

Digital Strategy How to achieve your digital transformation

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The Future of Shipping: 5 Key Trends





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Ongoing Industry Consolidation

Excessive Capacity

Higher Skilled but Less Crew



Increased Regulation



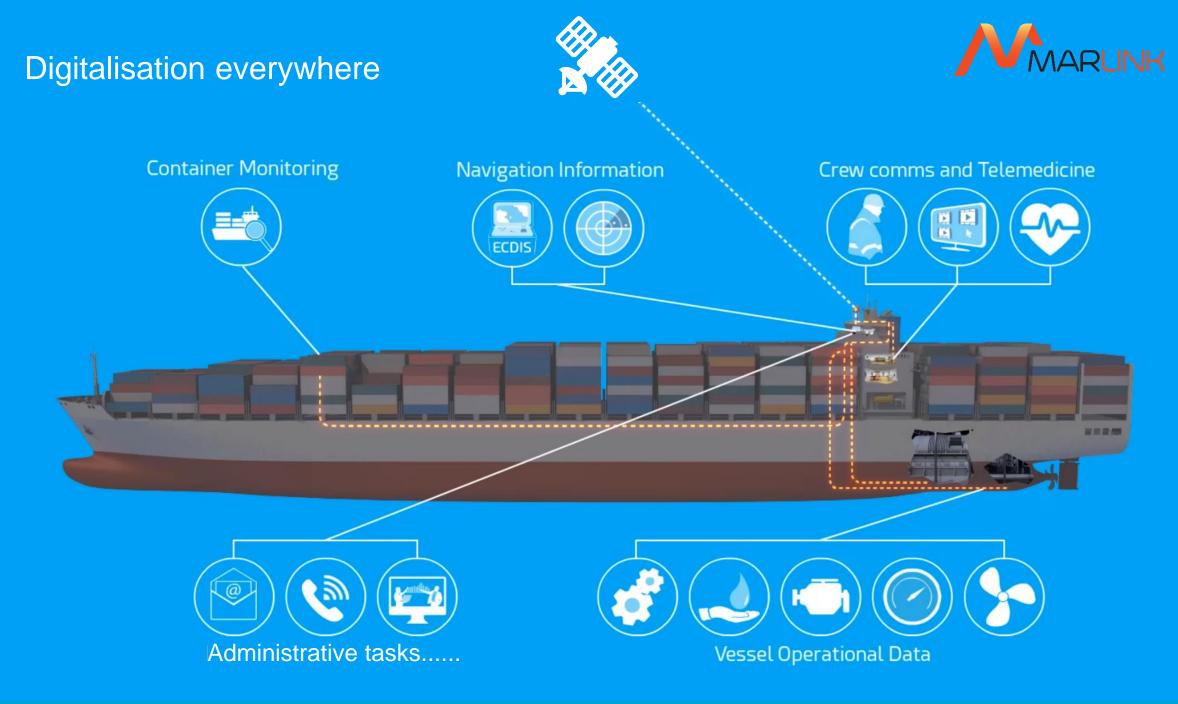
Digitalisation & Automation

Digitalisation@Sea: Today, tomorrow and in the future



Yesterday ANALOG SHIPS	Today CONNECTED SHIPS	Tomorrow DIGITISED SHIPS	After Tomorrow SMART SHIPS	Future Autonomous ships
Tools and associated processes did not allow further operational improvement	Crew operated vessels	Crew operated vessels + Remote assistance	Remote operated vessels + Crew assistance	Unmanned vessels?
	Technology enables and empowers frontline (ship & shore) to optimise performance and benchmark	Shore-based optimisation of assets and vessel performance through fleet wide real time & cloud connectivity	Assets and vessel performance optimisation through real time analytics ashore	Autonomous vessel navigation and performance optimisation through real time analytics

How to achieve your digital transformation?



Benefits of Digitalisation



COMPLIANCE

Increasing regulation relies upon digitalisation for accurate and timely reporting

MANAGEMENT & MONITORING

Operations increasingly managed centrally / from shore. Remote diagnostics & monitoring reduces burden of onboard IT

INTEGRATION

Data integration empowers shipping companies. Legacy systems need to be updated and integrated to improve processes

OPTIMISATION

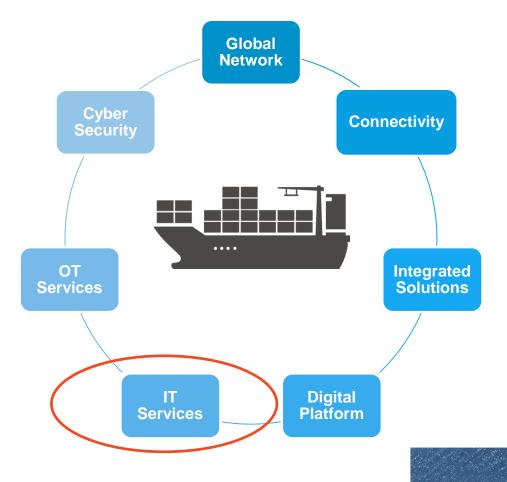
Vessels are only as efficient as its staff onboard. Staff needs to be able to use technology to optimise the entire voyage

Implementation of technology and digitising processes is an obvious way to maximise efficiency, run vessels at optimum levels and reduce costs!

