



Intelligent Hinterland Integration into Ports and Logistics Hubs

July 2nd - 4th, 2024

What **Ports/Hubs** Want from the Hinterland



More transactions



Flattening of the curve



Min. truck turn-around time



Less incoming trucks



Less Carbon Footprint



Better Yard Capacity

What the **Hinterland** Wants from the Ports/Hubs



High Visibility



Flexible arrival



Synchronization



Less Carbon Footprint

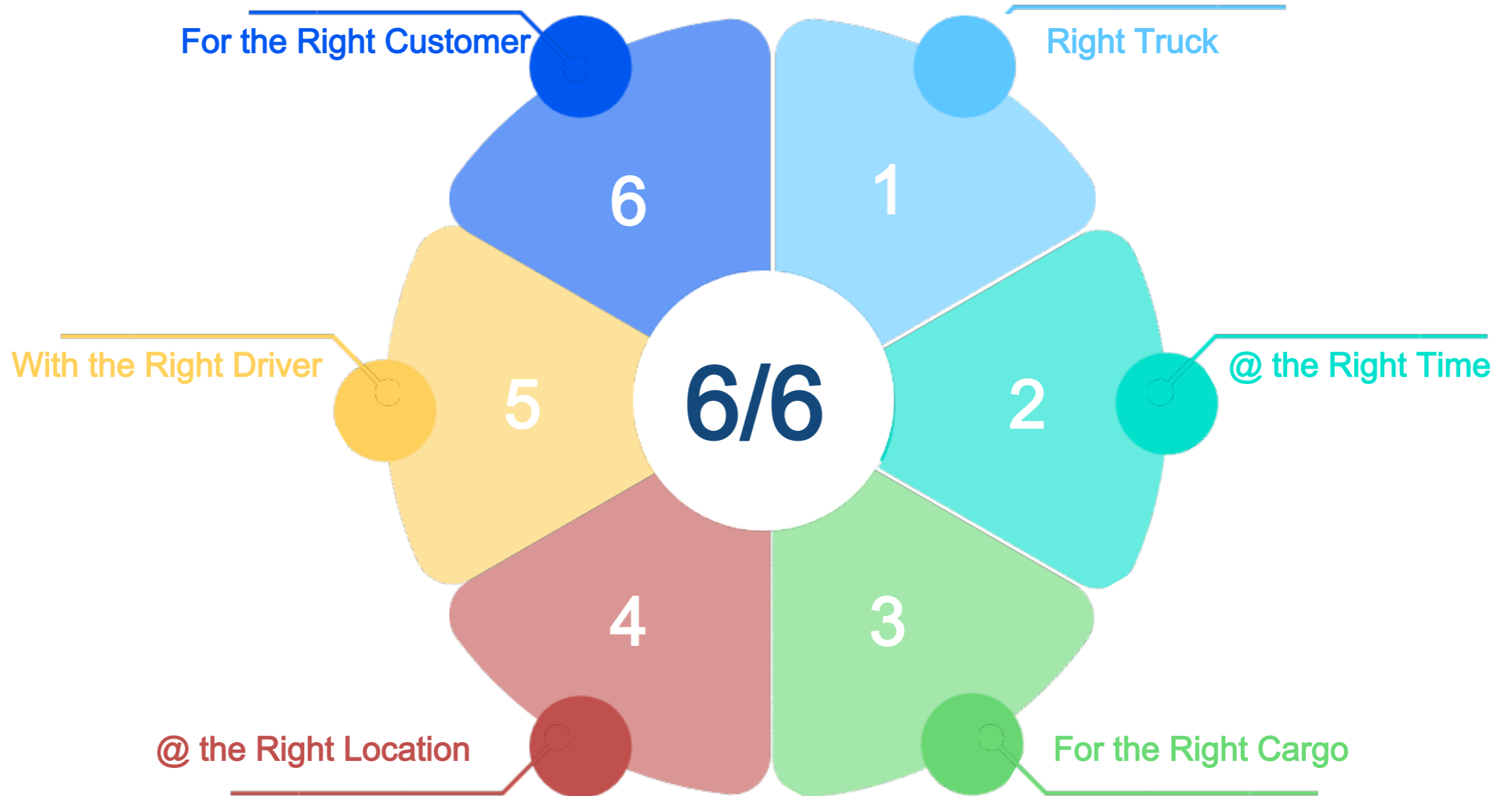


Min. truck turn-around time



No Waiting

What Ports/Hubs Want from the Hinterland



Hinterland Cycle

Basics

Assume "No Friction":

