



“From Know-How to Grow-How...”

... how to get from Smart to Smart-Digital (And Sustainable) in Ports?”

Jörn Springer, Managing Partner

September 2021, Baltic Ports and Shipping Travemünde



Key challenges of Lübeck Port's growth to be addressed by digitization

Key Challenges

Port of Lübeck must prepare for...

... an increase in traffic and at the same time a limited possibility to increase berth capacity with civil engineering

... change of ship-sizes and related change of operational challenges, e.g., peaks of workload etc.

... increased focus on and importance of the industries climate impact



Our objectives

Use the capabilities of digitization to...

... increase the efficiency and productivity of the port terminals in order to **optimize the utilization of the infrastructure and other resources**

... analyze climate impact and create transparency in order to enable a **reduction of the port's carbon footprint and set 'green port' standards**

Sleipner estimates a reduction in carbon footprint **>5%**

Benefit / Potential to grow

Smart Digital Green Port

DIGITAL

SUSTAINABLE



Analytics



Notification/ Alerting

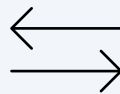
BUSY

SMART

1



Planning Process



Transactions

Effort / Time & Budget

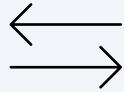
Sleipner MDA product offering to improve port activities



Planning Process

- + Reduce delays
- + Optimize berth usage

- Integration of long-term schedules and confirmed arrivals
- Port visit plan, incl. Cargo
- Berth planning, booking and allocation, incl. early heads-up on possible berthing conflicts
- Resource planning for pilots, agents, etc.
- Vessel tracking and live port map



Transactions

- + Auditable records
- + Optimize asset usage

- Plan and request work packages in web-based single source
- Confirm received work packages and track from anywhere
- Keep track of changes, time-stamps and events
- Instant updates to all users on need-to-know basis



Notification/ Alerting

- + Reduce “empty” runs

- Notify via standard messaging systems
- Keep customers up-to-date with Smart/Magic/One Link
- Request feedback from mission critical teams



Analytics



Billing



Planning process to reduce delays and optimize berth usage (1)

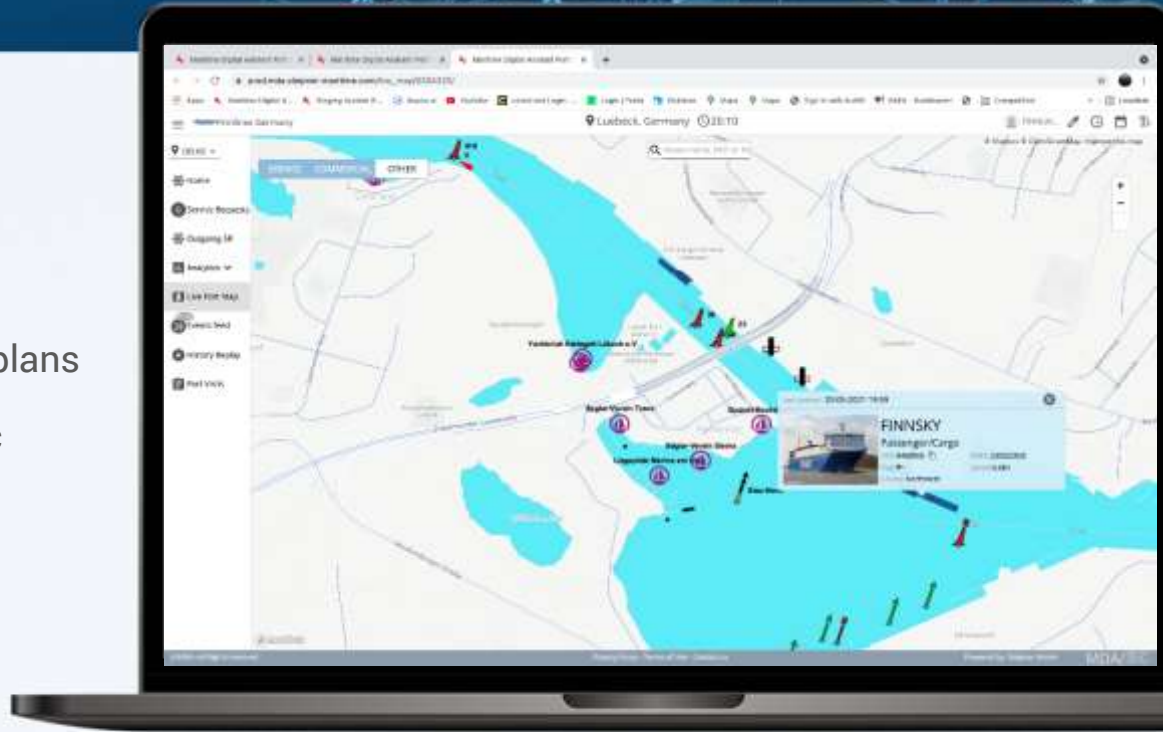
1 Live transparency for the total picture

