



# IBM Blockchain Services for **Supply Chain**

Solution Brief



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# Build intelligent supply chains

Supply chains are at the heart of delivering products to customers at the right time and at the right cost. No matter what type of product an organization produces or sells, a reliable, trusted supply chain network is crucial to keeping customers happy and meeting financial targets.

**Ensuring happy customers requires seamless collaboration and coordination across the value chain of suppliers, producers, banks, regulators, logistics providers and retailers.**

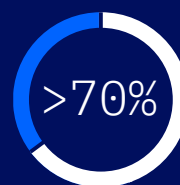
At the same time, the challenges facing organizations have never been greater. Disruptions in supply chains drive increased cost and, more importantly, loss of revenue. To make matters worse, these disruptions are exacerbated by inefficient processes that rely on data that is neither timely nor trusted.

Enterprises are seeking transparency, resiliency and agility in their supply chains to handle these shocks. Blockchain, as a component of your supply chain technology, drives trust, transparency and consensus across all stakeholders. While driving benefits to each participant, it ensures flexible business outcomes.

IBM Blockchain Services delivers results you want—increasing supply chain visibility and resiliency—by infusing blockchain into your supply chain networks. We will work together from strategy to full production, leveraging our accelerators and proven methodologies to jump start your project.

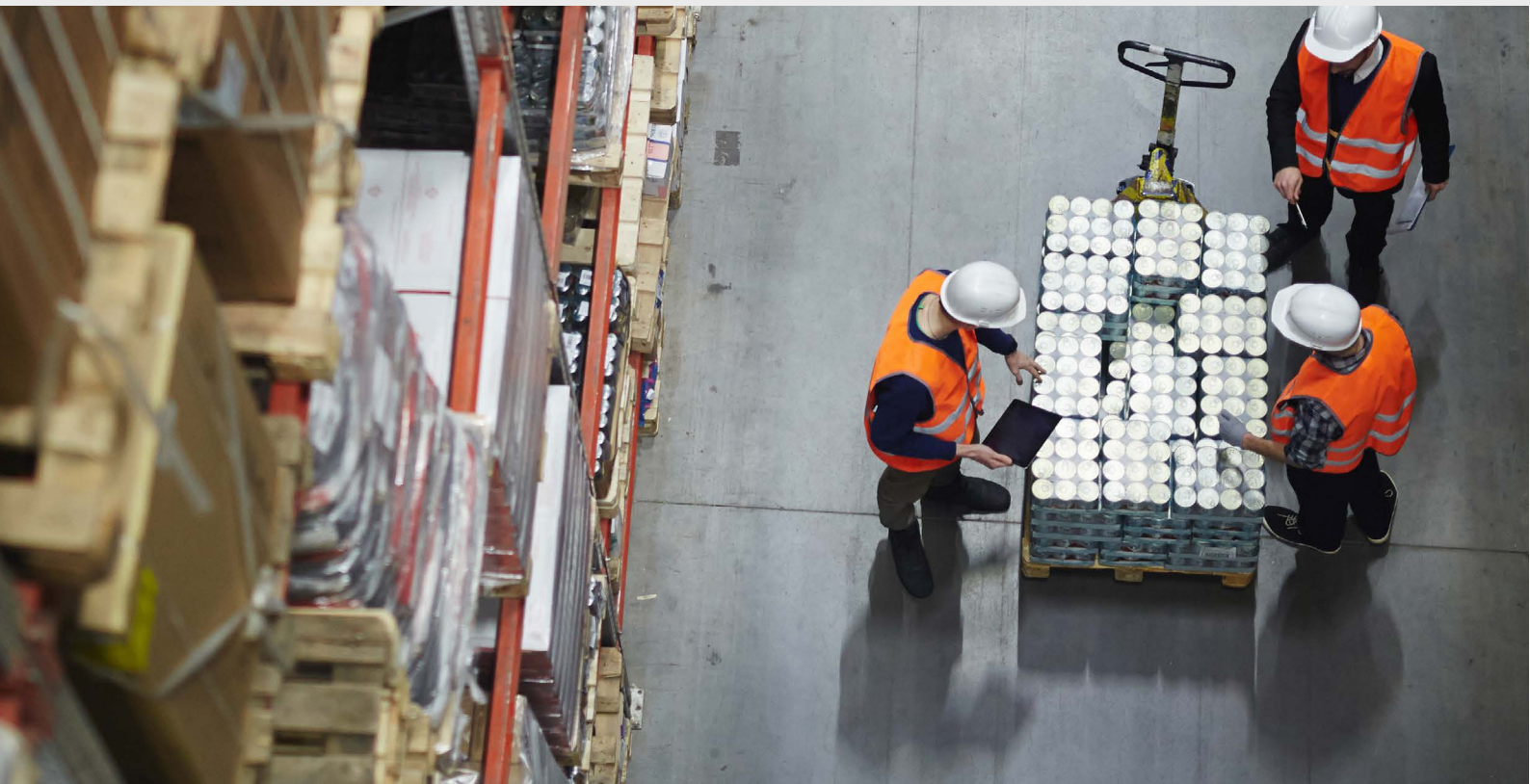


of supply chain leaders reported data sharing and integrity across their supply chain challenging.



of supply chain leaders cited significant improvement in data quality, integrity, visibility and speed by removing human intervention.

