

# Supply Chain Enterprise Platform

*Powered by Blockchain*



**REAL VARIABLE**  
Powered by Blockchain

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

Delivering Digital Transformative Solutions

Real Variable – Real Warranty Overview

- ✓ About Real Variable
- ✓ Overview of Blockchain Technology
- ✓ Real Variable – Blockchain Case Studies
- ✓ RealWarranty – Supplier Warranty Recovery co-innovated with 
- ✓ RealWare – Enterprise Supply Chain Platform



# Real Variable – An Enterprise Blockchain Co.

## ABOUT US

- Estd. in 2017 in India & USA.
- Focus on Supply Chain & Warranty Management products.

## BLOCKCHAIN ACHIEVEMENTS

- 5 Private Chains
- 30+ Blockchain Engineers
- 60+ Nodes
- 200+ Party Ledgers
- 600,000+ Events
- 1 Million + Parts tracked / Qtr
- Hybrid networks

## TECHNOLOGY USP

- Smart Contracts Algorithms
- Zero Code Platform
- Matching engine
- ~4500 concurrent transactions / second
- 1/3<sup>rd</sup> Time & Cost to Customize

## CREDENTIALS



**Global Europe Auto OEM**



**Global Logistics Service Provider**

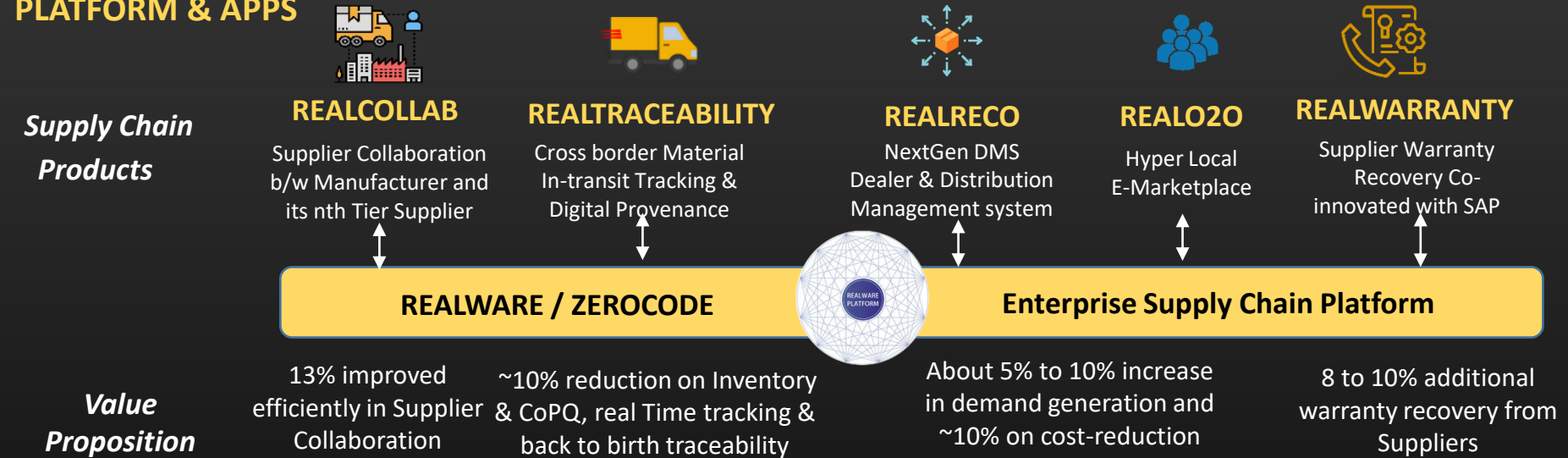


**Global Asian Auto OEM**

## PROBLEM STATEMENT

- Multiparty Collaboration between OEM & Tier 1,2...n Suppliers and Customers

## PLATFORM & APPS



## SECTORS



## STRATEGIC PARTNERS & BLOCKCHAIN PLATFORM COMPATABILITY



And many more... RealWare can connect to all systems / platforms through API connectors for data exchange

## 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 exists today:

- *Public Blockchains*
- *Private Blockchains*
- *Consortium Blockchains*
- *Hybrid Blockchains*

## Smart Contracts Working

- 
  - A Contract is created between two anonymous parties and stored on public ledger
- 
  - The contract self-executes as per written codes based on some triggering events which are preset
- 
  - Stakeholders can analyze all the activities.