Live port map available and included

Include overall port situation into your plans

Anticipate bottleneck or peaks in traffic

All traffic





Planning process to reduce delays and optimize berth usage (2)

2 Overview of port visits through digitized import of schedules

Month ahead with automated updates

Independent of IT technology

Voyage	Name	Organi...	Prev L...	Next L...	Berth	IMO	CW	Country	GT	Type
2120198	KENITCA	Transfers...	DELBC	DELBC	Seelandka 3	9307360	37	Netherlan...	28289	Special Ca...
2120420	GENCA	Transfers...	DELBC	DELBC	Seelandka 1	9307372	37	Netherlan...	28289	Special Ca...
2100374	SEAGARD	Transfers...	DELBC	DELBC	Norstrandka 1	9198977	37	Finland	10488	NA
2120198	PULICA	Transfers...	DELBC	DELBC	Seelandka 3	9346380	36	Netherlan...	28289	Special Ca...
2120415	GENCA	Transfers...	DELBC	DELBC	Seelandka 1	9307372	36	Netherlan...	28289	Special Ca...
2100373	SEAGARD	Transfers...	DELBC	DELBC	Norstrandka 1	9198977	36	Finland	10488	NA
2120409	GENCA	Transfers...	DELBC	DELBC	Seelandka 1	9307372	35	Netherlan...	28289	Special Ca...
2100234	GENCA	Transfers...	DELBC	DELBC	Seelandka 1	9307372	35	Netherlan...	28289	Special Ca...
2120197	RYCA	Transfers...	DELBC	DELBC	Seelandka 3	9346398	35	Netherlan...	28289	Special Ca...
2100232	GENCA	Transfers...	DELBC	DELBC	Seelandka 1	9307372	35	Netherlan...	28289	Special Ca...
31AUG2021	RYKSTAR	Finnlines ...	RHEL	RHEL	Skandinavka 6	9319443	35	Finland	45523	Passenger
30AUG2021	RINLAZIF	Finnlines ...	RHEL	RHEL	Skandinavka 6	9336268	35	Finland	45523	Passenger
3120408	RYKCA	Transfers...	DELBC	DELBC	Seelandka 1	9307372	36	Netherlan...	28289	Special Ca...

← Auditable transactions to optimize → asset usage (1)

