Port of Rotterdam

The steps in digitalisation to become a smart port

DIGITAL BUSINESS SOLUTIONS
Accelerated by Port of Rotterdam

Jan Gardeitchik

Port of Rotterdam 1982-2017

Head of Harbour Master Policy

Head of Transport & Environmental Safety

General manager Noxious and Dangerous Goods

Different advisory roles

Port of Fujairah 2017-2018

Corporate HSE executive

Port of Rotterdam 2018-Present

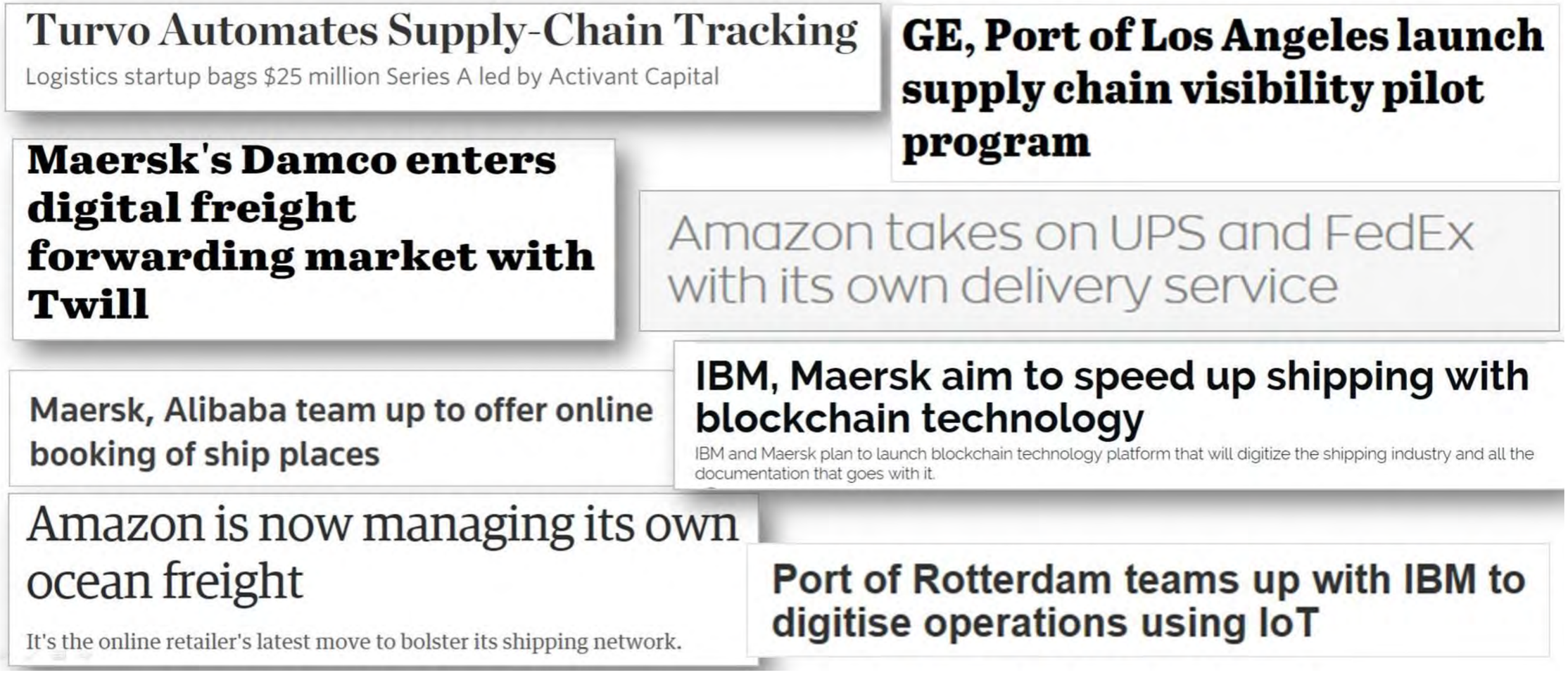
Senior Lead Digitalisation

Maritime Port Management Systems

Last 6 years:
Best infrastructure in the world.

What's next?