## Global German Auto OEM



## Global Logistics Service Provider (LSP)



## Global Japanese Auto OEM

	Global German Auto OEM	Global Logistics Service Provider (LSP)	Global Japanese Auto OEM
<b>Problem Statement</b>	OEM's APAC Dealers / Customers do not have order ETA updates due to multi level aggregation of orders and bulk shipments.	LSP incurs working capital of several million dollars towards OEM / Dealers advance customs and duties payments for cargo clearance.	The average TAT For 1500+ dealers of OEM for stock replenishment is about 2-3 weeks.
<b>Solution Provided</b>	Order / Shipments / Part Track & Trace with Real time ETA update to Dealers / Customers	Global Shipments Tracking / Surface, Ocean, Air Cargo/Customs Payments	Dealer Stock Visibility & Dealer to Dealer Stock Replenishment
<b>Solution Description</b>	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.	This solution includes Ordering, Invoicing, Reconciliation, Payment settlements and Reversals especially for transactions involving cross border shipments between Dealer, OEM, LSP & Bank. Some of the functionality is also made available on the mobile application.	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.
<b>Value Proposition</b>	Dealer / Customer satisfaction with real time tracking of order placed and cuts down manual coronation process between multiple organizations.	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	Just in time inventory levels at dealer & 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 & warehouse stocks, aggregates shipment orders.

# Supplier Warranty Recovery – Automotive Industry Pain Points

*“As per Warranty Week\* estimates; It is said that today the Supplier Warranty recovery in Automotive Industry is around 10 to 17% whereas the fair share of Supplier warranty recovery could be as high as 37% ”*

1. Ability to trace a part to the nth level and the identification of a supplier is a Complex process.

2. Higher Claim volumes and lower claim value discourages the OEMs / Tier 1 Suppliers from their counterparts due to higher recovery costs.

3. Significant Supplier Recovery gap for Automotive Industry which is almost 2.5 Billion USD per year as per warranty week\* estimates.