1 Plan and request work packages

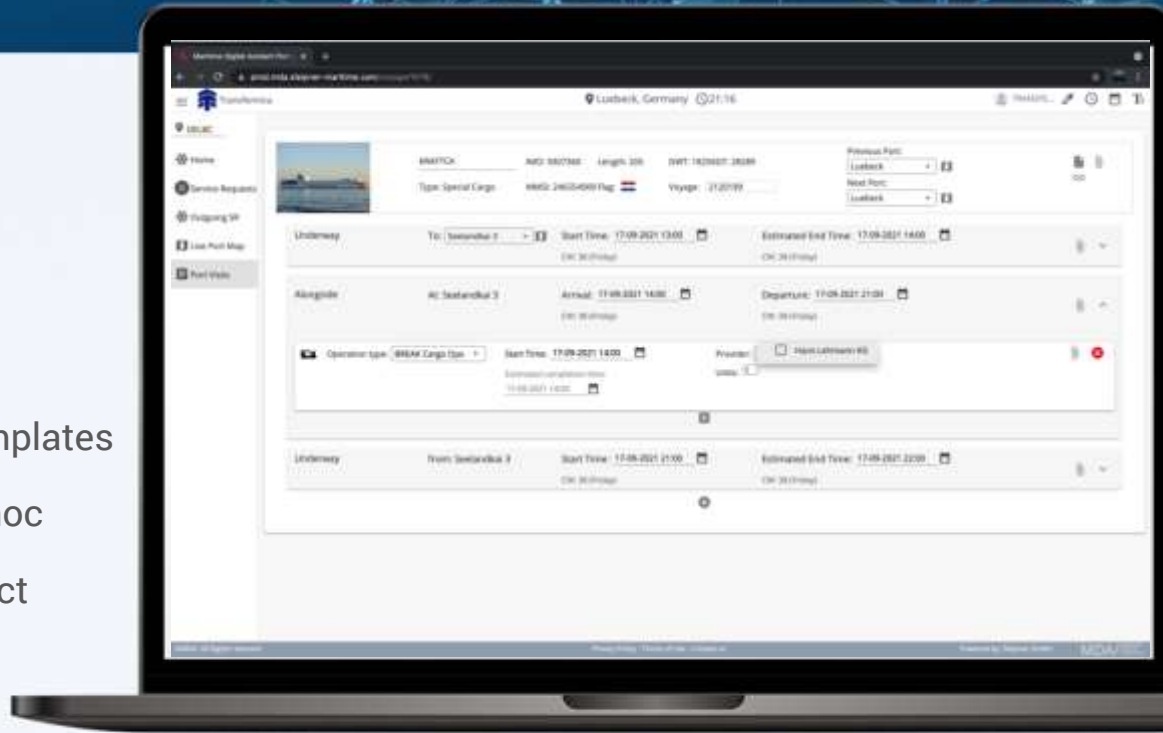
Flexible set-up

Set-up your individual organization

Pre-sets/standards can be saved in templates

Easy to add service/work requests ad-hoc

Internal and external parties can connect



← Auditable transactions to optimize asset usage (4) →

4 Overview of work packages

Track and manage all service request

Port authorities and/or terminal operators with complete overview of transactions

Early identifiable gaps or time delays

Voyage...	End Time	Start Time	Service Type	Port Call	Berth	Action	Time to Action
29AUG2021	29-08-2021 20:00	29-08-2021 20:30	Vorläufige Bestellung (PLOT)	FINNAAD	SK6	🟢🔴	46:23h 55m
29AUG2021	29-08-2021 20:00	29-08-2021 20:30	Feste Bestellung (PLOT)	FINNAAD	SK6	🟢🔴	46:23h 55m
28AUG2021	28-08-2021 08:00	28-08-2021 08:00	Vorläufige Bestellung (PLOT)	FINNWW	SK 4		38 10h 25m
22AUG2021	22-08-2021 08:00	22-08-2021 08:00	Vorläufige Bestellung (PLOT)	FINNWW	SK 4	🔴	
21AUG2021	21-08-2021 22:00	21-08-2021 22:00	Feste Bestellung (PLOT)	FINNPLP	SK6	🟢🔴	
21AUG2021	21-08-2021 04:00	21-08-2021 04:00	Feste Bestellung (PLOT)	FINNPLP	SK6	🟢🔴	
21AUG2021	21-08-2021 04:00	21-08-2021 04:00	Vorläufige Bestellung (PLOT)	FINNPLP	SK6	🟢🔴	



Notification and alerting to reduce “empty” runs (1)

