

# Kraken Robotics Inc.

(TSX-V: PNG, OTCQB: KRKNF)

World Leaders in Underwater Sensors & Robotics



Cantech Investment Conference  
January 2019





# Forward Looking Statements

Some statements herein contain forward-looking information. The use of any of the words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "will," "plans," "project," "should," "target" and similar expressions are intended to identify forward-looking statements. These statements may include, but are not limited to, statements with respect to potential markets and contracts, the completion of a proposed transaction, sales and EBITDA projections or potential applications.

These statements address future events and conditions and, as such, involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the statements. Such factors and assumptions include, among others, the effects of general economic conditions, the ability to project future sales and margins from current fundamentals and assumptions about market share, changing foreign exchange rates and actions by government authorities or cross-border authorities with jurisdiction over waterways, and negotiations and misjudgments in the course of preparing forward-looking information. Kraken believes the expectations reflected in those statements are reasonable but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in, or incorporated by reference into, this presentation should not be unduly relied upon. These statements speak only as of the date of this presentation. In addition, there are known and unknown risk factors which could cause the Company's actual results, performance or achievements to differ materially from any future results, performance or achievements expressed or implied by the forward-looking statements.

Known risk factors include risks associated with the ability to close contracts, working capital risk to be able to build inventory, loss of key personnel, lack of patents protecting intellectual property, changes in competing technology, continuing shrinkage of military budgets or other target customer budgets, risks associated with publicly traded company obligations, inability to raise required capital, and other potential risks that arise in the normal course of business. Forward-looking statements are made based on management's beliefs, estimates and opinions on the date that statements are made and the Company undertakes no obligation to update forward-looking statements if these beliefs, estimates and opinions or other circumstances should change, except as required by law.



# Serving \$5 Bln Maritime Robotics Market

- Kraken provides **underwater sensors, batteries, and robots** to military and commercial customers who use them to **Image** and **Map** the **Seafloor** and **Subsea Infrastructure** in **ultra high resolution**
- 6 year old company with 70+ employees in Canada, US and Germany; **validated by leading Navies and Defense contractors** and exports to 10 countries.
- Our **proven technology** and **robust** products enable **complex missions** in all water depths and **challenging ocean conditions** (no GPS, limited comms, extreme pressure).