Source: <https://www.ibm.com/downloads/cas/JX9KDGPI>



## Accelerate your journey to business value

Through hundreds of successful engagements with supply chain organizations across industries and geographies, we have developed a collection of robust accelerators across the supply chain spectrum that can speed time to value for new projects. These accelerators include reusable technology patterns, software assets, algorithms and potential governance models.

**Leveraging accelerators, we reduce the implementation time and drive faster adoption—helping you realize business value faster.**

We have accelerators in sourcing, procurement, manufacturing, logistics and distribution. They lay the foundation for an enterprise to get started where there is significant business value, while ensuring a comprehensive roadmap for future capabilities. Complementing these accelerators is our network-building experience for identifying, recruiting and onboarding new participants.

## Our engagement model and accelerators for projects are focused on speeding time to value

01

We start with a Design Thinking session (one day or less) to identify a focused pain point—along with the accelerator that addresses that pain point—and to define the hypothesis and outcomes desired.

02

To prove the hypothesis and outcomes, we work with you and your trading partner(s) of choice to initiate an 8- to 12-week initial project. The outcome of this phase includes a clear business case, proven adoption model and a roadmap to scale.

03

To ensure a production-grade solution, we harden the implementation and then drive scale. As enterprises choose to scale solutions, they may build a consortium or lead the network. We collaborate with the stakeholders to ensure clear ownership, strong governance and a viable commercial model.



### *Sourcing*

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 Responsible Sourcing
 

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 Supplier Information Management
 

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### *Procurement*

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 Dispute Management
 

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 Contingent Labor Management
 

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 Contract Management
 

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### *Manufacturing*

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 Responsible Sourcing
 

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 Enterprise Asset Management
 

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 Parts Provenance and Parts Maintenance
 

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### *Logistics*

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 Dispute Management
 

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 End-to-End Visibility
 

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 Delivery Transaction Intelligence
 

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### *Distribution*

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 Dispute Management
 

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## Accelerator use case

# Drive end-to-end visibility

**In the automobile industry, once a vehicle rolls off the manufacturing line it enters the supply chain known as finished vehicle logistics (FVL).**

On its factory-to-dealer journey, a new vehicle may pass through three or four in-country logistics service providers (LSPs) and both inland and sea carriers—along with its accompanying paperwork. The process is similar for fleet owners moving inventories of used vehicles.

IBM Blockchain Services helped a consortium of European LSPs establish end-to-end visibility across this supply chain with Vinturas, a blockchain-based data sharing platform that creates sustainable value for all stakeholders in the industry. Employing track-and-trace accelerators and our experience building consortium-based networks, we helped Vinturas build a production network and a governance strategy.

With real-time visibility into the status of a vehicle at any point in its journey, dealers know when it will arrive at their location and can plan their delivery process. Customers who have ordered a customized vehicle (the common practice in Europe for new-car buyers) can see where their vehicles are in the supply chain—enabling manufacturers and dealers to deliver a satisfying factory-to-owner experience. LSPs can optimize loads for more sustainable operations. Incidental damage can be documented and managed efficiently. And fraud due to mileage tampering or VAT evasion can be curtailed.



“Car manufacturers are expected to reduce their costs by **10 percent or more** as a result of **improved supply chain transparency.**”

Source: <https://www.ibm.com/blogs/client-voices/blockchain-brings-visibility-to-finished-vehicle-supply-chain/>



## Resolve multi-party disputes

**When a dispute occurs between two parties in the supply chain, both must put significant time and labor towards resolution.**

With most large firms holding an average of USD 200 million in disputes, the opportunity for improvement is immense.



Improving inefficient supply chain operations by just **3 percent** can reduce working capital costs by up to **USD 6 million**.

The Dispute Resolution accelerator provides a data- and rules-driven approach to this problem that identifies and resolves disputes as they happen. The platform ingests system-of-record data from each participant and provides an outside consensus layer that adjudicates disputes based on agreed-upon business rules, ensuring accuracy and fairness for all participants. The solution is built on The Linux Foundation's open-source Hyperledger Fabric and is cloud agnostic, which means you can deploy your network wherever it makes the most sense for you and your partners, on-premises or with a cloud services provider.

