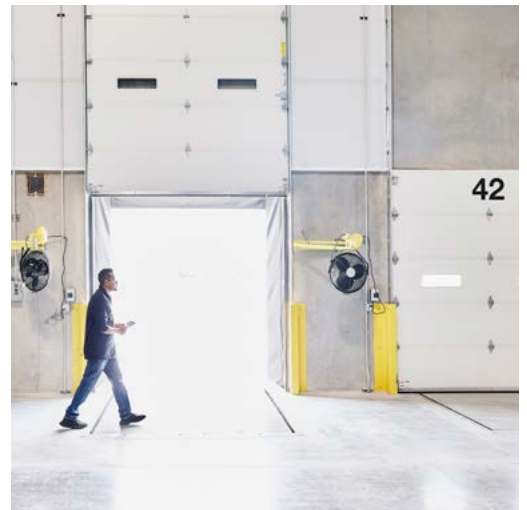# Achieving full supply chain visibility with a blockchain-based, end-to-end network

A hypothetical computer-building company oversees their entire supply chain, from production to product delivery.

InventoryNet: A model for supply chain-wide inventory and order visibility

Our envisioned blockchain-based supply chain network, serving high-tech supply chains, makes resources easy to manage with real-time visibility into inventory levels for every item across extended distribution channels. The network also enables order-to-delivery lifecycle capabilities and service parts inventory management functionality, adding value at every stakeholder point in the value cycle.

IBM **Blockchain**

Value generated by InventoryNet for HighTech Inc.

The annual value of joining a robust industry ecosystem with broad participation

Improvement	InventoryNet advantage	Value generated
Working capital optimization	Lower inventory levels	↓ **7% decrease** in inventory levels
	Respond to demand-supply imbalances	
New product introductions	Reduce excess inventory	↓ **10% decrease** in obsolete inventory
	Get new products to market faster	↑ **$70M recovered** from loss sales
Service and repair	Improve service levels	↓ **17% decrease** in SLA non-compliance penalties
	Enhance spare parts availability	↑ **2-point improvement** in fill rates
Optimized production	Increase effective manufacturing capacity	↑ **5% increase** in effective manufacturing capacity
	Improve asset turnover	↑ **+10 basis points** improvement in ROA
Logistics costs	Reduce the need for expedited freight	↓ **-5% reduction** in expedited shipments
	Diminish reverse logistics costs	↑ **$35M saved** in reduce freight spend
Anticounterfeiting	Track serialized units end-to-end	↓ **10% reduction** in counterfeits
	Reduce counterfeiting	↑ **$150M** additional sales
Dispute resolution and chargeback reduction	Reduce chargebacks and disputes	↓ **$17.5M reduction** in chargebacks
	Lower invoice processing costs	↑ **$12M saved** of A/R and A/P
Customer satisfaction	Boost customer satisfaction	↑ **1.5-point increase** in NPS score
	Increase consumer trust and engagement	↑ **$350M additional revenue** generated by this increase

Creating value for other supply chain participants

InventoryNet generates broad value for all the companies that participate in the network

	Suppliers	EMSs	OEMs	Distribution Channel	Whole Sys. Customers	Embedded Customers
Working Capital, Carrying Costs	High	Med.	High	Med.	Low	Med.
New Product Introductions	Med.	Med.	High	High	Med.	High
Service and Repair	Low	Low	High	High	Med.	Med.
Optimized Production	High	High	High	Med.	Low	Med.
Logistics Costs	High	High	High	Med.	Low	Low
Anti-counterfeiting	High	Med.	High	High	Med.	High
Dispute/Chargeback Reduction	High	High	High	High	Med.	Med.
Customer Satisfaction	High	High	High	High	High	High

Intrigued by these findings? Get the details behind the value creation story. Download the full report "The power of supply chain-wide inventory and order visibility: Measuring the Value Created by Blockchain-Based Supply Chain Networks" from ChainLink Research.

⬡ Chainlink

[Read the full story]

IBM