HYPERLEDGER

Improving Supply Chain Margins, Visibility & Transparency
TODAY’S AGENDA

1. World’s Largest Enterprise Implementation
2. Supply Chain Visibility
3. Impact & Significance
4. How do we do it?
5. Q & A
World’s Largest Enterprise Implementation
COMPANIES ARE BUILT TO WORK TOGETHER. SYSTEMS ARE NOT.

Systems are disparate and serve the companies that build them.

The inability to synchronize and use all the information that flows creates challenges – up and down every supply chain globally.

Particularly acute in supply chain because of sheer volume and manual processes.

On-platform frictionless financial services / trade finance.
ENTERPRISE SaaS PLATFORM
SINGLE SOURCE OF TRUTH / DATA

1. No Duplication
   A real-time shared ledger enables end to end workflow visibility and removes duplication.

2. Early Alerts
   Technology enables visibility to detect collected and missing information to expedite compliance.

3. Automation
   Blockchain integrates with legacy system to automate alerts and approvals on one tamper-proof ledger.

4. Commercial Trust
   Comprehensive information enables smooth transactions and trusted due diligence between parties.
Supply Chain Visibility
TYPICAL SHIPMENT & INVOICE PROCESS (11 steps)

1. Asset & shipment details confirmed
2. Asset dispatched
3. Asset accepted OR rejected
4. Rejection reason OR acceptance proof
5. Add accessorial charges
6. Generate invoice
7. Issue invoice
8. Invoice comparison with expected
9. Validate match OR raise dispute
10. Manual reconciliation
11. Invoice paid

PAST WORKFLOW
OUR RECONCILIATION-FREE INVOICE PROCESS

NEW DL FREIGHT WORKFLOW

1. Shipment details confirmed for Bill of Lading (Tender Process)
   - Invoice populated with known charges including line haul rate, fuel charges, stop charges, etc.

2. Transportation of Goods Occurs
   - IOT device adds GPS information, temperature checks, etc. real-time

3. Carrier Agrees to Shipment Details & proof of delivery via IOT
   - Invoice auto-updated with remaining IOT data and proof of delivery

4. Accessorial Charges Added & Invoice
   - Invoice populated with accessorial charges from carrier. Invoice issued to shipper (pre-approved for payment)

5. Invoice paid
   - Invoice payment made (according to payment terms)

Rejection reason OR acceptance proof

Notifies NOC of accessoril

Generate invoice

Invoice comparison with expected

Validate match OR raise dispute

Asset & shipment details confirmed

Information you can trust.
# Invoice

**Sample Company**

**Bill to:** Sample Company  
**G/O:** Transportation Department  
**Sample Company address**  
**City**  
**Zip Code**  
**Phone number**

<table>
<thead>
<tr>
<th>Invoice</th>
<th>23044501</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice issue date</td>
<td>June 4, 2020</td>
</tr>
<tr>
<td>Invoice Status</td>
<td>Payment Processed</td>
</tr>
<tr>
<td>Tax_reg_no</td>
<td>000000000</td>
</tr>
<tr>
<td>Org_reg_no</td>
<td>-</td>
</tr>
</tbody>
</table>

**Charges**

<table>
<thead>
<tr>
<th>Charges</th>
<th>Linehaul method</th>
<th>Load origin</th>
<th>Load destination</th>
<th>Rate</th>
<th>Quantity</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linehaul rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORM charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazmat charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Variable accessorials charges**

<table>
<thead>
<tr>
<th>Charges</th>
<th>Charge code</th>
<th>Smart contract charges</th>
<th>Rate</th>
<th>Quantity</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait time charge</td>
<td>WTB</td>
<td>$25.00</td>
<td>50.00</td>
<td>0.5</td>
<td>$25.00</td>
</tr>
<tr>
<td>Shunt charge</td>
<td>SHU</td>
<td>$0.00</td>
<td>25.00</td>
<td>0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Detention/Demurrage charge</td>
<td>DET/DEM</td>
<td>$0.00</td>
<td>25.00</td>
<td>0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Vehicle ordered not used</td>
<td>VOR</td>
<td>$0.00</td>
<td>1.50</td>
<td>0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Re-delivery charge</td>
<td>RCL</td>
<td>$0.00</td>
<td>1.50</td>
<td>0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Tarp charge</td>
<td>TAR</td>
<td>$0.00</td>
<td>100.00</td>
<td>0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Layover charge</td>
<td>LAY</td>
<td>$0.00</td>
<td>150.00</td>
<td>0</td>
<td>$0.00</td>
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<tr>
<td>Miscellaneous charges</td>
<td>MISC</td>
<td>$0.00</td>
<td>-</td>
<td>-</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

