

Improving Inbound Logistics at
Fuels Terminals in the Age of Covid

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Loading Process at Fuels Terminals

Workflow

CUSTOMER



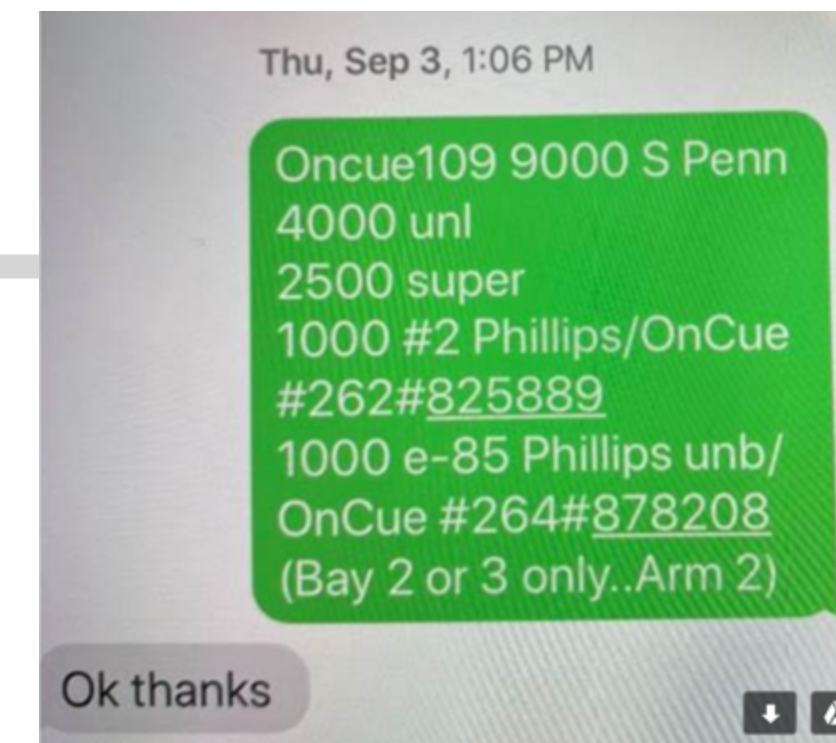
- Provides tank inventory levels and forecast

CARRIER DISPATCHES



- Reviews inventory levels and expected demand
- Creates orders
- Dispatches orders to available drivers

DRIVER LOADS AT TERMINAL



- Enters order data - including carrier, customer and account number, ship-to, vehicle/trailer, products, quantities, compartments
- Load
- Pull over to get BOL

Challenges

- No visibility into allocation data causes delays on site
- No visibility into wait times at terminals

- Takes time to enter order
- Manual entry is error prone
- Requires staff assistance
- "Trailer surfing" to avoid invalid certifications
- "Allocation stealing" if no allocation available
- Paper BOL further delays trucks from leaving
- Long lines outside on city streets during peak hours

Impact on Terminals

15-18 MINS

Gate-to-gate time

1+ HRS

Waiting outside of facility at peak hour

6.7 ERRORS

Driver data entry errors per 10,000 loads

1-3+ MINS

Order entry time under canopy

5.5%+

Throughput lost to driver order entry time

1+ FTE'S

Handling issues, rejections, BOLs, paperwork

\$230K+

Net profit lost for 150 loads/day terminal

\$60K +

Admin/FTE cost of paper BOLs, cancelled orders, re-bills, invoice corrections per terminal

