

Transforming Ferry/Ro-Ro: A New Era of Digital Innovation



Eric Bird



Maddy Bosch





SmartPort



BROCK solutions

Large Digital Transformations Are What We Do



35+ Years


1000+ Employees

\$250M+ Turnover

Key Take Aways

 Terminal Automation Drives both Port & Shipping Performance

 Operations need to function as a complete Eco-System

 **SmartPort**
ENTERPRISE “Leapfrog” your Digital Transformation

Terminal Automation

Port Performance

- ✓ Decrease Yard Dwell Time
- ✓ Free-Flow at the Gate
- ✓ Trucks In / Out Faster
- ✓ Less Idling / Less Fuel

"SmartPort allows our stakeholders and customers to exchange real-time information on vessel schedules, cargo movements, and port activities, enabling proactive decision-making and enhancing overall port performance."



Carl Coates

ICT Business Relationship Manager



Terminal Automation

Shipping Performance

- ✓ Faster Vessel Turn Times
- ✓ Improved Freight Tracking
- ✓ End-to-End Operational Visibility
- ✓ Smarter Load Management

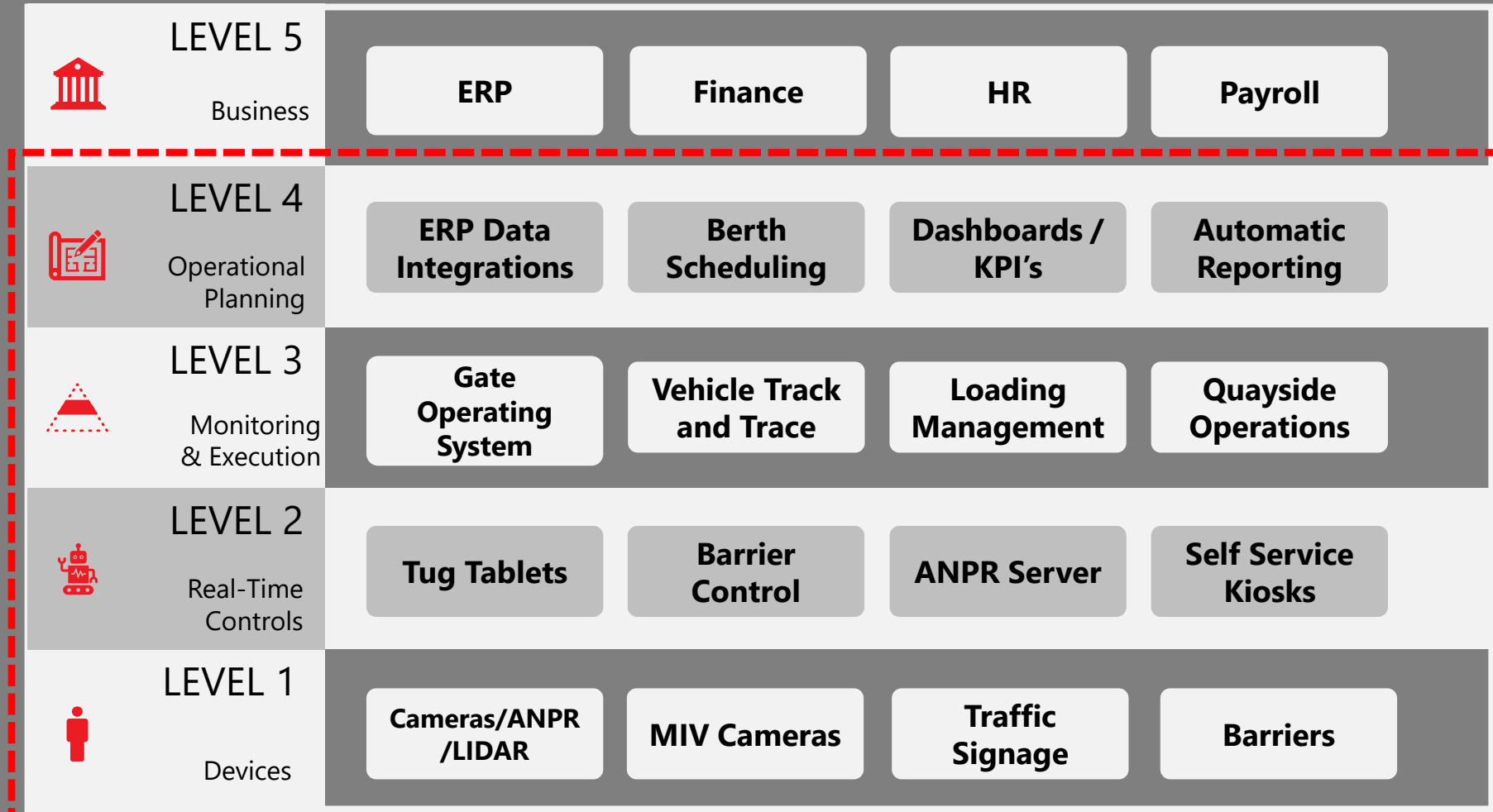
"SmartPort provides a route to a more efficient and digital customer journey providing a better experience for freight and tourist customers."



