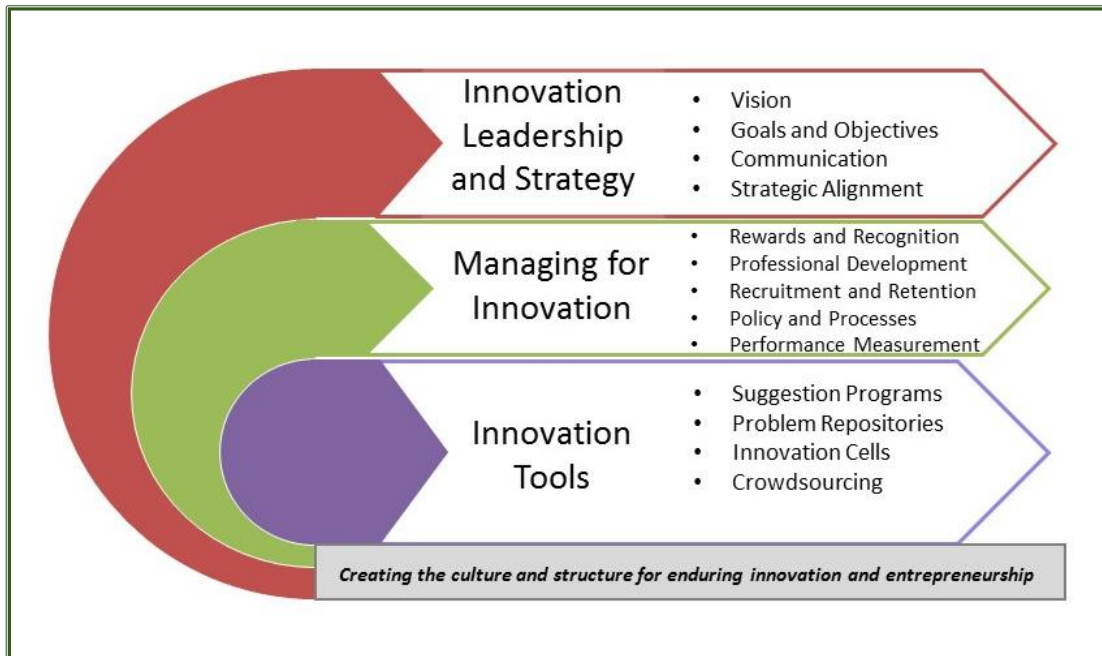


Figure 2. The Army's Three Pronged Approach to Innovation

Innovation tools are the programs and processes used to systematically promote the generation of ideas and to track and monitor their progress to implementation. Some of these tools are suggestion programs, problem repositories, innovation cells, and crowdsourcing. Managing for innovation addresses how management in organizations creates a culture that values innovation and entrepreneurship, such as criteria for rewarding and recognizing the workforce; approaches to training, recruitment, and resourcing; and what leaders pay attention to, measure, and control. Innovation leadership and strategy is about establishing and clearly communicating an innovation vision that is aligned to, and supportive of, organizational strategic direction. It includes the development and articulation of goals and objectives as well as formalized assessments of performance in support of achievement.

When fully deployed and integrated across the enterprise, these approaches work systematically to advance the Army toward a level of innovation maturity marked by consistent success that results from dynamic, repeatable, and adaptable practices and processes.

The AIS provides the framework and direction to advance the Army toward Level 5 innovation maturity (figure 3) by 2021. It establishes both a vision and key outcomes for innovation activities and investments across Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy (DOTMLPF-P). It provides the underpinnings for policy, establishing managerial practices to encourage innovation and entrepreneurship at the individual and organizational levels. Finally, the AIS will align innovation efforts through a distributed community of practice with the strategic direction of the Army; promote alignment among diverse offices and agencies within the Army; establish and communicate objectives and priorities, and help focus efforts around them; help in adjudicating conflicting or competing innovation priorities and allow for the distribution of resources in support of established priorities; and serve as an embedding mechanism in advancing a culture of

innovation and entrepreneurship across the Army. Table 1 addresses, within the context of the three pronged approach, the organizational characteristics and indicators of innovation maturity. As such, it acts as a roadmap for the Army in advancing innovation as a core capability that is strategy focused and people driven, with a return on investment that can be articulated and that makes the case for continued investment self-evident.

