



KOMHAR Distributed Ledger Use Cases



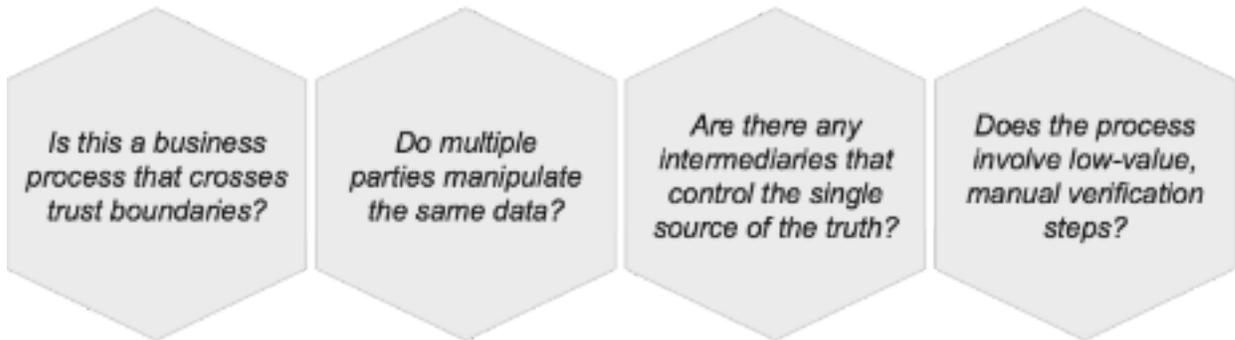
WWW.KOMHAR.COM

Confidential and Proprietary

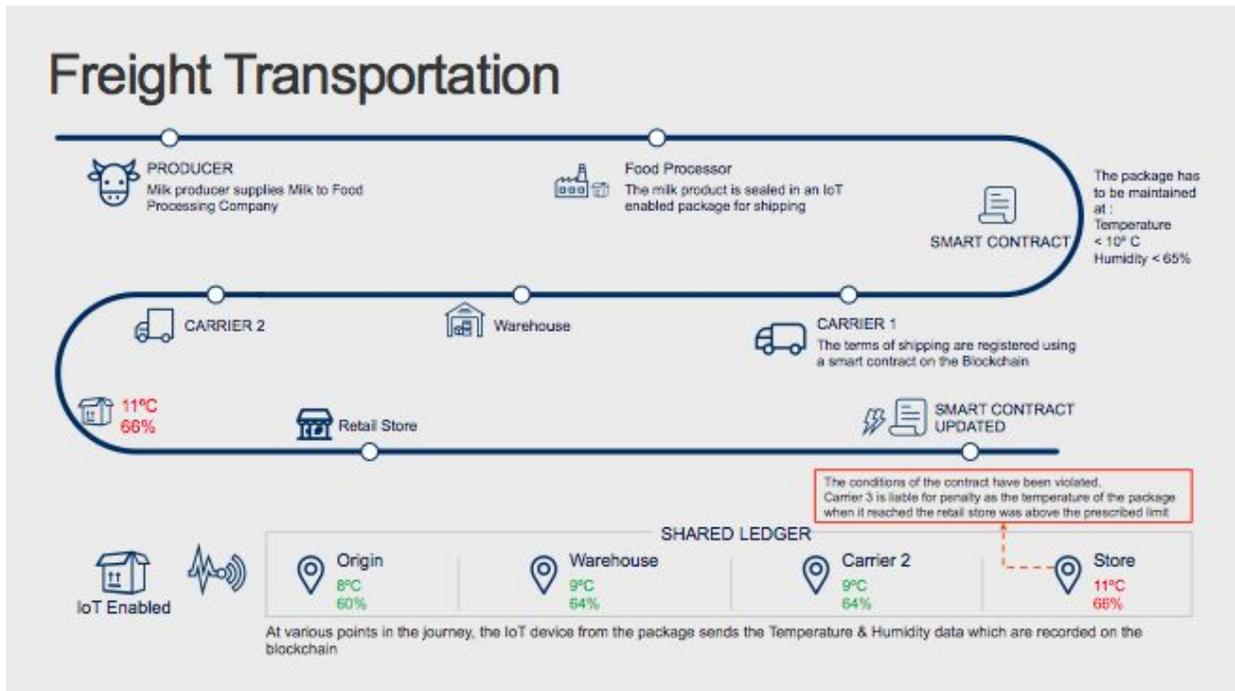
General Theme of BlockChain Use Cases:



Answering few questions can determine if blockchain is appropriate

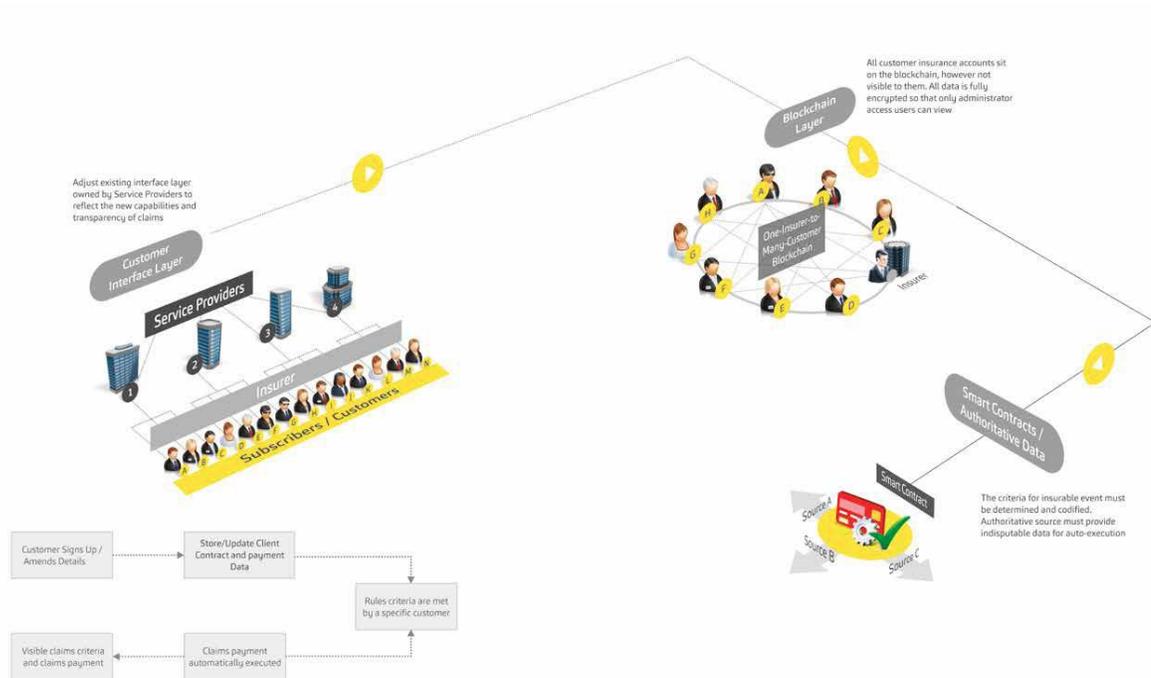


Example: Real World Scenario



Use Case : Insurance Claims Processing

Insurance claims handling is cumbersome for customers and expensive for insurance companies. Insurance claims handling processes have evolved only incrementally since online customer interfaces emerged. Customers want certainty that their claims will be assessed in a timely, transparent and objective manner while the Insurers want to reduce steadily climbing administrative costs and fraud losses. Both the customers' and insurers' challenges are derived from current claims handling processes that rely on subjective and manual steps to verify and assess information.