Gary Andrews
Business Transformation Lead

Overall Turnkey Responsibility

Terminal Automation





FERRY
SHIPPING
SUMMIT 2023



Ferry Port of the Year 2023





SmartPort



Rosslare
Europort



BROCK
solutions

A Proven Solution Designed Specifically for the Ferry Ro-Ro Shipping Industry





SmartPort ENTERPRISE

SmartPort Connect

Booking Systems Integration

Unified Data Model

Central Web Client

Centralized Tracking & Operations


Enterprise BI Tools

Data Sharing & Integrations

Invoicing & Reporting

SmartPort Modules

Berth Scheduling



Gate Operating System



Yard Management

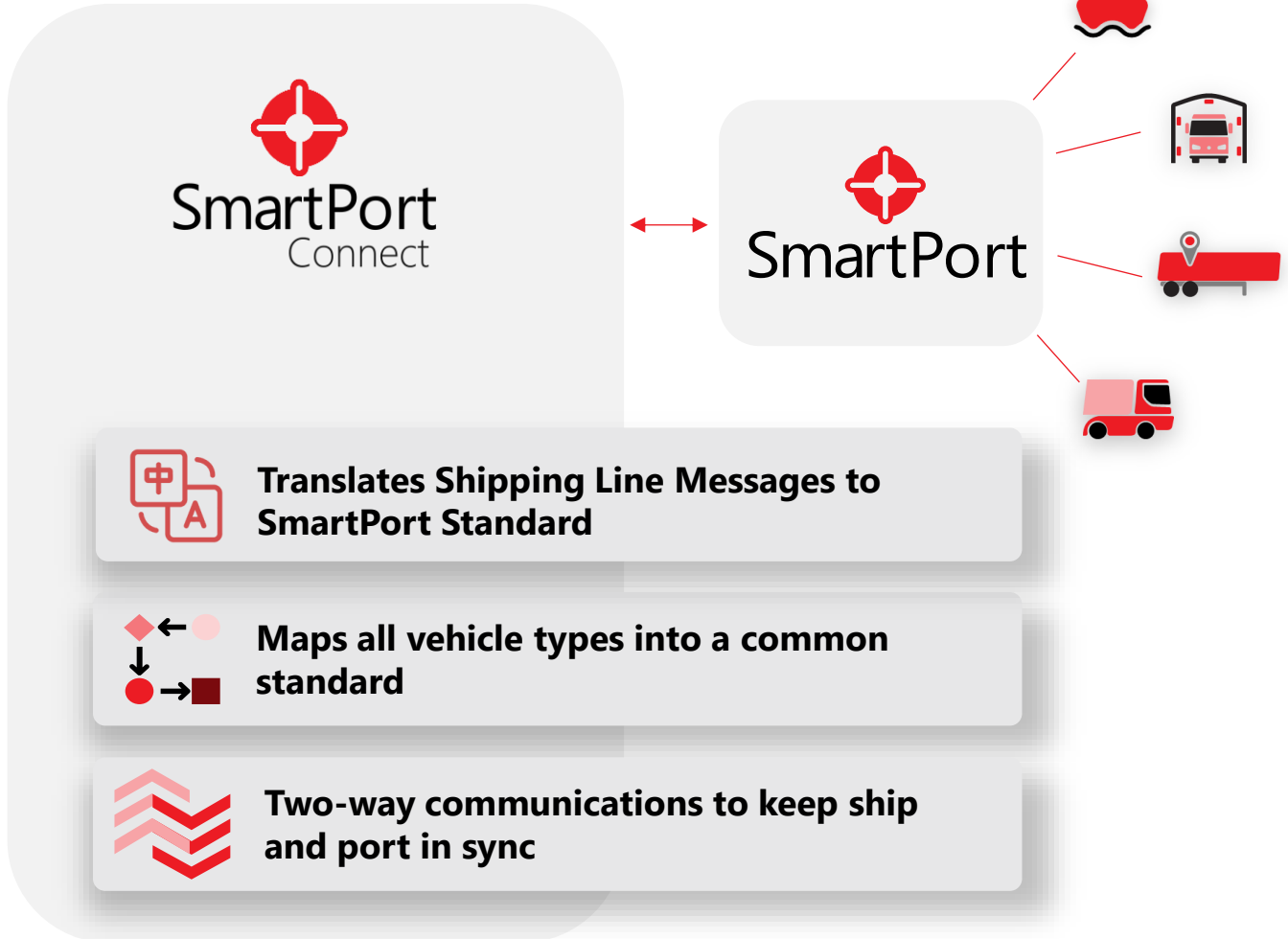


Loading Management



An Enterprise Message Broker

-  **Stena Line**
-  **IRISH FERRIES**
-  **Brittany Ferries**
-  **DFDS**
-  **Finnlines**