Lots of new digital initiatives around the world



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Lots of new digital initiatives at the Port of Rotterdam

BlockLab

Blockchain for Energy and Logistics

Lab for Blockchain projects

Start up accelerator

IoT platform with IBM

Digital Business Solutions

- We need to take ownership for the development of IT solutions with real business value. As a trustworthy and independent player in the port that can play a directive role.

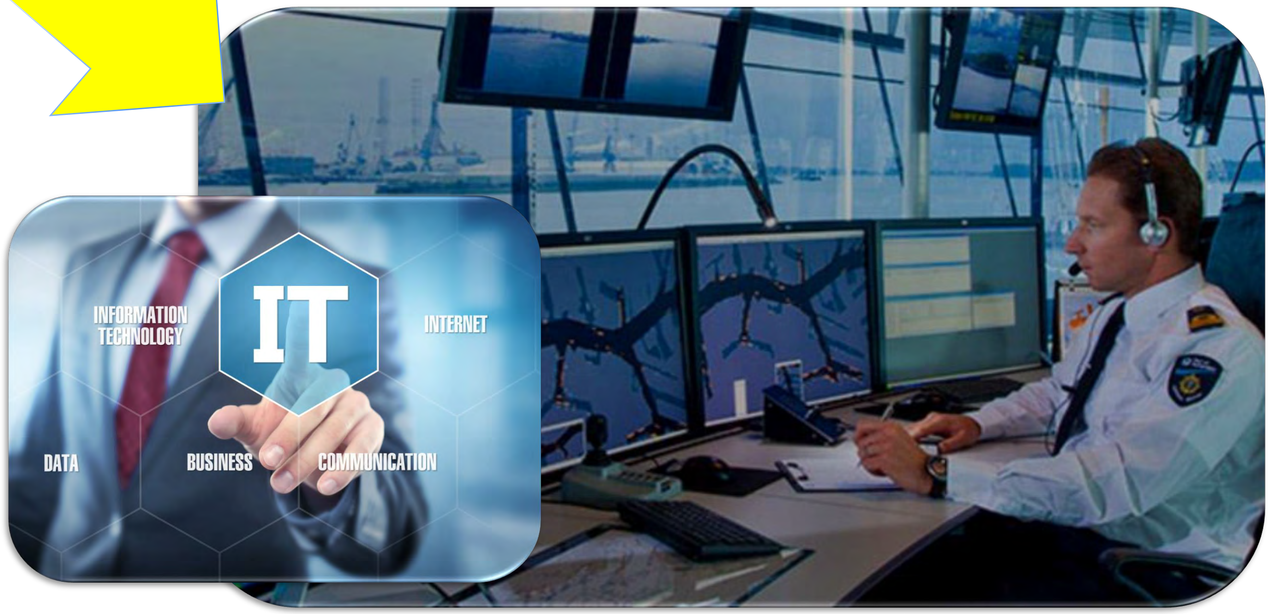
- Own product development helps to connect effectively to digital trends that impact global logistics and port sectors. Deliver digital solutions, data services and support.

- Current and upcoming challenges for Ports will not be solved by IT suppliers. In-depth knowledge of port operations is necessary to develop the right solutions.

CONNECT. OUTSMART. DELIVER.
MAKE IT HAPPEN.

