Navis: Positioned for Further Growth

Benoit de la Tour, President, Navis and Kalmar Software
Andy Barrons, Chief Strategy Officer, Navis
Agenda

Navis overview
• Team/Offices
• Terminal & Carrier Solutions
• Terminal Solutions
• Carrier Solutions

Navis Strategy
• Supply Chain Complexity
• Industry Trends
• Navis Digitalization Strategy
• XVELA

Vision and Summary
• Q&A
Terminal Solutions
Terminal Operating System (TOS) coordinates and optimises the planning and execution of container and equipment moves.

Carrier solutions:
Stowage planning and optimization
Loading computer
Vessel monitoring and analytics

- Stowman
- MACS3
- Blue Tracker

Our operating environment today
Leadership Team

Benoit de la Tour
President of Navis, Head of Kalmar Software

Rob Dillon
Chief Financial Officer

Andy Barrons
Chief Strategy Officer

Suni Lobo
Chief People Officer

Raj Gupta
Chief Technology Officer

Bruce Jacquemard
Chief Customer Officer

Scott Peoples
Chief Products Officer

REGIONAL GENERAL MANAGERS

Chuck Schneider
VP & General Manager, Americas

Guenter Schmidmeir
VP & General Manager, EMEA

Mark Welles
VP & General Manager, APAC

SOFTWARE BUSINESS REVENUES

148m €

2016
Navis Operations: **602 professionals close to customers**
Navis Terminal & Carrier Solutions

Planning & Execution: plan and execute all moves across terminal/Increases throughput and lowers cost

Track vessel operational performance and environmental compliance

Automate & improve truck turn times

Capture all billable events for accurate and timely billing

Optimize vessel load and discharge across cranes

Optimize container yard moves, save cost and reduce moves

Optimize rail load and discharge processes

Optimize vehicle routing and costs

Analytics for better operational decision making

Optimize vessel stowage planning

Ensure seaworthy loading of vessels

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Container arrives by road/rail transportation and is registered at the terminal.

Container is sorted and stacked at the yard.

Container is unstacked from yard and stowed on ship.

Vessel pilots out of the port, sails across ocean, and pilots into destination port.

Unloaded from ship onto quay crane. Containers move into trans-shipment or import/export storage.

Containers sorted and stacked in the yard.

Containers loaded onto rail/road transport.
Drivers of Revenue Growth

Collaboration Cloud Platform

Conventional TOS

Carriage Solutions

Automated TOS

Add-on Modules

Support

Professional Services

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Changing Revenue Model

Revenue Model Today

Perpetual License Payable Upon Delivery
Support & Maintenance Recurring Annual Fees
Professional Services

Revenue Model Tomorrow

Recurring Revenue Model
Subscription Fees Per User Per Month
Transaction Fees Per Container Move
Navis Market Share Growing

322 Customers globally

- EMEA: 40%
- AM: 35%
- APAC: 25%

### Segment Breakdown

<table>
<thead>
<tr>
<th>Segment</th>
<th>Number</th>
<th>Navis Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Small (1 - 99K TEU)</td>
<td>607</td>
<td>11%</td>
</tr>
<tr>
<td>Small (100K - 250K)</td>
<td>245</td>
<td>24%</td>
</tr>
<tr>
<td>Medium (250K – 1M)</td>
<td>292</td>
<td>40%</td>
</tr>
<tr>
<td>Large (1M – 4M)</td>
<td>131</td>
<td>54%</td>
</tr>
<tr>
<td>Very Large (4M +)</td>
<td>31</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1322</strong></td>
<td></td>
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</table>
• >30% of World Throughput is handled by terminals using Navis TOS
• 50% share of the Packaged TOS Solutions
• #1 Packaged TOS for Automated Terminals
• 1000+ customer users in Navis community
Customers Using Automated TOS

1. Long Beach Container Terminal
2. Lázaro Cárdenas
3. Global Container Terminal
4. Rotterdam World Gateway
5. APMT Maasvlakte II
6. ECT
7. Euromax
8. Antwerp Gateway
9. DP World London Gateway
10. Peel Ports
11. DP World Brisbane
12. VIT
13. Busan Newport
14. Victoria International Container Terminal
15. QQCTI
16. HHLA
17. ADT

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Our Customers

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Stowage Planning

- Market leader in Stowage Planning solutions - used by 12 of top 20 shipping line brands
- Developing automated stowage planning solution
- Connected to XVELA collaboration platform

Blutetracker Fleet Management

- Enables carriers and vessel owners to monitor operational performance
- Compliance solution for upcoming EU/IMO environmental regulations
On Board Loading Computers: Ocean Carriers