Berth Scheduling: Generated and Validated Automatically



Automatically generated



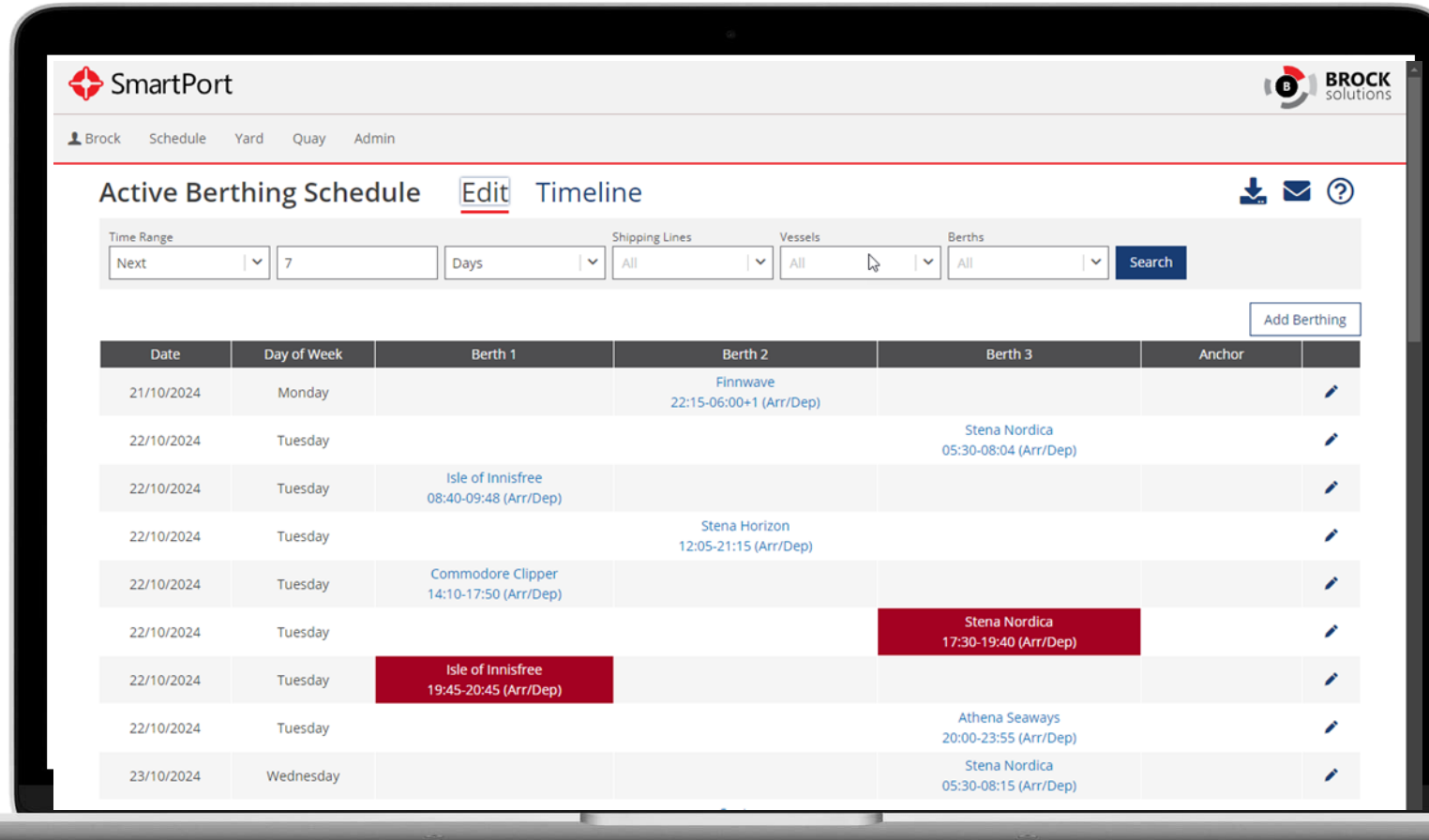
Easy to update
& share



Automatic conflict
validation

Coordinated Schedule Across
6 Shipping Lines in...

Minutes



| Date | Day of Week | Berth 1 | Berth 2 | Berth 3 | Anchor |
|------------|-------------|--|--|---|--------|
| 21/10/2024 | Monday | | Finnwave 22:15-06:00+1 (Arr/Dep) | | |
| 22/10/2024 | Tuesday | | | Stena Nordica 05:30-08:04 (Arr/Dep) | |
| 22/10/2024 | Tuesday | Isle of Innisfree 08:40-09:48 (Arr/Dep) | | | |
| 22/10/2024 | Tuesday | | Stena Horizon 12:05-21:15 (Arr/Dep) | | |
| 22/10/2024 | Tuesday | Commodore Clipper 14:10-17:50 (Arr/Dep) | | | |
| 22/10/2024 | Tuesday | | | Stena Nordica 17:30-19:40 (Arr/Dep) | |
| 22/10/2024 | Tuesday | Isle of Innisfree 19:45-20:45 (Arr/Dep) | | | |
| 22/10/2024 | Tuesday | | | Athena Seaways 20:00-23:55 (Arr/Dep) | |
| 23/10/2024 | Wednesday | | | Stena Nordica 05:30-08:15 (Arr/Dep) | |

Port Pre-Gate: Free-flow Metadata Collection

Measured Information

| Length (m) | Width (m) | Height (m) |
|------------|-----------|------------|
| 18.160 | 2.557 | 4.035 |

Gross Weight (kg)
23300


Location Information

| Last Seen | |
|---------------------|------------------|
| Pickup Drop-Off Hut | 21/10/2024 17:21 |
| Entry | |
| Pickup Drop-Off Hut | 21/10/2024 17:21 |
| Exit | |


Damage Reports

None


Images




📅 21/10/2024 17:13
📍 Weigh In Motion




📅 21/10/2024 17:13
📍 Weigh In Motion




📅 21/10/2024 17:13
📍 Weigh In Motion



📅 21/10/2024 17:13
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📅 21/10/2024 17:13
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📅 21/10/2024 17:13
📍 Weigh In Motion



