



# INNOVATION SUMMIT SERIES

## 27-28 JULY 2020



- **Purpose**
  - Exposure to dual-use concept and private investment/VC community for novel transition paths and collaboration opportunities.
- **Agenda**
  - 27 July: Overview of defense innovation programs and venture capital firms/funds investing in dual-use technologies.
  - 28 July: Shark tank team presentations to & feedback from VCs on the east (The Engine) and west coast (Share Ventures).



Dr. Charlene Stokes  
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# Detailed Agenda

Optional activity!  
Free time otherwise

## Day 1 / 27 July:

2:00-2:15 – Intro (Charlene Stokes)

2:15-2:30 – The Engine overview (*Orin Hoffman*, Venture Partner – <https://engine.xyz/>)

2:30-2:45 – Share Ventures overview (*Hamet Watt*, Founder – <https://share.vc/>)

2:45-3:00 – NSIN overview (*Matt Merighi*, Northeast Regional Director – <https://www.nsin.us/>)

3:00-3:30 – Q&A breakout sessions

## Day 2 / 28 July:

2:00-2:05 – Kickoff

2:05-3:30 – Shark tank presentations (5-min maximum)

### Shark Tank activity:

Opportunity to present potential product ideas (real or potential) directly to VCs and receive feedback.

### Market Questions:

- 1) What are the significant market need(s) that this technology could address?
- 2) What would be the product that could uniquely fill that market need?
- 3) What would you need as a company (money, people, time) to build a pilot product that could prove out that market hypothesis?



# MID- AND FAR-TERM IMPACT



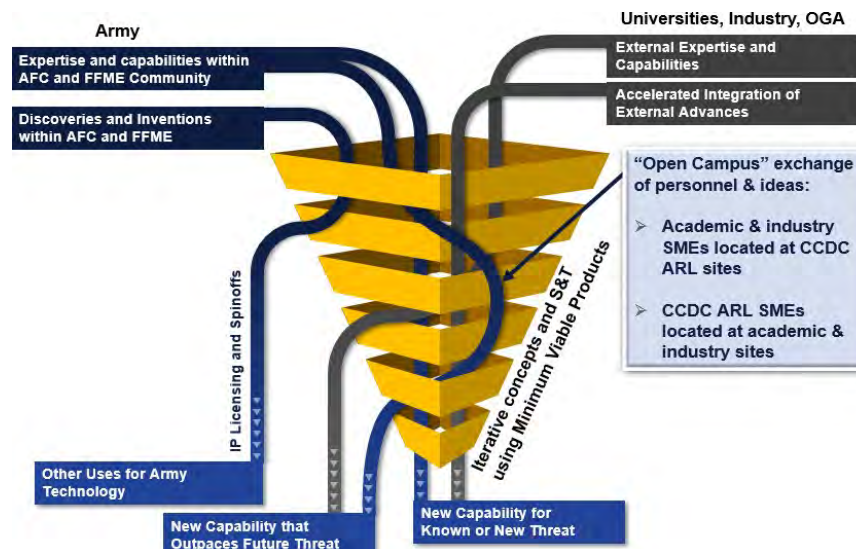
- **6.1 basic research focused on far-term goals and impact within the Army (2030+)**

- STRONG program aiming toward far-reaching, long-term goals (shaping future concepts)
- High-risk, high reward research

**What is the commercial sector potential?**

- **Creating and exploiting scientific knowledge for Transformational Overmatch**

- Integrated, “team of teams” approach for traditional transition pathways
- Exploration of novel transition pathways





# TENETS OF MULTI-DOMAIN OPERATIONS

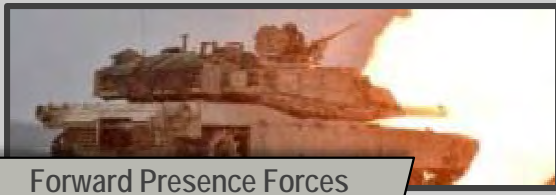


Executing MDO requires changing how the Army: postures the force physically with increased authorities; organizes its formations; and employs its new capabilities and emerging technologies.

