Naval Accelerator

Defense Innovation Days 2019

26-28 August 2019

Richard Carlin
Naval Accelerator
Office of Naval Research

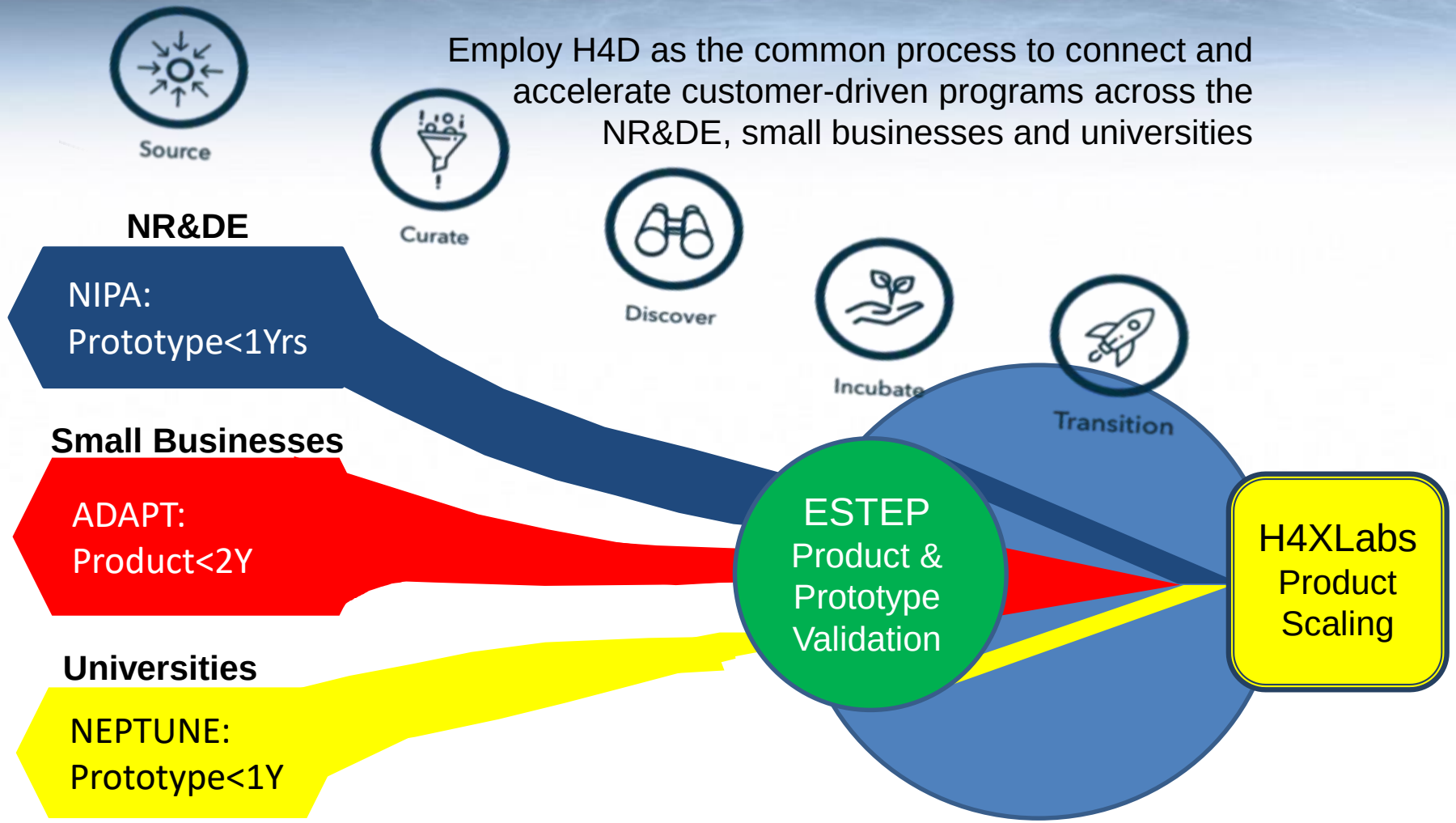
Accelerating…

- *<u>NR&DE (Warfare Centers)</u> Prototype Delivery*
  - *Naval Innovation Process Adoption (NIPA)*
- *<u>Small Business</u> Prototype/Product Delivery & Scaling*
  - *Accelerated Delivery & Acquisition of Prototype Technologies (ADAPT)*
- *<u>University</u> Prototype Delivery*
  - *Naval Enterprise Teaming with Universities for National Entrepreneurship (NEPTUNE)*
- *<u>Customer-Driven</u> Product/Prototype Validation*
  - *Energy Systems Technology Evaluation Program (ESTEP)*
- *<u>Customer-Demand</u> Dual-Use Product Scaling & Deployment*
  - *Naval Business Growth Accelerator (via H4XLabs)*
  - *Elemental Excelerator (HI and CA "Place Based" Growth Accelerator, EEx)*

…Prototype/Product Delivery, Scaling & Deployment

Integrated Scalable Ecosystem

Employ H4D as the common process to connect and accelerate customer-driven programs across the NR&DE, small businesses and universities



H4D Training & Facilitation

"Hacking for Defense™ is a university-sponsored class that allows students to develop a deep understanding of the problems and needs of government sponsors in the Department of Defense and the Intelligence Community. In a short time, students rapidly iterate prototypes and produce solutions to sponsors' needs." https://www.h4di.org and http://www.bmnt.com