4. Complex Recovery Process due to claim multipliers between OEM & Suppliers.

5. Claim litigation incidents leading to wastage of time and resources in warranty recovery.

6. Disparate Systems with no information exchange between OEM & Suppliers.

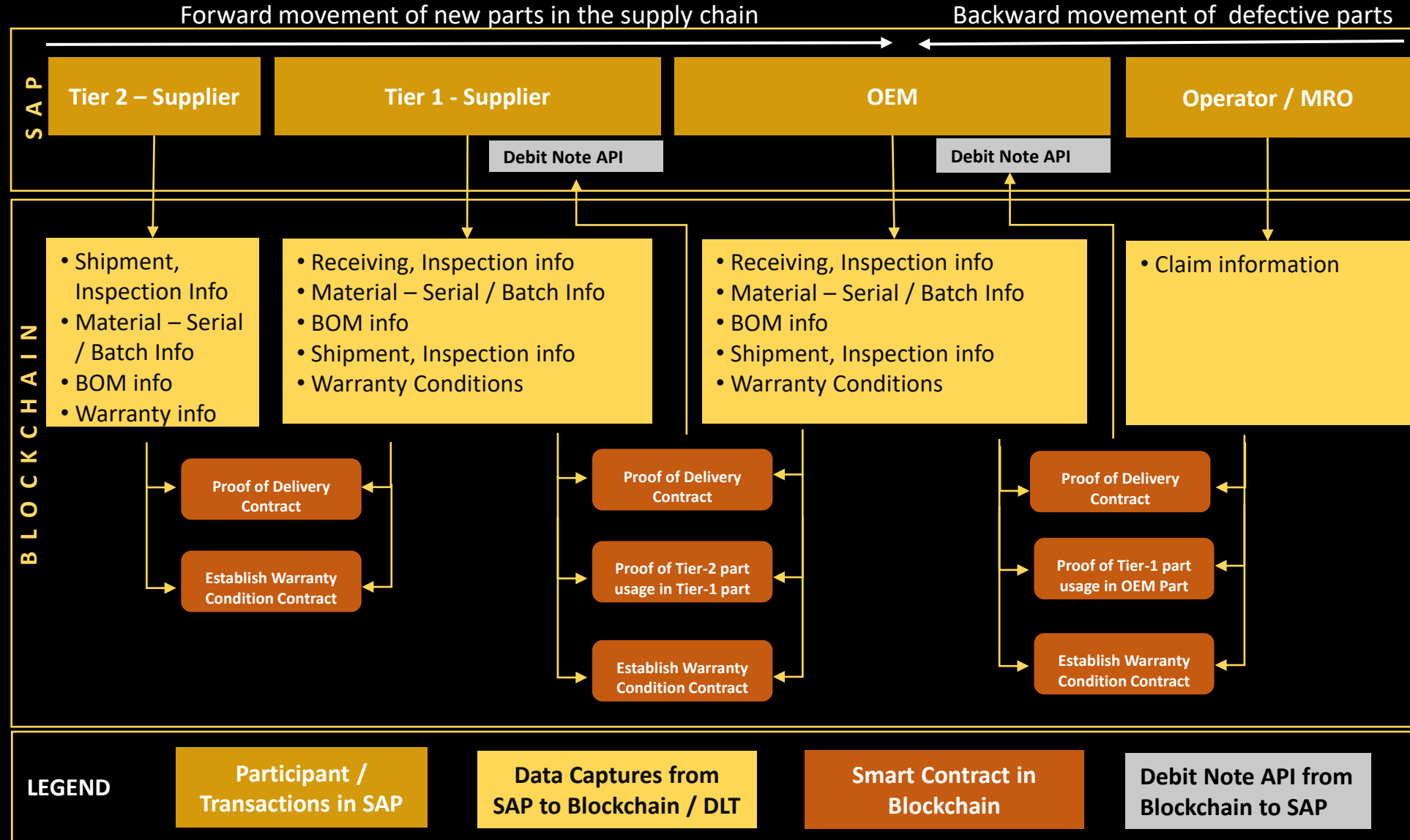
Ref: \*Warranty Week, Link: <https://www.warrantyweek.com/archive/ww20190418.html>, Dated: 18-Apr-2019

*“Note: The pain points across other industries also remain largely same, however the Supplier Recovery Gap varies from Industry to Industry”*

# RealWarranty – Supplier Warranty Recovery Soln. for OEM, Large Suppliers

## Blockchain powered RealWarranty Solution

- 1) Real Warranty is an aftermarket Supplier warranty recovery product which generates debit notes b/w OEM & Tier 1, Tier 1 & Tier 2... Tier n based on claim received by OEM. It leverages origin of Material, proof of delivery, usage in BOM, warranty conditions between various parties to establish traceability.
- 2) Solution seamlessly complements the existing SAP / Other ERP systems w.r.t Purchase, Sales, Receiving, Shipping, Warranty, Manufacturing transactions.
- 3) Warranty agreement can be modeled as Business Rules in Smart contracts on Blockchain
- 4) Functionality will be provided to Tier 2/3/4 suppliers network who are using legacy / non ERP systems on Blockchain for Supply chain transactions.



# RealWarranty – Supplier Warranty Recovery Business Benefits

## Business Benefits / Value Proposition

1) 8 to 10% Increased warranty recovery by OEM from its Suppliers. *(Estimated)*

2. Solution also benefits the Large Tier Supplier to recover warranty from next tier supplier apart from OEMs.

3. System generated Debit Notes on Supplier recovery leading to significant savings on time spent by warranty administrators, managers towards Supplier recoveries.