**ADAPTIVE
RECOGNITION**
an arh company

ABC-123 ANPR and Metadata Collection

 Full Vehicle Weight and Dimension Capture

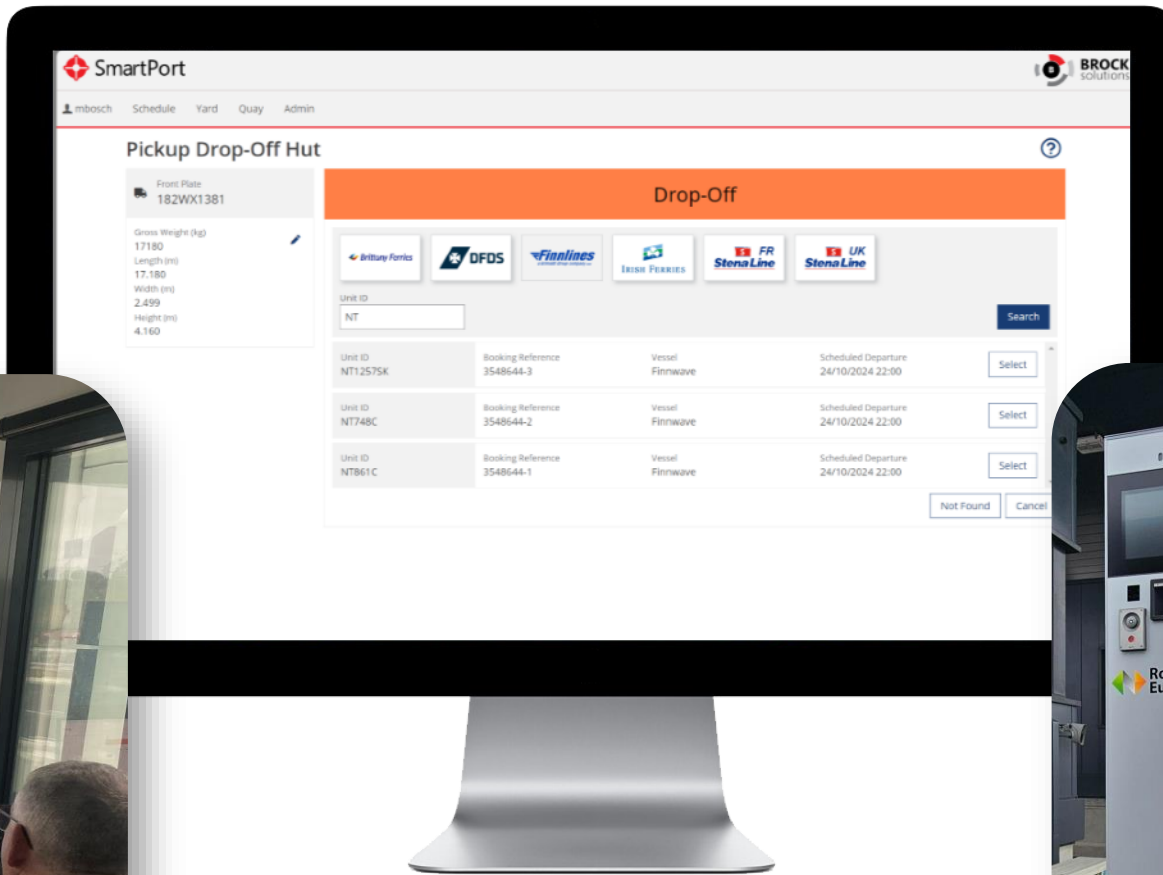
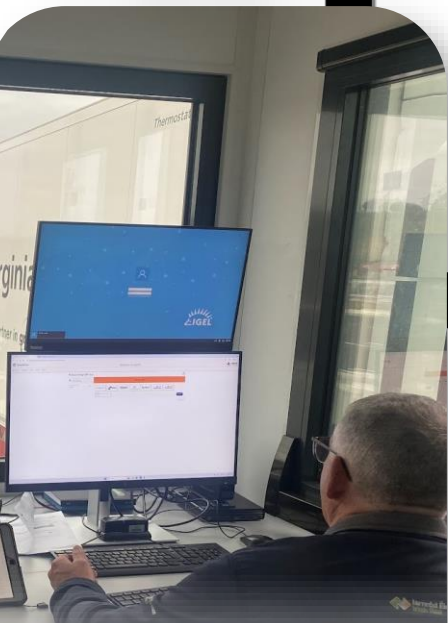
 360° Images for Damage Capture

Free-flow vehicle processing



Port Check-In: A Common and Streamlined Entry

Booth



SmartPort BROCK SOLUTIONS

embosch Schedule Yard Quay Admin

Pickup Drop-Off Hut

Front Plate: 182WX1381

Gross Weight (kg): 17180
Length (m): 17.180
Width (m): 2.459
Height (m): 4.160

Drop-Off

Shipping Lines: Brittany Ferries, DFDS, Finlines, IRISH FERRIES, Stena Line (FR), Stena Line (UK)

UNIT ID:

| Unit ID | Booking Reference | Vessel | Scheduled Departure | Action |
|----------|-------------------|----------|---------------------|---------------------------------------|
| NT12575K | 3548644-3 | Finnwave | 24/10/2024 22:00 | <input type="button" value="Select"/> |
| NT748C | 3548644-2 | Finnwave | 24/10/2024 22:00 | <input type="button" value="Select"/> |
| NT861C | 3548644-1 | Finnwave | 24/10/2024 22:00 | <input type="button" value="Select"/> |