"Hacking for Defense is offered in over 25 universities, but quickly following, Orin Herskowitz started Hacking for Energy at Columbia, Steve Weinstein started Hacking for Impact (Non-Profits) and Hacking for Local (Oakland) at Berkeley and will be starting Hacking for Oceans at Scripps. Hacking for Conservation and Development at Duke followed." https://steveblank.com/2019/06/07/hacking-for-defense-stanford-2019/

Naval Innovation Process Adoption (NIPA)

NR&DE

Bringing H4D to the NR&DE

- *Move NR&DE technologies from the Naval Warfare Centers and laboratories to the warfighter and the commercial sector*
- *Create and work with startups and nontraditional defense companies to promote economic and workforce development in NR&DE's local/regional communities*
- *Enhance collaboration across the NR&DE and promote collaboration with other DoD partners, other Federal and State Government Agencies, Academia, and Private Industry*

Accelerated Delivery & Acquisition of Prototype Technologies (ADAPT)

Small Businesses

Description:

"Accelerated Delivery and Scaling of Viable Operational Prototypes using Startup and Venture Capital (VC) Principles"

Key Characteristics:

- **Prototype-focused to utilize NDAA prototype authorities**
- **Milestone-driven award execution to accelerate delivery of operational prototype(s) and strengthen SBIR-DON engagements**
- **Implements new Naval Business Growth Accelerator (H4XLabs) to access private investments and facilitate prototype/product scaling**
- **Implements OTA business practices to eliminate barriers to scaling and acquisitions**
- **Flexible BAA Use: In-Cycle Special Topics, Out-of-Cycle Joint Topics, and Potential Annual Open BAA for Year-Round Topic Announcements**

Naval Enterprise Partnership Teaming with Universities for National Entrepreneurship (NEPTUNE)

Universities

Leland Stanford Junior University 1891

ASU Arizona State University

UCDAVIS PURDUE UNIVERSITY

MIT Massachusetts Institute of Technology

University of Rhode Island HOPE 1892

NPS Praestantia per Scientiam

U.S. Naval Academy

People + Partnerships = Problems-to-Products

The NEPTUNE program aligns university research with the National Defense Strategy (NDS) and establishes entrepreneurial practices to accelerate delivery of university-derived technologies and products to the defense and commercial sectors. NEPTUNE's outreach component involves the education of naval personnel across active duty and reserve military, ROTC and veterans.

Energy Systems Technology Evaluation Program (ESTEP)

Product & Prototype Validation

Education & Training Opportunities for Current & Future Naval Energy Workforce

- ***Command Personnel***
- ***Naval Postgraduate School (NPS) Energy Students***
- ***California State University San Marcos (CSUSM) Student Veterans***

SPAWAR

Program Management
Cyber-Physical Security Expertise
Technical & Business Training

Technology Demonstrations at Naval Facilities as Testbeds to Increase Energy Resiliency & Reduce Energy Costs

ONR Oversight & Funding

NPS

Energy ROI Research
Student Project Participation
Technical & Business Education

NAVFAC

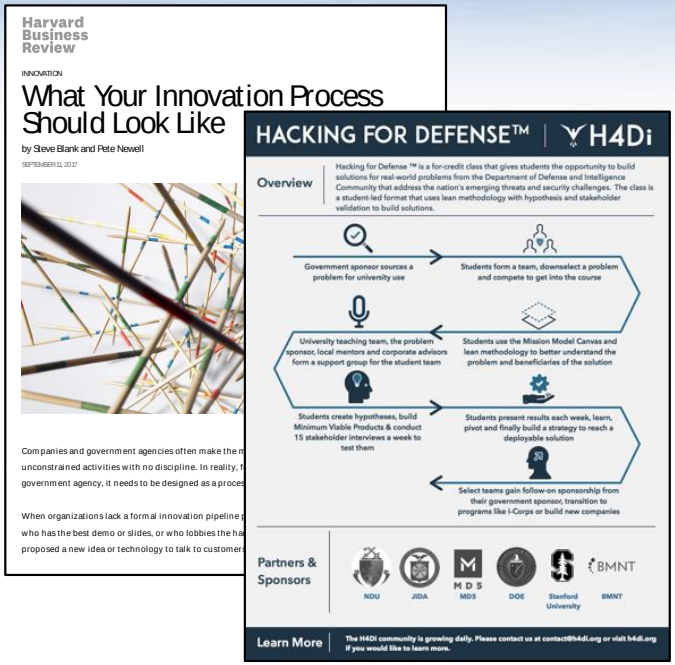
Project Management
Facility Expertise
Technical & Business Training

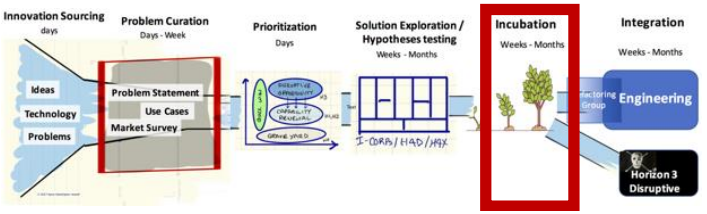
ESTEP
MISSION • PEOPLE • TECHNOLOGY

https://youtu.be/Ck-xjlC0NF8

Naval Business Growth Accelerator
H4XLabs

Product Scaling





A Pipeline for National Security Innovation

Purpose Driven – Problem focused

- Reinvents the business accelerator model by sourcing startups or spinouts that are created around sectors of problems as defined by the sponsors
- Creates viable freestanding companies
- Bridges government and primes to technologies and startups focused on their area of interests
- Focused on dual-use technologies that serve both national security and commercial use cases
- Operates at scale
- Works with startups/companies at any stage in their lifecycle

BMNT