**AUV**  
Autonomous  
Underwater  
Vehicle



**USV**  
Unmanned Surface  
Vehicle



**TOWFISH**  
Towed Underwater  
Vehicle



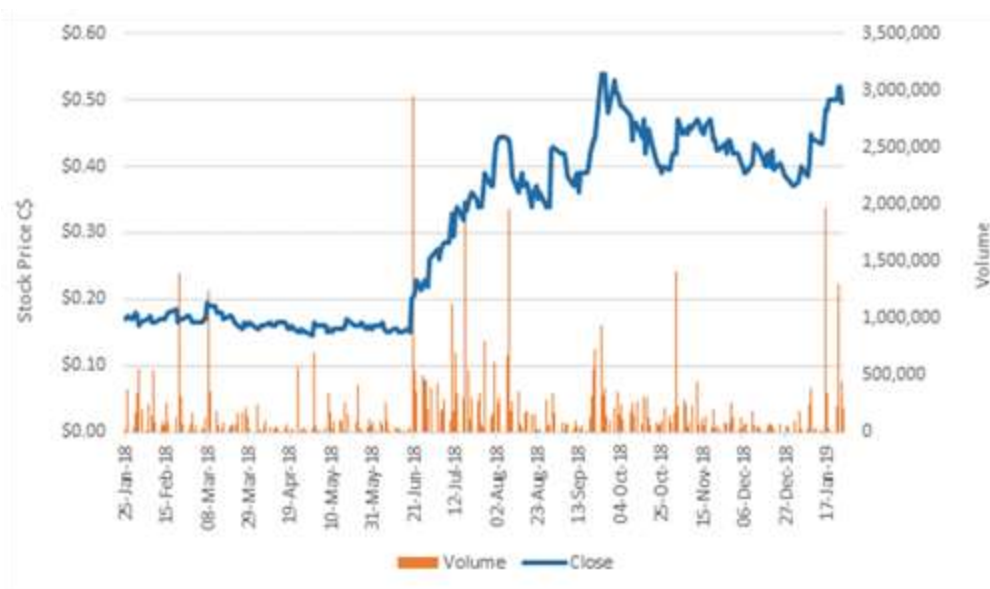
**ROV**  
Remotely Operated  
Vehicle

# Capital Structure

## MARKET CAPITALIZATION

*All figures in C\$ million except per share values*

|  |               |
|--|---------------|
| Share price as of January 25, 2019           | \$0.49        |
| Shares outstanding                           | 137.0         |
| <b>Market Capitalization (basic)</b>         | <b>\$67.1</b> |
| Options                                      | 7.0           |
| Warrants                                     | 8.9           |
| Fully diluted shares outstanding             | 152.8         |
| <b>Market Capitalization (fully diluted)</b> | <b>\$74.9</b> |
| Add debt                                     | \$0.0         |
| Less cash and short term investments         | \$6.0         |
| Less cash from options and warrants          | \$4.6         |
| <b>Total Enterprise Value</b>                | <b>\$64.3</b> |



## Ownership

|                                   |                   |
|-----------------------------------|-------------------|
| Management & Insiders             | ~ 30%             |
| Strategic Investor Ocean Infinity | ~ 11%             |
|                                   | 14% fully diluted |

## Intellectual Property

|                         |                     |
|-------------------------|---------------------|
| Internally Developed    | \$20 million        |
| Acquired & Partnerships | \$20 million        |
|                         | <b>\$40 million</b> |

## Analyst Coverage

**CLARUS**  
SECURITIES INC.

**BEACON**  
Securities Limited

# Kraken Solutions and Customer Platforms





# Over \$300M in Current Contract Pursuits



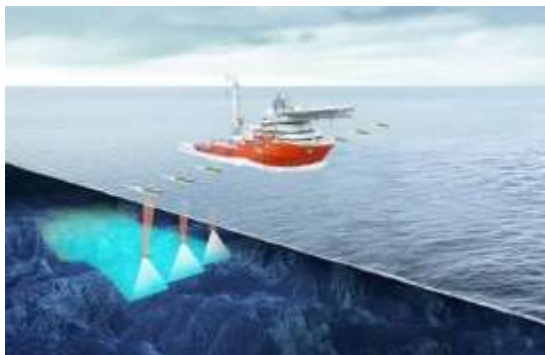
**International Navy Sonar Upgrades**  
**\$125M+**



**US Navy AUV Upgrades**  
**\$100M+**



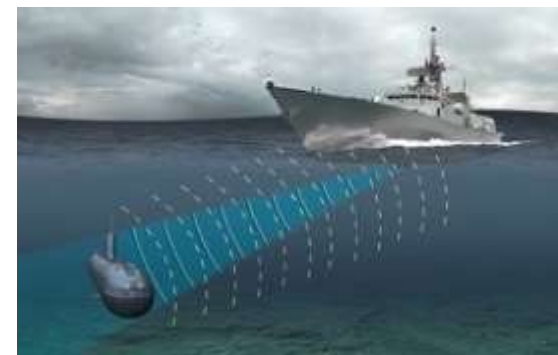
**Pressure Tolerant Batteries**  
**\$50M+**