- Info before arrival of trucks
- Booking/appointment system
- Digitalize pre-gate and out-gate processes
- Install eGates, auto-Weighing
- Capacity management of everything –
MAXIMIZE
- Operate at max efficiency ... all the time

Friction is:

- Teamsters
- Labor Unions
- Trucking unions
- Equipment shifting
- Equipment maintenance
- Traffic outside the port
- Capacity Management at adjacent ports

Hinterland Cycle Efficiency by Mode

Maximize Port/Hub Capacity



+25%

Standard Booking

- Operate at your own risk of congestion
- Deal with truck waiting times, outside the port
- High truck dwell times
- More delay at the gate
- Slow port gates
- Negative environmental effect
- Higher hinterland transport costs



+70%

Truck Appointment

- Digitalizes a wide part of the Hinterland cycle
- Very small Infrastructure investment
- Prone to port Friction
- Pre-determined capacity = max capacity
- Open slots are lost capacity
- Data analytics yield negligible enhancement
- Port specific, negative optimization of Logistics for multiple ports in one zone



++90%

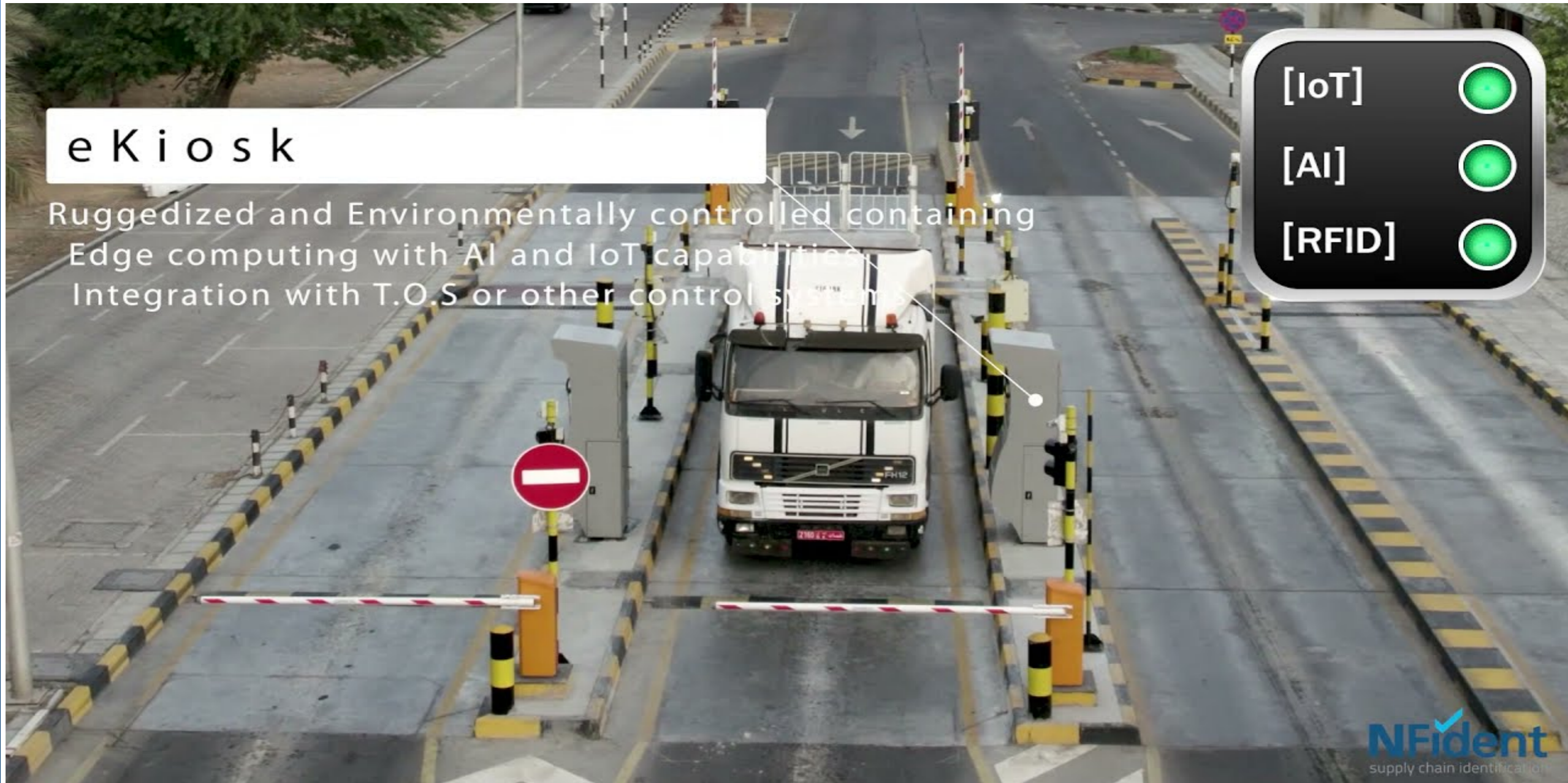
Scheduling Appt System

- Step up from the Appointment System
- Mutes Friction effects
- Operate at max capacity, or even higher
- Apply Data analytics to reach extreme optimization
- Close coupling with Yard and Berth cycles
- Requires minor infrastructure investment
- Can be a Port Authority project to add an extra layer of logistics optimization