(TEU M’s)

MACS3

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Global Supply Chain

COMPLEXITY
“We are... investing massively, in the digital and technology side

—Soren Skou, CEO, Maersk Transport & Logistics
The time is NOW

“...we must remove mind boggling inefficiencies

—Rolf Habben Jansen, CEO, Hapag Lloyd
The time is NOW

“...carriers need to invest in visibility

—Dr. Frank Appel, CEO, Deutsche Post DHL
What leaders have to say

- 57% poor coordination
- 90% Important/very important
- 66% tech adoption slow or “far behind”
As ships get larger, and they continue to show that level of unreliability, it creates an enormous strain on the whole system. This extends all the way to retailers, who cannot rely on the industry to keep their shelves stocked appropriately. The net result is an inefficient operation.

—Rich Ceci, SVP of Technology and Products, Port of Virginia
Any technology that can free this industry from its horrible reliance on EDI, with its armies of people scrubbing bad data, with its missing data, and untimely data, will be useful. Even more important is a new mindset that leads to change.

—Ron Widdows, Chairman, World Shipping Council
What industry insiders have to say

“Everyone benefits from collaboration and data sharing. It starts with the customers and moves to the carriers, then the terminal operators, vendors, freight systems, truck companies, and keeps going down the line. There will be no losers, only winners when the industry comes to terms with the need for collaboration.

—Ron Andreas Mrozek, Sr. Manager Global Marine Operations, Hamburg Sud
What we can’t control… **SHIPPING**

- Demand
- Vessel Size
- Consolidation
- Alliances
€17 BILLION of waste and inefficiency

→ Inefficient houskeeping
→ Stowage planning
→ Berth window planning

→ Sailing Performance
→ Visibility to container location
→ Container and Equipment Management
The airline industry

Cumulative Airline Profit
2010-2016

$34B

$100B

Financial Crisis

2010

2016

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Navis digitalization strategy

XVELA
Open-Platform Data Hub

Terminal operation
- Optimization
- Automation
- Business Intelligence

Carrier operations
- Stowage
- Stability
- Operational Performance
XVELA
Real-Time Visibility
Across the Container Logistics Chain
Closer look at XVELA
The players: Who’s talking?

**Ship’s Crew**
- Chief Mate

**Terminal**
- Ship planners
- Management
- Berth planners
- Operations
- Billing

**Carrier HQ (Vessel Operator)**
- Central planners
- Cargo Execution
- Vessel Operations
- Capacity & Allocations
- Invoicing
- Commercial
- Equipment management
- Network managers
The players: Who’s talking?

Other Terminals on String
- Ship planners
- Management
- Berth planners
- Operations
- Billing

Port Community
- Pilots
- Customs
- Tugs
- Linesmen
- Bunker
- Ship services

Carrier’s Local Office
- Regional planners
- Local agents

Carrier VSA Partners
- Central planners
- Cargo Execution
- Vessel Operations
- Capacity & Allocations
- Invoicing
- Commercial
- Equipment management
- Network managers

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How we communicate today

ISSUES:
- Multiple modes of communication (EDI, email, phone calls, paper plans) with no recorded history of changes or context for changes
- High risk of human error and messages falling through the cracks
- High administrative costs & effort, particularly with maintenance of complex alliances
- Significant impact on effectiveness and efficiency of operations
Disparate data sources

**ISSUES:**
- Multiple systems without real time communication, rudimentary EDI
- Lack of data standardization or poorly implemented standards
- Different view of the world – Ship Files, Terminal Data, Load lists, Hazard details, etc.
- Outdated requirements – e.g. port-based planning vs. terminal-based planning
How XVELA changes the game

What we’re NOT doing:

• Changing your existing tools
• Changing the essential processes of the ocean supply chain
• Changing the players, roles or responsibilities

We’re not really changing anything…

We’re just changing everything.
Shared visibility & collaboration tools

- Available
- Scalable
- Secure
- Continuous Delivery

[Diagram showing available tools: Ship Library, Terminal Library, Ship Viewer, Collaborative Planning, Notification Engine, EDI Engine, Analytics, API Connectivity]
How XVELA changes the game

• A single complete view of what is happening for all stakeholders
• Actionable Visibility
• Real-Time Collaboration

• Better Plans, Better Operations
• Opportunistic Gains & Improved Resource Utilization
• Improved Safety & Compliance
• Lower Administrative Costs
• Better Service to Customers
MAKING GLOBAL TRADE SMARTER, SAFER AND

More sustainable for everyone
Summary

Solid Existing Business

Expanding Software Strategy

Possibilities for Strong Growth
Thank you.

Q&A