BUILD *the Future*

Optimizing Automotive Title Management

The Challenge

Although governments worldwide utilize automotive titles to trace vehicle production and authenticate ownership, existing systems are often inefficient, segmented, and prone to human error. As a result, many governments are still referencing platforms that fail to address modern-day problems like increasing theft rates. For example, motor vehicle thefts are up 25.1% since 2019, reaching 1,011,967 vehicles in 2022—or 1.9 every minute.

Automotive Theft Rates

25.1% Increase in thefts since 2019

1,011,967 Vehicle stolen in 2022

1.9 Vehicles stolen every minute

In addition, platforms like Caravan, Vroom, Whipflip, and many others now offer new ways of buying and selling cars, complicating an already saturated market. This dynamic has increased the risk of fraud and human error as associated data exists across more stakeholders.

Fortunately, there are innovative solutions to these longstanding challenges. As a transparent, immutable technology, blockchain can give stakeholders real-time access to the same information. This functionality introduces oversight to the vehicle lifecycle post-sales, allowing all network participants to authenticate titles while ensuring vehicles are associated with a legitimate record.

Why Blockchain?

In short, blockchain introduces more trust to the automotive supply chain and titling process—here's how:

Transparency
On-chain transactions are visible to all network stakeholders.

Traceability
Anything can be tokenized and tracked throughout its lifecycle.

Immutability
Transactions are tamper-proof once recorded to the underlying blockchain.

Security
Blockchain permissions dictate who can access select networks or verify transactions.

Accuracy
Blockchain-based smart contracts automate processes, eliminating human error.

Speed
Using automated smart contracts eliminates intermediaries and optimizes processes.

Blockchain for Automotive Titles

By automating interactions, blockchain applications can help eliminate redundancy, reduce human error, and prevent fraud. This functionality creates transparency for all stakeholders and generates the following benefits:

Less Time: Instead of spending days or weeks closing a deal, private owners or sellers, dealerships, and online platforms can shorten the sales cycle to minutes.

Lower Costs: Blockchain-based solutions can reduce workflows and redundancy by eliminating traditional automotive intermediaries.

Reduced Risk: Blockchain can help eliminate instances of human error and fraud by establishing transparent, immutable data provenance.

Improved Auditability: With blockchain, governments can ensure vehicle taxes are earned at full market value, and errors are immediately addressed while ensuring vehicle information is valid and traceable.

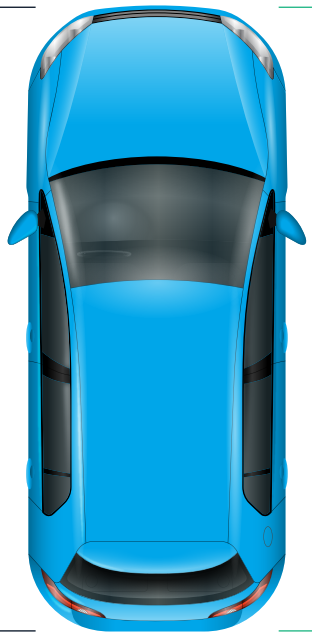
Did You Know?

In 2022, the General Services Administration (GSA) awarded SIMBA Chain a Multiple Award Schedule (MAS) contract. This long-term, government-wide contract permits SIMBA to supply its blockchain solutions and services to all Federal US agencies for up to 20 years. This designation means that local and state governments across the US can leverage the power of SIMBA Blocks to build automotive titling solutions.

GSA

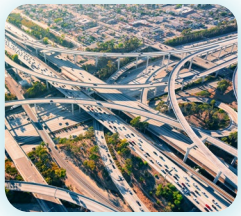
Vehicle Lifecycle

Potential Blockchain Data Points



- Vehicle Manufacture Specifications
- Title & Registration Creation
- Registration Renewal
- Registration Expiry
- Maintenance Records
- Satisfaction of Lien
- Vehicle Transfer & Sale
- Salvage Title Creation
- Clean Title Creation
- Vehicle Recycled

Related Projects



California, USA

See how the California Department of Motor Vehicles is testing out the digitization of car titles and title transfers via a private Tezos blockchain.

Read More

United Arab Emirates

See how the UAE Roads and Transport Authority (RTA) is working to create a vehicle lifecycle management system using blockchain technology.