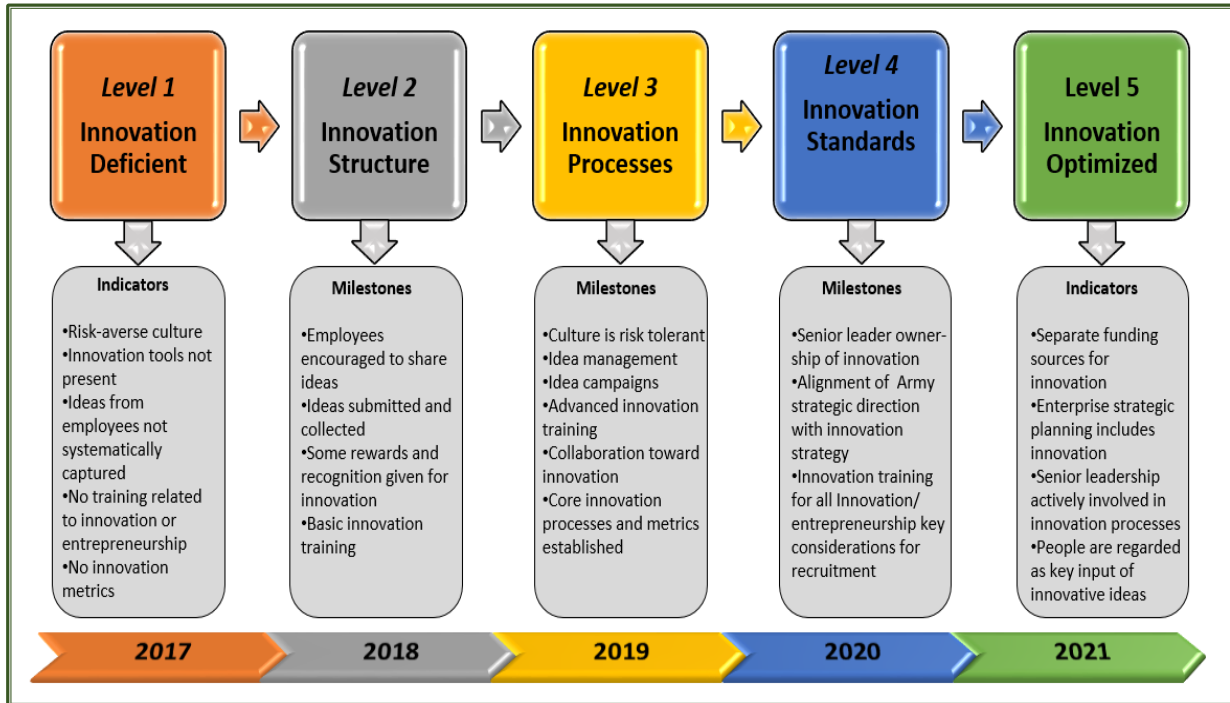


Figure 3. The Innovation Maturity Model

Paul R. Williams, "Think for a Change"

### III. Strategic Narrative

The Army addresses the imperative for systematic, accelerated innovation across the generating and operating forces through leadership committed to challenging and changing cultural norms, the institutionalization of management practices and processes that support the rapid conversion of new ideas into valued outcomes, and leveraging the diverse talents and capabilities of the Total Force, key partners, suppliers, and other collaborators. Approaches to this accelerated innovation include programs and tools to generate and elevate new ideas or solutions for consideration; increased tolerance for risk and failure in experimentation; changing the way that the Army is managed, including innovation and entrepreneurship as key considerations in attracting, recruiting, retaining, developing, and promoting both the civilian and uniformed forces; focusing innovation efforts on key strategic outcomes that impart competitive advantage on the battlefield; and finally by relentlessly pursuing opportunities for cooperation and collaboration in developing solutions to the Army's strategic challenges and removing bureaucratic obstacles to such initiatives.

***"Innovation is the result of critical and creative thinking and the conversion of new ideas into valued outcomes. Innovation drives the development of new tools or methods that permit Army forces to anticipate future demands, stay ahead of determined enemies, and accomplish the mission."***