LEVEL 1

Individual automation
Goal this step: Eliminate waste for a single port player



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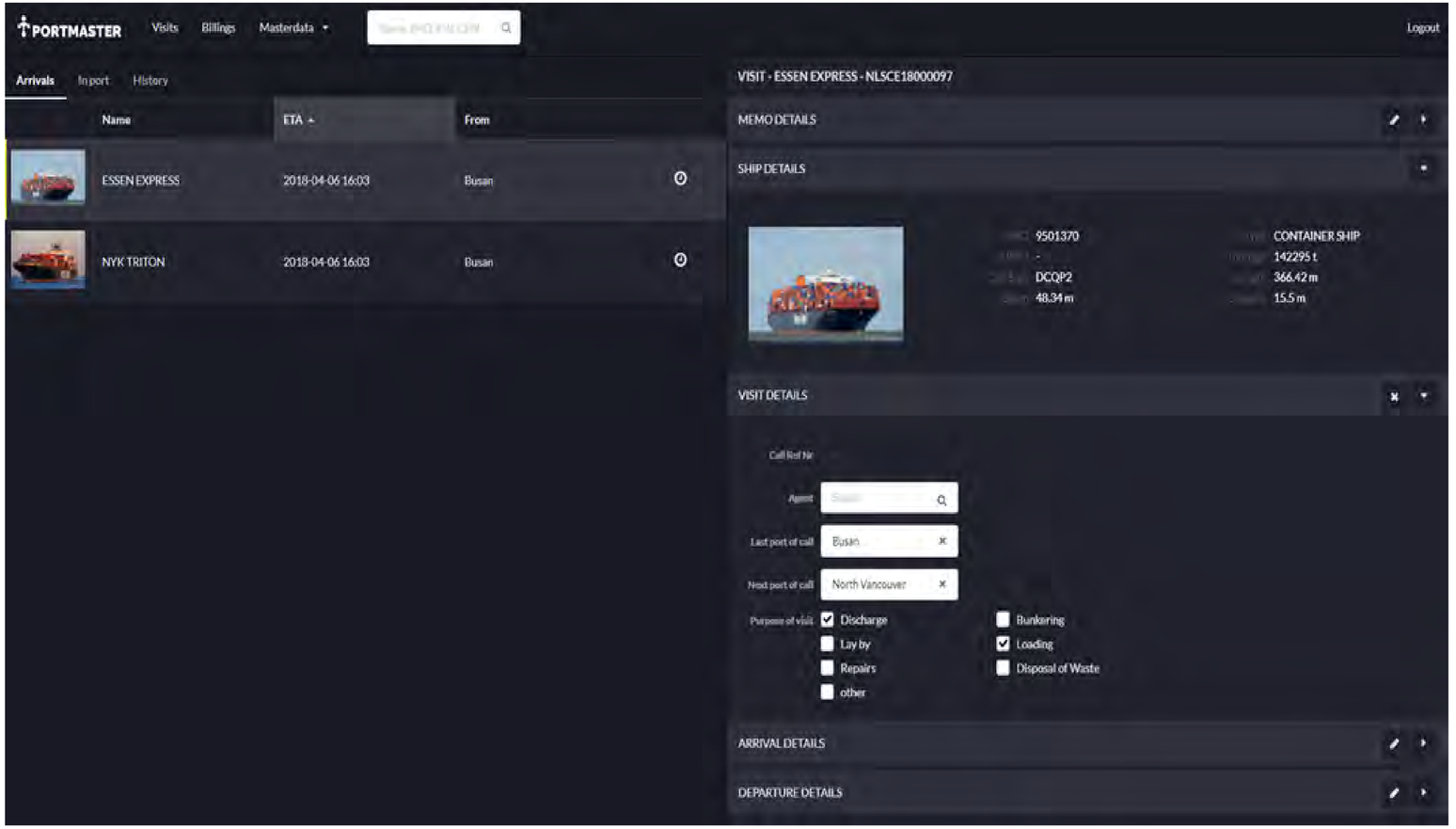
LEVEL 1

Individual automation



Port Management System

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LEVEL 1

Security : Crucial element in this phase (all phases) directly: How to keep your systems and operations safe as a port?

What do we suggest you have to do?

- Security by design
- Continuous security testing (automated)
- Safe hosting by trusted partners
- Testing and educating the maturity of developers
- SecDevOps

How do we check that we are doing this?

- Bug bounty (involve ethical hackers)
- (Human) Code review
- Vulnarablity scanning (Technical)
- Continious scanning
- Pentesting (code) of products always before launching
- Security operations center (identity abuse of potential attempts of infringenment)
- Team of security officiers full time working on cybersecurity

