Tailored Interventions to Foster Acquisition Innovation

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Agenda

Objective

Innovation Alliance Program

Pilot

- **Methodology**
- **Results**

Purpose

To uncover and mediate underlying systemic pressures on the acquisition workforce in the DoD that impede agility and innovative behaviors

How: To pilot a program of cohesive interventions – the **Innovation Alliance Program** (IAP) – to addresses systemic factors to incentivize lasting behavior and cultural changes

Why this matters

- NDS & EO 14265: Calls for innovation and agility
- DoD must accelerate acquisition transformation
- Systemic, not just technical, barriers to innovation persist

What is the Innovation Alliance Program (IAP)?

1. Method for continuous monitoring to identify signals of barriers and facilitators to a healthy innovation culture within an organization: *Systemic Contributors and Adaptations Diagramming* (SCAD) interviews
2. Model and a tool to aid in the interpretation of the signals collected in the identification activities
3. Co-design process for supporting the transition high potential ideas to improve their implementability and sustainability at increasing scale: Accele*rating Impacts Workshops* (AIW)
4. Scaffold approach to build internal capacity, anchoring knowledge transfer from novice to expert to execute the program: *See-Do-Teach*

Pilot Methodology

Collaboration with the Air Force Installation Contracting Center (AFICC) in 2 phases:

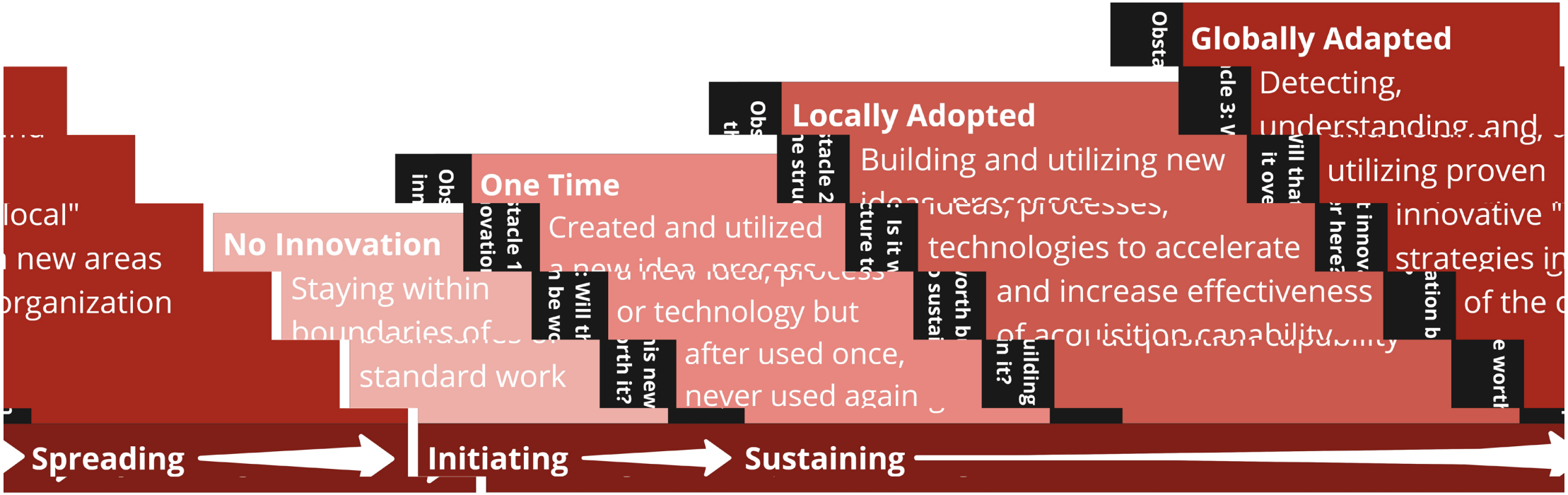
25 SCAD interviews

3 AIWs

Embedded AFICC lead with OSU

Positions	Phase I	Phase II	Functions
Leadership (6)	Military (1) Civilian (4)	Military (0) Civilian (1)	Contracting (3) Program Management (3)
Frontline (19)	Military (5) Civilian (5)	Military (9) Civilian (0)	Contracting (19)

Innovation Continuum in DoD Acquisition



SCAD Insights – Barriers & Enablers

Acquisition innovation is shaped by the interaction between **system attributes**—organizational conditions that enable innovative behavior—and **system pressures** that constrain it

Key system attributes that enable innovation include *organizational learning, internal and external collaboration, goal alignment, autonomy,* and *making room for failure and risk-taking*