Army Operating Concept, 2014

Table 1. The Army Innovation Maturity Matrix

		Level 1 <i>Innovation Deficiencies</i>	Level 2 <i>Innovation Structure</i>	Level 3 <i>Innovation Processes</i>	Level 4 <i>Innovation Standards</i>	Level 5 <i>Innovation Optimized</i>
<b>Innovation Leadership and Strategy</b>	<b>Culture</b>	Culture is risk-averse, and closed to new ideas	Culture recognizes ideas but systems to move the ideas forward are lacking	Culture is risk-tolerant and new ideas are documented	Culture encourages risk-taking	Culture encourages collaborative innovation efforts
	<b>Strategic Planning</b>	Strategic planning focuses on past performance, maintaining status quo	Ideas generated not aligned to strategy	Ideas aligned with subordinate strategies	Innovation systems and approaches aligned to strategy	Governance established to ensure ideas are aligned to strategy before implementation
	<b>Leadership</b>	Leaders focused on past performance and current initiatives only	Leaders understand the difference between continuous improvement efforts and innovation	Senior leaders rely on middle management to communicate innovation goals and processes	Leaders create and market targeted idea campaign and communicate innovation strategy and processes	Senior management position dedicated to innovation program (Chief Innovation Officer)
<b>Managing for Innovation</b>	<b>People</b>	People viewed as productivity units and not idea sources	People are encouraged to submit ideas	People are encouraged to cooperate and collaborate to move ideas forward	People are encouraged to take calculated risks when problem solving	People are regarded as key providers of innovation ideas and are encouraged to use work time to generate them
	<b>Processes</b>	Innovation-related processes not present	Innovation-specific reward and recognition systems are established	Idea management process and related systems established	Goals related to innovation system are established	Innovation program formally established
	<b>Training</b>	Innovation-related training not provided	Employees and managers are introduced to creative problem solving and innovation concepts	Senior leaders and executives are offered creativity and innovation training	Advanced innovation process and Idea champion training to employees and management	Advanced creative problem solving, idea generation and innovation training provided to employees and management
	<b>Performance Measurement</b>	No established innovation-related metrics	Leading indicators established and reported (number of ideas submitted, percentage of awards linked to innovation)	Metrics aligned to innovation goals and success factors (percentage of employees and managers with innovation training, ratio of implemented to submitted ideas)	Lagging indicators established and reported (overall cost savings or avoidance or improved capabilities from innovation)	Positive correlation of innovation goals with other key/operational outcomes
<b>Innovation Tools</b>	<b>Idea Capture</b>	Ideas from employees are not captured and idea management systems not present	Employee ideas are captured by mid and front line management	Ideas are captured and processes exist to advance ideas toward implementation	Formal processes and tools exist to track and monitor idea status through the process	Centralized idea database is established supported by formal implementation systems
	<b>Other Tools</b>	Innovation tools and techniques are not present	General idea submission systems are established to collect and store ideas	General idea campaigns are launched to harvest ideas, regardless of problem(s) to be solved	Targeted idea campaigns are launched to solve specific problems	Idea generation sessions are sponsored and facilitated

Paul R. Williams, "Think for a Change"

#### IV. Strategic Alignment

The 2015-2018 U.S. Department of Defense Agency Strategic Plan underscores the criticality of innovation in its strategic goal to “achieve dominant capabilities through innovation, technical excellence, and defense institutional reform.” Echoing this priority, Department of Defense (DoD) leaders frequently point to accelerated innovation across the department as critical to putting competitive advantage firmly in the hands of American power projection over the coming decades. This need is supported by the 2016 Army Vision, which cites innovation’s importance in obtaining capabilities ahead of competitors and adversaries, and in streamlining processes within the institutional Army.