Impact on Carriers

15-18 MINS

Gate-to-gate time

3-5+ MINS

Delays at terminal for data entry and BOL collection

1+ HRS

Waiting outside of facility at peak hour

NO

Visibility into customer allocations

NO

Visibility into terminal wait times

6.7

Driver data entry errors per 10,000 loads

4+%

Reduced fleet utilization

5+ LOADS

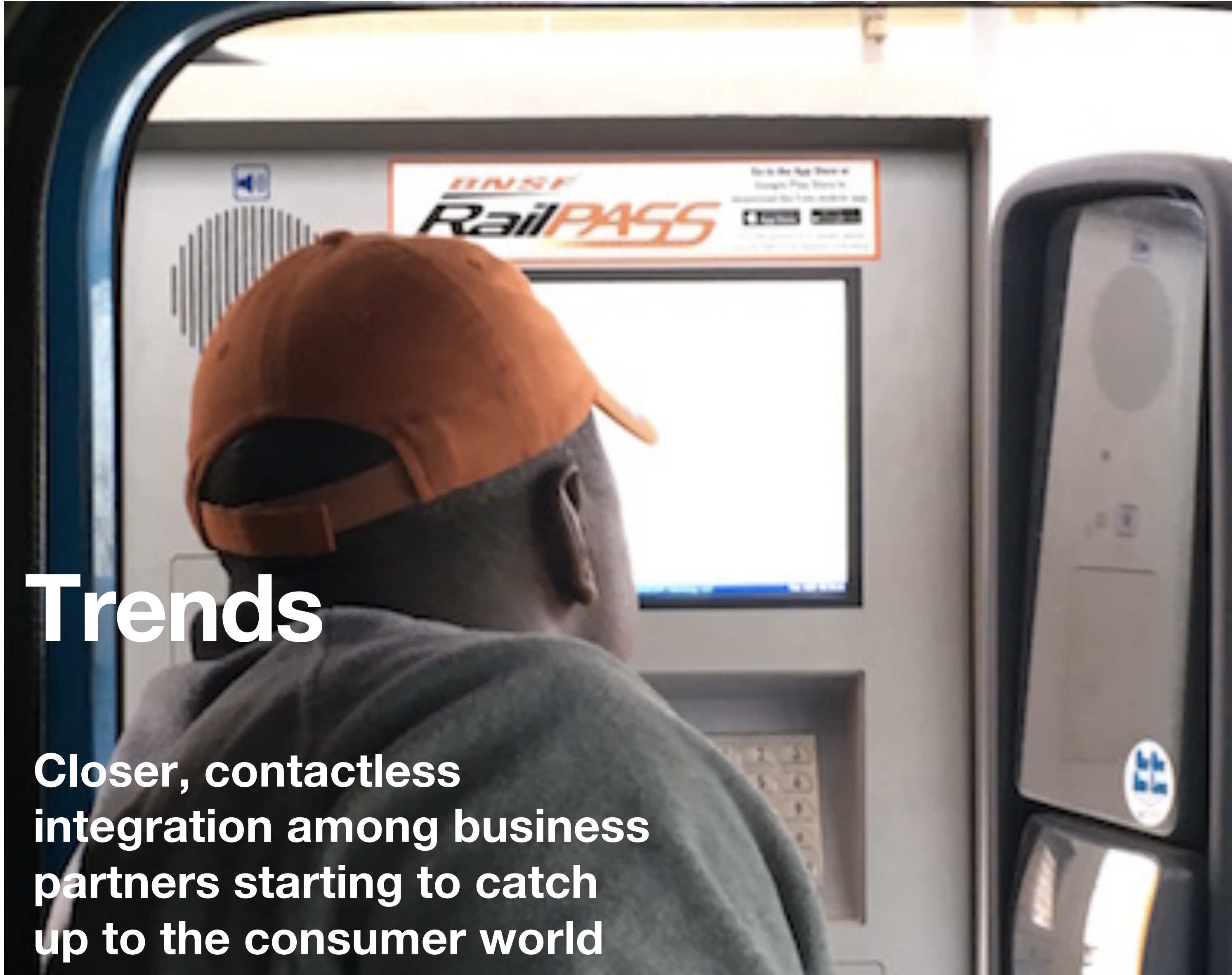
Turned away due to allocation, equipment, driver authorizations