**Supercluster Seabed Mapping**  
**\$25M+**

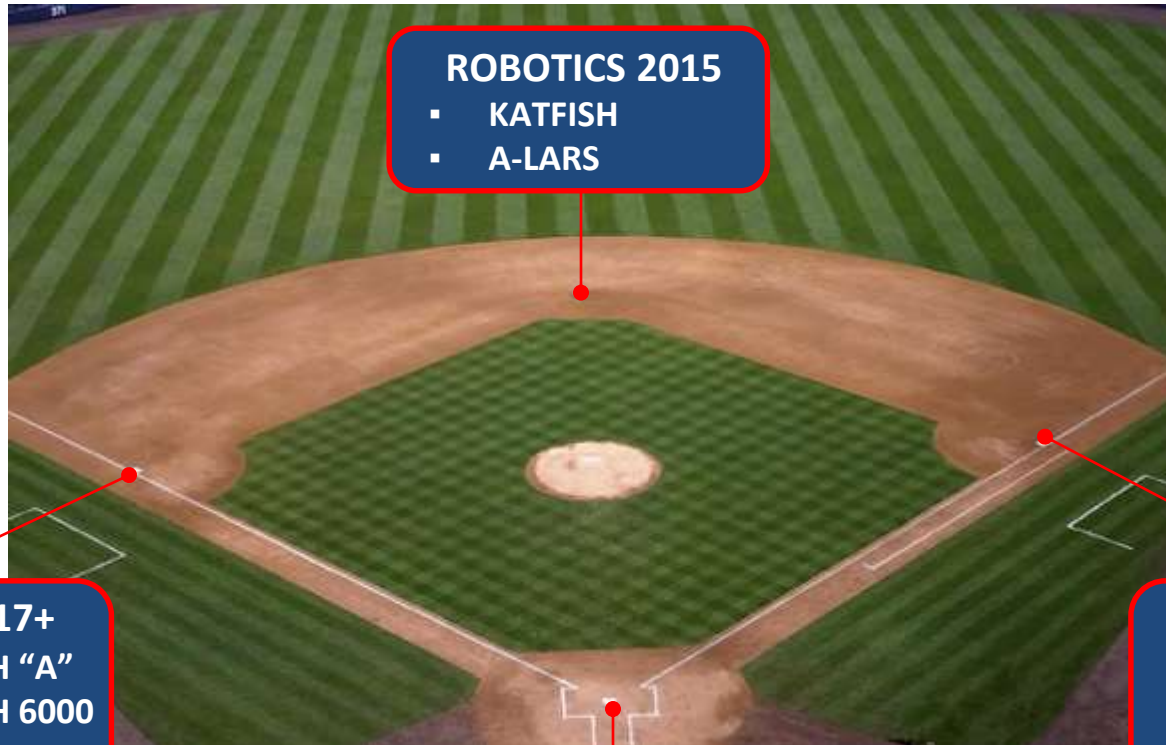


**Offshore Wind Energy**  
**\$10M+**



**ASW Acoustic Signal Processing**  
**\$10M+**

# Corporate Strategy – From Products to RaaS



## ROBOTICS 2015

- KATFISH
- A-LARS

## ROBOTICS 2017+

- THUNDERFISH "A"
- THUNDERFISH 6000

## SENSORS 2012

- ACOUSTIC
- LASER
- OPTICAL

## RaaS 2018+

- DATA ACQUISITION
- ARTIFICIAL INTELLIGENCE
- DATA ANALYTICS

# Sensors - Synthetic Aperture Sonar (SAS)



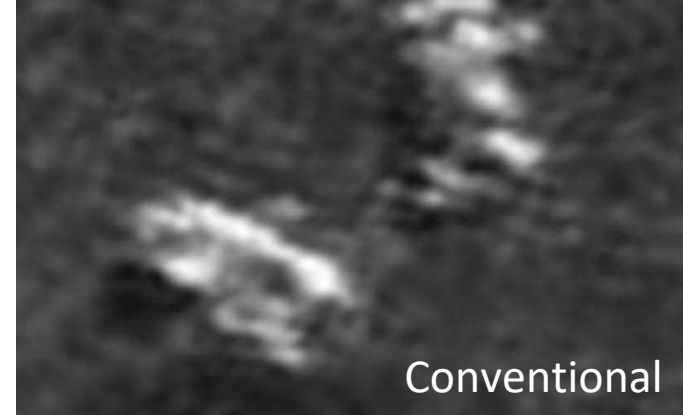
*Image courtesy ECA Robotics*

## Some SAS Advantages

Ultra High Image Resolution  
(15x Better)