Integrated Portfolio

Integrated business-critical connectivity IT and digital solutions

MARLINK





Standardisation of IT – facilitator for digitalisation



• Security

Mitigate cyber threats by replacing outdated software and updating applications across the fleet in minutes

Compliance

Enforce rules and processes for your IT environment to ensure compliance visibility

• Productivity

Utilise technology to maximise business efficiency and empower your workforce

Automation & Remote Management

Adopt more automated and remote managed processes to reduce the manual burden on your IT team and crew

Cost efficiency

Take control of your IT environment and save time and money





Competitive Advantages through Digital Transformation

CASE I: Global bulk carrier operator

Key Challenges:

- Minimise number of suppliers for Connectivity & IT needs
- Lack of standard processes & onboard infrastructure
- Data collection from OT network as key business enabler
- Global coverage, higher trough put to run new IP applications (video surveillance, data transfer, remote monitoring, etc.)
- Flexibility to increase bandwidth for shorter periods

Marlink Solutions

- Full ICT Managed service based on the KUAS platform
- VSAT Sealink Premium with 1m Global Ku-Band VSAT
- Iridium Open Port
- XChange Power integrated communication management platform

Customer Benefits



Single point of contact with one capable vendor for connectivity & IT



Fleetwide standardised, flexible and manageable ICT platform



State of the art security across their entire fleet



Flexibility to increase bandwidth as needed



Competitive Advantages through Digital Transformation

CASE II: Major International Offshore & Dredging operator

Key Challenges:

- Service demands and complex requirements
- Standardisation, upgrading and control of applications, IT infrastructure and connectivity
- Cyber Security
- Need for a more industry standardised approach, therefore outsourcing
- Reduce number of providers

Marlink Solutions

- Full ICT Managed service based on the KUAS platform
- Sealink VSAT Premium packages, unlimited FB back-up and stabilised Ku-band antenna
- Data Manager: to manage data solutions via a secure and simple online portal
- Local Numbers: unlimited calls to vessels from shore at local number cost
- Managed 4G with Marlink LTE hardware kit, plus Wi-Fi

Customer Benefits



Standardised IT environment for all vessels, larger solutions for more complex demands



State of the art security across their entire fleet



Outsourced IT Solution with one provider for single point of contact - for connectivity and IT



Flexibility, scalability and future proofed for digital transformation, future integration and requirements like for OT

Competitive Advantages through Digital Transformation

CASE III: one of the world's largest marine energy transportation, storage and production companies.

Key Challenges:

- Improved communication for crew
- Submit higher number of data to shore for remote monitoring and diagnostics
- Need for reliable global broadband connectivity with permanent bandwidth
- Operation become increasingly sophisticated and so are its IT requirements
- · Reduce burden to manage onboard IT

Marlink Solutions

- VSAT Sealink with back-up included
- 4G Smart connect
- Virtual Xchange platform, including WiFi
- Full ICT Managed service based on the KUAS platform

Customer Benefits



Improved facilities for crew welfare

MARLINK



More control of bandwidth in use and onboard equipment



High performance & stable connection



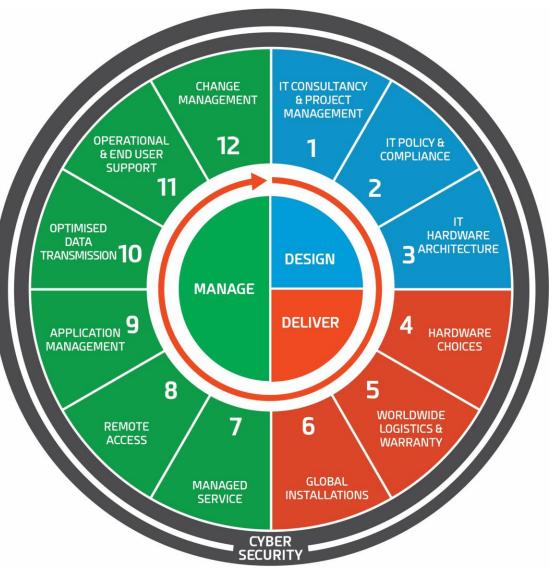
Enables 3rd party remote diagnostics on equipment



Single point of contact for connectivity, IT and enhanced cyber security



TLINK Marlink's complete portfolio of IT solutions



Full IT consultancy, implementation and management service enabling maritime customers to standardise, simplify and automate IT operations at sea

The portfolio is structured around three phases:

DESIGN – DELIVER – MANAGE



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How to achieve your digital transformation

- Select the right partner combining connectivity and IT know-how and IT capabilities
- Choose a future-proof and multi-band ready, effective high-speed connectivity service
- Ensure implementation of cyber security solutions
- Leverage the available data to improve the vessels' performance
- Empower your staff to use connectivity enabled applications and tools

Connect smarter. Anywhere.