Port Digitalisation – A Global Update

June 2022

ION
An Innovative Global Data and Technology Company

- **Innovative global data and technology firm for 50+ years**
  - o 30+ years optimizing offshore operations
  - o HQ in Houston with 8 global offices
  - o 270 staff, including 90 in Edinburgh

- **Data and software optimizes decision-making and results**
  - o Systems and data integration
  - o Operational management
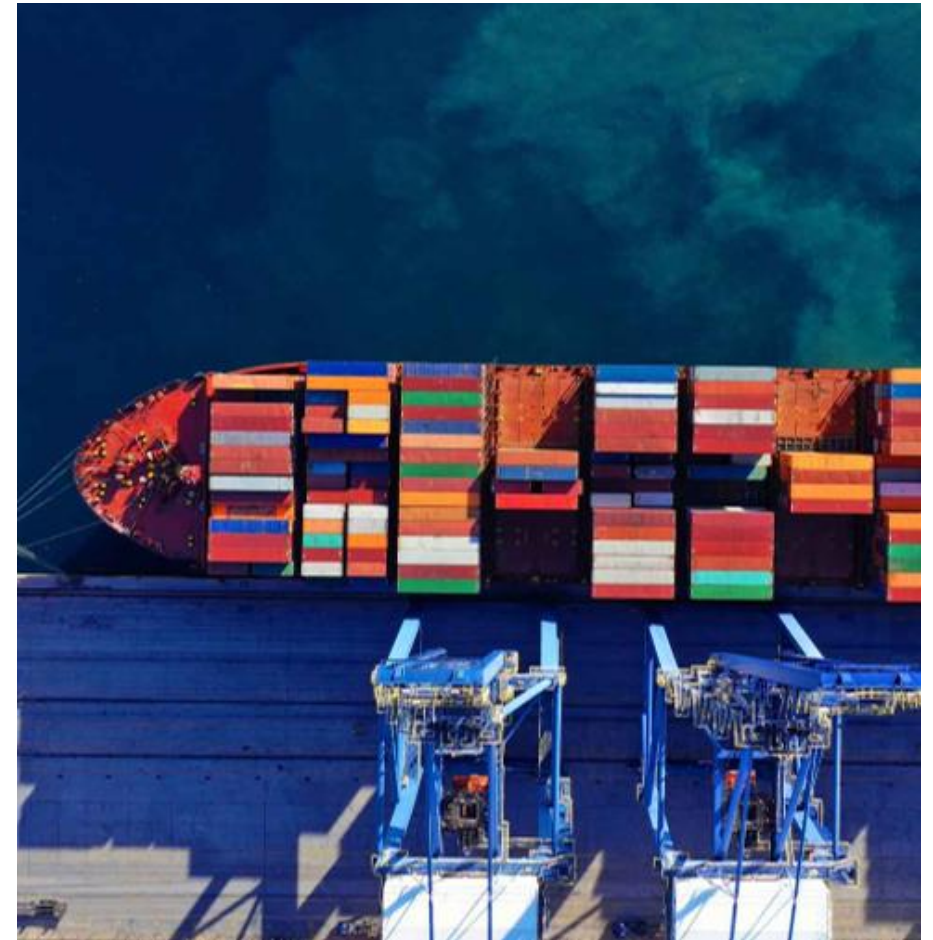 - o Analytics

Maritime Operations Leader

What is a Smart Port?

A Smart Port uses automation and innovative technologies to improve its performance.

"Smart ports are the only ports that will survive." Prof. Dr. Olaf Merk

How Do We Work Today and a Vision for the Future

WHERE ARE WE NOW? → **THIS LEADS TO:** → **WHAT IS THE FUTURE?**

WHERE ARE WE NOW?

- Each port is unique – history, geography, service mix and tariffs create a unique scenario
- Each port receives port call requests across a range of interfaces:
  - From agents or vessels
  - By phone, Email or VHF radio
  - By PDF or Word pre-arrival notifications

THIS LEADS TO:

- Missing paperwork
- Incomplete forms
- Inaccurate ETAs
- Pressure on port services such as pilots and tugs

WHAT IS THE FUTURE?

- A seamless digital process:
  - Port calls booked online
  - Vessels updating information in real time
  - Data flowing to regulators
  - Secure shared notifications with stakeholders

ion

What is Port Digitalisation?

Digital Divide – 80% of the 4,900 ports in the world do not have a digital port solution

Paper or Excel are still **prevalent** in the majority of ports ports

Paper and Excel Carry Risks

- Insufficient to manage increasingly complex port operations and cargo loads - difficult to scale up to meet rising demand

- Labour intensive and prone to errors

- Lack safety and security

- Siloes Data, reducing collaboration, information sharing and customer service.

Why Should You Digitalise?