Kiosk



Common-use system



Automatic booking matching

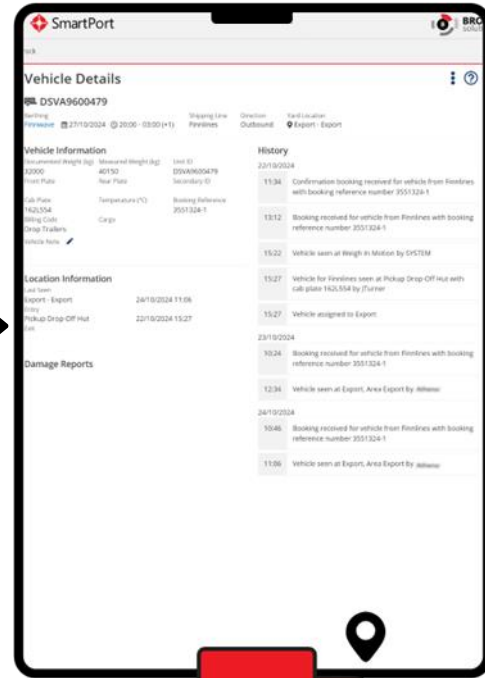
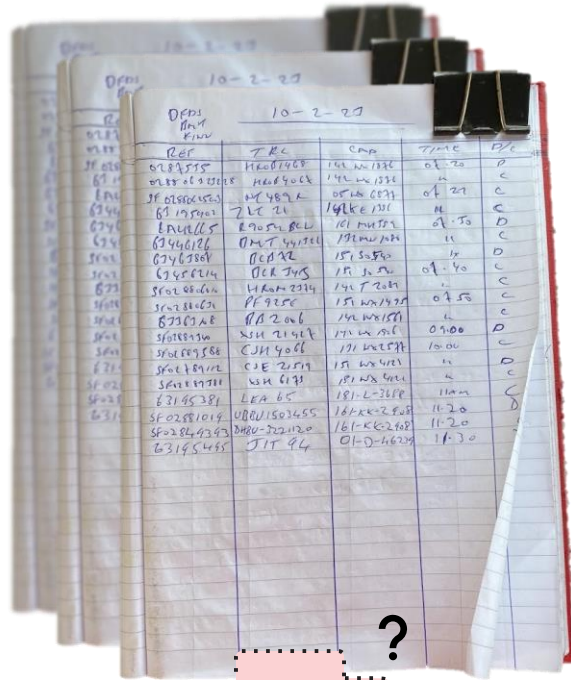


Messaging back to shipping line systems

Accurate information on unit entry for shipping lines and the port



Yard Management: No more Hide and Seek



Up Next:

ADAPTIVE RECOGNITION
an arh company

Tug Mounted OCR Cameras

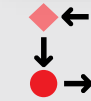
Reduce manual Yard auditing and improve visibility