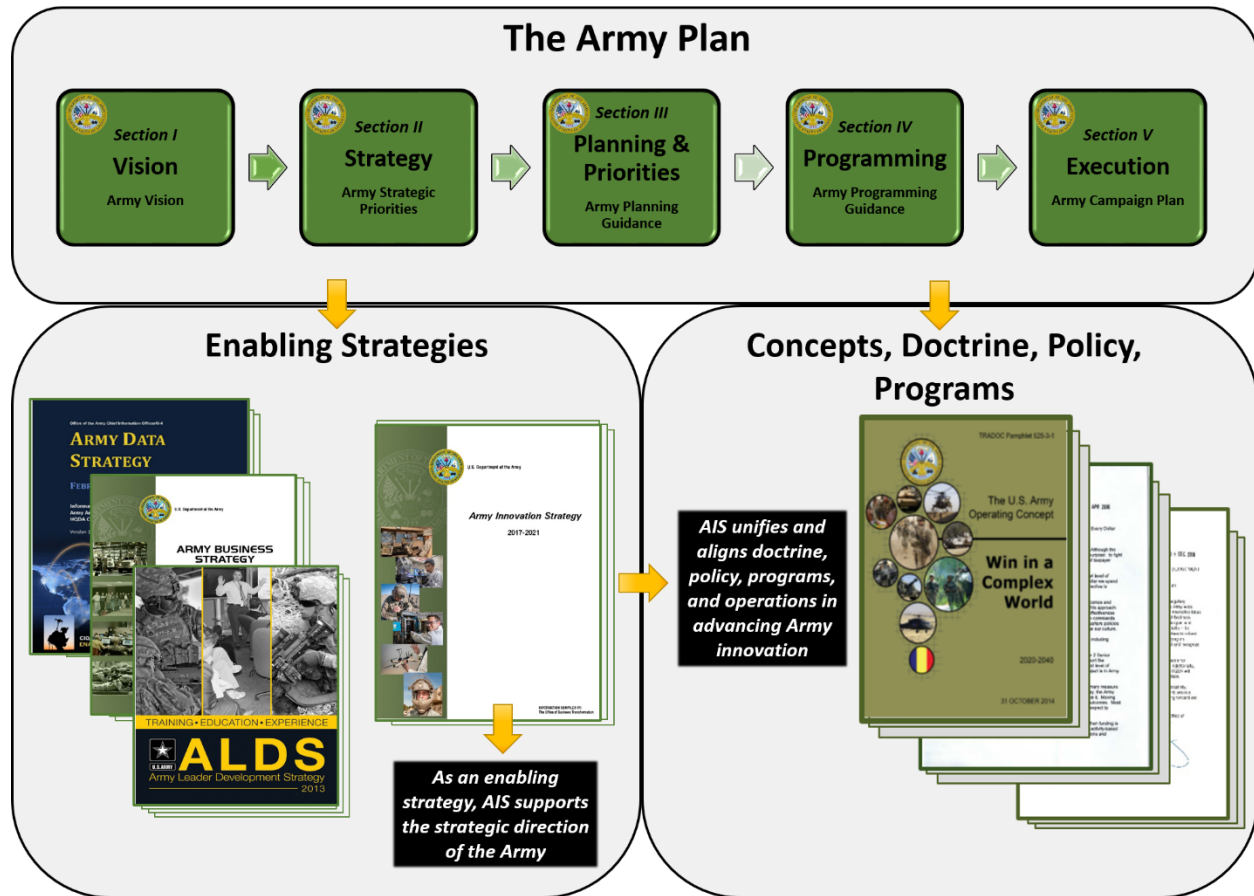


Figure 4. The AIS Integration in the Army Planning Hierarchy

Further, the 2014 Army Operating Concept specifically identifies innovation as one of eight key tenets for guiding the application of combat power. The concepts underpinning the philosophy and principles of Mission Command, specifically, mutual trust, disciplined initiative, and prudent risk-taking, are consistent with and supportive of the conditions necessary for successful and sustained innovation and entrepreneurship. Similarly, innovation and entrepreneurship are central to the achievement of goals and objectives contained in the Army’s Business Strategy, 2017-2021, that governs the management of the institutional Army in delivering its Title 10, United States Code (U.S.C) responsibilities.

To this end, the AIS is an enabling strategy to the Army’s Vision of “Strategic Advantage in a Complex World,” and also supports the strategic direction and plans of subordinate Army functions. At the same



time, the AIS provides overarching and unifying strategic direction for operations, programs, and policies that depend on innovation and entrepreneurial management for their execution such as the Army Operating Concept, the Army Directive 2016-15 (Changing Management Behavior: Every Dollar Counts), and the 2016 Army Ideas for Innovation Implementation Plan (figure 4). Strategic direction established by the AIS will be translated to action through the development and active management of an implementing plan.

## **V. Governance and Assessment**

The Army Office of Business Transformation (OBT) is responsible for development and coordination of the AIS and oversees the assessment of performance related to the accomplishment of its objectives. Senior leaders review progress in the achievement of AIS goals and objectives through the 2- and 3-Star Army Business Council (ABC) meetings and updates are provided as appropriate to the Senior Review Group (SRG), chaired by the Vice Chief of Staff of the Army (VCSA) and the Under Secretary of the Army (USA). Although the primary purpose for the reviews is to monitor progress, ABC venues provide Army senior leaders with the opportunity to engage in overcoming obstacles or necessary decision making in the achievement of AIS goals. The strategy has a 5 year planning horizon but is reviewed and updated bi-annually to ensure continued responsiveness to the Army's evolving strategic environment. OBT publishes updates to the AIS during the first quarter of the fiscal year.

The Army's Strategic Management System (SMS) is the primary enterprise-level tool used to manage Army and organizational strategy execution, to include the AIS. The SMS facilitates measurement of progress against strategic objectives and allows organization leaders to communicate strategy; demonstrate strategic alignment; build goals, objectives, measures and targets; and assess performance in objective accomplishment.

## **VI. Strategic Challenges, Goals, and Objectives**

Following are goals and objectives responsive to the key innovation challenges that must be addressed in achieving the Army's innovation vision. These challenges were identified by cross-functional teams of Army leaders, subject matter experts, and other stakeholders across the Army commands.

### ***A. The Army Culture's Low Tolerance for Risk***

**Challenge:** A culture that promotes repeatable and sustainable innovation in any organization requires prudent risk-taking and a reasonable tolerance for failure. However, the Army, like most Federal Government agencies, has a deeply ingrained culture of risk aversion, particularly within the institutional Army where this is reflected in approaches to managing the Total Army and the prioritization of both money and time. Innovation and entrepreneurship are not universally valued across the Army. Instead, adherence to standards is the foundation upon which individual and organizational performance are assessed. As a result, entrepreneurial behavior and the innovation it engenders are discouraged and opportunities to improve the Army and its operations are lost.