3-7 DAYS

Delays to invoice with paper-based BOL and delivery ticket

Trends

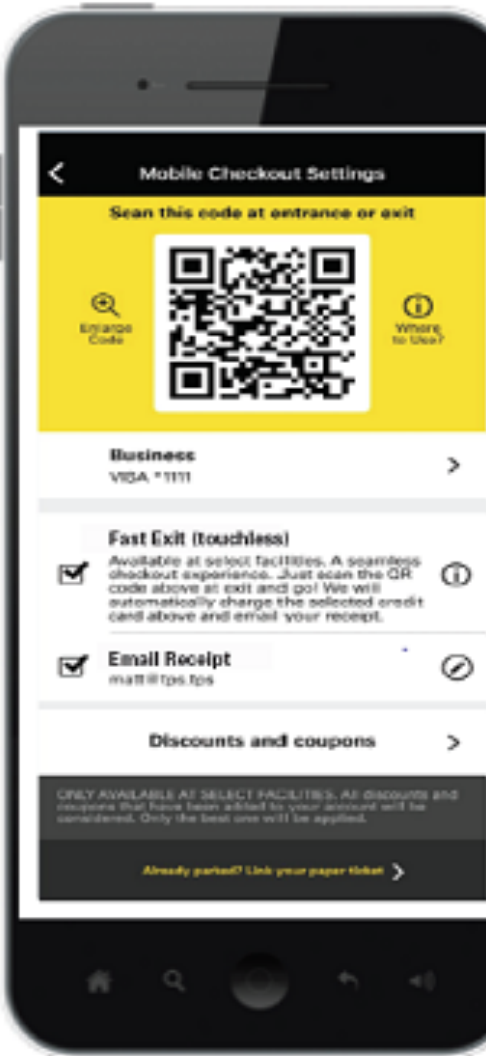
Closer, contactless integration among business partners starting to catch up to the consumer world