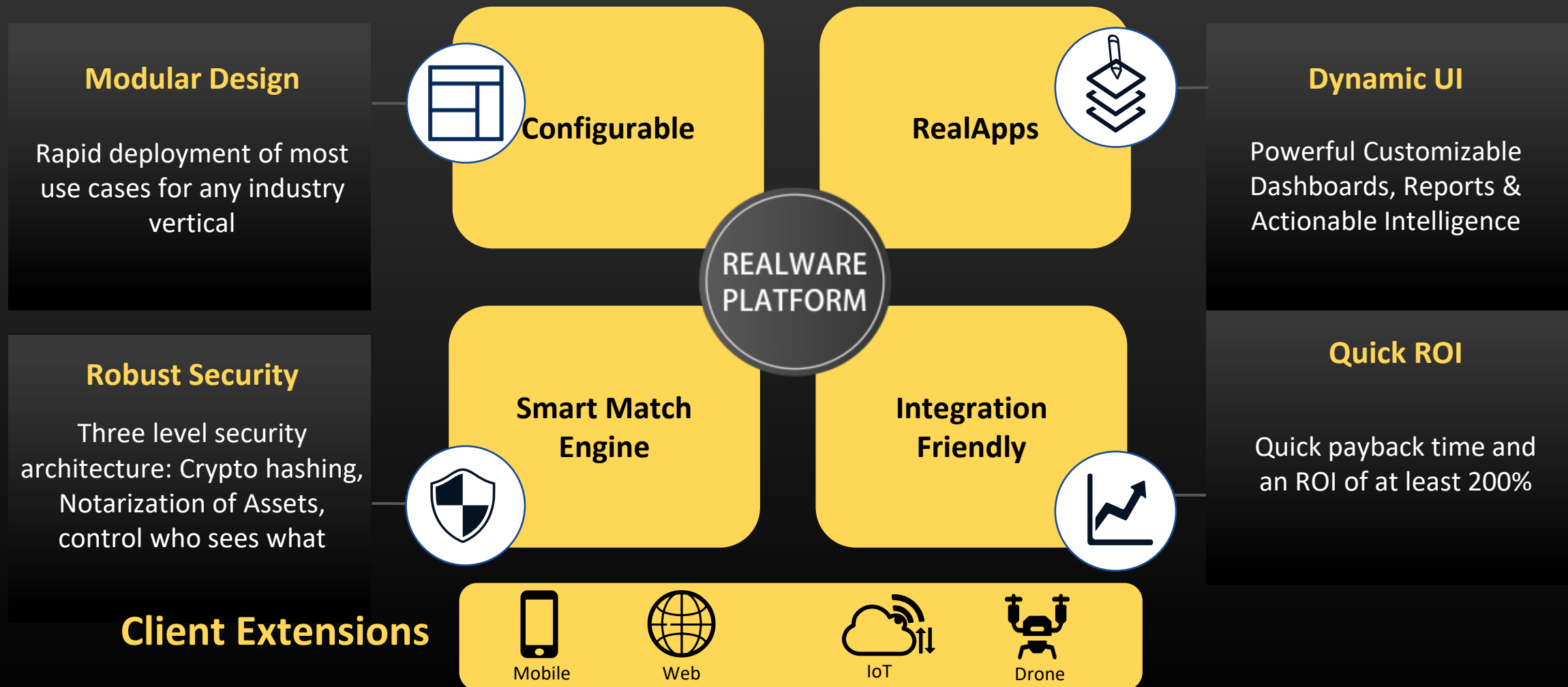


4. Increase the trust among entities due to Blockchain technology which brings in immutability, encryption and trust among the participants in the ecosystem and no single entity controls the system.

5. Reduction in claim litigation incidents between participants in the ecosystem..



*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.*



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



# Thank you



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