WAV-C

WASHINGTON
AUTONOMOUS VEHICLE CLUSTER

G3 SLOCUM GLIDER

kitsapeda.me/WAVC

KITSAP
ECONOMIC
DEVELOPMENT
ALLIANCE

MISSION

ACCELERATE INNOVATION

To accelerate innovation for autonomous and unmanned vehicles, particularly in the maritime sector.

WORKFORCE DEVELOPMENT

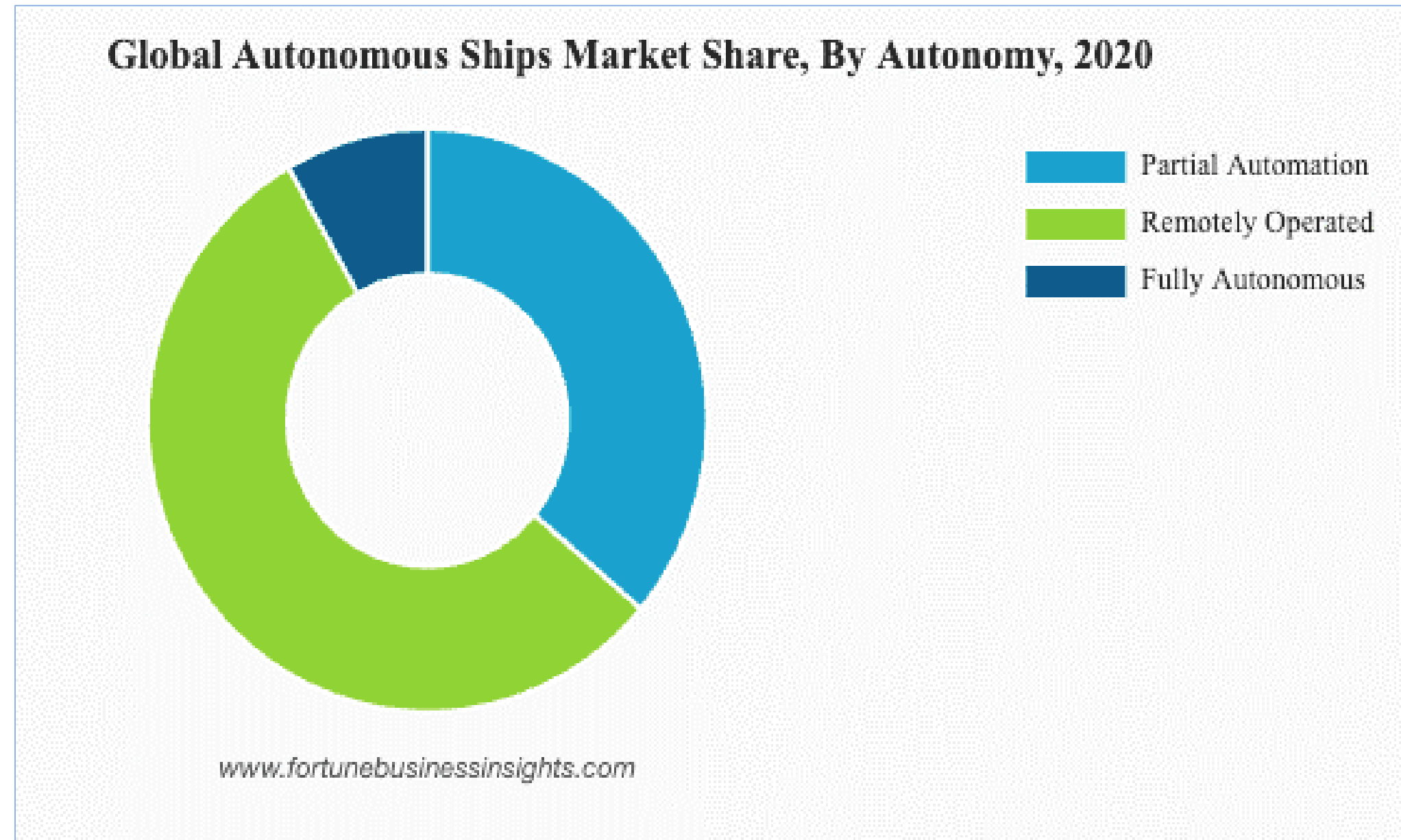To develop and ready a highly skilled workforce for the next generation of maritime technologies.

CREATE A COLLABORATIVE

Create a fluid collaborative space where Government, Corporations, Academics, Entrepreneurs and Capital work together towards a common goal.

WAV-C
WASHINGTON
AUTONOMOUS VEHICLE CLUSTER

KITSAP
ECONOMIC
DEVELOPMENT
ALLIANCE

kitsapeda.me/WAVC

DEVELOPMENT EVENTS

- Maritime Autonomous Systems first introduced in the 1970s.

- Technology slow to catch up to market trends/environmental needs.

- Little appetite for investment backing AV Systems initiatives (at sea) - risk not well understood.

- Confluence of costs, crews, the rise of the internet, & environmental concerns conspired to new R&D on autonomy.

- 2018-1019 The IMO introduced, and nations ratified the Maritime Autonomous Surface Ships (MASS) initiative.

- South Korea Hyundai Ship industry " Prism Courage" first in world to complete a transoceanic trip autonomously (gulf of Mexico to Busan Korea in 33 days).
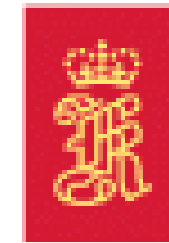
Technology Areas

Global Autonomous Ships Market Share, By Autonomy, 2020

- Partial Automation
- Remotely Operated
- Fully Autonomous

www.fortunebusinessinsights.com

WAV-C
WASHINGTON
AUTONOMOUS VEHICLE CLUSTER

MARKET
OVERVIEW

$6.40 Billion
2020

$6.55 Billion
2021

$12.07 Billion
2028

KITSAP
ECONOMIC
DEVELOPMENT
ALLIANCE

ADVANTAGES

At Sea:

- Reduce logistic costs

- Reduce needless trips

- Reduce Emissions

- Reduce workload on crews
  & equipment wear

- Minimize accidents/other mishaps

On Shore:

- Better cooperation with base operations

- Seamless connections with other modes of transport

- Reform workstyles

- Reduce shipping cost

kitsapeda.me/WAVC

OVERCOMING ANXIETY

- One of the major obstacles is **operating in a mixed navigational environment** where conventionally manned, remotely controlled, and unmanned vessels are interacting at the same sea areas

- New types of autonomous systems and their related equipments and sensors would **increase complexities** and introduce new risk profiles, failure modes, system interdependencies, and unpredictable ship behaviors.

- National interests may prevent **cooperation between nations** and associated flagged vessels

- Many seafarers' organizations have yet to fully embrace maritime autonomy as they **fear losing jobs** and other economic resources

LOOKING FORWARD

TRENDS:

- More innovation in maritime autonomy
- Advanced software (security)
- Workforce adaptation

DRIVERS:

- Large investments (operators and investors)
- Ship technology projects
- Need for next generation crafts

LEGISLATION:

- Sovereignty
- Maritime autonomy regs
- Territory Claims

kitsapeda.me/WAVC

Innovation Cluster:

- Funded initially through a Washington state grant

- Tasked to accelerate innovation in maritime (undersea) autonomous systems

- We are industry focus by bringing together entrepreneurs, investors, academics, corporations and government.

Wants & Needs:

- Make the PNW the epicenter of autonomous systems in the US

- Attract capital to grow industry and train the next generation

- Grow an active membership and establish strategic alliances

- Work on unique projects that add value to our communities

kitsapeda.me/WAVC