The accelerator helped drive quick ROI for a leading retailer in North America. The journey started with a short design workshop led by IBM with the retailer and its partner. Having established a clear pain point and the business value desired, a three-month initial project was launched to prove that blockchain could resolve disputes by providing transparency and trust and by automating business rules to drive resolution. With over 65 percent reduction in disputes and reducing dispute resolution time to just days, the platform is now scaling to partners and also adding new use cases that drive better relations with suppliers.

## Accelerator use case

## Improve contingent labor management

**Recent years have seen a steady rise in the use of contingent workers across organizations globally. Today, on average, 18 percent of an organization's workforce is employed on a contingent basis.**

For employers, that means significant time and manual effort goes into verifying timesheets, validating vendor invoices and onboarding new contractors. For suppliers of contract labor, major pain points include slow invoice reconciliation and delayed payment.

The Contingent Labor Management accelerator, developed by IBM Blockchain Services for IBM's procurement organization, streamlines the way organizations procure, manage and pay for contractor resources. It provides built-in approval workflows for both the employer and the labor supplier and a single source of truth for contractor timesheets.



Using this platform, IBM has reduced the volume of blocked and rejected invoices from **10 percent** to **0.5 percent** and has reduced the cost per invoice by **30 to 50 percent**.

### Here's how it works:

- Purchase orders, time records and invoices are ingested by the platform from existing systems of record
- Contractor resources are matched to their respective purchase orders
- Consumption of time and expenses is tracked against the PO so there are no more billings against under-funded POs
- Once consensus is reached by all parties, transactions are written to the shared blockchain ledger
- Invoices are automatically reconciled and cleared for payment



# Why IBM Blockchain Services?

Enterprises across industries and around the world turn to IBM Blockchain Services.

We are consistently ranked as the leading services provider in the industry, and we've helped create more than 150 production networks delivering value and changing the way businesses work together.

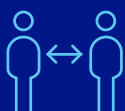
With more than 2,000 business and technical experts—leaders in building blockchain for business from the ground up—and more than 1,000 client engagements, we'll help you address the three most critical design points in bringing a blockchain for business network to life: governance, business value and technology.



**150+**  
production networks



**2,000+**  
blockchain experts



**1,000+**  
client engagements

“IBM has the deepest experience, broadest geographic reach, and largest organizational commitment to blockchain across the vendors.”

*IDC MarketScape Worldwide Blockchain Services 2020 Vendor Assessment*

“Clients value IBM’s ability to bring an integrated services and solutions offering.... Based on the analysis, IBM emerged as a leader.”

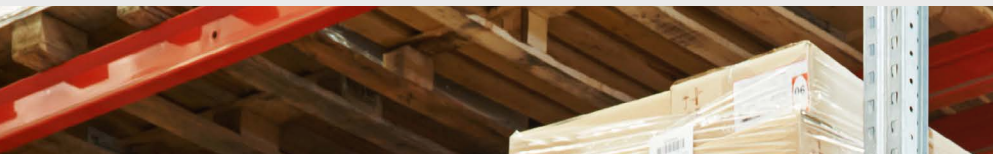
*Everest Group PEAK Matrix™ for Enterprise Blockchain Services 2020*

“...the flag bearer of enterprise blockchain with a significant number of live blockchain networks.”

*HFS Top 10 Enterprise Blockchain Services*

“IBM is clearly regarded as having the strongest credentials in the blockchain sector, well ahead of competitors.”

*Juniper Research Blockchain Enterprise Survey*

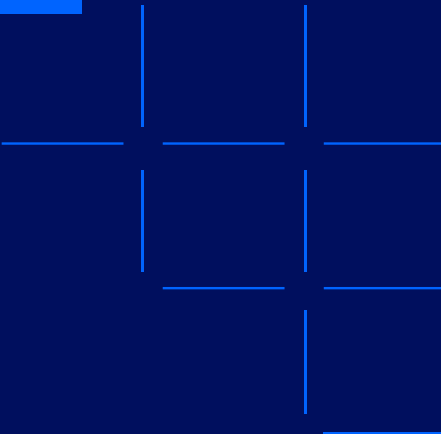


# Start your blockchain journey with IBM

The most challenging part about building a blockchain for business network is the business part itself. Talk to us about your organization, your supply chain and your ecosystem, and we'll help design a path to success.

**Schedule a one-on-one discussion with one of our experts in your industry.**

Schedule now



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