



Managing the Maritime Known Unknown

Technology as Game Changer

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March 20, 2018

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Entrepreneur

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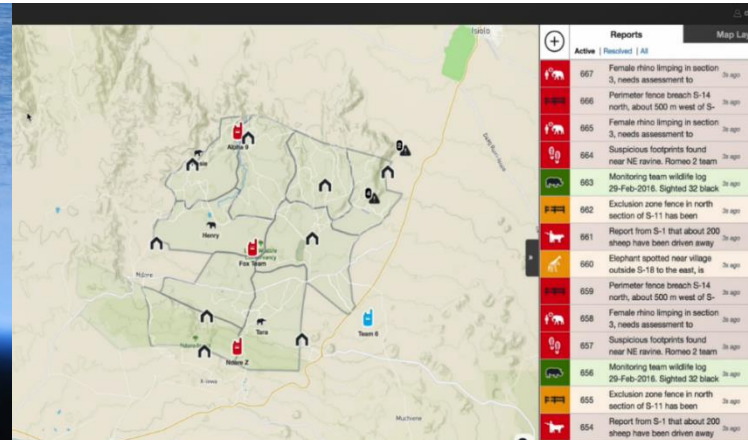
Vulcan Inc.



Stratolaunch Systems



Skylight



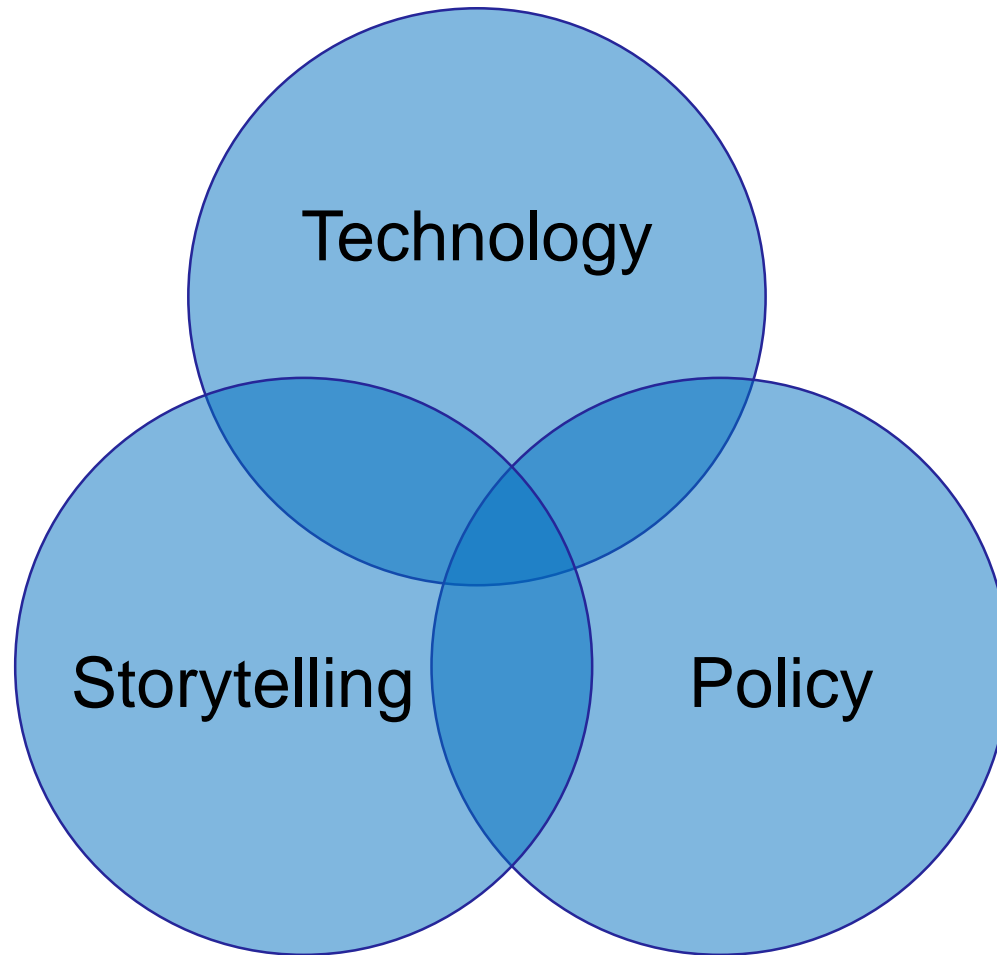
Domain Awareness System



Allen Institute for Artificial Intelligence



Discovery of the *USS Indianapolis*



Our oceans are gold mines

- 50% Oxygen
- 80% Life
- 20% animal protein
- \$2.5 trillion/year

Consequences of maritime wealth blindness

Lack of protection
=
Loss of ocean and national wealth



For the public *and* the private sector



- Supply chain security
- Right fish?
- Free of crime?

