Business and Organizational Impacts for Modular Flexible Ships

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Speed of Capability

The U.S. DoD is the envy of all nations, but …

- Near-peer competitors are progressing faster than we change
  - e.g., COTS tools & building blocks are available to all
- New threats are vexing in key warfare areas

- To move faster, we need a different approach
- The environment is ripe with opportunities for new approaches

This next LSC hull would have “the ability to be upgraded in stride, without these long, expensive modernization periods typically required for really top-end platforms,” Boxall said. He noted the Navy now has a requirement to upgrade in stride and has to adjust to do so.

Defense Daily, 10/29/2018

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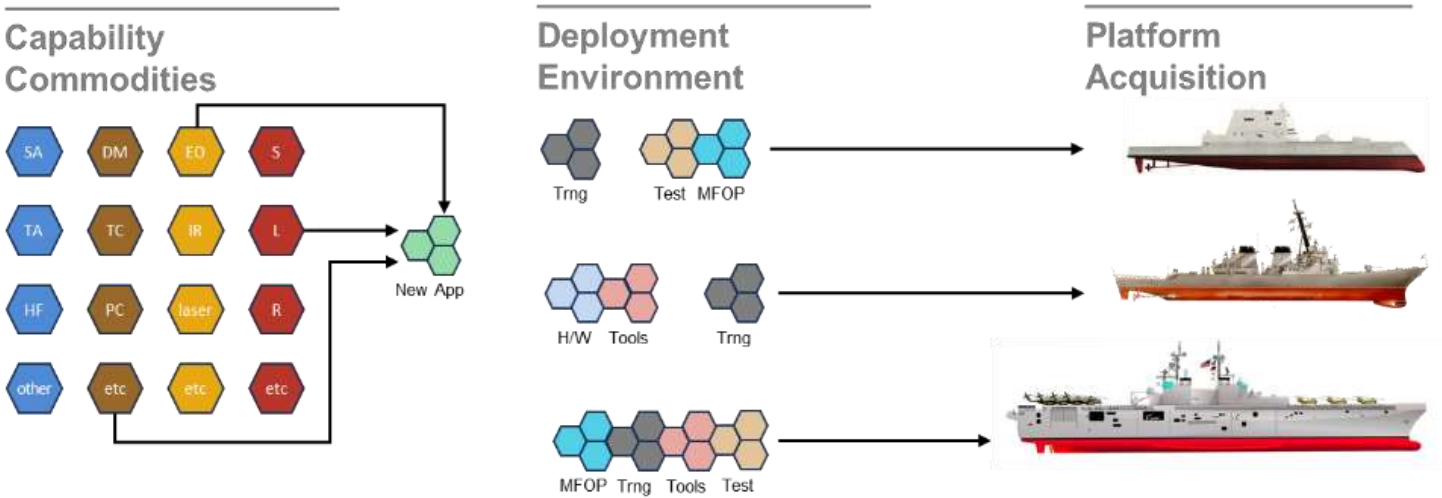

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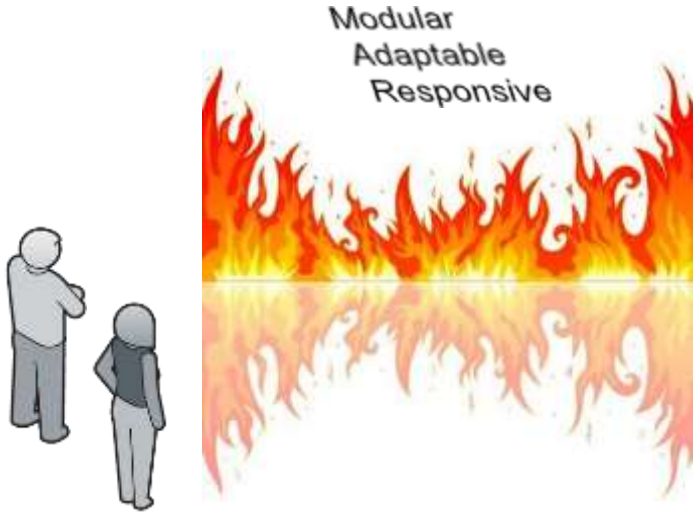
Nimble Responses to Nimble Adversaries via Modularity & Rapid Delivery

