



Holistic Naval Accelerator Ecosystem

**Richard Carlin
Naval Accelerator
Office of Naval Research**



Naval Accelerator Foundational Principles

- ***Utilize effective agile technical and business processes and pathways that accelerate technology delivery, acquisition and deployment to the warfighter***
- ***Leverage the commercial market and attract private investments to accelerate and reduce the cost for defense acquisition and deployment of technologies that provide capabilities to the warfighter capability***
- ***Employ agile best-practices in contracting that accelerate awards and provide flexibility and speed in technology maturation and adoption.***



Hacking For Defense (H4D)



“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.”

<http://www.h4di.org/about.html> and <http://www.bmnt.com/gov>

“...Maintaining the Department’s technological advantage will require changes to industry culture, investment sources, and protection across the National Security Innovation Base”

<https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf> and <https://steveblank.com/2018/02/13/innovation-at-speed-when-you-have-2-million-employees/>



Naval Innovation Process Adoption (NIPA)

Why Bring H4D to the Naval Research & Development Establishment (NR&DE)?

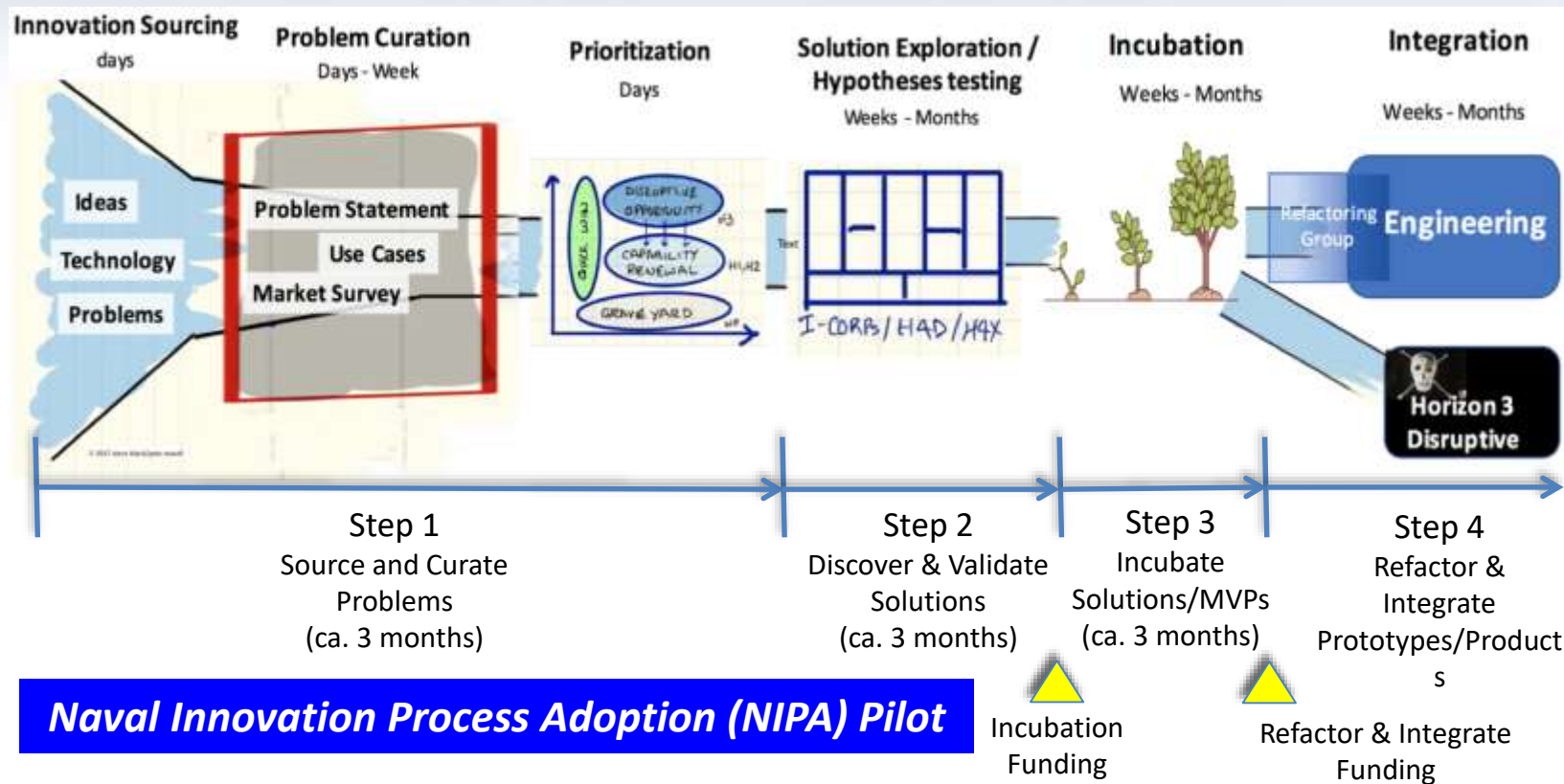
- ***Move NR&DE technologies from the Naval Warfare Centers and laboratories to the warfighter and the commercial sector***
- ***Create and work with startups and nontraditional defense companies to promote economic and workforce development in NR&DE's local/regional communities***
- ***Enhance collaboration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