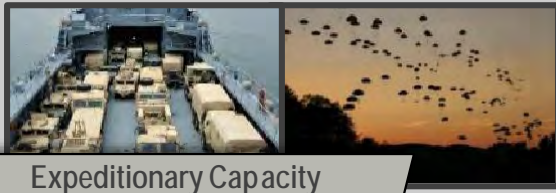
Calibrated

## Commercial sector potential?

Intelligence



Forward Presence Forces



Expeditionary Capacity



National-Level Capabilities



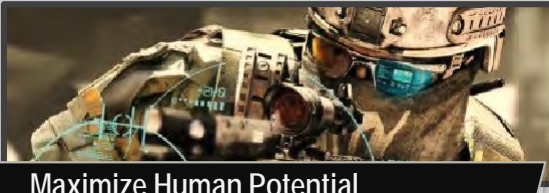
Authorities



Conduct Independent Maneuver



Employ Cross-Domain Fires



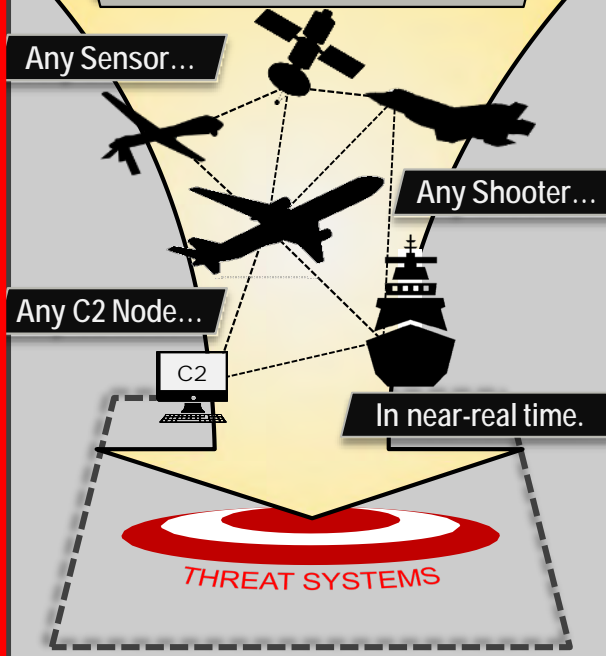
Maximize Human Potential



Echelons Above Brigade Formations

The rapid and continuous integration of capabilities in all domains through:

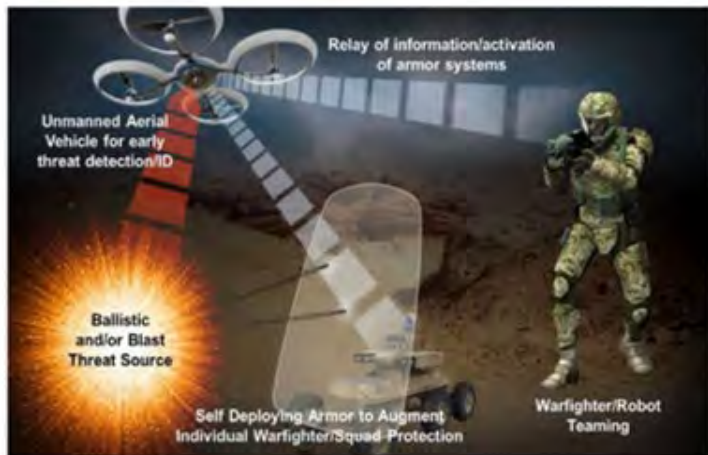
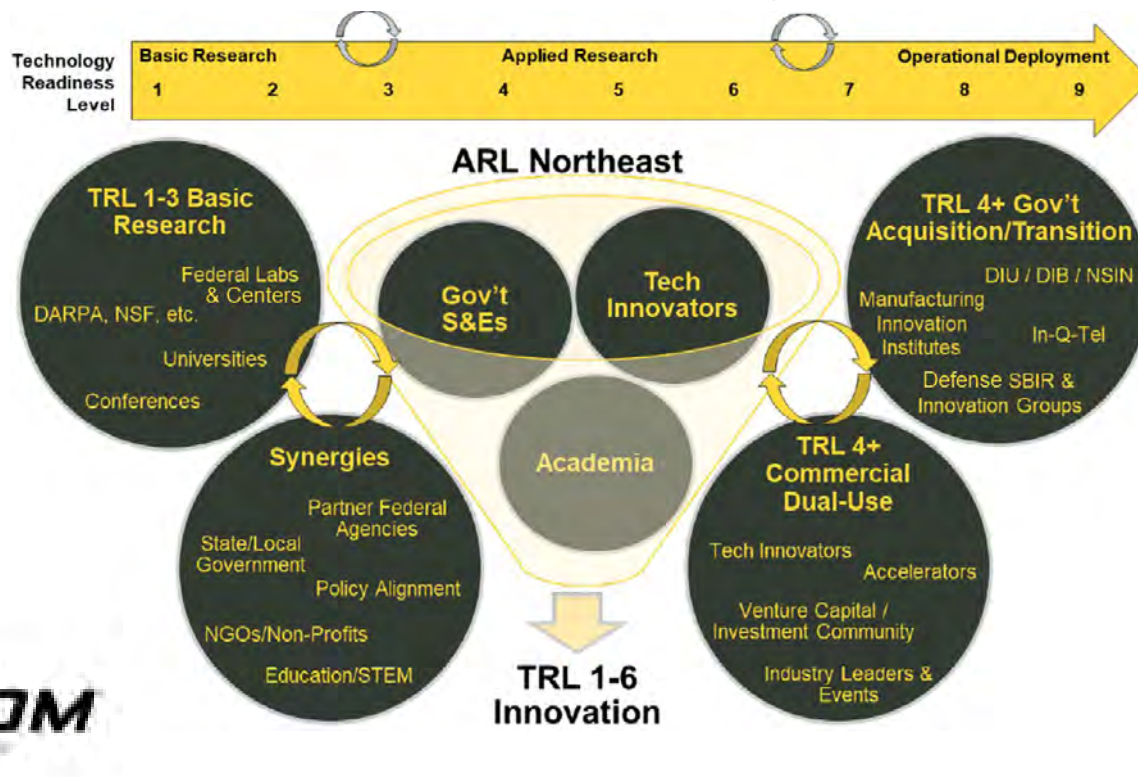
- Cross-Domain Synergy
- Redundant Kill Chains
- Mission Command