Everything on the table to change the DoD acquisition ecosystem:

- Continuous change in the field
- Financial management
- Innovation Engine
- Organization
- Contracts
- Incentives
- Training
- Certification
- Operations



Establish the environments to support exquisite capability

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Capability Evolution and Delivery Constantly In Motion

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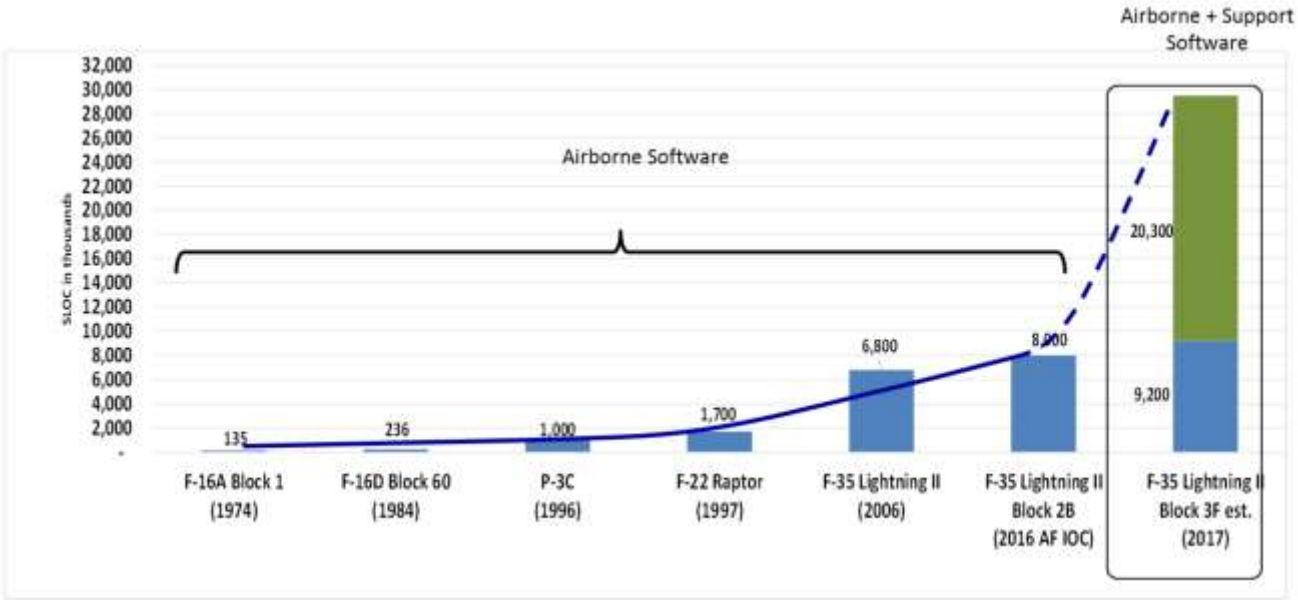
The Methods, Standards and Support are also in Motion

We need to develop the capacity to change how we create value at pace with the world