Naval Innovation Process Adoption (NIPA) Pilot

NIPA Training across NR&DE

Lean Startup/H4D Innovation Pipeline



Reference: <https://steveblank.com/2017/10/10/office-of-naval-research-onr-goes-lean/>



Accelerated Delivery and Adoption of Prototype Technologies (ADAPT)



DON ADAPT BAA and Workshop (April 10)

The DON's Accelerated Delivery and Acquisition of Prototype Technologies (ADAPT) is a new approach to engage non-traditional technology solution providers with Naval needs.

The DON is releasing an out-of-cycle BAA for this new Naval Accelerator Pilot. This BAA will contain 6 direct-to-Phase II (DP2) topics aligned to address naval challenges in the ship building community. The ADAPT BAA is scheduled to be pre-released prior to the workshop.

Hosted by the DON SBIR/STTR programs, the ADAPT workshop will take place on Wednesday, April 10 with additional one-on-one meetings on the 11th in Lowell, MA. The Workshop will include an introduction to the ADAPT pilot, technology briefs on the topics, discussion on the proposal process and contracting, and an opportunity for one-on-one discussions with subject matter experts. Registration is required and free of charge.

Registration will open Friday, March 15, 2019. More information available at: www.onlineregistrationcenter.com/ADAPT



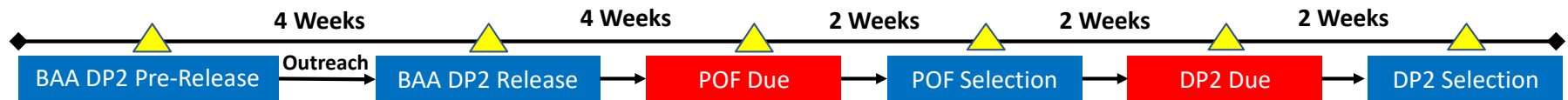
Accelerated Delivery & Acquisition of Prototype Technologies (ADAPT)

1. DON Enterprise Sourced Topics with Direct to Phase II SBIR BAA (6-8 Weeks)

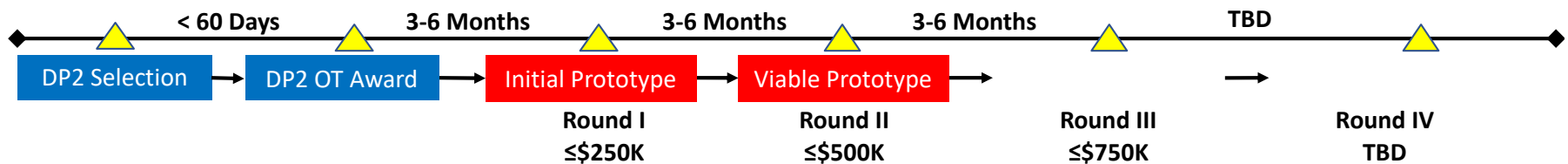
6-8 Weeks Concurrent Topic and BAA Preparation



2. Accelerated 2-Step Proposal Submission, Review and Selection (14 Weeks)



3. Accelerated Award (< 60 Days) and Milestone-Driven Operational (OPER) Prototype Delivery (9-18 Months)



DP2 = Direct to Phase II
 POF = Proof of Feasibility
 OT = Other Transaction





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

People, Power and Partnerships

Advance Department of Navy personnel and technology objectives by supporting university research activities that directly incorporate participation and education of naval personnel across active & reserve duty military, ROTC and veterans.





Elemental Excelerator

Who We Are

Strategically located in Honolulu, HI, Energy Excelerator (EEx) is an ONR-supported technology commercialization program under the Asia-Pacific Technology and Education Program (APTEP) focusing on commercializing clean energy technology, research and development that can later be utilized at Naval installations and civil society once it is proven and the cost has been reduced through commercialization activities.

We focus on two different areas:

1. Helping our **companies succeed**; and
2. Helping transform a place, the **Asia-Pacific**, through innovation, and research and development

Asia Pacific Regional Engagement

Energy Excelerator is building research and development partnerships in the Asia-Pacific through ongoing meeting and discussions with:

- ❖ Korea Electric Power Co (KEPCO) and Korean Energy Technology Evaluation and Planning Dept (DETEP)
- ❖ First Philippine Holding Co
- ❖ Enetech and the Okinawa Prefectural Govt Ministry of International Trade and Industry
- ❖ New Energy & Industrial Technology Development Org (NEDO)



Energy Excelerator New Industry Partners

Federal support is core to this effort. Additionally, as part of the commercialization mission of EEx under APTEP, EEx engages industry partners to assist and inform technology innovation and research and development. New industry partners include:



Support for new water track focused on conservation and energy savings technologies.



