

# Accelerating Ocean Technology Innovation Public Private Partnerships

Justin E. Manley



Appreciation to:



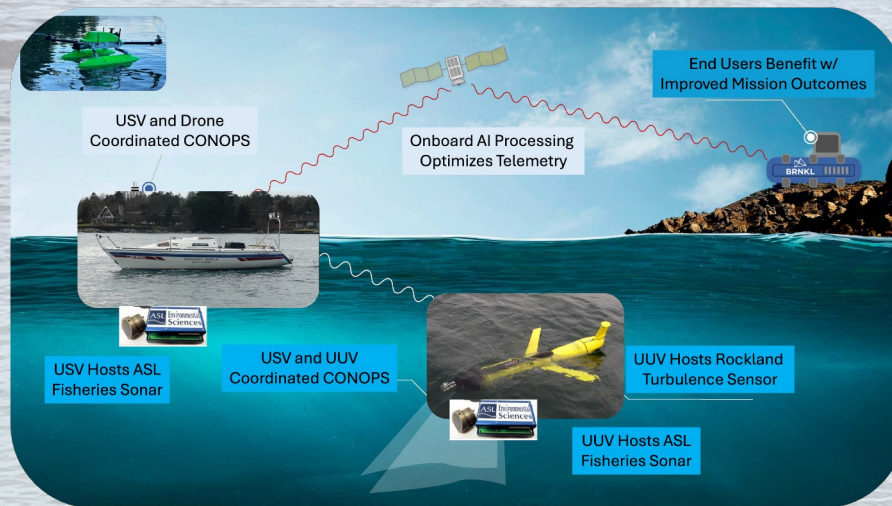
# Bottom Line Up Front

- **Government programs are typically slow and inflexible**
- **Oceantech innovation is fast, and accelerating**
- **Successful examples and lessons learned suggest there is significant room for improvement to:**
  - **Inform markets**
  - **Shape investment**
  - **Deliver economic and societal value**



# Case Study: Canada's Ocean Supercluster

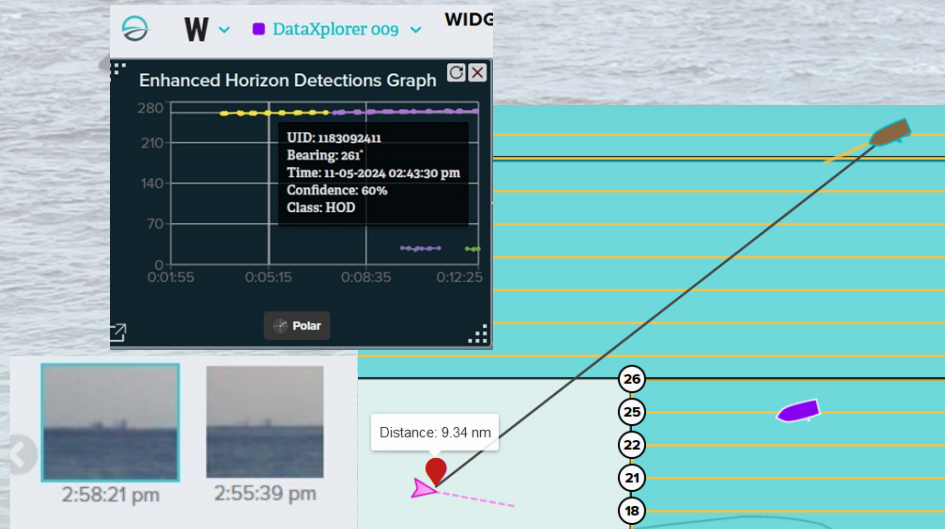
- (+) Matches industry \$ for innovative technology
- (+) Focuses calls on key topics e.g. AI
- (+) Drives industry collaboration (in Canada)
- (+) Drives global cooperations
- (-) Is administratively demanding





# Case Study: MPAbots

- (+) NOAA end users engaged industry/philanthropy
- (+) Rapid test cycles shaped technical outcomes
- (+) NOAA users adapted their own efforts
- (+) Successful philanthropy demo in Caribbean
- (-) Some tech providers proved incompatible with mission/vision





# SBIR: Mixed Results

- (+) Focuses \$ on small businesses
- (+) Clear phases, budgets, schedules
- (+/-) Clear end user needs (sometimes)
- (-) Not always connected to actual budgets
- (-) Not administered consistently
- (-) Not always commercially informed





# OTAs: Driving Innovation

- (+) DIU is rapidly shaping UUV/USV/UAS market
- (+) Inspiring significant venture investments
- (+) Delivering new tools (prototypes) rapidly
- (+) Exposes new providers to Gov. users
- (-) Not widely used outside DoD





# Emerging Markets

- Marine carbon credit
- Biodiversity credit
- In situ eDNA
- Marine mammal monitoring
- Seafloor minerals
- Ropeless fishing



**All demand government input but agencies lack awareness of innovations, or ability/interest to discuss openly. How do we develop best practices?**



# Recommendations

How can the private sector support effective adoption of novel ocean technologies by government agencies?

- **Make solutions available for sale but . . .**
- **Agencies need to be open to buying them**
- **Endeavor to close the communications gap**
- **Advocate for innovations**
- **Listen for distinctive government needs**



# Recommendations

What can the ocean agencies and departments do to better harness the innovation occurring in the private sector?

- **Commit to buying commercial solutions**
- **Find faster and more flexible paths to both testing and acquisition**
- **Engage private sector early in product/technology development**
- **Get out and see innovation at work**



# Recommendations

What challenges exist with respect to entering into public-private partnerships and how could new models address them? What would new models look like? Would the executive branch have the power to enact them, or would a change in legislation be required?

**Bureaucracy and inertia stifle innovation, eliminate them!**

- **Use OTAs**
- **Train contracting officers to say yes first**
- **Award incentive prizes**
- **Buy data/services (GOCO/COCO)**



# Recommendations

What incentives could the government offer to attract partnership from industry?

- **Shape best practices through multi-party conversations using honest brokers**
- **Provide clear guidance on technical needs**
- **AND guidance on procurement plans**
- **Offer to test/trial/debug collaboratively**



A photograph of a beach at sunset. The sky is filled with vibrant orange and red clouds. In the foreground, there is a sandy beach and a wooden pier extending into the water. Two palm trees are visible on the right side of the frame.

# Innovations are out there!

Justin Manley  
[jmanley@alum.mit.edu](mailto:jmanley@alum.mit.edu)