Slogan of our security team: ***We build it, we run it, we protect it***

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LEVEL 2

Integrated systems within the port community

Goal this step: Eliminate waste in the whole Port Community

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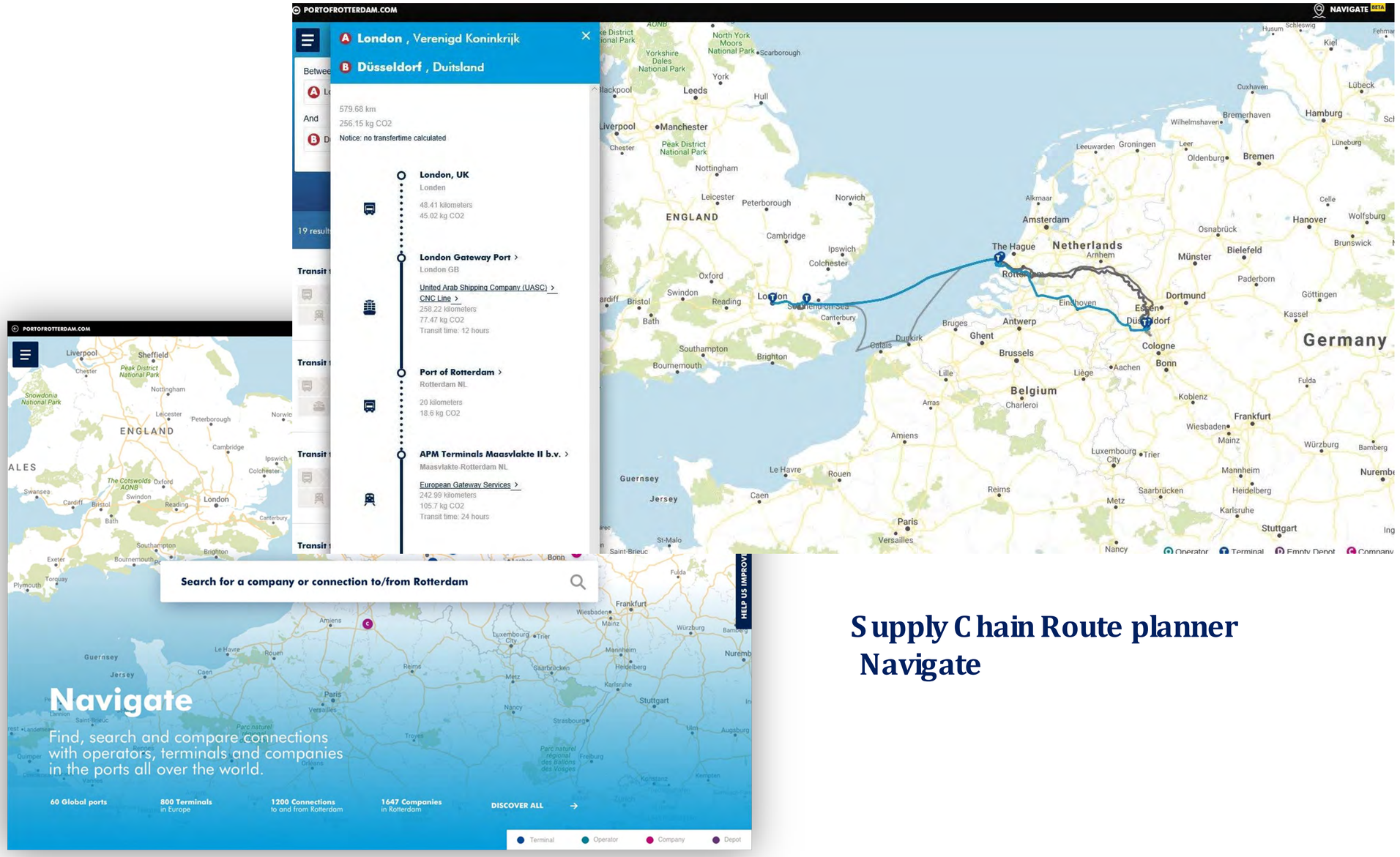
LEVEL 3