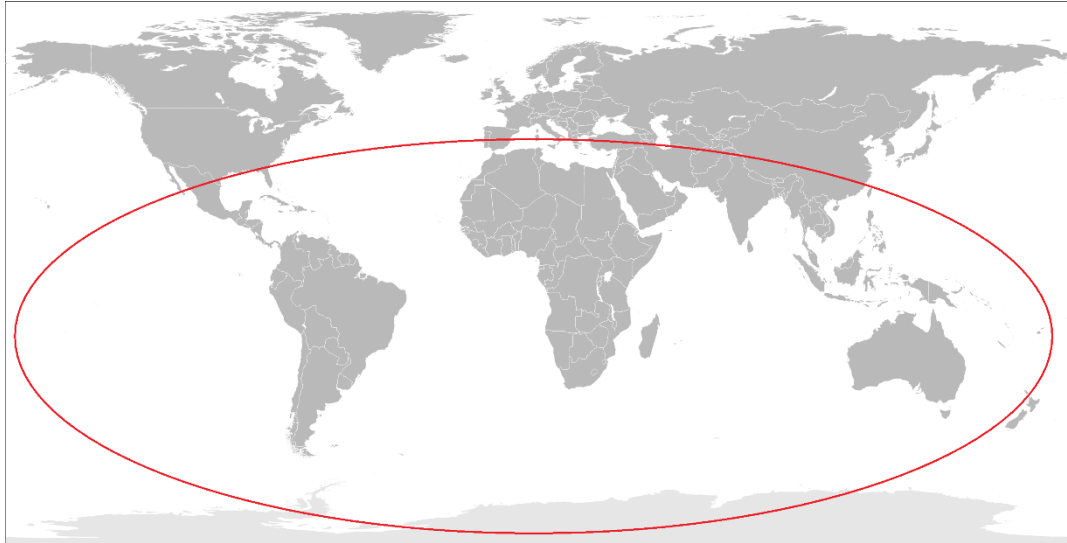
Maritime blindness

- Over 50% of EEZs developing countries
- 18% small island developing states
- “Paper parks”
- Need more monitoring, enforcement



