



Calhoun: The NPS Institutional Archive
DSpace Repository

Acquisition Research Program

Acquisition Research Symposium

2022-05-06

Framework for Organizational Needs of Innovation in the Department of Defense

Taylor, Jennifer M.

Monterey, California. Naval Postgraduate School

<http://hdl.handle.net/10945/70283>

Copyright is reserved by the copyright owner

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>



Framework for Organizational Needs of Innovation in the Department of Defense

Jennifer M. Taylor

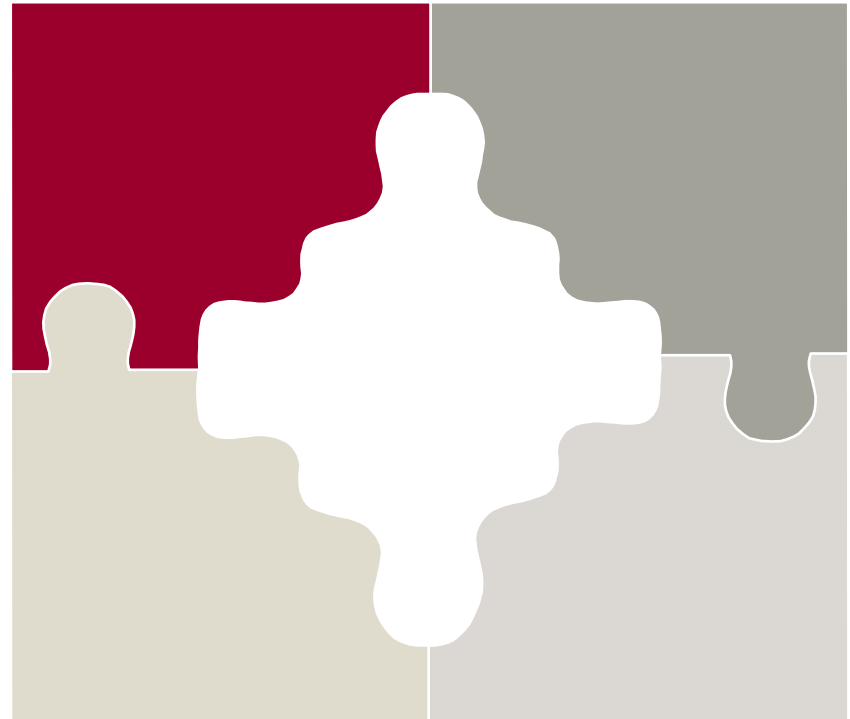
May 11, 2022

Institute for Defense Analyses
730 East Glebe Road • Alexandria, Virginia 22305

Research question

Which **bureaucratic environment** and **innovation environment** attributes describe the elements that need to be considered to support organizational decision-making in:

- realigning the innovation ecosystem,
- aligning efforts, or
- developing new strategies?



Data Sources and Applications

- This framework was informed by:
 - Over 25 expert interviews
 - Department of Defense documents
 - Innovation and Organizational literature
 - Panel discussions
- This framework may be valuable to provide the attributes to consider in order to:
 - Account for required elements in potential shifts in direction to the innovation ecosystem.
 - Determine potential adjustments in alignment.
 - Consideration of proposals such as consolidation or expansion of innovation organizations.
 - Implement recommendations to establish a Chief Innovation Officer for DoD.
 - Develop an innovation strategy.

Definition of Innovation

New capabilities and practices and changes to existing capabilities and practices that cause disruptive effects: those that, in order to avoid creating a persistent competitive advantage for the adopter(s), mandate either (a) adoption by other competitors, or (b) a corresponding counter-innovation by non-adopters.

Timeline of Illustrative Organizations in the Innovation Ecosystem

- There has been a marked uptick in the creation of these innovation organizations in the last decade.
- DOD's new portal begins to address the criticism that there is no central entry point to the innovation ecosystem. It lists:
 - Science and Technology Reinvention Laboratories
 - University Affiliated Research Centers
 - Federally Funded Research and Development Centers
 - Partnership Intermediary Agreements
 - Software Factory
 - Governance and Guidance Offices
 - Technology Transfer



Balancing Organizational Needs

DOD and Innovation Organizations have overlapping, but different, needs.

There is an inherent tension between innovation and ongoing operations.

Organizationally, the innovation organizations need:

- An alignment that will maximize their capacity to drive a renewed mandate and charter
- Freedom to operate differently (i.e., not driven by cost or schedule)

For these organizations to be effective in their mission, it needs to have access to the right people, tools, and technology capable of working in an uncertain and nonroutine environment.

Organizationally, DoD is not optimized to:

- Make fast, agile changes, with a sense of urgency
- Adopt innovative approaches, but there are increasing tools to assist
- Measure the success of innovation
- Support processes that are different from the day-to-day operations

DoD is driven to perform its national security mission, and to maximize results works to make every process and activity as predictable as possible. There is a need for oversight, with the right kind of performance measures.