Swipe up for Mobile Checkout on home screen

Add payment method and check box to enable Fast Exit

Pro Tip: Enable email receipt, for a completely touchless experience

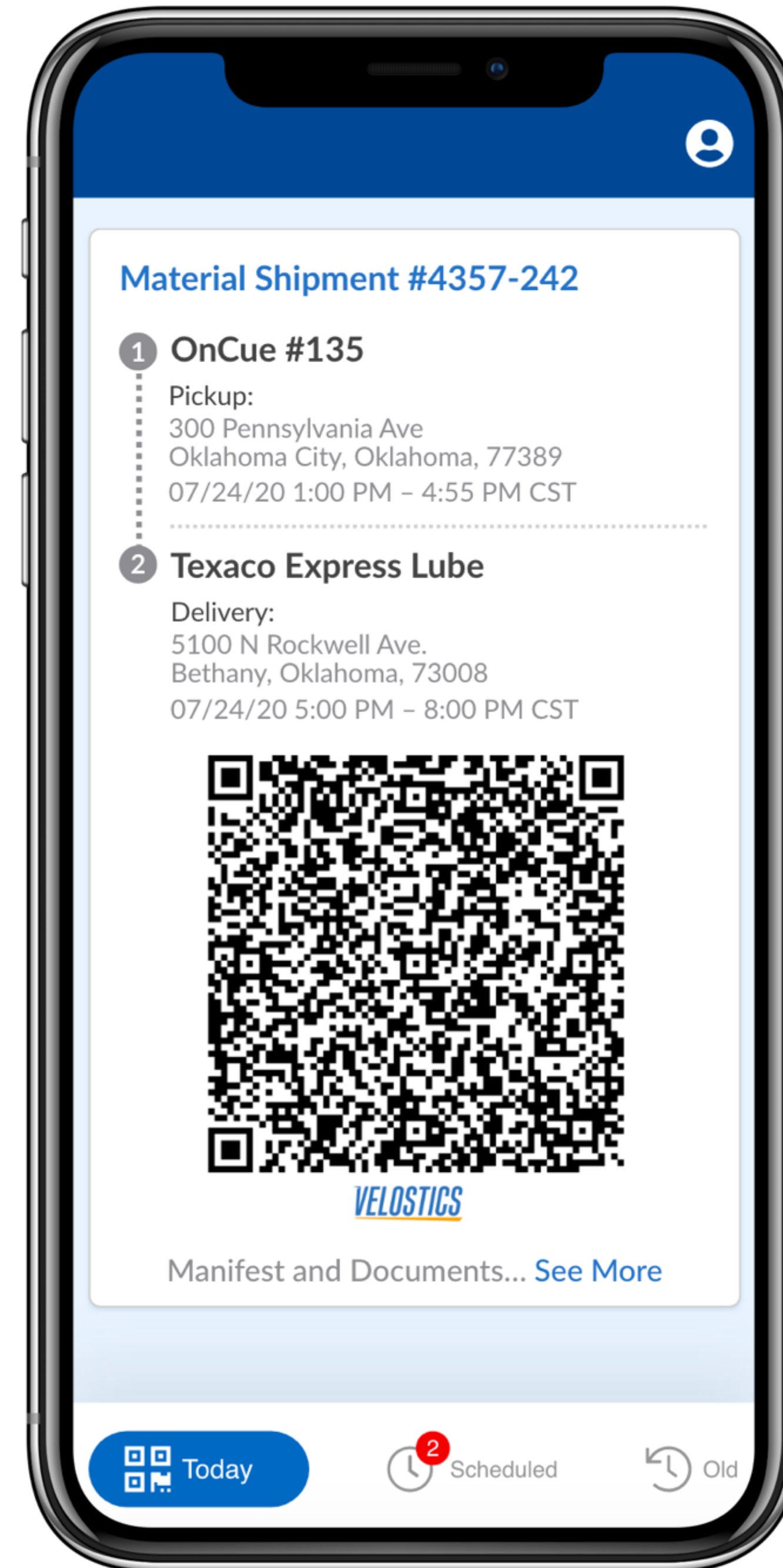




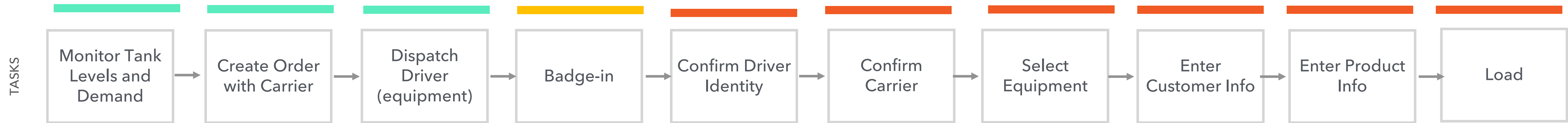
Boarding Pass Experience for Terminals

Trucks arriving for loading and unloading at terminals can get loaded faster with QR codes. The same experience when boarding flights, now at a facility near you.

Velostics Pass QR code contains all information to create order instantaneously and contactlessly.



Scheduling and Executing Loads - Data Entry



* Under Rack

* Handled by TMS - (ex. DTN, TopTech)

* Wizard interface with steps and entry to select and enter up to **14 header elements and 6 per line item**:

- Driver info and passcode

- Carrier, including carrier, truck, trailer numbers

- Customer info, including BillTo, ShipTo, destination, PO, order number, contract