Increased Area Coverage  
Rate

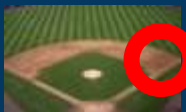
Operational Safety



Conventional



Kraken AquaPix® SAS



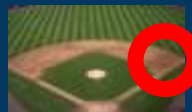
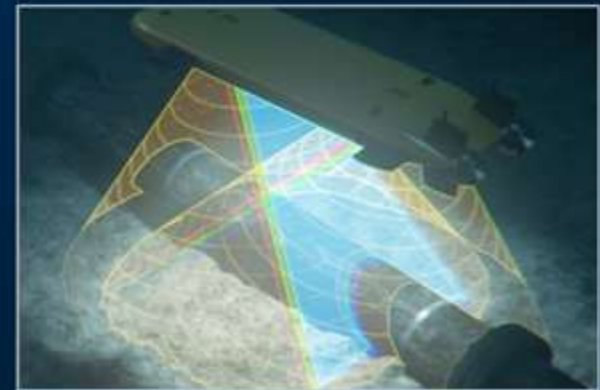


# Sensors - World 1<sup>st</sup>: Full Colour 3D Underwater Laser

## SEAVISION™

3D UNDERWATER  
IMAGING SYSTEM

- Ultra-high resolution
- Twin pods enable flexible mounting on ROVs and AUVs
- Dynamic (profiling) or static (scanning) operation
- Full colour point clouds from RGB lasers
- Unprecedented scan speed (300,000 points/second)
- High-sensitivity colour camera with live video streaming
- No wet moving parts
- Real-time signal and image processing
- Embedded inertial navigation system
- Simple in-field, on-deck calibration
- Compact and lightweight  
(42 cm length x 11.4 cm diameter, 6 kg)
- Low capital cost



# SeaVision Inspections – Mooring Chain, Ship Hull, etc.



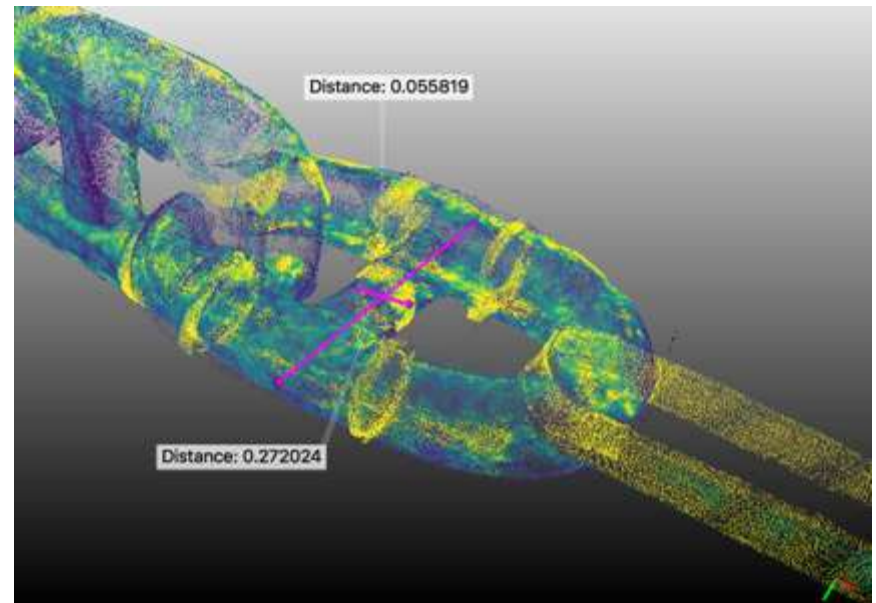
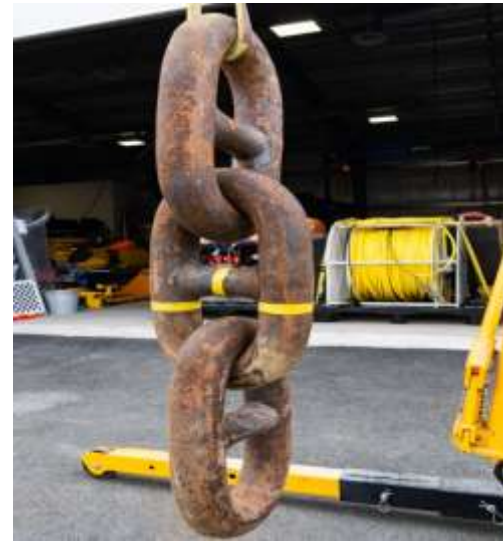
**Underwater  
Crawler**