1 Confirm work requests received from anywhere

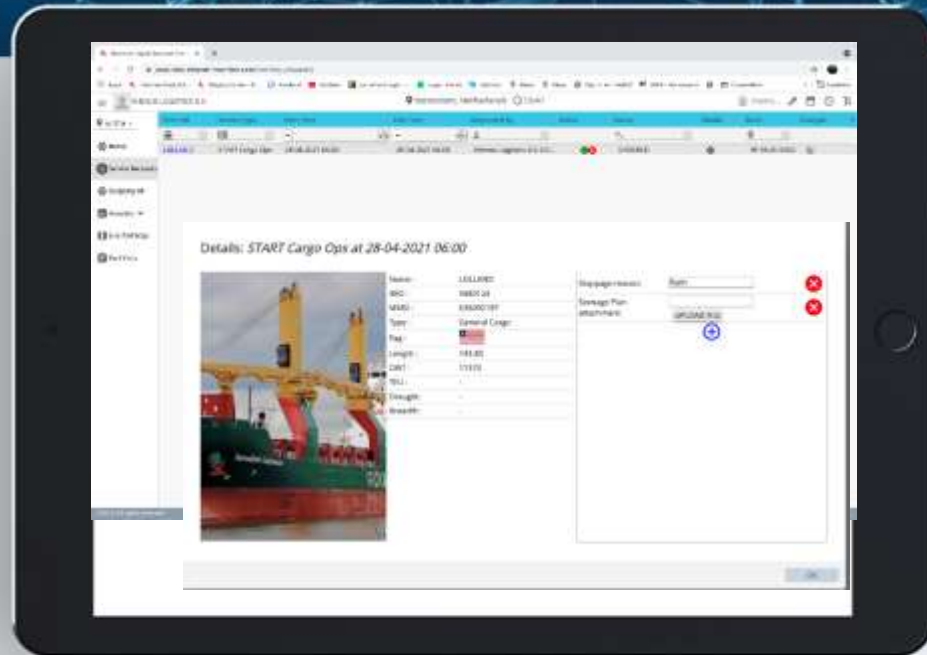
Request are visible on any device

Details are visible or can be added

One-to-many or bi-lateral communication possible

Real-time connection

Instant updates possible



Tablet / phone application for white collar / blue collar employees on the ground



Notification and alerting to reduce “empty” runs (2)

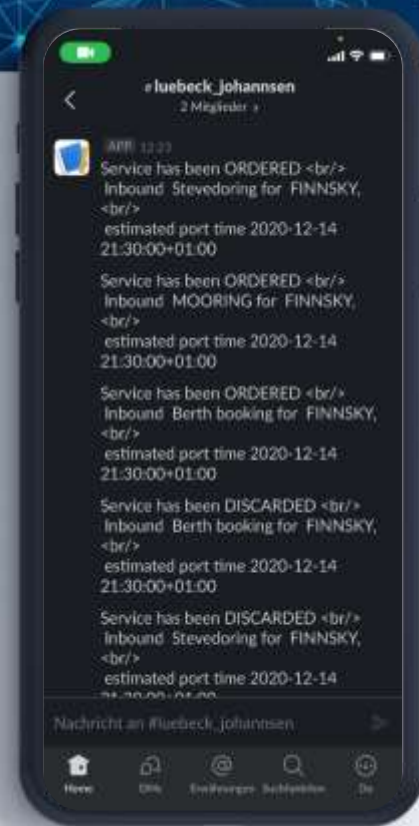
2 Instant notification and alerting

Option to notify via standard messaging systems

Get instant and real-time notification across your team

Request feedback from mission critical teams

No training needs required during implementation





Notification and alerting to reduce “empty” runs (3)

2 Instant notification and alerting

Option to notify via standard messaging systems

Get instant and real-time notification across your team

Request feedback from mission critical teams

No training needs required during implementation

MagicLink powered by SLEIPNER

CMA CGM
CMA CGM

KATHARINA SCHEPERS
MMS: 210999000 | IMO: 9584885
Voyage Number: 137P5R
Type: Special Cargo | Gross Tonnage: 10318
Length: 152m | Width: 24m

Hamburg (Germany)