Learn More

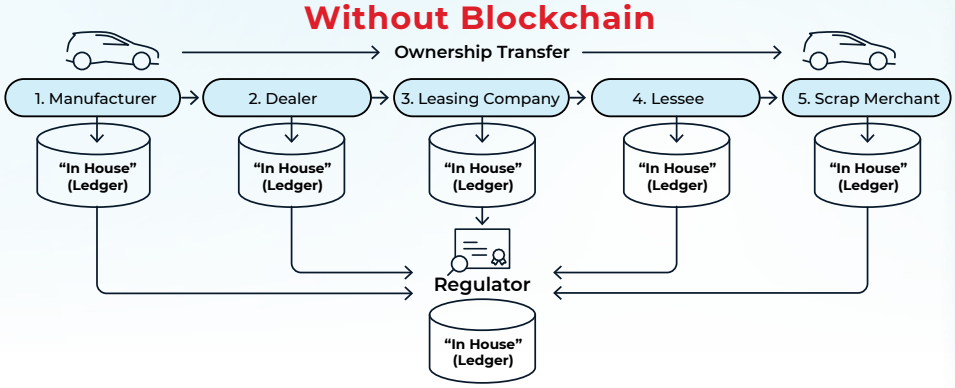
Estonia

Learn more about Estonia's plans to launch the world's first fully digital vehicle registration system.