- Line items, including product codes, volumes, compartments

PIDX for Terminal Orders

XML Data	Used (filter on Blanks to see example XML)	Descriptions
<?xml version="1.0" encoding="UTF-8"?>	XMLHeader	
<!--Sample XML file generated by XMLSpy v2012 rel. 2 sp1 (http://www.altova.com)-->	XMLHeader	
<pidx:PIDXAuthRequest pidx:MajorVersion="05" pidx:MinorVersion="01" pidx:FixVersion="00" xsi:schemaLocation="http://www.pidx.org/schema/ds/v5.01	XMLHeader	
Repeats <pidx:AuthRequests>	XMLBeginSection	
<pidx:AuthParties>	XMLBeginSection	Authorization Parties
<pidx:SellerNum>001</pidx:SellerNum>	Required	XYZ Oil Company
<pidx:FinalShipper>001</pidx:FinalShipper>	Required	XYZ Oil Company - Last
<pidx:Consignee>12345678</pidx:Consignee>	Required	ABC Distribution Com
<pidx:AuthSequence>1</pidx:AuthSequence>	1	Required field which is
</pidx:AuthParties>	XMLEndSection	
<pidx:AuthTransport>	XMLBeginSection	Carrier/MOT Related D
<pidx:Company>	XMLBeginSection	
<pidx:PartnerName>CYW Trucking</pidx:PartnerName>	Optional - recommended	CYW Trucking
<pidx:PartnerIdentifierString</pidx:PartnerIdentifier>	Optional - recommended	Terminal Haulier ID cou
<pidx:AgencyString</pidx:Agency>	Not Required Send in E	Not Required Send in E
<pidx:ContactNameString</pidx:ContactName>	Not Required Send in E	Not Required Send in E
<pidx:ContactNumberString</pidx:ContactNumber>	Not Required Send in E	Not Required Send in E
<pidx:ContactEmailString</pidx:ContactEmail>	Not Required Send in E	Not Required Send in E
<pidx:AddressLineString</pidx:AddressLine>	Not Required Send in E	Not Required Send in E
<pidx:CityNameString</pidx:CityName>	Not Required Send in E	Not Required Send in E
<pidx:StateOrProvinceString</pidx:StateOrProvince>	Not Required Send in E	Not Required Send in E
<pidx:PostalCodeString</pidx:PostalCode>	Not Required Send in E	Not Required Send in E
<pidx:PostalCountryString</pidx:PostalCountry>	Not Required Send in E	Not Required Send in E
<pidx:CountyString</pidx:County>	Not Required Send in E	Not Required Send in E
<pidx:URLString</pidx:URL>	Not Required Send in E	Not Required Send in E
<pidx:TransportSecondaryIdentifier>	If Additional Haulier Typ	If Additional Haulier Typ
<pidx:TransportIdentifierType>TerminalHaulierD</pidx:TransportIdentifierType>	If Additional Haulier Typ	If Additional Haulier Typ
<pidx:TransportIdentifier>000001</pidx:TransportIdentifier>	If Additional Haulier Typ	If Additional Haulier Typ
</pidx:TransportSecondaryIdentifier>		
</pidx:Company>	XMLEndSection	
<pidx:Agent>	XMLBeginSection	Agent/Driver
<pidx:DriverLicense>ABC123</pidx:DriverLicense>	Optional-Recommended	Driver License no
<pidx:DriverIdentifier</pidx:DriverIdentifier>	Optional-Recommended	Terminal Assigned Driv
<pidx:DriverCardNo</pidx:DriverCardNo>	Optional-Recommended	Account Driver Picking
<pidx:DriverName>SMITH</pidx:DriverName>	Optional-Recommended	Driver Name - SMITH
</pidx:Agent>	XMLEndSection	
<pidx:MOInfo>	XMLBeginSection	
<pidx:ModeOfTransport>	XMLBeginSection	
<pidx:MotType>Truck</pidx:MotType>	Required	
<pidx:MotSubType>Truck</pidx:MotSubType>		Not Used
<pidx:SealStringString</pidx:SealString>		Not used
<pidx:Engine>	XMLBeginSection	
<pidx:TpuIdentifierCardString</pidx:TpuIDCard>		
<pidx:TpuTypeString</pidx:TpuType>		
<pidx:TpuLicenseString</pidx:TpuLicense>	Optional	License Plate #
<pidx:EngineSecondaryIdentifier>		Fill in Any other Engine
<pidx:EngineIdentifierType>PartnerEngineD</pidx:EngineIdentifierType>		Currently not use in Ex
<pidx:EngineIdentifierText</pidx:EngineIdentifier>		
</pidx:EngineSecondaryIdentifier>		
</pidx:Engine>	XMLEndSection	
</pidx:ModeOfTransport>	XMLEndSection	
<pidx:ContainerSize>	XMLBeginSection	
<pidx:Measurement>	XMLBeginSection	
<pidx:MeasurementType>Ordered</pidx:MeasurementType>	Optional Recommended	Fill in Sum of Containe
<pidx:MeasurementQualifier>Standard</pidx:MeasurementQualifier>	Optional Recommended	Standard - 15/60 Degre
<pidx:UnitQualifier>Volume</pidx:UnitQualifier>	Optional Recommended	Volume
<pidx:Quantity>34000</pidx:Quantity>	Optional Recommended	
<pidx:Unit>L</pidx:Unit>	Optional Recommended	Liters
</pidx:Measurement>	XMLEndSection	