**Inspection  
Class ROV**



**Work Class  
ROV**





# Evolving from Sensors to Systems and RaaS



# KATFISH - Tethered Underwater Towfish



**Commercial  
& Military  
Certified**



- ❑ Key component in major foreign navy bids
- ❑ Orders from Germany and Israel
- ❑ Recent surveys performed under CRADA with US Navy and NOAA
- ❑ Successful demonstrations at Advanced Naval Technology Expo (ANTX) 2018 in U.S
- ❑ Successful integration on Elbit Seagull USV
- ❑ Completion of MIL-STD Testing





# Tentacle<sup>®</sup> Winch – For Launch & Recovery



## 2 Year R&D Effort from Kraken Handling Systems Group in Nova Scotia

- Intelligent electric winch can adjust cable scope through active feedback from u/water towed platform
- Intelligently communicates with KATFISH for motion compensation, and bottom avoidance.
- Successful 2018 demonstrations at ANTX in U.S and during NOAA and NUWC CRADA's
- Kraken's Handling Systems Group is former team from Rolls Royce Marine

# Kraken Power – Deep Sea Batteries & Thrusters

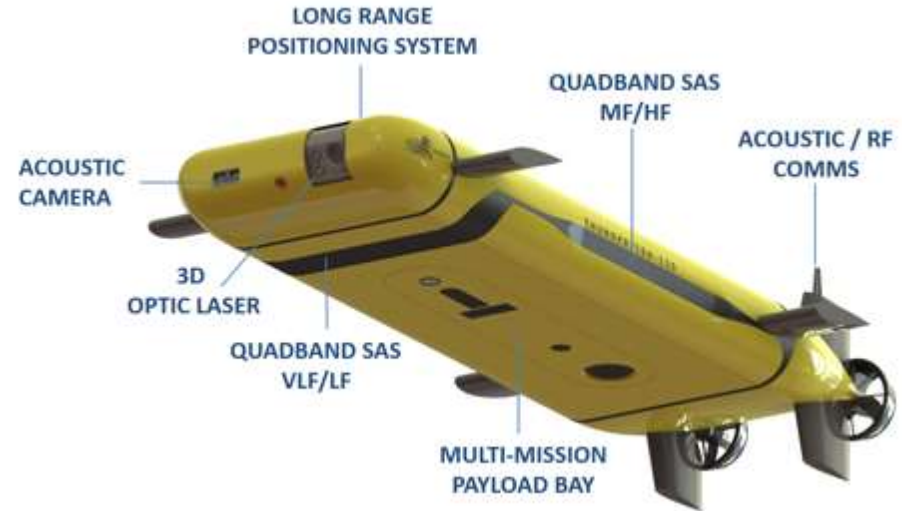


## Ocean Infinity Battery Contract

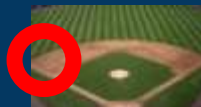
- \$9M battery order for delivery in 2019 for 10 AUVs.
- LiPo batteries for integration on 6000M Hugin AUVs (15 AUV fleet)
- Extends single mission time from 50+ hours (with current batteries) to 85+ hours with Kraken batteries