The real experts take advantage

- “Aquatic cocaine”
- DWF Fleets
- ToC



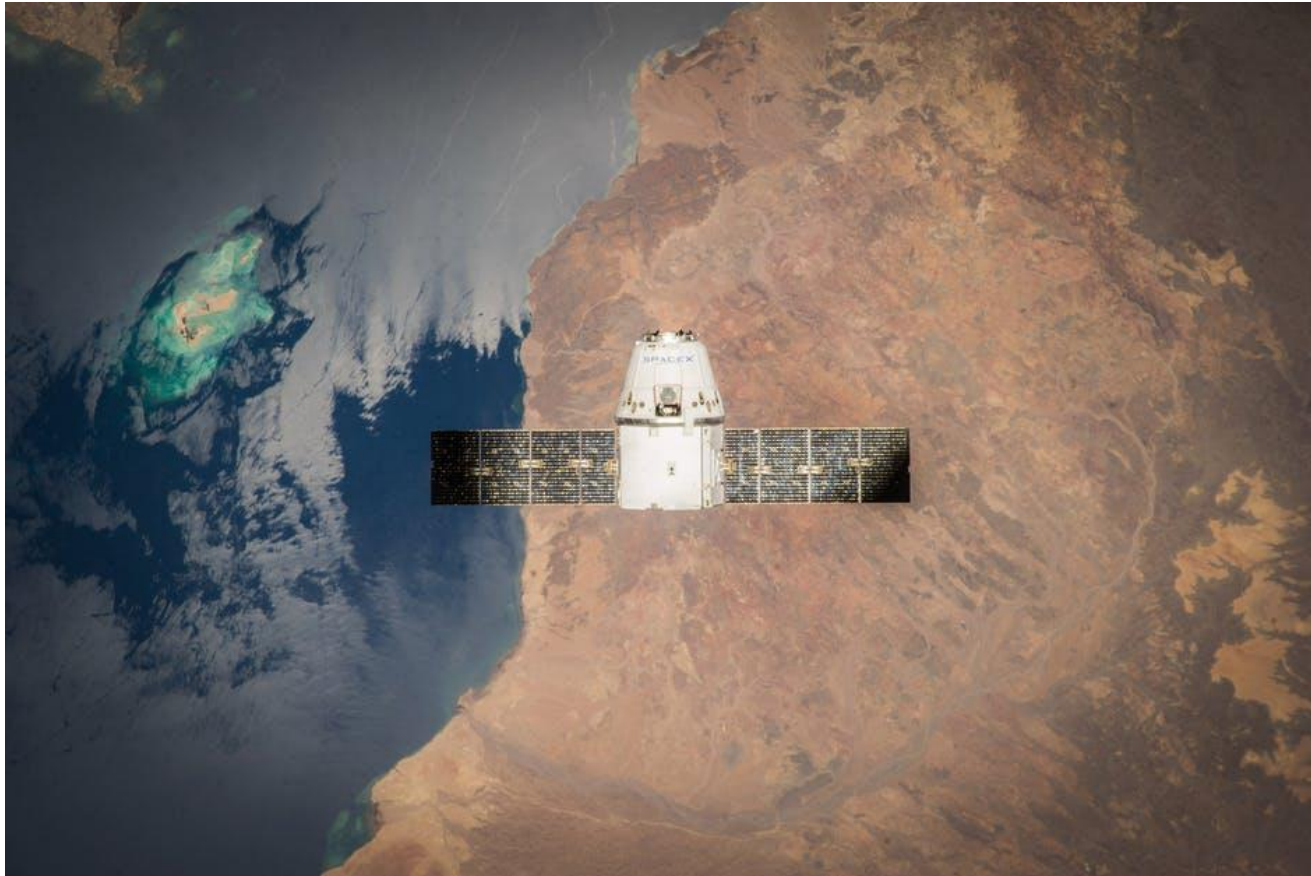
Known unknowns

- How large is maritime crime?
- \$206–504 million in WIO
- “There are no dark targets here.”



Cameroonian boarding team conducts training

What role can technology play?



The Good News

Monitoring and Surveillance Technologies for Fisheries

Drafted for Waitt Institute
By Shah Selbe, Conservation Technologist



November 2014

The screenshot shows the 'Secure Our Oceans' website. At the top, there is a navigation menu with links: 'The Project All About Us', 'Find Technology Explore by Category', 'Get Inspired Tech in Action', and 'Call to Action Get in Touch'. The main content area features a large background image of a sea turtle swimming underwater. The text on the page includes a 'Call To Action' heading, a paragraph describing the organization's mission, and a 'Find Out More' button. On the right side, there is a 'Sections' sidebar with a list of links: 'GET IN TOUCH Call to Action', 'EXPLORE BY CATEGORY Find Technology', 'TECH CATEGORY FEATURE Aquatic Monitoring', 'THE PROJECT All About Us', 'TECH IN ACTION A Storage for a Member', and 'GET IN TOUCH Call to Action'.

Leveraging Technology: Do's and Don't's

7 tips to be:

- Impactful
- Cost-effective
- Sustainable

1. Avoid Tech Dumps and Dig Where You Stand

Assess enforcement capabilities

Prosecution?



A public, private and NGO responsibility

2. Don't Go It Alone

Regional partnerships

Provide regional support



3. Private Sector Nimbleness

Don't just retrofit defense technology

Public sector needs to make it easier to adopt new technologies



4. Private-Private Partnerships

No one technology

Integrate technological solutions



5. Information and Machine Learning is the Future

Acquire actionable information

Analysts are expensive



6. Strategic Patience and Joint Investments

Near term limited financial reward

With longer term financial ROI

Bridge funding gaps

Finance technology with gains made



7. Return on Investment

A new type of enterprise/model will take on rising issues



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