Digitized yard auditing



Added touch points for vehicles

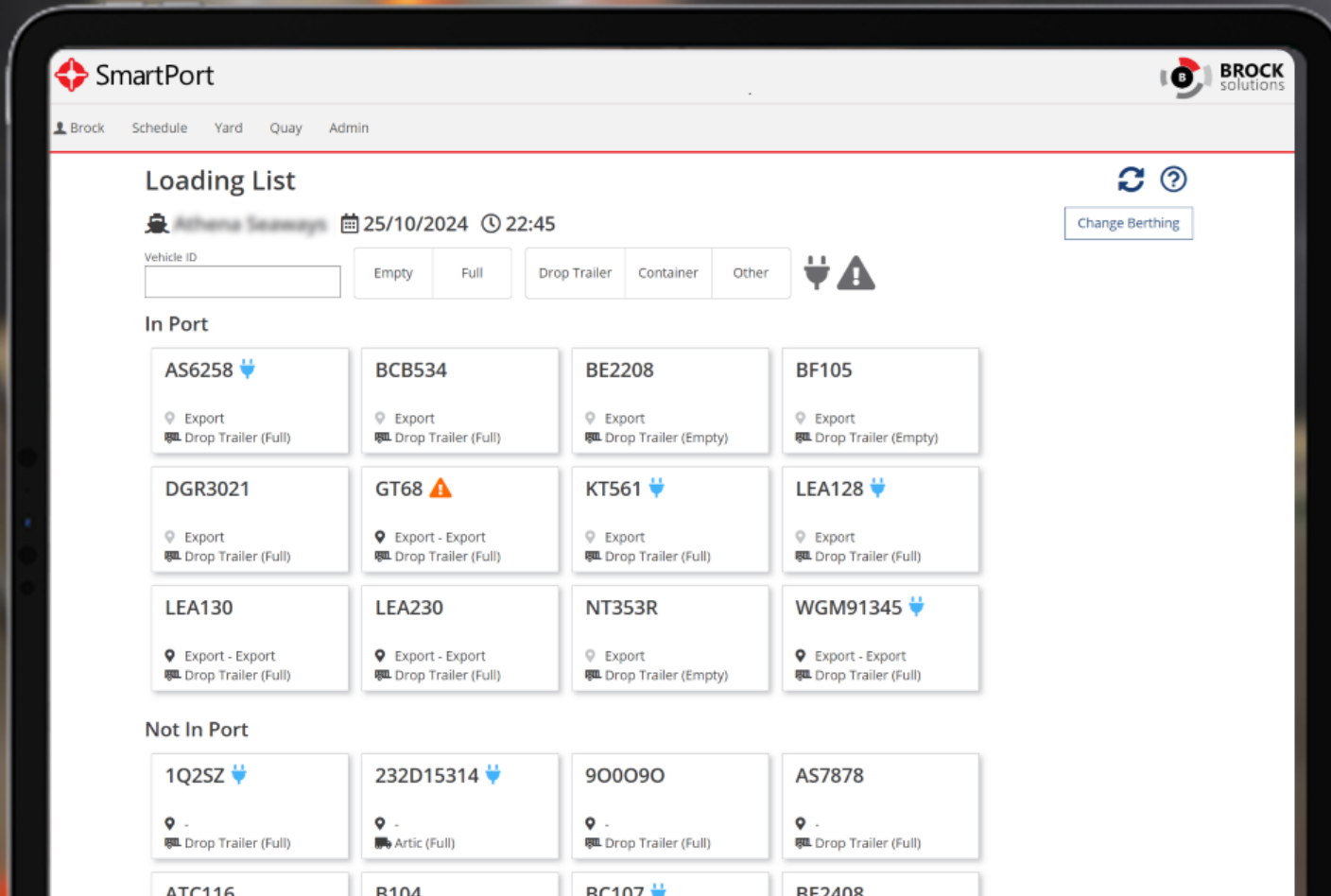


Track vehicle journeys through the port

Accurate yard inventory and dwell time tracking



Loading Management: Simple, Intuitive, Informed



The screenshot shows the SmartPort Loading List interface. At the top, there's a navigation bar with 'SmartPort' and 'BROCK solutions' logos, and a user profile 'Brock'. Below the navigation, the page title is 'Loading List'. There are filters for 'Athens Seaways', date '25/10/2024', and time '22:45'. A 'Change Berthing' button is visible. The interface is divided into 'In Port' and 'Not In Port' sections. Each section contains a grid of vehicle cards with details like ID, status, and actions.

| Vehicle ID | Status | Actions |
|------------|-----------------|----------------------|
| AS6258 | Export | Drop Trailer (Full) |
| BCB534 | Export | Drop Trailer (Full) |
| BE2208 | Export | Drop Trailer (Empty) |
| BF105 | Export | Drop Trailer (Empty) |
| DGR3021 | Export | Drop Trailer (Full) |
| GT68 | Export - Export | Drop Trailer (Full) |
| KT561 | Export | Drop Trailer (Full) |
| LEA128 | Export | Drop Trailer (Full) |
| LEA130 | Export - Export | Drop Trailer (Full) |
| LEA230 | Export - Export | Drop Trailer (Full) |
| NT353R | Export | Drop Trailer (Empty) |
| WGM91345 | Export - Export | Drop Trailer (Full) |
| 1Q2SZ | - | Drop Trailer (Full) |
| 232D15314 | - | Artic (Full) |
| 900090 | - | Drop Trailer (Full) |
| AS7878 | - | Drop Trailer (Full) |
| ATC116 | - | - |
| B104 | - | - |
| BC107 | - | - |
| BE2408 | - | - |



All information readily accessible



Intuitive & common-use interface

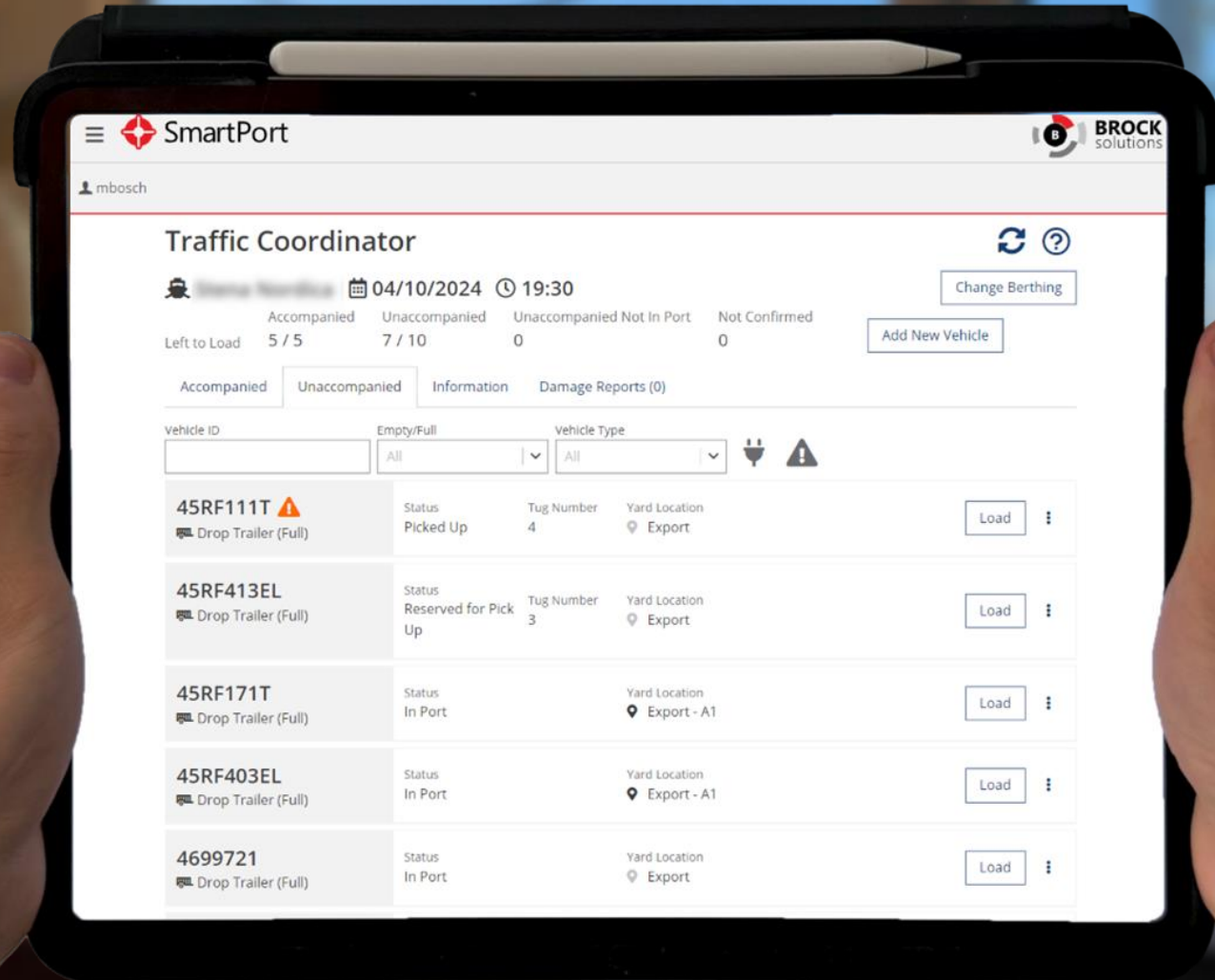


Loading lists reflect real time updates

More efficient and accurate loading processes with higher visibility for everyone