# THUNDERFISH<sup>®</sup> - Autonomous Underwater Vehicle



Searched for Avro Arrow models in Lake Ontario



# Robotics as a Service - Kraken's SeaScout Offering



The advertisement features a large background image of a Synthetic Aperture Sonar (SAS) scan showing a seabed with various objects. In the top left corner is the 'seascout' logo with the tagline 'SEALED MAPPING & INTELLIGENCE'. In the top right corner is the 'KRAKEN' logo with an octopus icon. The main title is 'High Speed Synthetic Aperture Sonar for Underwater ISR'. Below this, there are four bullet points describing the system's capabilities. On the right side, there are two inset images: the top one shows the SeaScout system being deployed from a ship's deck using a crane, and the bottom one shows a white USV (Unmanned Surface Vessel) on the water. At the bottom left, the website 'www.krakenrobotics.com' is listed. At the bottom, there is a horizontal axis with numerical values from 40 to 160.

**seascout**  
SEALED MAPPING & INTELLIGENCE

**KRAKEN**

## High Speed Synthetic Aperture Sonar for Underwater ISR

- **Tightly Integrated System Solution**  
SAS / Towbody / Intelligent Winch / LARS
- **UHD Resolution At Long Range**  
3x3 cm imagery, 6x6 cm bathymetry  
440 m swath with full resolution
- **Exceptional Area Coverage Rate**  
3km<sup>2</sup> @ 8 knots tow speed
- **Rapid Deployment**  
Complete system fits in 20' ISO container
- **Superior Price / Performance Value**  
Purchase or contract as a service  
COTS or MIL-STD certified

[www.krakenrobotics.com](http://www.krakenrobotics.com)

40 60 80 100 120 140 160

- KATFISH remote minehunting system as a service
- SeaScout system is comprised of an actively controlled intelligent KATFISH, autonomous launch and recovery system (ALARS), Tentacle winch and tow cable, remote link and remote operator and visualization software.
- SeaScout System is designed to be deployed from either manned or Unmanned Surface Vessels (USV).
- Entire system is designed to be quickly installed and removed from craft of opportunity platforms and is packaged for easy transportation.



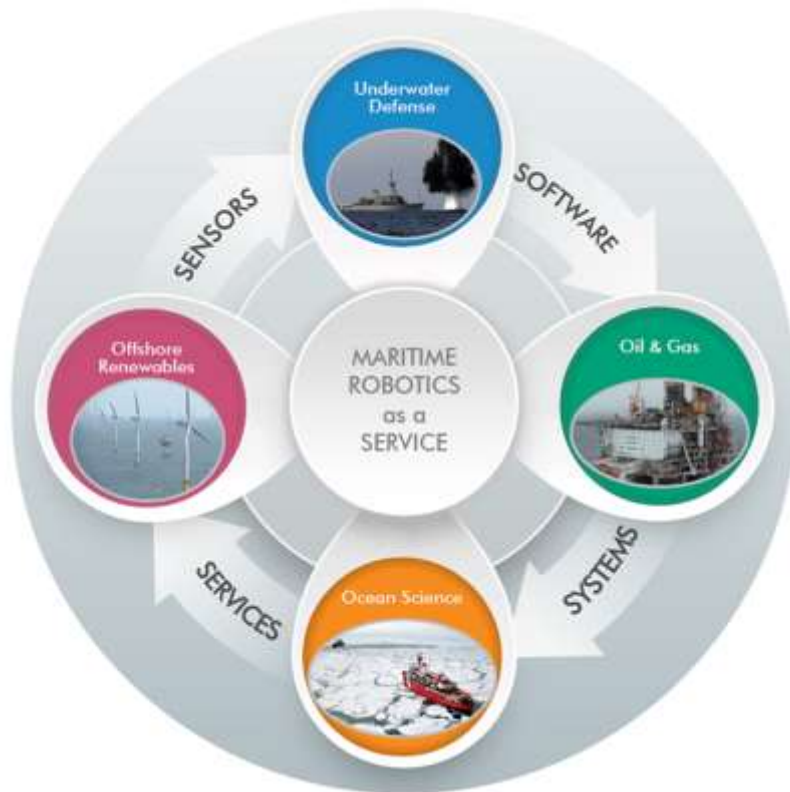
# Reasons to Own Kraken Stock (TSX-V:PNG)