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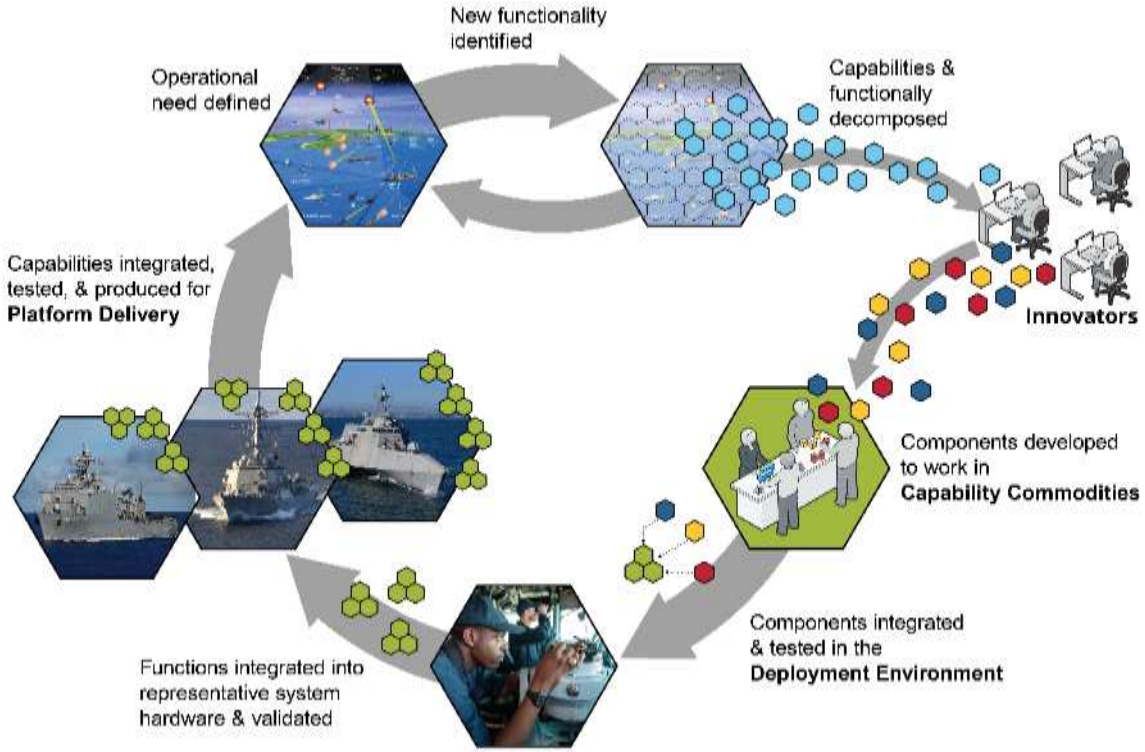

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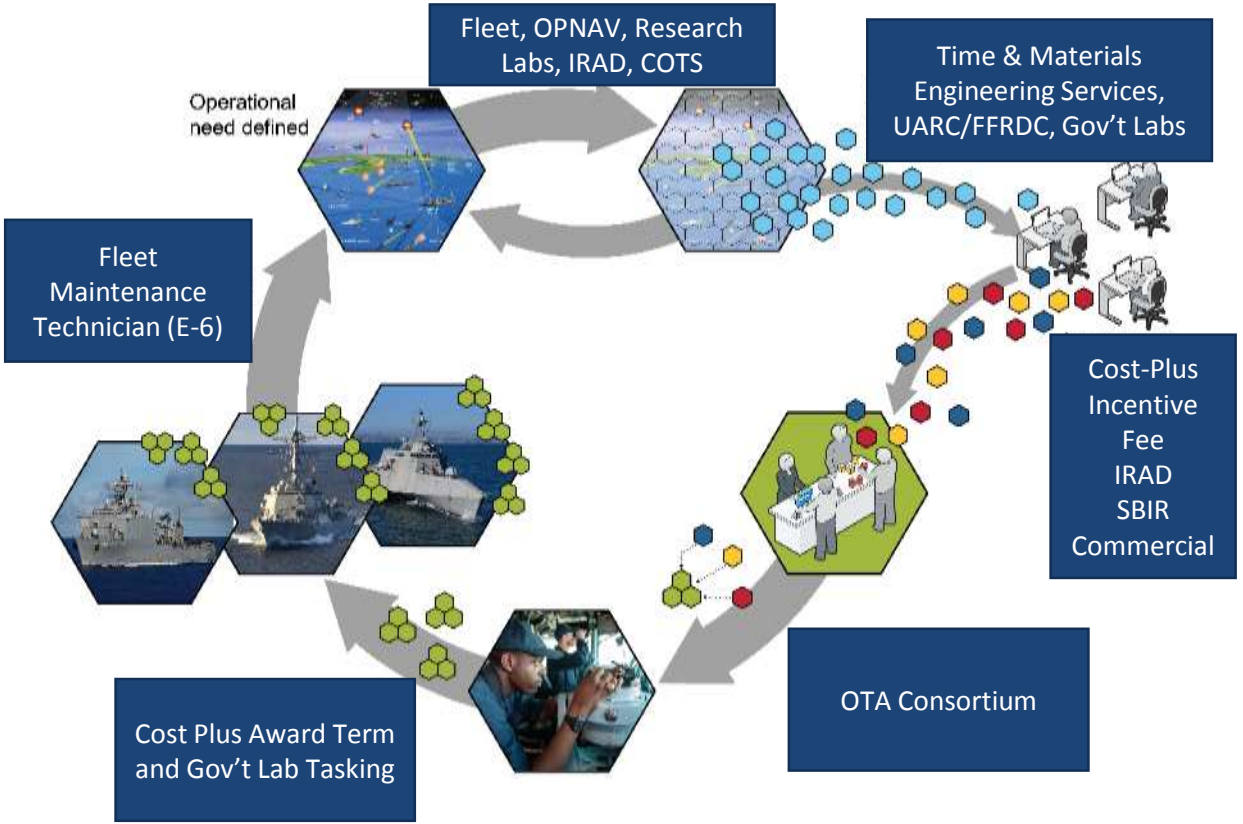
Business and Contracting Impacts to Continuous Delivery



