



WHY DRY BULK SHIPPING NEEDS DIGITALISATION

23/11/2022 | Lars Greiner, Associate Partner, HPC



THE GREEN REVOLUTION IS COMING TO SHIPPING

WILL SHIPPING BE READY?

Shipping has always innovated Globalisation



TECHNOLOGY PROMOTES VALUE CREATION

Digitalisation

- Software
- Process driven
- invisible

Automation

- Hardware
- Operational
- Visible

Sustainability

- The GOAL is a VOYAGE itself
- Final destination unknown
- Efficient and sustainable

THE NATURE OF SURVEYS IS CHANGING

WHERE DIGITALISATION MEETS AUTOMATION, SENSORS, SCANNERS and DRONES




AUTOMATION OF CARGO HANDLING



3D laser scanning system for ship modelling and boom and shuttle protection



RTK GPS system for machine positioning

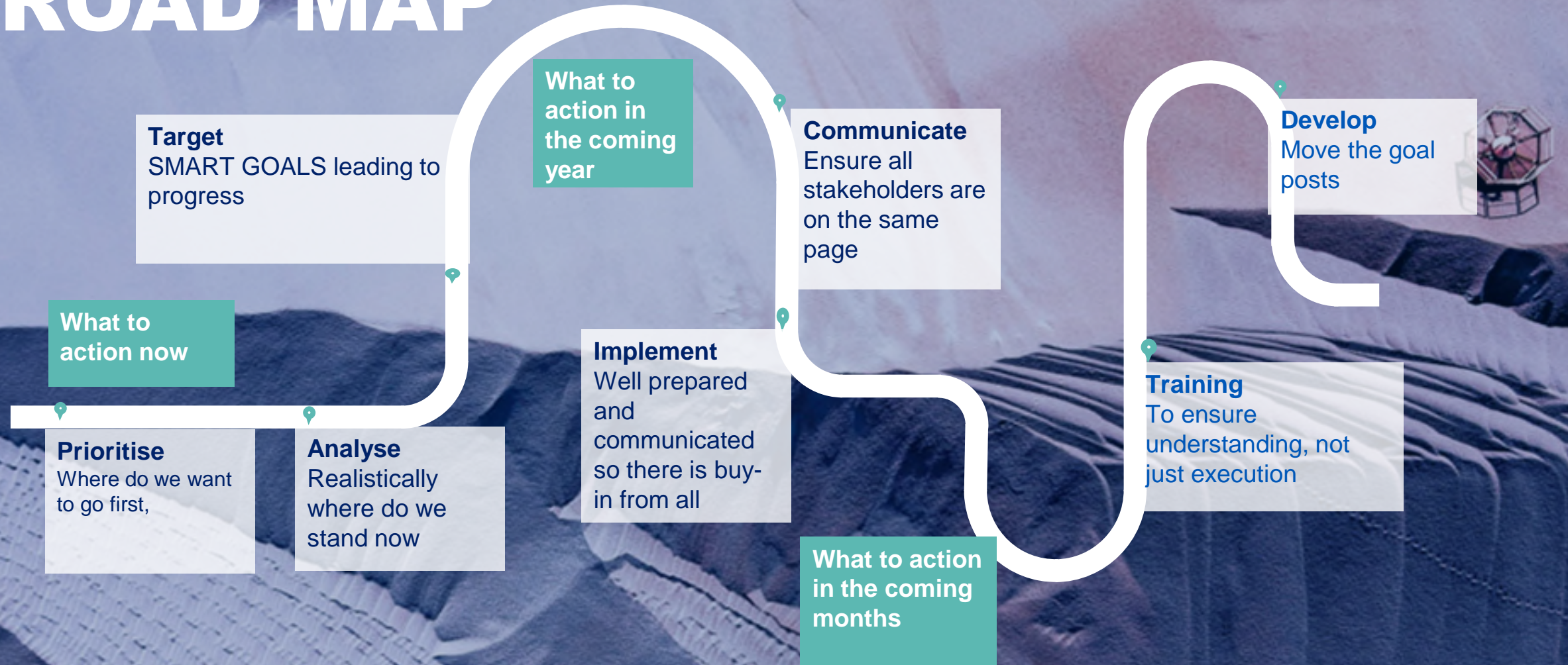


Software for sensor data evaluation and detection of possible collision hazards



Interface with existing machine control systems

IT IS ALL ABOUT ROAD MAP



DIGITALIZATION IS VITAL, WHAT'S NEXT?

More Clarity

the entire supply chain is becoming more visible

- Requirement is coming to track the carbon footprint
- Faster trading requires higher efficiencies.
- This requires quicker access to data, which is becoming more accessible, but
- Data security is vital
- Current conflicts have highlighted need for better tracking of vessels and cargoes

Door-to-Door

Efficiencies are required

- As trades speed up, less room for middle-men
- Traders and cargo owners are only efficient trades
- Setup and implementation of cargo flows must be visible and resilient
- Success in international commerce means keeping up with changing environments

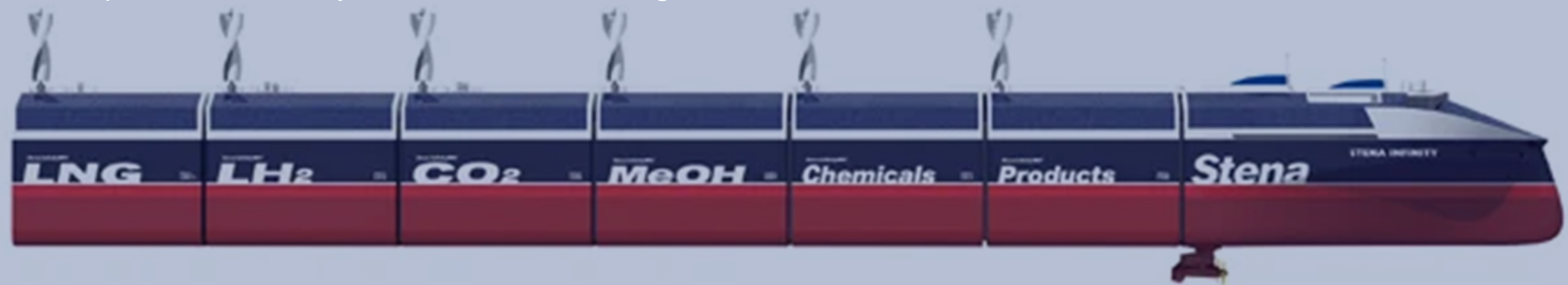
New Shipping

Innovation on the ships themselves

- New Fuels
- Autonomous ships
- Modular shipping
- Sustainable solutions
- Specializations
- Ports changing, offshore ports
- Successful implementation

InfinityMAX – CONCEPT OF HYBRID MODULAR BULK CARRIER

Concept vessel – many new versions coming soon.



TECHNOLOGY ON ITS WAY



New technology is happening

Redesigning ships, fuels, but also cargo handling, tracking as well as new modes of transport, all speeding the supply chain,

THERE WILL BE SURPRISES!



WELCOME TO INNOVATIVE VALUE CREATION

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