**Goal 1:** Innovation and entrepreneurship are valued across the depth and breadth of the Army. Increased and accelerated innovation that directly contributes to the achievement of the Army's vision is the result of uniformed and civilian leaders at all echelons empowering and rewarding experimentation, prudent risk-taking, and learning from mistakes.

***“In order for innovation to thrive, there needs to be a fundamental acceptance to experimentation, iteration of ideas, and willingness to allow an idea forward that may be contrary to corporate thinking.”***

David Westfall

**Objective 1.1:** Facilitate the surfacing, vetting, refinement, and implementation of workforce-generated ideas.

*Performance Measure 1.1a:* Number of Army Ideas for Innovation (AI2) accepted monthly. Target: 10% growth monthly in first year and 2% each subsequent year through fiscal year 2021 (FY21).

*Performance Measure 1.1b:* Number of substantiated complaints received monthly through AI2 on timeliness of idea advancement. Target: 0.

**Objective 1.2:** Incentivize, reward, and recognize innovation that supports the current needs and future objectives of the Army through formal approaches such as Army Materiel Command’s Army Greatest Innovation awards program.

*Performance Measure 1.2a:* Formal innovation-related reward and/or recognition programs established at Army command/Army service component command/direct reporting unit levels. Target: Programs established by second quarter 2018.

*Performance Measure 1.2b:* Army-level ceremony held to recognize top innovators. Target: One ceremony annually.

*Performance Measure 1.2c:* Army score on annual Federal Employee Viewpoint Survey for “Creativity and Innovation are Rewarded.” Target: 10% increase annually from 2016 baseline through 2021.

**Objective 1.3:** Remove bureaucratic and technical barriers to solution emergence with approaches such as the Army Rapid Capabilities Office and Army Cyber Challenges.

*Performance Indicator 1.3:* New, formalized programs that promote unobstructed emergence of solutions to challenges across functional domains are established throughout the enterprise.

**Objective 1.4:** Incorporate innovation and entrepreneurship in Army doctrine as key characteristics of the military profession.

*Performance Measure 1.4:* Army Doctrine Publication 1 includes innovation and entrepreneurship as key characteristics of the military profession. Target: With first revision cycle after publication of this document.

#### ***B. Programming and Resourcing of Innovation across DOTMLPF-P***

**Challenge:** Successful innovation initiatives often require collaboration across functional and organizational lines that necessitate cost sharing, flexible spending approaches, and the flow of money

to promising opportunities that is not overly obstructed. Such flexibility is inconsistent with the Army's traditional approach to planning, programming, and budgeting where priority is given to codified requirements for meeting standards and achieving specific and predictable outcomes. The lack of deliberate, dedicated, and systematic funding for innovation and innovative ideas outside of Research, Development, Testing and Evaluation (RDT&E) and inflexible funding processes that inhibit the rapid reprogramming and flow of resources to new opportunities often discourages innovation and constrains the Army's ability to collaborate with external agencies in problem-solving for its continued success.

**Goal 2:** The Army systematically plans and programs funding that promotes and supports innovation and entrepreneurial behavior throughout the enterprise, facilitates cost sharing across organizational lines, and provides the means for rapid application of funding to new opportunities as they emerge.

***"Innovation...is seldom the product of a single individual's intellectual brilliance. Innovation is the product of connections between individuals and their ideas."***

Gary Hamel

**Objective 2.1:** Develop new approaches to planning, programming, and execution that adapt to and support emerging ideas and changing operational demands such as the Army Venture Capital Initiative.

*Performance Indicator 2.1:* Funding is approved with flexible budget justification that allows availability and rapid application of funds to support innovation initiatives and ideas in the year of execution. Target: FY19.

**Objective 2.2:** Develop and submit proposals for Secretary of Defense and congressional consideration that support new approaches to planning, programming, and executing innovation activities that support changing operational demands across DOTMLPF-P.

*Performance Indicator 2.2:* Proposals developed, approved and submitted for consideration. Target: NLT EOY 2018.

**Objective 2.3:** Identify and report measures that facilitate an objective assessment of Return on Innovation Investment to rationalize future funding in support of innovation.

*Performance Measure 2.3:* Simple, meaningful criteria to effectively measure desired innovation-related behaviors and outcomes for leaders, organizations, and individuals are established and used for routine reporting and review by the ABC. Target: Annual reviews conducted beginning in 2nd Quarter FY18.

**Objective 2.4:** Foster creative cost sharing approaches with other Federal agencies; international, state, and local organizations; and the private sector to support collaborative innovation initiatives.

*Performance Indicator 2.4:* Innovation funding (Performance Indicator 2.1a) is unobstructed by execution rules and guidance that preclude mutually beneficial cost sharing arrangements.