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Applying Architecture to Testing

Start testing with a Testable Architecture, Checkpoints throughout development

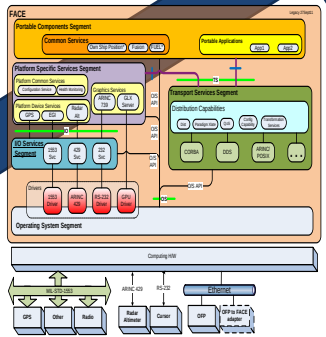
Abstraction Layer

- Functionality
- Data Exchange
- Devise I/O

Enterprise Architecture

Establish Testable Requirements of Architecture

Preserve Testability in the Deployment Environment



Automated Testable Product Architecture

Start testing with a Testable system, the game is over.

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IRAD = Individual Research and Development
Ulim = Unlimited
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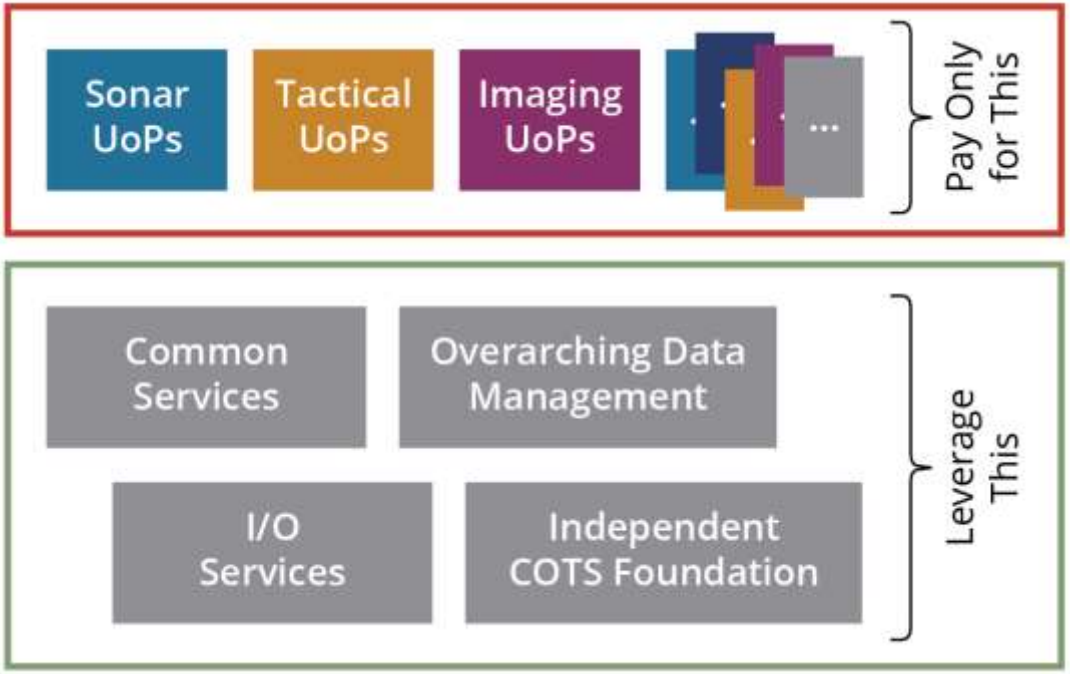

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