All displayed times are in port local time

12 days to go

CTA (berth)	Arrival: 2021-10-05 16:00 (Tue)	Departure: 2021-10-05 17:00 (Tue)
CTT (berth)	Arrival: 2021-10-05 18:00 (Tue)	Departure: 2021-10-05 19:00 (Tue)
CTB (berth)	Arrival: 2021-10-05 20:00 (Tue)	Departure: 2021-10-06 10:00 (Wed)
ECT Hamburg (berth)	Arrival: 2021-10-06 11:00 (Wed)	Departure: 2021-10-06 14:00 (Wed)



Analytics tools enabling transparency on port optimization

Post-process and analysis

Keep track of your operation quality, e.g., berth usage

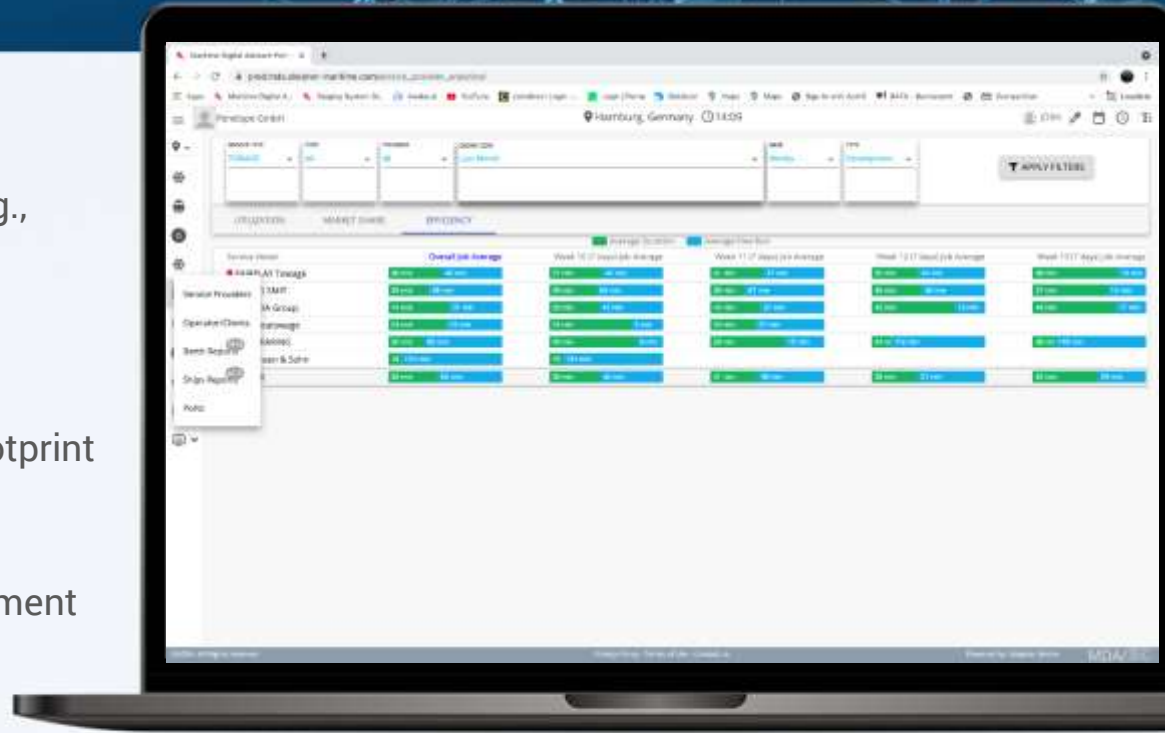
Create transparency and identify best practices

Use data to track and reduce carbon footprint

Compare and benchmark

Track success of your change management

Option to compare to historical data



Outlook on upcoming features

Direct link to authorities

(customs, declaration of hazardous goods etc.)

Round trip planning

Anchorage altering

Billing



Thank You!



Holländischer Brook 2, 20457 Hamburg
mail to: springer@sleipner-maritime.com web: <https://sleipner-maritime.com/>