System pressures that impede innovation include *excessive workload, time scarcity, procedural rigidity, low prioritization of innovation,* and *limited resources*

- *Leadership support* emerges as a particularly potent **compound system pressure**, in that it amplifies or mitigates the effects of other pressures depending on how it is exercised

Role of Leadership in Acquisition Innovation

Leadership is a **force multiplier**

(+) Leaders enabled innovation when they

- provided "top cover" for experimentation
- modeled openness to uncertainty
- aligned authority with responsibility
- fostered autonomy and resilience in their teams

(-) Leaders stymied innovation when they

- lacked alignment with team goals
- failed to delegate authority
- signaled low tolerance for deviation from established norms (whether overtly or in their aggregate response to previous events)

Key Findings

Innovation emerges locally, but often stalls

Time and resource constraints limit reach

Lack of formal mechanisms to scale innovations

Strong need for cohesive, sustained efforts to support changing behaviors

Leadership is essential for cultural change

→ **IAP helps to surface, support, and scale innovation across defense acquisition enterprise**

Acquisition innovation is not optional. It is strategic readiness.

Thank You

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Backup Slides

See-Do-Teach: Building Internal Capability

Dr. Amanda Girth is an expert in acquisition policy and practice. She is an Associate Professor of Public Affairs at the John Glenn College of Public Affairs at The Ohio State University and is faculty-in-residence for the Glenn College in Washington, DC.

Dr. Girth has three lines of research inquiry at the intersection of the public and private sectors. (1) She studies the strategies that front-line public managers utilize to manage their contracts, contract markets, and various constituencies. (2) She examines how public managers design and implement performance incentives to motivate contractor behavior. (3) She researches inclusion policies that target underrepresented groups in order to understand the impact of such acquisition policies on purchasing agencies and suppliers. Her research is widely published in leading academic journals, such as the *Journal of Public Administration Research and Theory*, *Journal of Supply Chain Management*, and *Public Administration Review*, among other outlets.

Dr. Girth has testified before the U.S. Congress and conducts sponsored research for the U.S. Department of Defense, positioning her at the forefront of acquisition innovation. She is an Adjunct Fellow in the Defense-Industrial Initiatives Group at the Center for Strategic and International Studies, and a member of the Research Council for the Systems Engineering Research Center/Acquisition Innovation Research Center.

Dr. Mike Rayo is an Associate Professor in Integrated Systems Engineering at the College of Engineering at The Ohio State University. He holds appointments as a core faculty member of the Translational Data Analytics Institute at OSU. He is also the Director of Cognitive Systems Engineering Laboratory at OSU. Dr. Rayo is an expert in resilience engineering, focused on identifying signals and patterns of healthy and strained systems. He has publications in multiple high-impact systems engineering journals and invited international talks on these topics.

Dr. Rayo's research focuses on programs and technologies that improve overall system resilience over the widest possible range of expected and unexpected conditions. The goal of his lab is to deepen our understanding of organization-wide and multi-agent teamwork and to translate these findings into technology attributes that improve human-machine teamwork. His work is focused on the design of threshold alarms, decision-support technologies, and human-machine teams in healthcare, military, transportation, and power generation settings.

Dr. Rayo's work in organizational resilience, joint human-machine activity including alarm design and management, visual analytics, computerized decision support, and interpersonal communication has been funded by the Air Force Research Laboratory, Agency for Healthcare Research and Quality, the Ohio Department of Health, Eurocontrol, the American Nurses Foundation, and the National Center for Advancing Translational Sciences. He has published 24 peer-reviewed journal articles, 2 book chapters, and 42 proceedings papers on these topics, and serves on multiple patient safety committees and advisory groups. He was also a 2019 IBM Faculty Award winner for his work on organizational resilience.

Dr. Rayo received his doctorate and Master of Science degree in cognitive systems engineering from The Ohio State University. He also has a Bachelor of Science degree in chemical engineering and a Bachelor of Arts degree in music performance from Case Western Reserve University.

Dr. Laura Maguire is a Research Scientist with the Cognitive Systems Engineering Lab at Ohio State University with extensive experience working with industry and governmental organizations. She brings a practical and adaptive approach to working with high tempo, production environments conducting research, training, and co-designing efficient organizational improvement efforts in resilience engineering, process improvement, and cognitive systems engineering.

She has led studies and advised for Fortune 500 companies, start ups, industry and professional associations, and government entities. Her most recent industry role was the Head of Research & Cognitive Systems Engineering at a Series A software start up based on her doctoral work that was acquired in 2023. She is an engaging facilitator and sought after international keynote speaker.