### **C. Leveraging the Total Force: People, Diversity, Experience, Partners, and Collaborators**

**Challenge:** Openness to new ideas, a willingness to experiment and take risks, workforce engagement, and diversity are values most closely correlated with strong performance in innovation. Yet the Army's approaches to recruiting, developing, managing, retaining, and recognizing the uniformed and civilian force do not fully support these values. Further, as an enterprise, the Army lacks a systemic approach for the discovery, rapid evaluation, accreditation, integration, and acquisition of promising ideas, technologies and processes that may be realized through collaboration with partners, suppliers, and collaborators internal and external to the Federal Government.

**Goal 3:** The Army optimizes and aligns the diverse talent, skills, backgrounds, and ideas from the Total Army as well as partners from other nations, industry, and academia to systematically explore, incentivize, and adopt new concepts, technologies, and processes that positively impact the Army and its operations.

***"The Army will work with all stakeholders across the Department of Defense, other services, industry, research laboratories, and civilian innovators to develop new operating concepts and technologies."***

GEN Mark A. Milley, CSA

**Objective 3.1:** Build the Army's innovation network. Strengthen linkages with external idea creators and invest in collaboration forums which connect innovators across traditional organizational lines with such approaches as the Army Research Laboratory's Open Campus Initiative.

*Performance Measure 3.1:* An entity at the Headquarters, Department of the Army (HQDA) level is designated identify and implement opportunities for partnerships to optimize innovation capacity. Target: End of year (EOY) FY17.

**Objective 3.2:** Integrate innovation and entrepreneurship into the Army's talent management practices.

*Performance Indicator 3.2a:* The Army establishes measurable objectives for and rates individual behaviors and leadership actions in innovation and entrepreneurship. These objectives and behaviors are included in Army approaches to recruiting, performance evaluations, professional development, and promotion. Target: EOY FY20.

*Performance Indicator 3.2b:* The Secretary of the Army (SECARMY)/Chief of Staff, Army (CSA) with other senior leadership personally and routinely spotlight and recognize individuals and initiatives demonstrating innovation and entrepreneurship.

**Objective 3.3:** Better leverage the Continuous Process Improvement (CPI) community, including Lean Six Sigma as Business Process Re-Engineering (BPR) practitioners and related infrastructure (e.g., the Army's BPR Center of Excellence) for the identification of institutional challenges and solutions.

*Performance Indicator 3.3:* Lean Six Sigma practitioners and leaders within the CPI community work systematically and synergistically with idea capture and idea management programs across the enterprise to facilitate the implementation of innovative solutions to Army challenges. Target: EOY FY18.

***“Diverse backgrounds and experiences bring inherently different outlooks and ways of thinking, the key to innovation in organizations. We gain a strategic advantage by leveraging the diversity of all members and creating an inclusive environment in which each member is valued and encouraged to provide ideas critical to innovation, optimization, and organizational mission success.”***

DoD Diversity and Inclusion Strategic Plan, 2012-2017

**Objective 3.4:** Understand, promote, and set conditions to exploit the positive correlation between force diversity and innovation.

*Performance Measure 3.4a:* Army score on annual Federal Employee Viewpoint Survey for “Policies and Programs Promote Diversity in the Workplace.” Target: 5% increase annually from 2016 baseline through 2021.

2. *Performance Indicator 3.4b:* The Army actively supports in strategy and policy the recommendations contained in the 2011 Military Leadership Diversity Commission Report to the President of the United States and Congress.

**Objective 3.5:** Cultivate intrinsic motivation.

*Performance Measure 3.5:* Army score on annual Federal Employee Viewpoint Survey for “I Feel Encouraged to Come Up with New and Better Ways of Doing Things.” Target: 10% increase annually from 2016 baseline through 2021.

#### ***D. Demonstrated, Sustained Leadership Commitment to Innovation***

**Challenge:** Leaders who encourage innovation and who invest time and other resources in actively driving and managing it are the primary motivators of innovation and entrepreneurial behavior germane to all organizations in all industries. Army leaders acknowledge and often support the criticality of innovation to the effectiveness and efficiency of the operational and institutional Army. However, to ensure this support remains responsive to the evolving needs of the Army, continuous evaluation of their approaches innovation (e.g., prudent risk-taking, openness to new ideas, rewards and recognition, workforce development, and resource commitment) is necessary.

**Goal 4:** Uniformed and civilian Army leaders possess a strong personal bias for intelligent risk-taking as well as a demonstrated commitment to improvement and innovation. They combine these attributes with a resolute approach to drive necessary changes that create an environment for workforce engagement, entrepreneurship, and technological and organizational innovation, holding subordinate leaders accountable for the same.