eKiosk

Ruggedized and Environmentally controlled containing
 Edge computing with AI and IoT capabilities
 Integration with T.O.S or other control systems

- [IoT]
- [AI]
- [RFID]



Tools & Technology

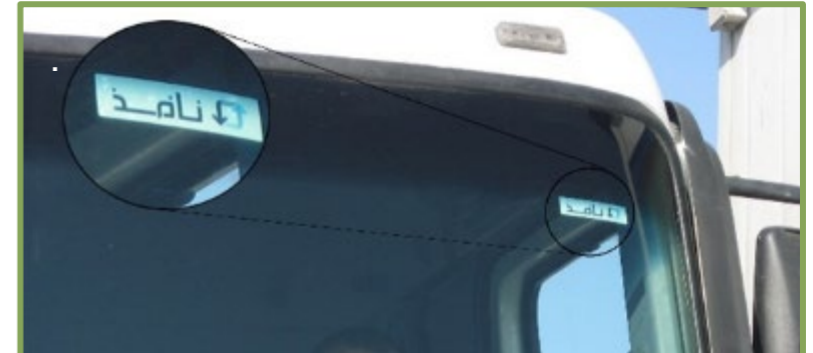
IoT, D/L, Edge Tech



eSeals
Secure Cargo on the Move



eID Cards
Long Range For Truck drivers and Access Mgmt



Truck eID
Secure RFID tags, Trailer/Chassis eSeals



Deep Vision
Deep Learning Edge Technology for Traffic Sensing




Weigh In Motion
Axle Load Mgmt, Advanced Vehicle Sensing



Internet of Things
Continuous Development into the Future

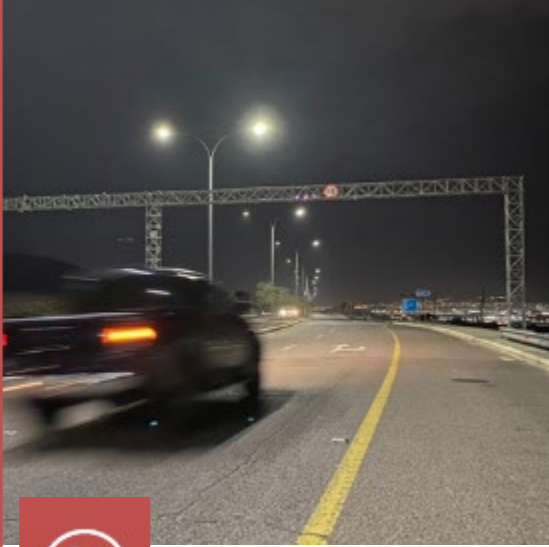
Tools & Technology

IoT, D/L, Edge Tech




iGates
Centrally controlled

iGates are manufactured and delivered by NFIDENT, a wholly owned factory/subsidiary of Nafith




iPortals
Sense everything

iPortals Categorize vehicles, streamlined monitoring, using Deep Learning/Vision



CC Centers
Control & Monitor

Command and Controls Center that covers all logistics events and interventions



Logistics Systems
NFlow, NCheck, NStar

Platforms are web, mobile, GIS, Data Analytics, Dashboards, accessible within a centralized entry point

What is in it for Ports/Hubs

Cost / Benefit

- Supports ports, marshalling yards, free zones, special economic zones
 - Containers, General Cargo, RoRo, Chemicals
 - Deep Integration of hinterland with your operations, TOS, other systems, up to the iGate
 - Trucks, trains and all other vehicles
 - Seamless weighing of cargo (LSWIM, Weighbridge)
 - Hazmat detection and management
 - Cut down truck turn-around time
 - Optimized hinterland access
- One Vendor
 - No licensing costs
 - No hidden costs
 - No changes costs
 - SaaS Model
 - High availability
 - Max redundancy
 - Grows with you
 - Changes with you

Thank You
Please visit our Booth!

NFident

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Virtual Reality Tour of
NFident iGates