Digital Transformation – The New Normal

INCREASING BURDENS OF REGULATIONS AND REPORTING

- Maritime Governance
    - IMO Single Window
    - Just in time operations
    - Decarbonization

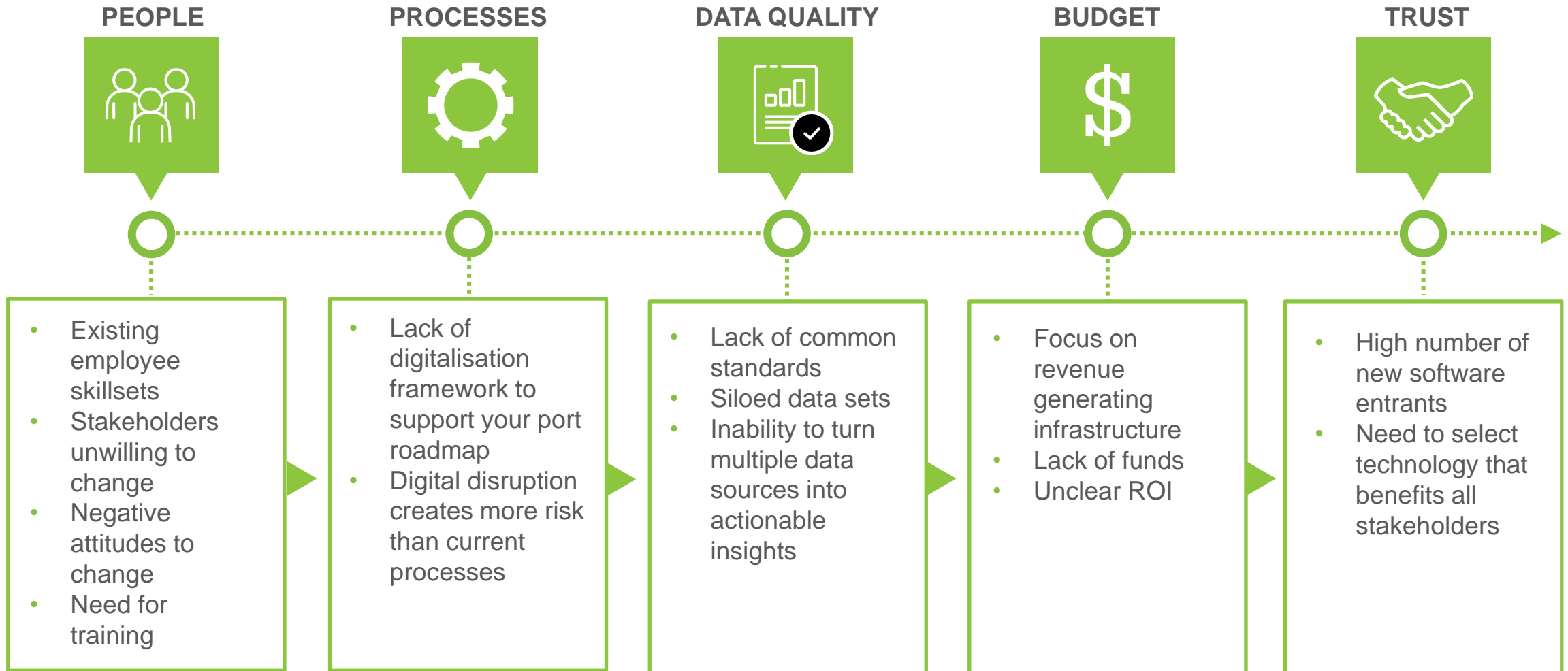### ENABLE KEY PERSONNEL TO DO THEIR JOBS EFFICIENTLY

- By receiving data digitally you reduce the time spent on admin by key people such as VTS Operators

- Information can flow effectively to key team members, like pilots and tugs, reducing time spent on unnecessary work

INCREASED COMMUNICATIONS GIVES YOU A COMPETITIVE EDGE

- Take command of the digital race to become the preferred port destination in your region

- Identify your port as innovative, sustainable, and environmentally friendly in the eyes of your key stakeholders

Barriers to a Digital Port Transition

PEOPLE
- Existing employee skillsets
- Stakeholders unwilling to change
- Negative attitudes to change
- Need for training

PROCESSES
- Lack of digitalisation framework to support your port roadmap
- Digital disruption creates more risk than current processes

DATA QUALITY
- Lack of common standards
- Siloed data sets
- Inability to turn multiple data sources into actionable insights

BUDGET
- Focus on revenue generating infrastructure
- Lack of funds
- Unclear ROI

TRUST
- High number of new software entrants
- Need to select technology that benefits all stakeholders

Marlin SmartPort
Digital Port Solutions from Trusted Partners

Port digitalization does not have to be complex

There are numerous options, but off-the-shelf commercial solutions may not always meet the needs of your port

Choose a reliable system that can grow with your port

Choose a reliable digital partner for your digital journey