Loading Management: A Central View of Operations



The tablet displays the SmartPort Traffic Coordinator interface. At the top, it shows the user 'mbosch' and the date/time '04/10/2024 19:30'. Below this, there are statistics for 'Left to Load' (5/5 Accompanied, 7/10 Unaccompanied, 0 Unaccompanied Not In Port, 0 Not Confirmed) and buttons for 'Change Berthing' and 'Add New Vehicle'. The main section is a table of vehicles with columns for Vehicle ID, Empty/Full, Vehicle Type, Status, Tug Number, and Yard Location. Each row has a 'Load' button and a menu icon.

| Vehicle ID | Empty/Full | Vehicle Type | Status | Tug Number | Yard Location | Actions |
|----------------------------------|------------|--------------|----------------------|------------|---------------|---------|
| 45RF111T Drop Trailer (Full) | All | All | Picked Up | 4 | Export | Load |
| 45RF413EL Drop Trailer (Full) | All | All | Reserved for Pick Up | 3 | Export | Load |
| 45RF171T Drop Trailer (Full) | All | All | In Port | | Export - A1 | Load |
| 45RF403EL Drop Trailer (Full) | All | All | In Port | | Export - A1 | Load |
| 4699721 Drop Trailer (Full) | All | All | In Port | | Export | Load |

 **Visibility on loading progress**

 **Automatic operational updates**

 **Authoritative loading information**

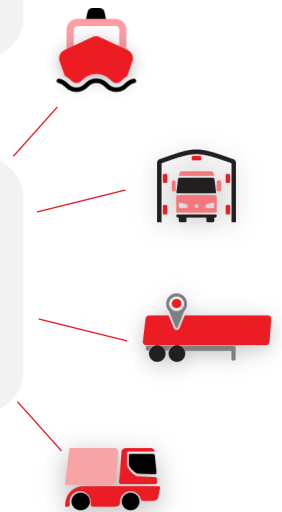
**Increase
in On-time
Sailing Departures**







Unified Enterprise Layer




 **Central Web Client**
Access Anywhere

 **Unified Data Model**
Break Down Data Silos



-  **Centralized Operations**
-  **Data access management**
-  **Accessible from anywhere**
-  **Simplified invoice generation**
-  **Reporting & insights**
-  **Digitized damage reporting**

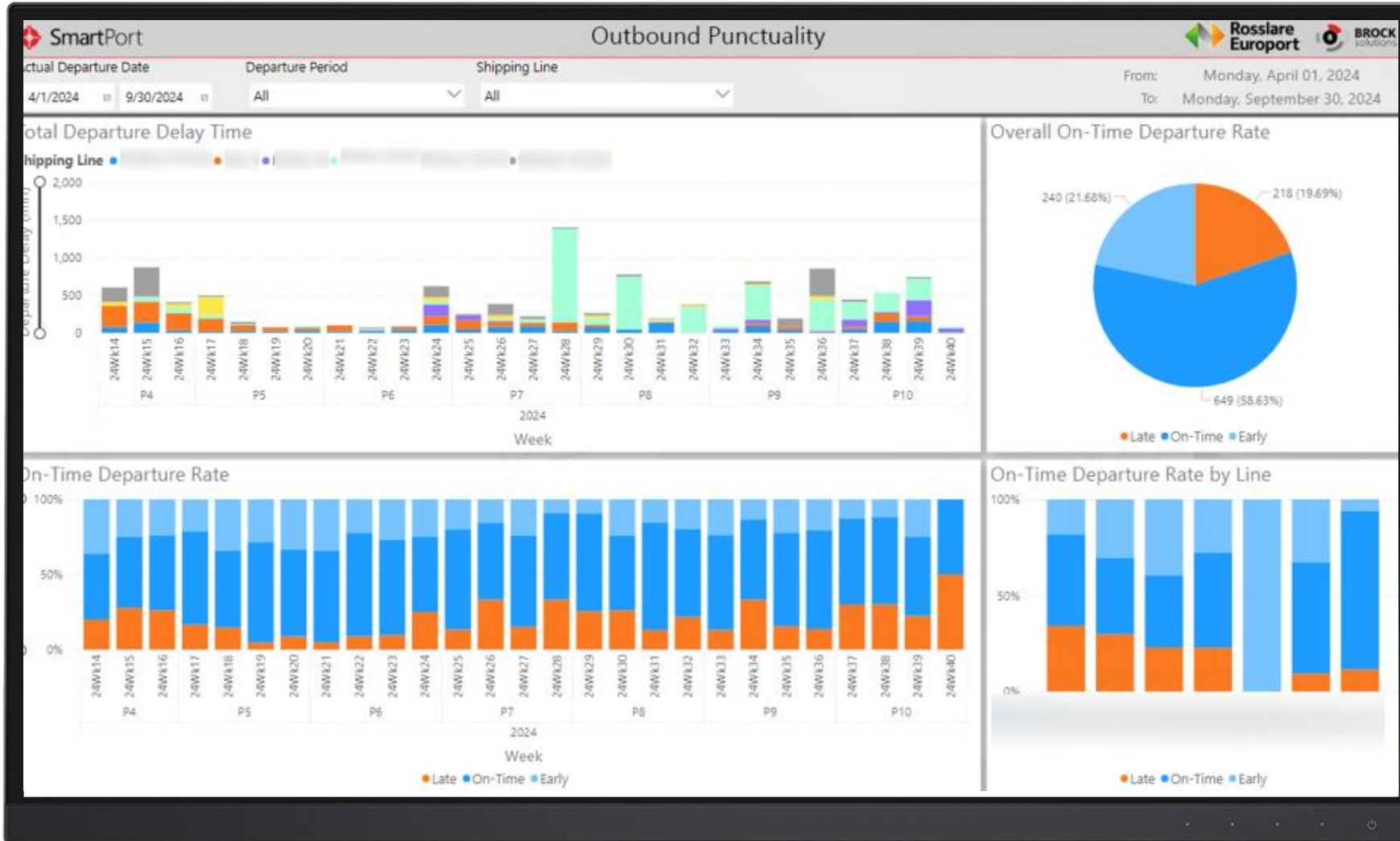
“SmartPort has provided me with visibility to the loading process without needing to be at the Port”

