Supply Chain Enterprise Platform

DISRUPTING BUSINESS PROCESSES, ONE BLOCK AT A TIME...

Delivering Digital Transformative Solutions

Real Variable – RealTraceability Overview
✓ About Real Variable
✓ Overview of Blockchain Technology
✓ Real Variable – Blockchain Case Studies
✓ RealTrace – Track & Trace
✓ RealWare – Enterprise Supply Chain Platform
Real Variable – An Enterprise Blockchain Co.

**ABOUT US**
- Established in 2017 in India & USA with focus on SCM & Warranty products

**PROBLEM STATEMENT**
- Multiparty Collaboration between Manufacturers & Tier 1,2...n Suppliers and Customers

**BLOCKCHAIN ACHIEVEMENTS**
- 1 Million + Parts tracked / Quarter
- Built Hybrid networks

**REALWARE PLATFORM USP**
- ~4500 concurrent TPS
- 1/3\textsuperscript{rd} Time & Cost to Customize

**REALWARE PLATFORM USP**
- 4 to 10% additional warranty recovery from Suppliers

**SECTORS**
- Automotive
- Logistics
- Aviation
- Consumer Electronics
- Industrial
- Healthcare / Pharma

**VALUE PROPOSITION**
- Digital Twins, 1 to 5% reduction in CoPQ, CoCS
- Digital provenance & 13% improved efficiently in Collaboration

**STRATEGIC PARTNERS & BLOCKCHAIN PLATFORM COMPATIBILITY**
- Microsoft
- SAP
- NTT DATA
- Azure
- Hyperledger Fabric

**REALCOLLAB**
- Collaboration b/w Manufacturer and its nth Tier Supplier

**REALTRACEABILITY**
- Material In-transit Tracking & Digital Provenance

**REALWARRANTY**
- Supplier Warranty Recovery Co-innovated with SAP
Blockchain Technology – Overview

What is Blockchain?
➢ “It is digital ledger of transactions that is duplicated and distributed across the entire network of computer systems. Each block in the chain contains a number of transactions, and every time a new transaction occurs on blockchain, a record of that transaction is added to every participant’s ledger.”

What is DLT?
➢ “A decentralized database managed by multiple participants is known as Distributed Ledger Technology (DLT). Blockchain is a type of DLT in which transactions are recorded”

What is Smart Contract?
➢ “A smart contract is a self-executing contract with the terms of the agreement between buyer and seller being directly written into lines of code”

Features / Properties of Blockchain Technology
- Global Distributed Ledger
- Shared Across Business Network
- Cryptographic Transactions
- Decentralized Architecture
- Controlled Access
- Business Rule Validations
- Immutable Records
- Private & Confidential

Types of Blockchain Network
- 4 types of Blockchain networks exist today:
  ➢ Public Blockchains
  ➢ Private Blockchains
  ➢ Consortium Blockchains
  ➢ Hybrid Blockchains

Smart Contracts Working
1. A Contract is created between two anonymous parties and stored on public ledger
2. The contract self-executes as per written codes based on some triggering events which are preset
3. Stakeholders can analyze all the activities.
# Real Variable – Blockchain Case Studies