See More

Tracking Vehicle Ownership

Without Blockchain

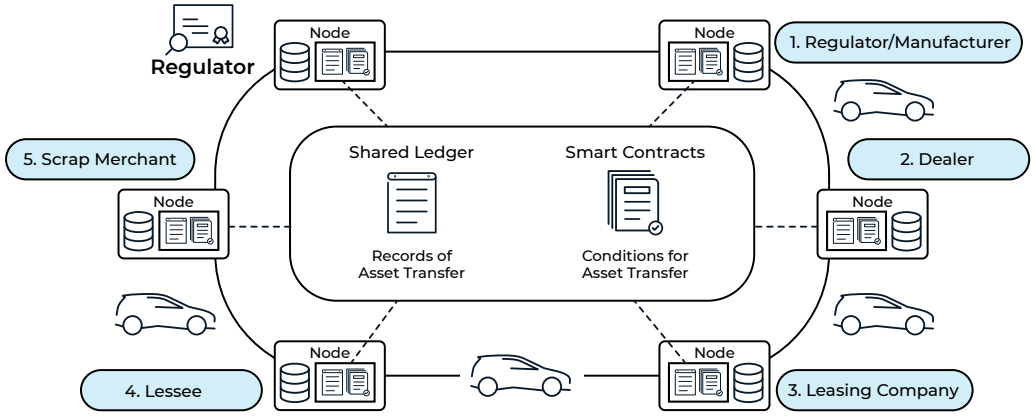


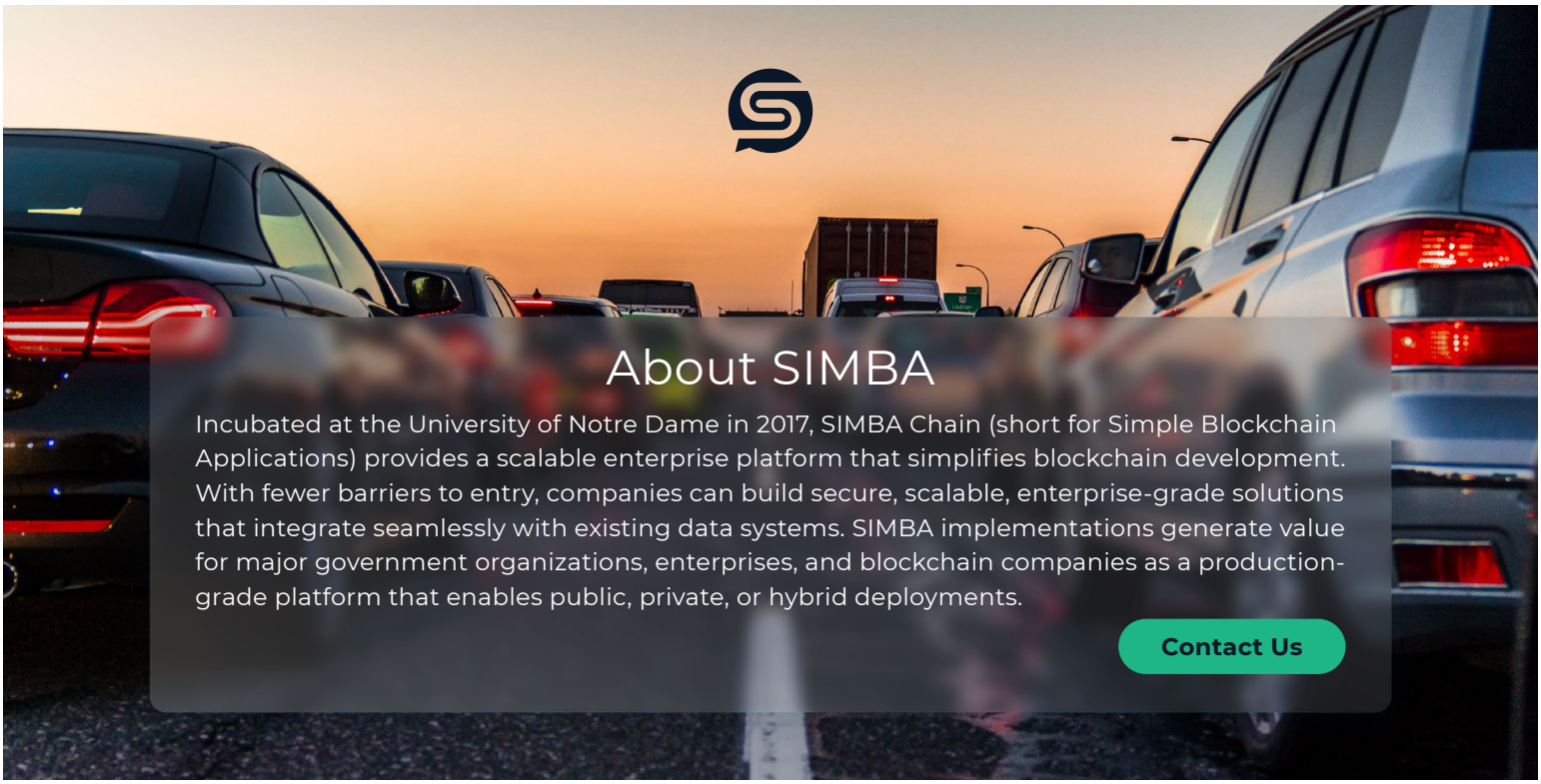
The Pitfalls of Existing Title Management Platforms:

- Slow processes that delay vehicle sales and delivery
- Inaccurate data that requires manual interventions (i.e., tracking errors or paying fines)
- Revenue loss due to unnecessary intermediaries

VERSUS

With Blockchain





About SIMBA

Incubated at the University of Notre Dame in 2017, SIMBA Chain (short for Simple Blockchain Applications) provides a scalable enterprise platform that simplifies blockchain development. With fewer barriers to entry, companies can build secure, scalable, enterprise-grade solutions that integrate seamlessly with existing data systems. SIMBA implementations generate value for major government organizations, enterprises, and blockchain companies as a production-grade platform that enables public, private, or hybrid deployments.

Contact Us

FAQ

Question:	**Is blockchain safe?**
Answer:	Yes, blockchain is generally considered safe due to its immutability, cryptographic security, and decentralized nature. However, it's important to implement additional security measures and follow best practices to mitigate potential vulnerabilities and risks.

Question:	**I need privacy; will everyone on the blockchain see all my information?**
Answer:	No, not everyone will see your information. Blockchain technology allows for different levels of privacy depending on the implementation. Private or permissioned blockchains can restrict access to information, ensuring that only authorized participants have visibility to specific data while benefiting from blockchain technology's security and transparency.

Question:	**What lift is required to adopt such a system?**
Answer:	Building a blockchain solution requires a collaborative effort involving various stakeholders, including government agencies, automotive industry participants, technology experts, and legal professionals. It requires a comprehensive approach encompassing technical expertise, regulatory compliance, data integration, and establishing secure governance models to ensure the successful implementation of the blockchain solution for government automotive titles.

Question:	**What are the upfront and ongoing costs?**
Answer:	The upfront costs of implementing a blockchain solution typically include initial development, integration, and infrastructure expenses, which can vary depending on the complexity and scale of the project. Ongoing costs primarily involve maintenance, upgrades, and operational expenses, including network fees, governance costs, and security measures to ensure the continued functionality and security of the blockchain solution

Question:	**Is anyone else doing this?**
Answer:	Several governments worldwide are exploring and implementing blockchain solutions for automotive titles. For example, countries like Sweden, Estonia, and the United Arab Emirates (UAE) have piloted or launched initiatives to leverage blockchain technology for securely managing and tracking vehicle titles and registration information.

Question:	**What do I need to get started?**
Answer:	You'll require a well-defined project scope, access to relevant data and documentation, and the necessary technological infrastructure to support blockchain implementation—that's where *SIMBA can help*.