Operations Supervisor 



SmartPort ENTERPRISE

Data-Driven Decision Making



Flexible reporting



PowerBI Integration



Single System for all Data Access

Breaking down data silo's by connecting solutions across operations



**Rosslare
Europort**

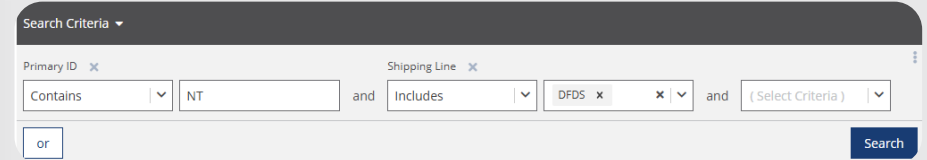


Integration with Revenue for PBN Verification

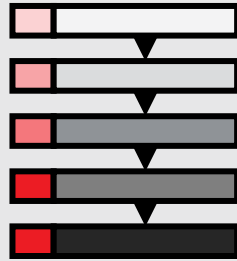


Integrations with Hauliers

Expanding visibility across the port community



Powerful Advanced Search System



Complete Vehicle Traceability



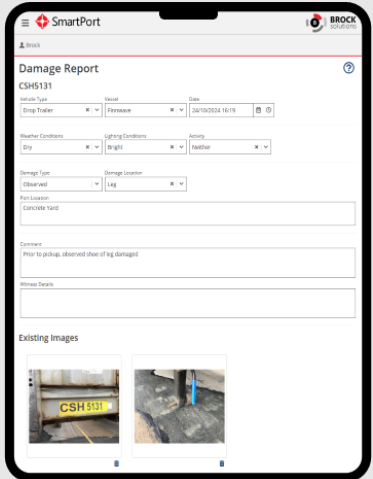
SmartPort



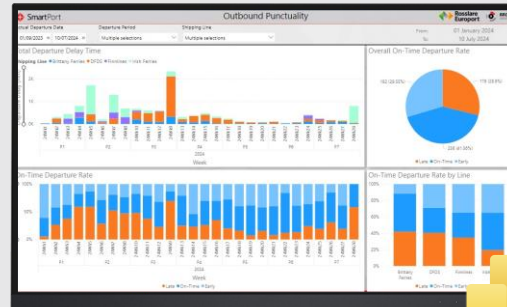
Tug Fleet Mgmt



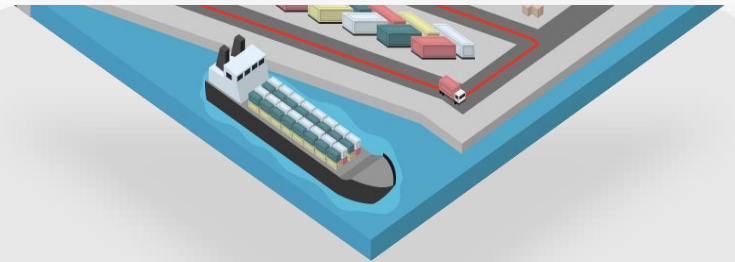
Tug Safety Checks



Damage Reporting



Quayside Ops Monitoring





SmartPort




BROCK
solutions

How Brock Solutions is Uniquely Positioned



Key Take Aways

 Terminal Automation Drives both Port & Shipping Performance

 Operations need to function as a complete Eco-System

 **SmartPort**
ENTERPRISE “Leapfrog” your Digital Transformation

“Leapfrog” your Digital Transformation

35+ Years of Experience with Real-Time Operations

Overall Turnkey Responsibility



Tailored Solutions to Customers Operations

Modular Deployment



How do you eat a digital elephant...

A large, colorful elephant is constructed from a dense grid of small, multi-colored pixels (red, green, blue, purple, yellow). The elephant's trunk is thick and tapers towards the tip. The background is a dark blue space filled with falling binary code (0s and 1s) in various colors (red, blue, white). In the bottom right corner, a woman in a dark suit is sitting at a desk, viewed from the side, looking towards the digital elephant. The overall scene is a metaphor for digital data and its consumption.

How do you eat a digital elephant...
1 "BYTE" at a time

Thank You!



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