- Strong competitive position in industry with high barriers to entry
- \$5 billion market by 2020
- Partnerships, new products, and industry upgrade cycle driving accelerating growth
- Many catalysts given \$300 million of contract pursuits
- Strategic Investor owns ~11% of outstanding shares
- Management & Insiders own ~30%

## Some Customers



# Thank You For Your Attention!



**Greg Reid, CA, CPA, CFA**  
**Chief Financial Officer**

**Kraken Robotics Inc.**  
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# Extra Slides

# Strategic Partner - Ocean Infinity \$3.8M Equity Investment

- **WHO:** New well funded entrant to ocean survey & exploration business
- **WHY:** They were looking to adopt the best technology to better automate the ocean survey data acquisition chain and accelerate industry disruption
- **INVESTMENT:**
  - June 2018: \$2.3M at 33% premium to previous stock price with 3 year share lockup
  - Additional purchase of \$0.5M at \$0.40 in the market
  - Dec 2018: Invested \$1M at \$0.40
  - Currently own 11% basic and 14% fully diluted (5.8M warrants at \$0.40)
- **FUTURE BUSINESS:**
  - \$9M contract for subsea batteries
  - Expect adoption of a range of Kraken products



# US\$5B Maritime Robotics Market – Key Drivers

## Military

- Mine Warfare - 500,000 underwater mines
- Anti-Submarine Warfare - 400 operational submarines
- Intelligence, Surveillance, Recon - Special forces, covert operations, environmental assessment
- Resurgence in underwater warfare and emergence of seabed warfare driving demand for unmanned systems for “dull, dirty, dangerous” missions.
- Unmanned Systems budget growing rapidly but still just 1.4% of US DOD F19 budget. F19 Budget for Unmanned Maritime Systems \$1.3 billion.



## Offshore Energy

- >7,000 fixed platforms; >200 floating platforms
- >4,000 subsea wells; >650 offshore drilling rigs
- >200,000 km subsea pipelines
- >4,000 offshore wind turbines
- >600,000 subsea connectors
- Maintenance of existing infrastructure is a major driver for underwater sensors and robotics.
- Sensor data key for data analytics and digital twins

## Other Areas

- Ocean Science, fisheries, hydrography, treasure hunting, ocean mining

# Ocean Supercluster – RAAS Opportunity

- Private sector led partnership to boost innovation and modernization across ocean sectors.
- Funding by the Federal Government was announced in February 2018; when matched with private sector investment, the pool of capital for projects is more than \$300 million over 5 years
- Initial project awards expected near the end of Q1, 2019
- Kraken will be proposing OceanVision™ a \$25 million project to map the sea floor in high definition for members across the stakeholder chain (science, defence, fisheries, offshore energy, etc.)

## Supercluster Goals:

- Deploy innovative technology platforms across ocean sectors
- Strengthen links between ocean value chains and technology providers
- Fill capability gaps in the innovation ecosystem.
- Extend global reach and market opportunities.

## Enabling Technologies:

- Sensors & imaging
- Robotics
- Autonomous systems
- Big data & analytics
- Subsea communications
- Biotechnology & genomics
- Remote systems & Satellite technology