**Applicable carbon tax charges**

<table>
<thead>
<tr>
<th>Charges</th>
<th>Charge description</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable carbon tax</td>
<td>Carbon tax if not included in Sample Company Fuel Program</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub total</th>
<th>$2187.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax</td>
<td>$109.36</td>
</tr>
<tr>
<td>Total</td>
<td>$2296.65</td>
</tr>
<tr>
<td>Quick pay discount</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

**Grand total**: $2295.60

**Terms and conditions:**

Invoice terms are 45 days from date of billing

Invoice generated on 06/04/2020, 11:51:27 AM Eastern Daylight Time

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**Shipment details received**  
**Real-time monitoring**  
**All information available**  
**Accessorials charges added**  
**Invoice paid**
Impact & Significance
VALUE REALIZED FROM DEPLOYING OUR PLATFORM

Expedited access and sharing of accurate information throughout a workflow, in real-time.

- Simultaneous multi-party collaboration
- Accessible to all parties in real-time
- Eliminates duplication - no need for data resubmission
- Identity, compliance and due diligence protocols
- Invoice creation & payments processes
- 3rd party authenticated digital and physical documents
- Seamless integration with legacy systems
- Connects other technology (IOT, AI, BI, etc.)
- Automated proof of delivery
- Real-time / early alerts for missing information
- Eliminates data discrepancies
“The biggest improvement for us is **reduction of manual work** in resolving disputes. The **cost and the waste** associated with chasing dispute resolution has come down dramatically – from 70% to now under 2%. That is from real observations on over 85,000 invoices in the first few months. We are seeing the proof of the waste that can be wrung out of the system.”

“We very quickly saw patterns develop, enabling us to get in front of issues early on and **helping to save millions of dollars in waste**. We also see **opportunities** to tighten up our planning because we can now see our information, through the ledger, all in one place.

The technology brings all this together into one ledger that originally was a payment platform, but we **are using it much more as an information platform to give us insight on how we run our business.**”

John Bayliss
SVP Logistics & Supply Chain, Walmart Canada
SUPPLY CHAIN VISIBILITY

- $***M: Processed Invoice Valuation
- $******: Total QUICK PAY Discount Received
- 85,453: Total Invoices
- $****: Transaction fees Collected
- 1,381 = 1.6%: Invoices in dispute
- 1,1B lbs.: Total Weight Served
- 253: Active Users
- 11,4 Million: Messages Received
- 52,928,495: Miles Travelled To Date
- 8.1M Gallons: Fuel Consumed
- 27,694: Delivery Stops
- 26,789: Canada
- 905: United States
How do we do it?
MODULARITY FOR QUICK TIME TO MARKET

Infinite number of configurable functions

Resulting in significantly faster (10x) time to market and includes out of the box support and lifecycle management.
INDIVIDUAL CARRIER DASHBOARD

STATUS OF WORKFLOW
- 10,622 approved invoices (payment process + settled)
- 1,201 invoices in progress (deliveries + disputes + cancelled)

TOTAL SHIPMENTS: 11,823
- Payments processed – 3,879 invoices
  - invoice approved & awaiting payment terms
- Payments settled – 6,743
  - invoice has been paid
- Current open disputes: 197 or 1.7%
- 929 shipments scheduled but not yet delivered / approved
MODULARITY & RE-USABILITY ASSURED BY TECHNICAL INNOVATION

Our platform allows for quick time to market because of its modularity and reusability. All of that is achieved by applying a concept of ASIKS.
Demonstration
Thank you.
Any Questions?

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