Integrated systems from port to hinterland

Goal this step: Eliminate waste from the port to and from hinterland



Supply Chain Route planner
Navigate

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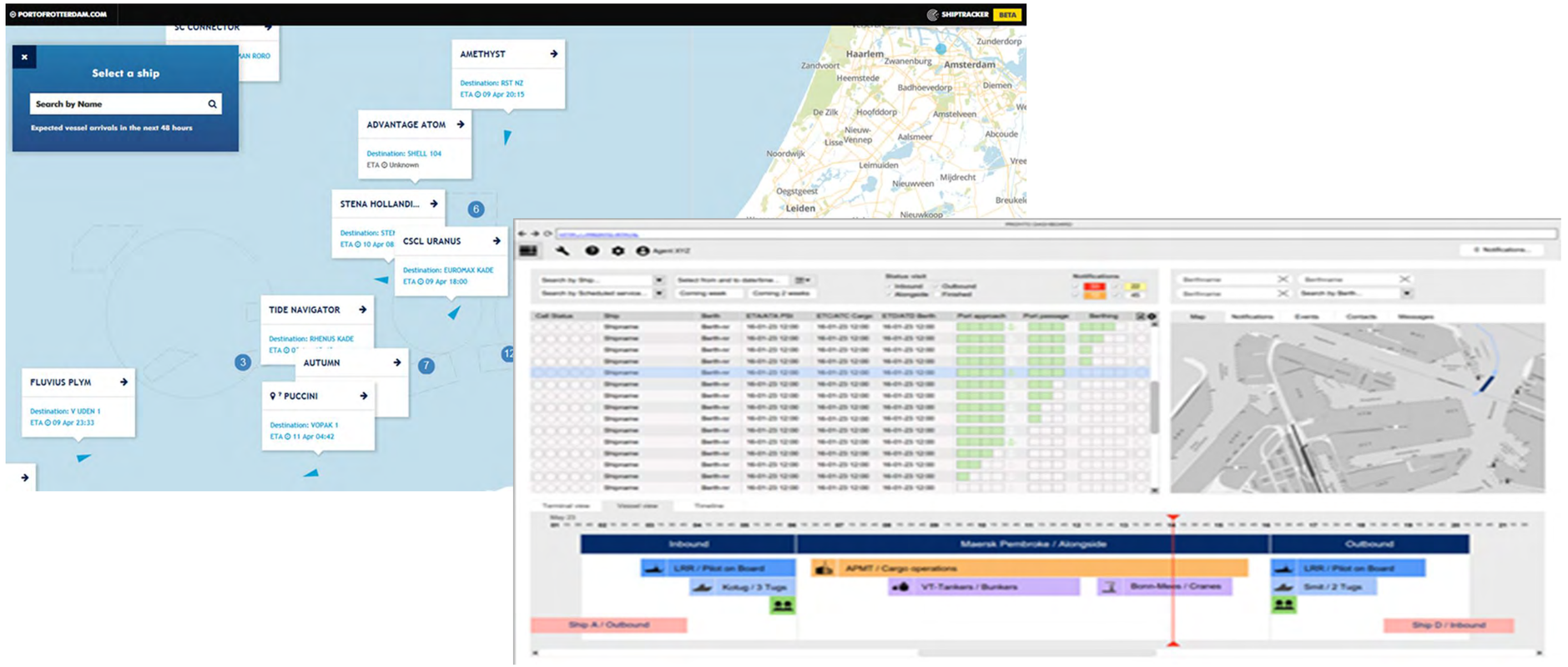
SMART PORT

Global connected ports and logistic chain
Goal this step: Eliminate waste in end to end logistic chain



Paul Smits (CFO Port Of Rotterdam) `We will share data with the Port of Antwerp´.

