WORKING TOGETHER ON THE BEST POSSIBLE PORT.

MAKE IT HAPPEN.

MA.swanson@portofrotterdam.com
Hinterland Port of Rotterdam (1/2)

Global Hub and Gateway to Europe: 500 million consumers within 24 hours reach
2017 – European ports (mln. tonnes)

* UK ports: preliminary figures
Port of Rotterdam – lay-out and segments
We are a publicly-owned, business driven port developer

**Public Shareholders**
- National / local government
- Provide strategic guidance
- The land in the port is owned by the City of Rotterdam

**Port Development Company / PoR**
- Run as a business
  - Responsible for development of the port area
  - Leases land and infrastructure to terminals / industries
  - Collects port dues from shipping lines
- Responsible for safety and security
- Authorizes marine service providers
- Stimulate new developments and innovations

**Private companies**
- Provide services
- Process raw materials

---

**Equity stake**
- Dutch Government: 30%
- Rotterdam City: 70%

**Client relationship**
- Terminals / Industries
- Shipping Lines

**Other**
- Shippers
- Marine Services
- We manage the port according to the ‘landlord model’
- Increasingly involved in new, supporting activities (→ Port Development Company)
Digital Solutions - Smart Ports

• **Port of Rotterdam (PoR)** is one of the smartest*, most digitized, ports in the world.

• We have **digitized** all our **core processes** and many **supporting processes**.

• We have **worked together** with all parties in our port and around it (commercial and non-commercial)

• This way, in Rotterdam, we have managed to create a **digital business community** contributing to the **success** of the **Port** and of **all parties involved**.

*smartest infrastructure 6 years in a row, according to:
Reach of our Solutions

NAVIGATE (marketing & service)
PORTMASTER (PMS)
PORTINSIDER (PCS)
PRONTO
HAROLD TRAIN TRACKER
STREAMLINE CONTAINER TRADE PLATFORM
SHIPTRACKER 48 HOURS
Pronto – 2014 how it started...

- Need for **global standards** (nautical/logistics: sea – port- terminal)

- Establishment of **International Taskforce Port Call Optimization**, a neutral, global, industry initiative

- In co-operation with a number of large parties from the maritime industry and maritime organisations

For more information on the PCO taskforce: BRJ.Scherpenzeel@portofrotterdam.com
# 2016: A Good Solution...

## Key Performance Indicators we tested for

<table>
<thead>
<tr>
<th></th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides one central view for all services around one vessel</td>
<td>✔</td>
</tr>
<tr>
<td>Uses accepted industry standards and definitions</td>
<td>✔</td>
</tr>
<tr>
<td>Allows for service providers who already have planning tools to interact</td>
<td>✔</td>
</tr>
<tr>
<td>Gives the highest possible accuracy in ETA/ATA and ETD/ATD (realtime facts)</td>
<td>✔</td>
</tr>
<tr>
<td>Will work with harbour master and port community systems already in place</td>
<td>✔</td>
</tr>
<tr>
<td>Really increases efficiency for its users in the following areas:</td>
<td></td>
</tr>
<tr>
<td>- Ease of use and simple user interface (end user acceptance)</td>
<td>✔ -80%</td>
</tr>
<tr>
<td>- Will reduce number of phone calls between parties</td>
<td>✔ -20%</td>
</tr>
<tr>
<td>- Will reduce wait time in port, due to berth &amp; service planning optimisation</td>
<td>✔ - 5%</td>
</tr>
<tr>
<td>- Will reduce fuel use (Co2 emissions) in port approach</td>
<td>✔ + tbd</td>
</tr>
<tr>
<td>- Leads to effective and efficient use of port capacity</td>
<td></td>
</tr>
<tr>
<td>Is trusted by all parties who share their data (data ownership)</td>
<td>✔</td>
</tr>
</tbody>
</table>
Vessels approaching the Port (real time)
Planned activities for/around a Vessel

Planned shifts from terminal to terminal

Tue 13 November

<table>
<thead>
<tr>
<th>00:00</th>
<th>01:00</th>
<th>02:00</th>
<th>03:00</th>
<th>04:00</th>
<th>05:00</th>
<th>06:00</th>
<th>07:00</th>
<th>08:00</th>
<th>09:00</th>
<th>10:00</th>
<th>11:00</th>
<th>12:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUROMAX KADE / Alongside</td>
<td>Shift</td>
<td>RWG DS 1 / Alongside</td>
<td>Shift</td>
<td>APMT DSQ / Alongside</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pilot on Board**

EUROMAX KADE / Cargo Operations

RWG DS 1 / Cargo Operations

MATADOR 2 / Floating Crane

CALENDULA 12 / Bunker
The view for the terminal
JIT arrivals and fuel savings (emission reductions)

Missed savings of USD 9,000
2019: Pronto!

Fully operational solution
Shipping lines, terminals and pilots love it
Will work in any port, available to any port in the world – 3 months’ implementation time
Works for all trades (containers, bulk, chemicals)
Allows you to collaborate where you are not competing

Conclusion: huge operational and commercial benefits - @for all
Navigate: for ambitious container ports

- Higher visibility worldwide of your port
- All possible routes a. **globally** for container cargo **to-from-via your port** b. into the hinterland (trains, trucks, inland waterways etc.)
- Carbon emissions calculated for each option
- **Empty Depot** drop off pick up tooling
- **Yellow pages** (ease of doing business)
- 24*7 Marketing **intelligence**
- no IT hassle
- Works on **smartphone too**
Why use Navigate?

Navigate has been developed especially for container ports with an ambition to:

- attract more container cargo
- Show all businesses in their port
- facilitate end customers in finding their way with their cargo
- Show sea and hinterland connections (train, truck, barge)
- ask for quotes
- compare transit time and carbon emissions of these options
- smoothly manage growth of cargo volumes
- Be an efficient, high-service port.
Next: Booking

- Facilitate the booking of container services, and hinterland operators
- Attract new customers, demonstrate and further increase the ease of doing business in your port (port shift!)
- Create additional revenue streams for your port

<table>
<thead>
<tr>
<th>Type of providers</th>
<th>Shipping lines</th>
<th>Platforms</th>
<th>Forwardsers</th>
<th>Book only hinterland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mærsk</td>
<td>DHL</td>
<td>Kuehne Nagel Seaxplorer</td>
<td>ECG</td>
</tr>
<tr>
<td></td>
<td>CMA-CGM</td>
<td>DHL</td>
<td>DHL</td>
<td>DHL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHL</td>
<td>Van Dongen en de Roo</td>
<td>ECG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHL</td>
<td>ECG</td>
<td>DHL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DHL</td>
<td>DHL</td>
<td>DHL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Book only hinterland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train</td>
</tr>
<tr>
<td>ECG</td>
</tr>
<tr>
<td>Diatriail</td>
</tr>
<tr>
<td>Barge</td>
</tr>
<tr>
<td>Castorco</td>
</tr>
<tr>
<td>BCTN</td>
</tr>
<tr>
<td>Truck</td>
</tr>
<tr>
<td>Uturn</td>
</tr>
<tr>
<td>Dan Hortgh</td>
</tr>
</tbody>
</table>
What is the next step?
Move forward!
Thank you