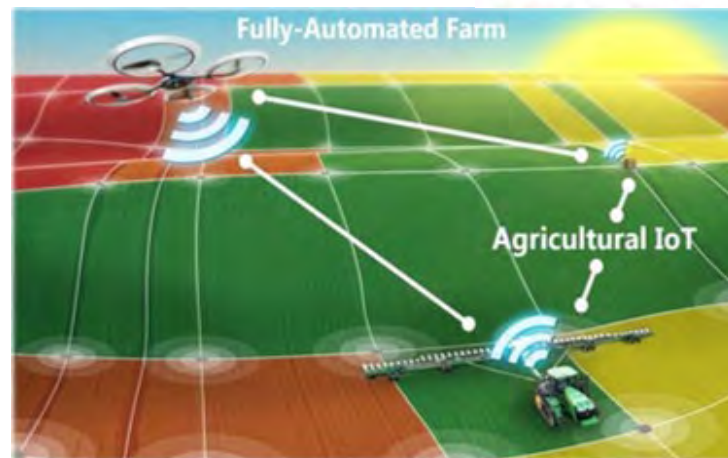




# A Dual-Use Innovation Ecosystem



*Dual-Use Example*



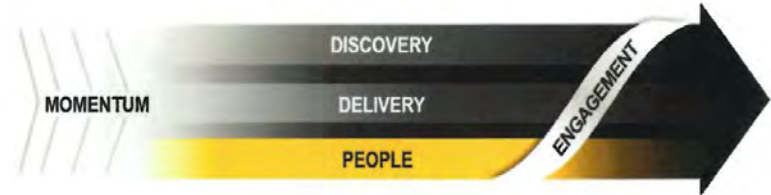


# Harmonized Engagement and Mutual Benefits

What the Army is doing for dual-use

Partnering with the private investment community to spur multiple transition avenues for leap-ahead, transformative technologies

Acquisition and **seed funding (e.g., STRONG)**



Multiple novel transition paths (in addition to traditional 6.2 Army)

Army-defined S&T areas

- Targeted MDO modernization areas
- Dual-use with defined National Industrial Base priority and commercial sector potential

Spin off startup company

- Seed funding from STRONG
- VC funding for follow on
- Maintain STRONG/Army ties for future transition/acquisition

Collaboration with startups

- Research funding from STRONG (seedling or follow-on award)
- VC funding for startup partner

Market response / follow-on investments

- Rapid demo/prototype cycles and market testing provide increased TV&V opportunities



Gov't-VC partners working together to support teams/companies across the full lifecycle



# A (NON-EXHAUSTIVE) LIST OF RESEARCH CONSIDERATIONS...



SCIENTIFIC &  
TECHNICAL MERIT

BUILDING BLOCK  
/ ARMY IMPACT

COLLABORATION

1. How does this project advance *understanding how individual dynamics influence the emergent properties in human-agent teams*?
  - Does the research lead to or test models bridging dynamic, continuous individual and group attributes, emergent behaviors, and team performance?
  - Does the research enable or develop means of predicting and leveraging individual performance variation for improved overall team performance?
2. What risks are involved? How does this align with the Army focus on high risk, high return?
  - Technical risk? Scientific risk?
3. What are the potential uses that may evolve from the scientific results of your project? What tools (algorithms, metrics, devices, methods) can be built based on the research? Can we envision a transition path for the research?
4. What is the potential for disruption? How will this lead to transformational overmatch for the Army?
5. Why is this particular research not suitable for funding from agencies like the NIH or NSF? How is this better suited for addressing the mission of the Army science and technology community?
6. What do you believe are the key, defining elements of meaningful collaboration?
  - What metrics would demonstrate and validate the amount and quality of collaboration?
7. How would or could you extend this project given additional resources and/or expertise from another team/space/location outside of the proposal team?
  - What additional expertise would enable broader impact of your research outcomes?
  - What scientific or technical gaps could you address with complementary knowledge, skills, abilities from other groups?

**Commercial sector potential?**



# Shark Tank Instructions

- Decide on idea/product (real or potential) that your research might lead to and you would like to pitch directly to a VC for feedback on market potential.
  - Does NOT have to be specific to follow-on STRONG proposal being presented, but excellent opportunity to align potential transition
- Sign up for time slot
  - 9 private time slots max
  - 5-minute presentation max
- Prepare pitch for Day 2
  - Responding directly to below questions
  - Modality up to you

Optional activity!  
Free time otherwise

## Market-oriented questions:

1. What are the significant market need(s) that this technology could address?
2. What would be the product that could uniquely fill that market need?
3. What would you need as a company (money, people, time) to build a pilot product that could prove out that market hypothesis?