***“Innovation is the military imperative and the leadership opportunity of this generation.”***

2014 Quadrennial Defense Review

**Objective 4.1:** Issue direction from SECARMY/CSA stating engagement in and facilitation of ideation and problem solving as a basic competency expected of all within the Army.

*Performance Measure 4.1:* SECARMY/CSA direction defining desired behaviors for innovation is issued. Target: First quarter, FY18.

**Objective 4.2:** Incorporate in the performance objectives, reviews, and counseling of uniformed and civilian leaders their effectiveness in promoting a culture of prudent risk-taking, improvement, and innovation in their units and organizations.

*Performance Measure 4.2:* Uniformed and civilian supervisors have included in their performance objectives their effectiveness in promoting prudent risk-taking and innovation. Target: EOY 2018.

**Objective 4.3:** Incentivize, reward, and recognize leadership in innovation.

*Performance Measure 4.3:* Leadership in innovation is formally recognized at HQDA level. Target: Annually at recognition ceremonies (see Performance Measure 1.2b).

#### ***E. Aligning Innovation Processes with Strategically Important Outcomes***

**Challenge:** In the evolution of innovation processes over the past three decades, Outcome-Driven Innovation is proven to have the highest success rate. However, at all echelons of the Army, performance assessment is grounded largely in measures of performance where the focus is on processes rather than measures of effectiveness that are reflective of key operational and institutional outcomes. When desired outcomes are not clearly defined, communicated, and measured, then approaches to innovation and entrepreneurship lack the necessary focus to optimize their benefits and meaningful impacts and to meet the current and future needs of the Army.

**Goal 5:** Innovation processes and entrepreneurial behavior in the Army are driven by well-defined, clearly articulated, measurable outcomes whose achievement meaningfully impacts the Army's effectiveness and efficiency.

**Objective 5.1:** Identify and aggregate Army challenges through the development and maintenance of a repository or repositories available to innovators across DoD, key partners, and suppliers.

*Performance Indicator 5.1:* Problem repository or repositories are established and active. Target: Second quarter, FY18.

**Objective 5.2:** Align enterprise-level recognition and rewards to innovation that is successful in addressing these challenges.

*Performance Measure 5.2:* Innovation rewards and recognition given at HQDA level ceremonies are grounded in clearly articulated, high-impact Army challenges. Target: 100%.

***“[The DoD will] fuel entrepreneurship and innovation and improve government efficiency and effectiveness by unlocking the value of government data.”***

***The DoD Agency Strategic Plan, 2015-2018***

**Objective 5.3:** Leverage emerging data analytics capabilities in identifying opportunities for innovation.

*Performance Indicator 5.3:* Data analytics are increasingly used to drive innovation across the enterprise.

**Objective 5.4:** Develop an enterprise-wide, scalable business process for innovation.

*Performance Measure 5.4:* Enterprise-wide, scalable business process for innovation is developed and deployed across the enterprise. Target: EOY 2018.

## **VII. Goals and Objectives Summary**

Table 2 summarizes the Army Innovation Strategy goals and objectives.

## **VII. Conclusion**

In preparation for framing and writing the AIS, OBT met with leaders and innovators from industry, academia, private organizations, other Service branches and Federal agencies, and the Army. Two key learnings came from these engagements that became foundational concepts of the AIS. The first of these is that across the Army the call for innovation has not gone unheard. Army agencies and organizations at all echelons are systematically developing and implementing innovative solutions to solve the Army’s greatest challenges with velocity that until now has only been seen in times of war. Accordingly, the intent of the AIS is not to supplant these efforts, but rather to set the conditions for advancing a culture of innovation and entrepreneurship across the Army.

The second learning from these engagements is that successful, sustainable innovation with demonstrable outcomes requires a three-pronged approach, driven from both top-down and bottom-up, that includes innovation tools, managing for innovation, and innovation leadership and strategy. To this end, the AIS establishes, through goals and objectives responsive to the Army’s most fundamental innovation challenges, a trajectory for the maturation of these approaches. Through the accomplishment of these objectives and achievement of the targeted maturity level, the Army will institutionalize an enduring culture of innovation and entrepreneurship that drives solutions to win in a complex world.