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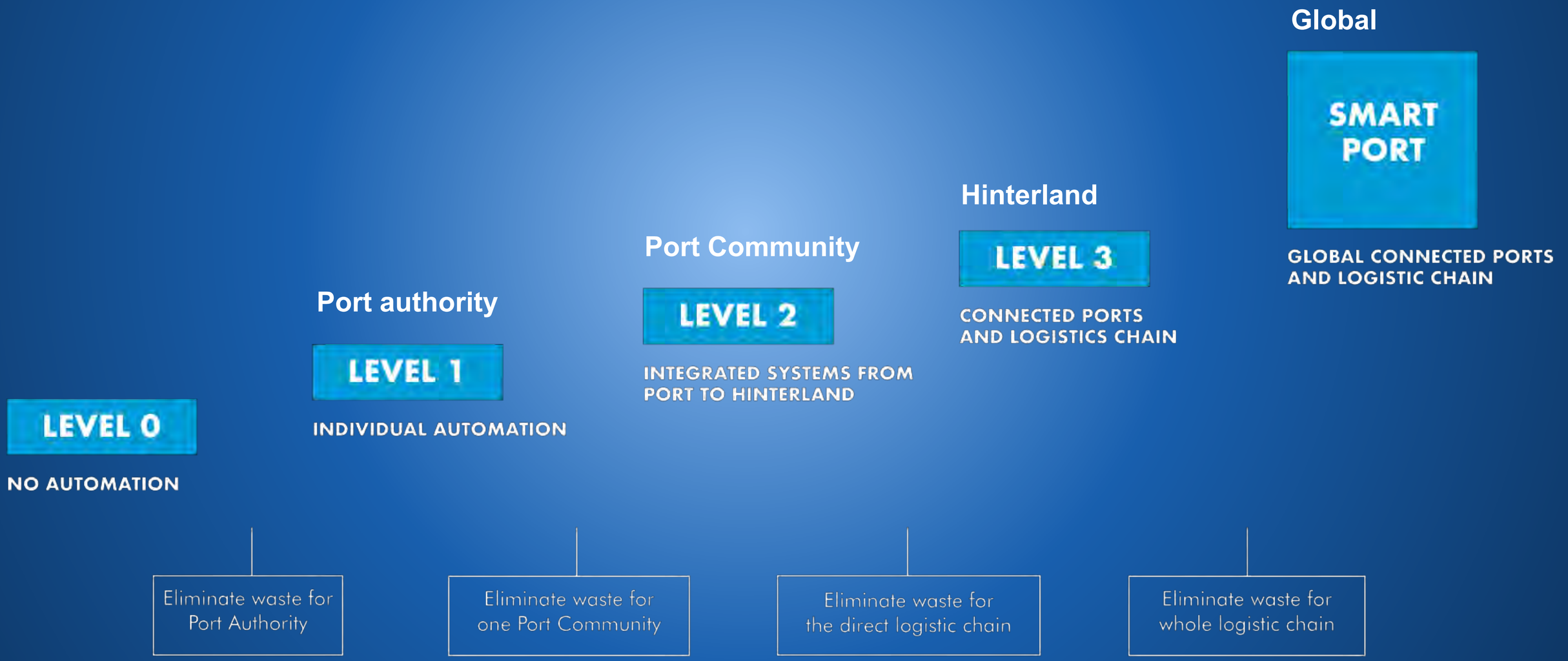
Recap presentation+
Port of Rotterdam vision levels of digitalisation of Ports

Where are you at the moment? And what is your ambition?



Portfolio DBS: levels of maturity digitalisation

1 individual automation

2 integrated system in the port

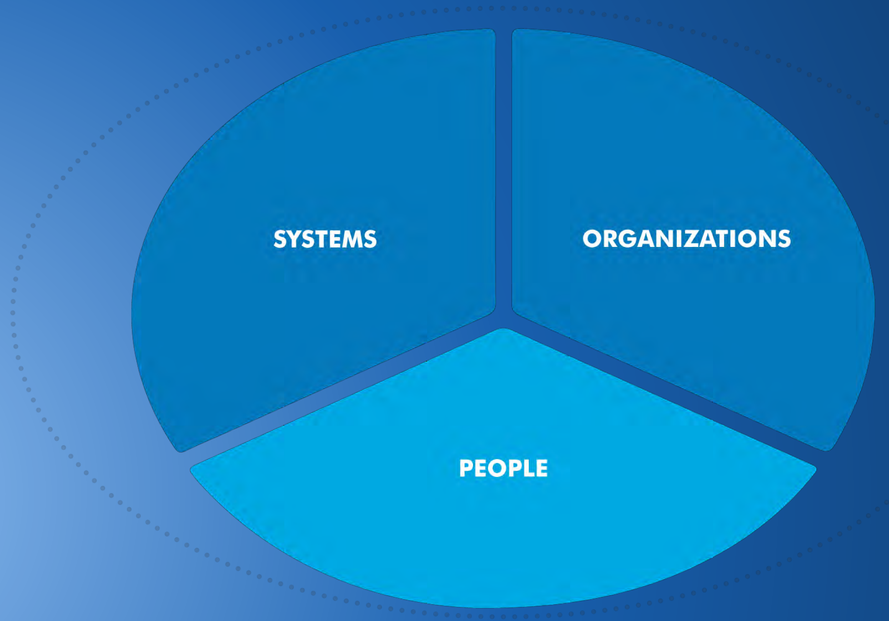
3 integrated system port to hinterland

4 integrated system end to end

Digitalise? Step by step...

New technology will also change the way we work

Let´s share ideas!



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