How to use the system to support innovation at DoD

Innovation efforts are reinforced and accelerated by maintaining consistent processes for contracting, personnel matters, budgeting, and other organizational concerns.

Minimize the time and effort spent on issues related to these efforts, more space is created to allow for innovative connections to take place.

- **Centralize** those functions– like hiring, budgeting, administration, acquisition management– that benefit from consistency and require oversight.
- **Define** appropriate metrics– traditional program effectiveness metrics may measure the wrong things for innovation. Success should be defined by disruption and adoption.
- Innovation is not driven by requirements, but by “**what could be.**”

Innovation organizations inside and outside DoD, are strongly influenced by their founding personalities. Innovation is a human behavior, dependent on personality, and there is **no change without change agents.**



Successful innovation will be driven by organizational structures that encourage:

Interactions beyond boundaries and stovepipes

Continuous learning

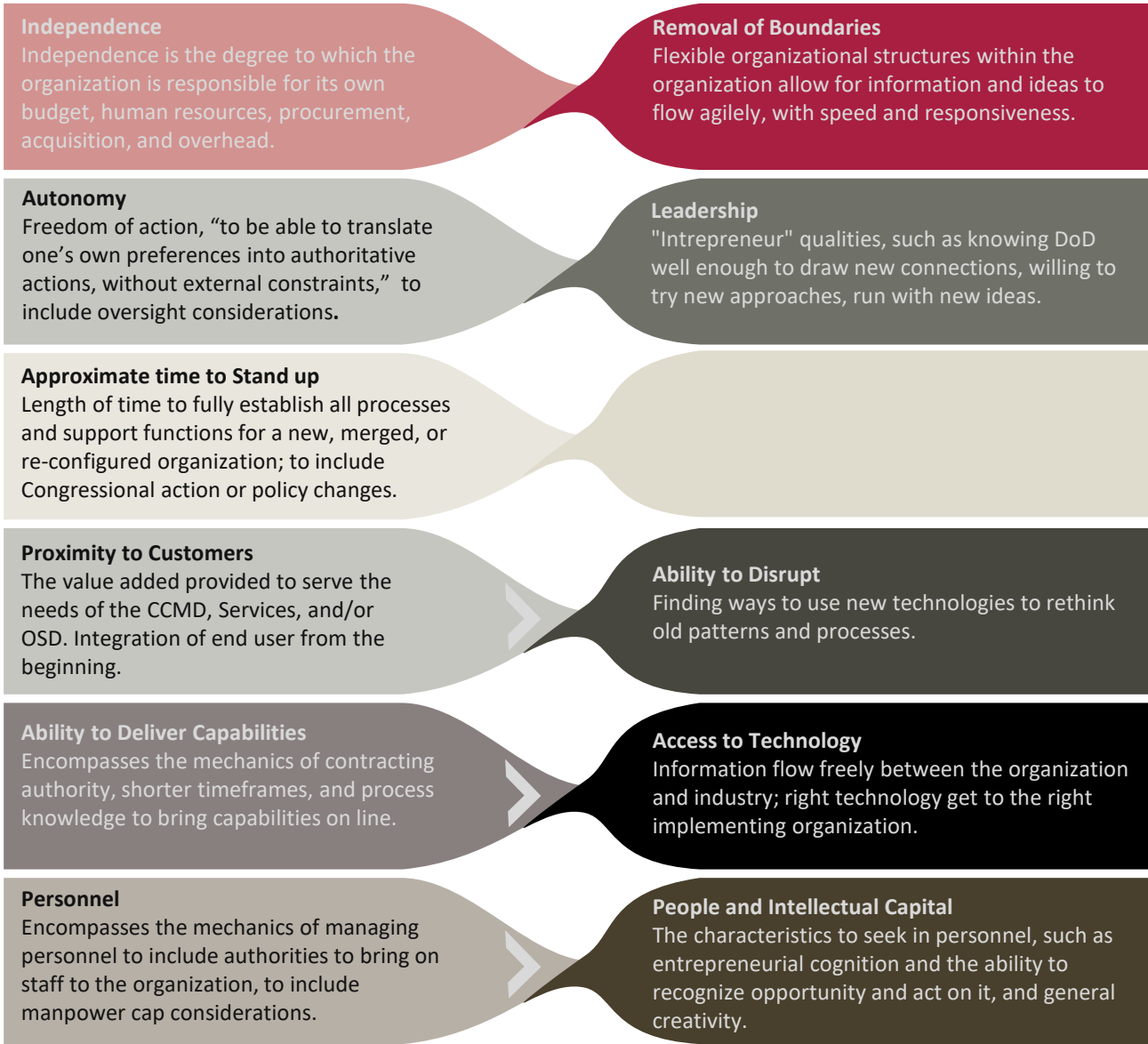
Creativity

Finding new connections

Facilitation of interactions with relevant users

The attributes

Bureaucratic Environment Attributes



Innovation Environment Attributes