<table>
<thead>
<tr>
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<th>Global German Auto OEM</th>
<th>Global Logistics Service Provider (LSP)</th>
<th>Global Japanese Auto OEM</th>
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<tbody>
<tr>
<td><strong>Problem Statement</strong></td>
<td>OEM’s APAC Dealers / Customers do not have order ETA updates due to multi level aggregation of orders and bulk shipments.</td>
<td>LSP incurs working capital of several million dollars towards OEM / Dealers advance customs and duties payments for cargo clearance.</td>
<td>The average TAT For 1500+ dealers of OEM for stock replenishment is about 2-3 weeks.</td>
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<tr>
<td><strong>Solution Provided</strong></td>
<td>Order / Shipments / Part Track &amp; Trace with Real time ETA update to Dealers / Customers</td>
<td>Global Shipments Tracking / Surface, Ocean, Air Cargo/Customs Payments</td>
<td>Dealer Stock Visibility &amp; Dealer to Dealer Stock Replenishment</td>
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<tr>
<td><strong>Solution Description</strong></td>
<td>This solution is primarily for traceability of the spare part shipment from the OEM’s regional distribution center to dealer network spread across 21 countries and used by over 200+ Dealers in APAC region. Solution is live since 12 months.</td>
<td>This solution includes Ordering, Invoicing, Reconciliation, Payment settlements and Reversals especially for transactions involving cross border shipments between Dealer, OEM, LSP &amp; Bank. Some of the functionality is also made available on the mobile application.</td>
<td>This solution provide transparency to Dealer Network on Stock availability, Stock allocation, estimated time of departure, arrival notification including track and trace. This is solution is going to be used by 1250+ Dealers across USA, 250+ Dealers in Canada.</td>
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<tr>
<td><strong>Value Proposition</strong></td>
<td>Dealer / Customer satisfaction with real time tracking of order placed and cuts down manual coronation process between multiple organizations.</td>
<td>LSP’s supply chain movements tracked on real time giving customer goods ETA. For LSP it cuts down working capital paid and payment process time from T+7 to T+2 days for custom duties paid in advance for clearance of goods</td>
<td>Just in time inventory levels at dealer &amp; warehouses across US, Canada and Japan. Dealer stock replenishment time is cut down from T+3 week to T+1 week. Better visibility of dealers &amp; warehouse stocks, aggregates shipment orders.</td>
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1. Considerable time spent by Manufacturer, Logistics providers / customers in identifying the part location and estimated delivery date.

2. Lack of real time visibility of movement of a package due to cross border shipments, custom clearance, multi modal logistics providers from source to destination

3. Special precautions required for transit of certain types of parts and the information needs to be captured in an immutable way.

4. Disparate Systems with no information exchange between participants in an eco-system.
1) The RealTraceability is an In-transit logistics and Digital provenance solution which not only provides real time movement of the part / material in the supply chain but also captures origin of the material and its associated parameters in an immutable way through the supply chain.

2) Solution seamlessly complements the existing ERP / SAP systems w.r.t Purchase, Sales, Receiving, Shipping transactions.

3) All supply chain stakeholders will be connected to a single blockchain platform in which each party can store and share the information (Orders, Shipments, Trade Documents) securely and in immutable way.
1. As per SCM Review, the total net benefit increases by 13% with the use of smart contract technology through the blockchain platform.

2. Monitor performance of logistics providers with evidence including on-time deliveries, on-time pickups and more.

3. Maintains History of High-Value Assets to ensure it complies with safety standards from factory floor to delivery.

4. Improves Quality Assurance as every authorized member involved in a transaction can access critical data to validate its milestones.

5. Improves Payments and Pricing Processes as payment processing and settlement is secure manner through Blockchain framework.

5. Digital Provenance ensures that every shipped good includes a digital “passport” that include essential data such as part origin and it journey in the life cycle of the part.
RealWare – An Enterprise Supply Chain Platform

RealWare accelerates business transformation of an organization by simplifying deployment of enterprise applications; enables a seamless collaboration between suppliers, customers, partners, employees & existing processes delivering qualitative outcomes.

Modular Design
Rapid deployment of most use cases for any industry vertical

Robust Security
Three level security architecture: Crypto hashing, Notarization of Assets, control who sees what

Configurable

RealApps

Smart Match Engine

Integration Friendly

Dynamic UI
Powerful Customizable Dashboards, Reports & Actionable Intelligence

Quick ROI
Quick payback time and an ROI of at least 200%

Client Extensions

Mobile
Web
IoT
Drone

Value Proposition: Quick ROI, ~4500 concurrent transactions / second and 1/3 rd Time & Cost to Customize

Real Variable Document Distribution Controlled
Thank you