Table 2. Summary of Innovation Goals and Objectives

Goals	Objectives
<p><b>1: Innovation and entrepreneurship are valued across the depth and breadth of the Army. Increased and accelerated innovation that directly contributes to the achievement of the Army's vision is the result of uniformed and civilian leaders at all echelons empowering and rewarding experimentation, prudent risk-taking, and learning from mistakes.</b></p>	<p><b>1.1:</b> Facilitate the surfacing, vetting, refinement, and implementation of workforce-generated ideas.</p> <p><b>1.2:</b> Incentivize, reward, and recognize innovation that supports the current needs and future objectives of the Army through formal approaches such as Army Materiel Command's Army Greatest Innovation awards program.</p> <p><b>1.3:</b> Remove bureaucratic and technical barriers to solution emergence with approaches such as the Army Rapid Capabilities Office and Army Cyber Challenges.</p> <p><b>1.4:</b> Incorporate innovation and entrepreneurship in Army doctrine as key characteristics of the military profession.</p>
<p><b>2: The Army systematically plans and programs funding that promotes and supports innovation and entrepreneurial behavior throughout the enterprise, facilitates cost sharing across organizational lines, and provides the means for rapid application of funding to new opportunities as they emerge.</b></p>	<p><b>2.1:</b> Develop new approaches to planning, programming, and execution that adapt to and support emerging ideas and changing operational demands such as the Army Venture Capital Initiative.</p> <p><b>2.2:</b> Develop and submit proposals for Secretary of Defense and congressional consideration that support new approaches to planning, programming, and executing innovation activities that support changing operational demands across DOTMLPF-P.</p> <p><b>2.3:</b> Identify and report measures that facilitate an objective assessment of Return on Innovation Investment to rationalize future funding in support of innovation.</p> <p><b>2.4:</b> Foster creative cost sharing approaches with other Federal agencies; international, state, and local organizations; and the private sector to support collaborative innovation initiatives.</p>
<p><b>3: The Army optimizes and aligns the diverse talent, skills, backgrounds, and ideas from the Total Army as well as partners from other nations, industry, and academia to systematically explore, incentivize, and adopt new concepts, technologies, and processes that positively impact the Army and its operations.</b></p>	<p><b>3.1:</b> Build the Army's innovation network. Strengthen linkages with external idea creators and invest in collaboration forums which connect innovators across traditional organizational lines with such approaches as the Army Research Laboratory's Open Campus Initiative.</p> <p><b>3.2:</b> Integrate innovation and entrepreneurship into the Army's talent management practices.</p> <p><b>3.3:</b> Better leverage the Continuous Process Improvement (CPI) community, including Lean Six Sigma as Business Process Re-Engineering (BPR) practitioners and related infrastructure (e.g., the Army's BPR Center of Excellence) for the identification of institutional challenges and solutions.</p> <p><b>3.4:</b> Understand, promote, and set conditions to exploit the positive correlation between force diversity and innovation.</p> <p><b>3.5:</b> Cultivate intrinsic motivation.</p>
<p><b>4: Uniformed and civilian Army leaders possess a strong personal bias for intelligent risk-taking as well as a demonstrated commitment to improvement and innovation. They combine these attributes with a resolute approach to drive necessary changes that create an environment for workforce engagement, entrepreneurship, and technological and organizational innovation, holding subordinate leaders accountable for the same.</b></p>	<p><b>4.1:</b> Issue direction from the Secretary of the Army (SECARMY)/Chief of Staff of the Army (CSA) stating engagement in and facilitation of ideation and problem solving as a basic competency expected of all within the Army.</p> <p><b>4.2:</b> Incorporate in the performance objectives, reviews, and counseling of uniformed and civilian leaders their effectiveness in promoting a culture of prudent risk-taking, improvement, and innovation in their units and organizations.</p> <p><b>4.3:</b> Incentivize, reward, and recognize leadership in innovation.</p>
<p><b>5: Innovation processes and entrepreneurial behavior in the Army are driven by well-defined, clearly articulated, measurable outcomes whose achievement meaningfully impacts the Army's effectiveness and efficiency.</b></p>	<p><b>5.1:</b> Identify and aggregate Army challenges through the development and maintenance of a repository or repositories available to innovators across DoD, key partners, and suppliers.</p> <p><b>5.2:</b> Align enterprise-level recognition and rewards to innovation that is successful in addressing these challenges.</p> <p><b>5.3:</b> Leverage emerging data analytics capabilities in identifying opportunities for innovation.</p> <p><b>5.4:</b> Develop an enterprise-wide, scalable business process for innovation.</p>



## **VIII. References**

1. Department of Defense, Agency Strategic Plan, 2016-2018
2. Memorandum, Secretary of Defense, November 15, 2014, subject: The Defense Innovation Initiative
3. Headquarters, Department of the Army, The Army Business Strategy 2017-2021.
4. Headquarters, Department of the Army, The Army Vision 2015-2025.
5. Memorandum, Secretary of the Army, 15 April, 2016, subject: Army Directive 2016-16 (Changing Management Behavior: Every Dollar Counts).
6. Memorandum, Under Secretary of the Army, 14 December, 2016, Army Ideas for Innovation (AI2) Program Implementation Plan.
7. U.S. Army Training and Doctrine Command Pamphlet 525-3- 1, The U.S. Army Operating Concept, Winning in a Complex World 2020-2040.

# **Army Innovation Strategy**

## **2017-2021**