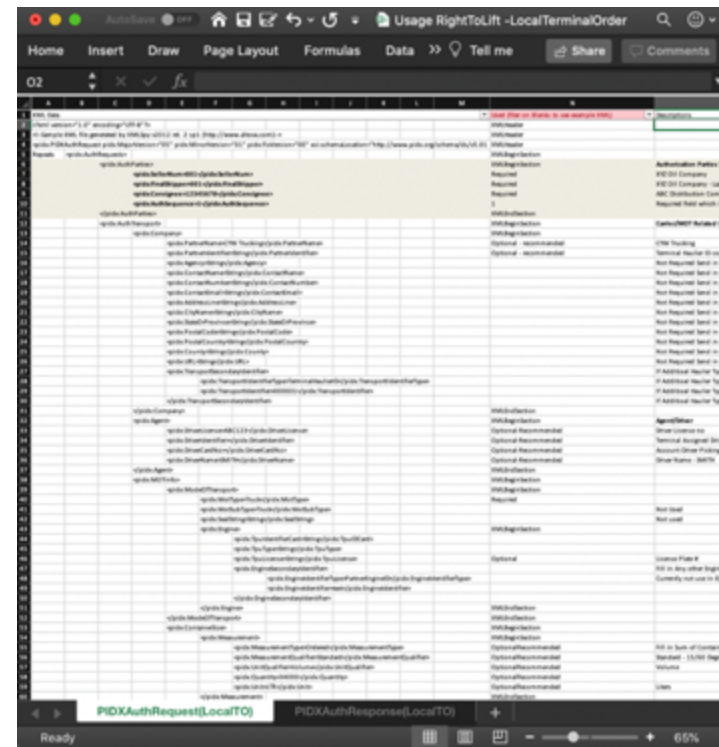
Covers:

- Business partners
- Products

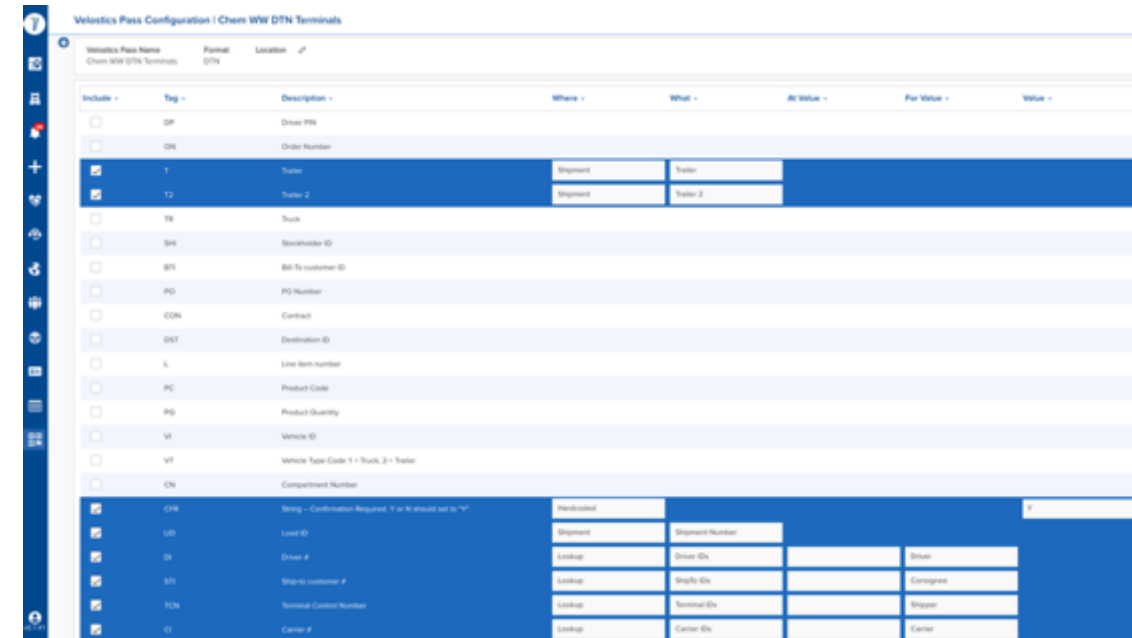
Does not cover:

- Equipment
- Does not include IDs and numbers that terminal understands

How do we support PIDX?



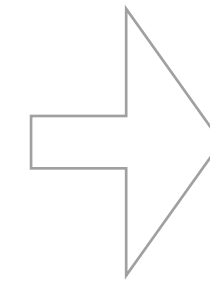
Receive PIDX order
Carrier TMS



Merge order with data from terminal management system (TMS) - terminal

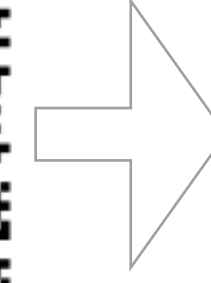
Tie order and shipment data to QR generator based on location and supported format

Enrich with additional fields - end customer, ship-to, channel, etc.



Generate QR code with simplified code to save space

Share with drivers via text or app



Scan QR code at gate

Identify driver

Create order



Push order to TMS

Driver confirms order under rack

Load and go!