Vector is the largest electric distributor in New Zealand.



Tokyo Electric Power Company is the largest electric utility in Japan and the 4th largest electric utility in the world.

New Companies Accepted into the Program to Advance their Research, Development and Commercialization

2016 Cohort

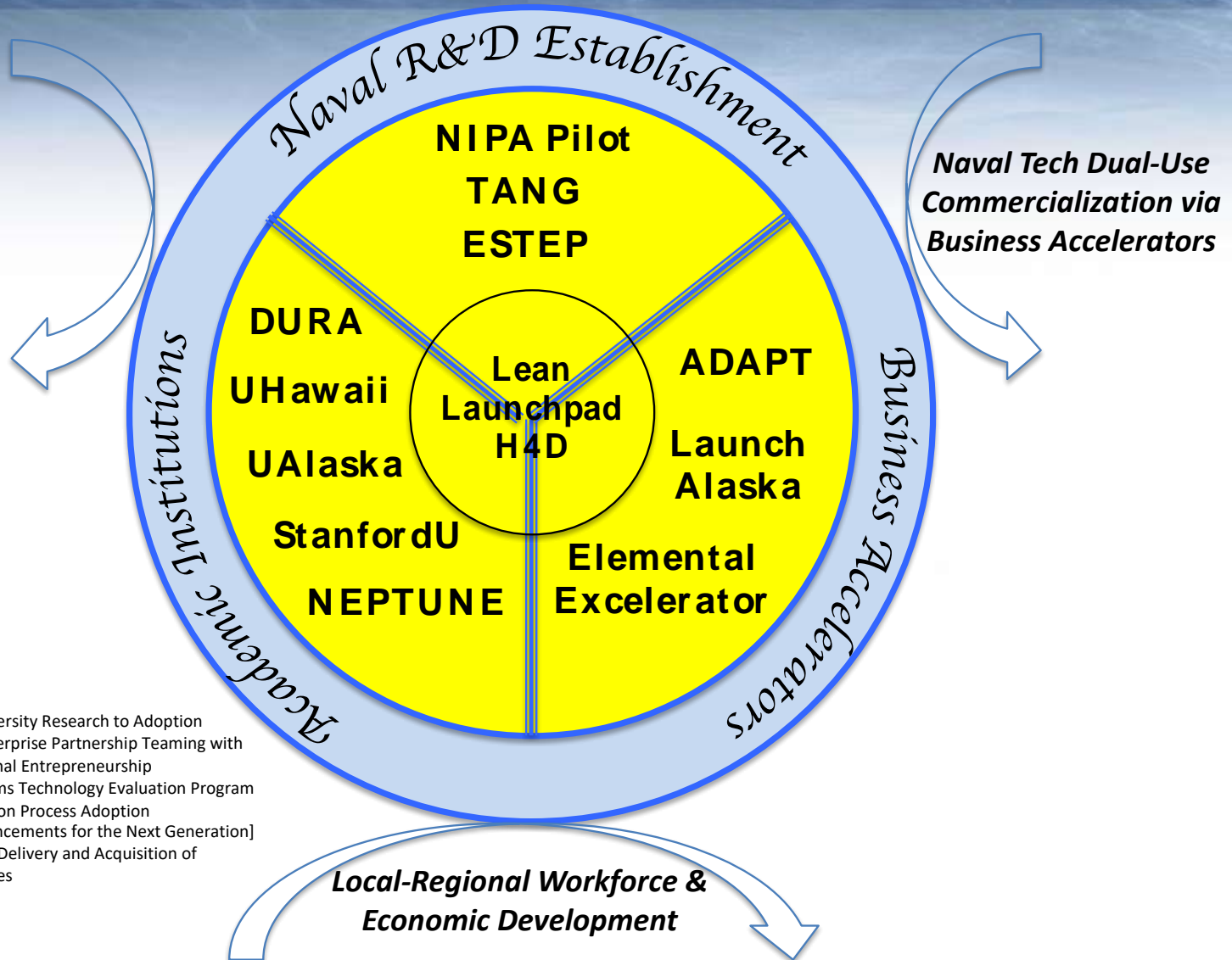
Energy Efficiency	Finance	Generation	Grid	Water	Cybersecurity

<http://elementalexcelerator.com>

It Works!!
\$20M Federal → \$350M Private Investments



Holistic Naval Accelerator Ecosystem



DURA = Defense University Research to Adoption
 NEPTUNE = Naval Enterprise Partnership Teaming with Universities for National Entrepreneurship
 ESTEP = Energy Systems Technology Evaluation Program
 NIPA = Naval Innovation Process Adoption
 TANG = Tactical Advancements for the Next Generation
 ADAPT – Accelerated Delivery and Acquisition of Prototype Technologies



Thank You!!

Dr. Richard Carlin
Naval Accelerator
richard.carlin1@navy.mil

