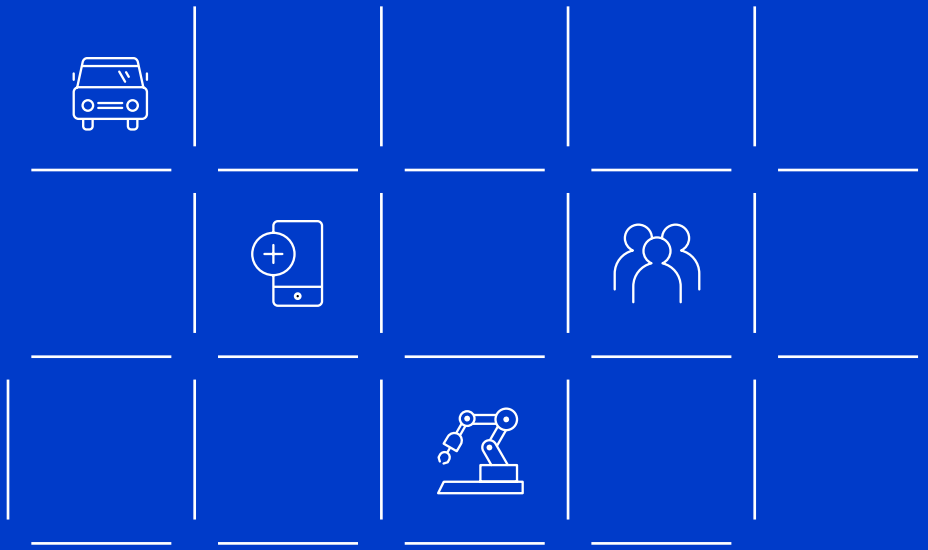


Drive your automotive enterprise forward with IBM blockchain

Rely on blockchain records for innovative mobility services, supply chain traceability and trustworthy financial transactions

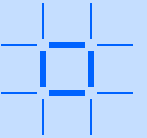


Every part of the complex automotive business ecosystem — from parts suppliers and manufacturers to customers and safety regulators — relies on a network of transactions and knowledge that starts long before a vehicle is manufactured and extends far beyond its purchase.

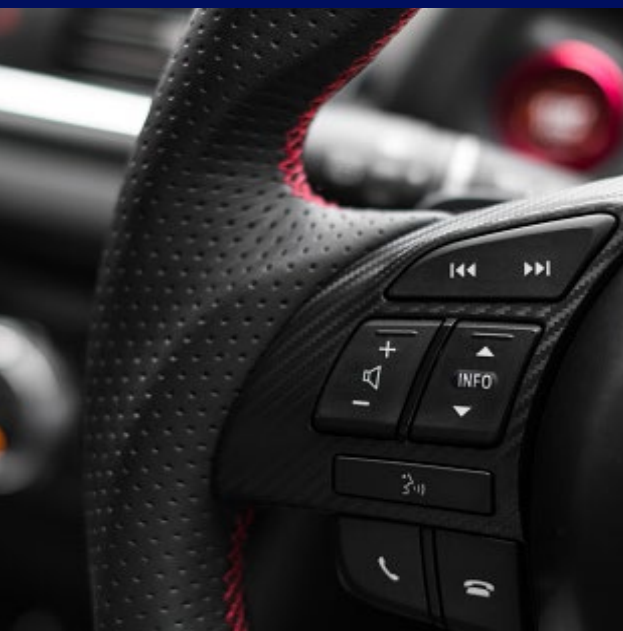
And that network is growing. From support for evolving hardware and services to understanding the provenance and

location of defective or counterfeit parts, the amount of data that automotive industry players must keep track of is exploding. IBM Blockchain can help build efficiency, transparency, and trust with a shared, permissioned record of ownership, location and movement of parts and goods. And the versatility of blockchain records makes them perfect for keeping up with innovative new business models.

Current challenges in the automotive industry — and how IBM Blockchain can help



Mobility services



Challenges

Today's cars are not just standalone transportation devices — they're complex, networked software platforms on wheels. Vehicles increasingly need to incorporate secure, seamless mobility services, handling micropayment and other interactions with ride-sharing services, smart transportation infrastructure and electric vehicle charging.

The result

IBM has announced a partnership with ZF and UBS Bank to implement a blockchain-backed car eWallet service delivered through IBM Cloud™, enabling cashless micropayments for tolls, congestion fees, electric charging, parking and even making payments between vehicles. The system can also allow a vehicle to be used as a secure drop point for packages, with permissioned access to its trunk.

Supply chain



Challenges

Auto manufacturing is truly global. Parts are sourced worldwide — and completed vehicles might be driven anywhere on earth. To contend with counterfeit parts and defect-driven product recalls, traceability is crucial in understanding a vehicle's post-sale movements. To maintain safety and reliability, makers must be able to track vehicle movements for regulators and purchasers.

The result

Analogous to the auto industry, Boeing is implementing a solution based on IBM Blockchain to make information from across the supply chain accessible to component vendors, aircraft owners and maintainers, and regulators. And in the case of a component safety issue, the same kind of IBM technology being applied to enable timely, efficient food recalls can help automobile makers and parts suppliers quickly understand where parts are.

Finance



Challenges

From parts orders and fleet-purchase financing to managing letters of credit and arranging insurance coverage, every step of the automotive supply chain is underpinned by payments. Blockchain's traceability and transparency makes it perfect for keeping track of transactions that drive purchases, shipping arrangements, dealer transactions and millions of micropayments in mobility services. Blockchain-backed smart contracts go far beyond tracking and visibility to include funds released only on satisfactory delivery.

The result

Manufacturing powerhouse Mahindra is incredibly diverse, as a federation of businesses ranging from agriculture to aerospace — and their supply chain finance needs are just as diverse. Now, they're working with IBM to create a common blockchain platform for supplier-to-manufacturer transactions, allowing near-real-time transaction visibility and simplified communications to drive trust and transparency across its business ecosystem.

Ready for blockchain-driven transformation?

Blockchain applications can help you address a wide range of automotive supply chain challenges, paving the way for innovative consumer and fleet-oriented services. Ask yourself how well you can answer the questions below:

- How can we ensure that our supply chain information is efficiently and transparently available?
- Can we reliably trace genuine parts to identify counterfeits?
- Do we have a rigorous, end-to-end system for addressing product recalls?
- Can we employ standards-based application programming interfaces (APIs) to simplify data transfer, application and network integration?
- Can we work with mobility services to allow in-car micropayments for parking, electric charging, road tolls and other fees?
- How can we increase consumer and partner trust?

IBM can serve as partner and change enabler, with dedicated experts who understand your business processes to help transform your automotive industry enterprise — and prepare for the future. Explore IBM Blockchain Solutions by reaching out to experts who can start you on the journey to getting more business value from your data.

Visit: ibm.com/blockchain/services to learn how IBM Blockchain can help your automotive enterprise.

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