Velostics: Loading Flow for Terminals



Benefits

- Throughput increase (1+ minutes per truck)
- Error reduction
- Contactless check-In
- Driver and equipment certification checks at dispatch
- Supports existing flow for incremental adoption

About Us



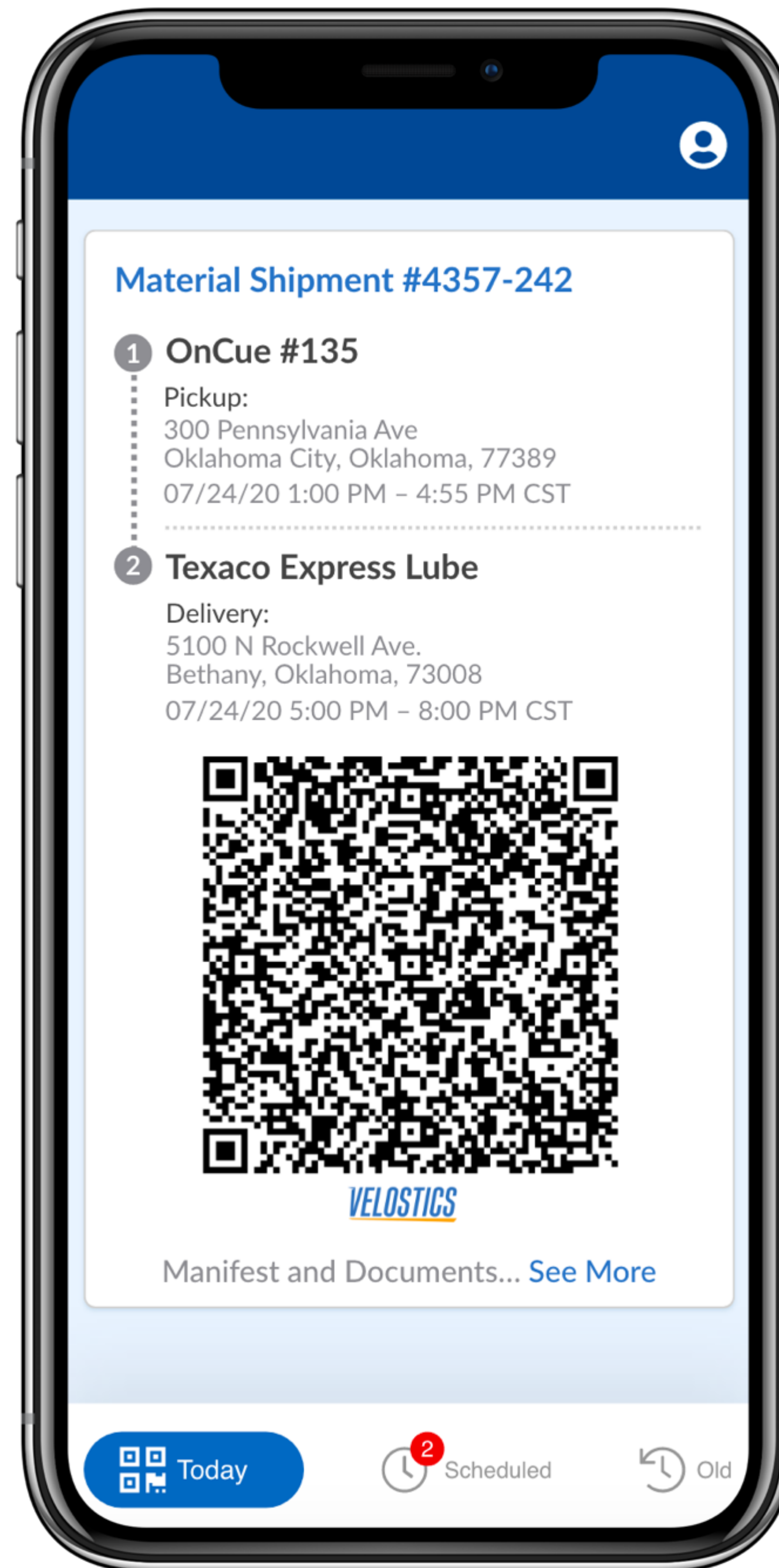
CHAIONE REPRESENTATIVE CUSTOMERS





Boarding Pass Experience for Logistics

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Customer Terminal View

Easy to view terminal wait times, allocation status and product availability.



Scheduling and Wait Times

Select Terminal

Terminal

- Shute Creek ⓘ
- Hawkins ⓘ

Lifted vs Allotment/Plan

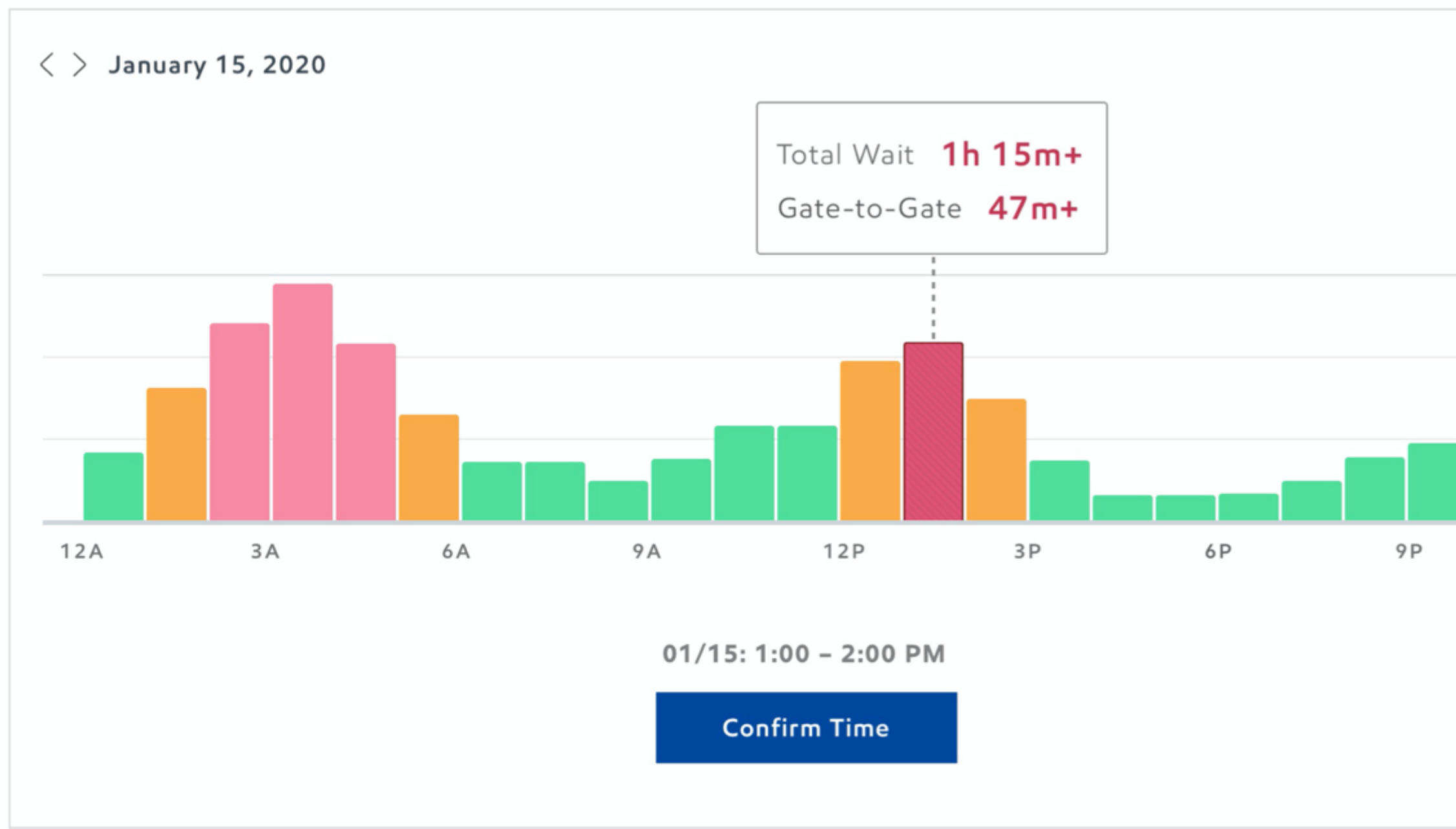
Current Month

16,000 / 42,000

Today: January 15, 2020

800 / 1,400

(No additional capacity available today)



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