Komhar's InsurTech Accelerators built on the Blockchain builds trust by:

- Distributing the database with customers and the insurer as nodes
- Updating the customer's personal, contract and payment details directly onto the blockchain via the customer interface layer
- Executing the payments via the blockchain wallet
- Enabling smart contracts to automatically execute based on authoritative data sources and the customer details
- Ensuring authoritative data sources produce independent, trusted and indisputable evidence

Contact us at Inquiry@Komhar.com

Use Case: Trade Finance

Trade finance today is a core business for global banks, insurance companies and other players. Yet, trade finance today is also 10 years behind modern technology – manual and document intensive – and breaks in business cycles inhibit visibility and amplify challenges such as financial crime. Trade finance fraud costs businesses an estimated \$14 billion a year impacting corporates across the value chain. In combination with other emerging technologies, such as Artificial Intelligence and the Internet of Things (IoT), blockchain can enable a faster, better and safer performing business. Komhar brings the power of blockchain-based network validation, smart contracts, and digital currency to make the trade finance cycle more efficient and more risk-free by an order of magnitude. It combines three key digital technologies to provide:

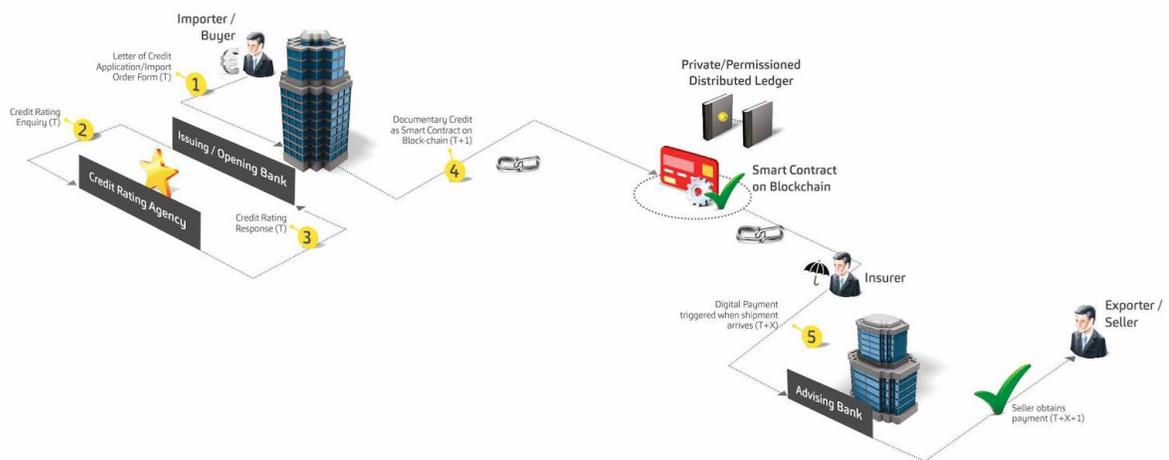
- An easier and more efficient trade-finance experience
- Reduced risks of trade
- Contract integrity and reduced fraud by automatic checks for contract terms and-conditions
- Access to smart contracts using a private, permissioned Ethereum network to gain the benefits of contract verification
- Option to combine the transaction data with other blockchain networks and emerging technologies

Blockchain is uniquely positioned to rethink this highly-decentralized, paper-contract, payment-based market. It can digitize the entire workflow as well as providing a common workflow for all participants – banks, suppliers and buyers, along with credit rating and shipping providers.

Komhar brings the power of blockchain-based network validation, smart contracts, and digital currency to make the trade finance cycle more efficient by an order of magnitude.

Our working code and applications show you how to:

- Use a private, permissioned Ethereum network to gain the benefits of contract verification from other participants without compromising sensitive client identities.
- Automatically check contract terms and conditions, which include the triggering of payments through a low-cost private digital payment system.
- Make the trade finance experience easier and more efficient, both internally and for customers, with feature-rich baseline blockchain applications and user interfaces.



Applying blockchain-enabled smart contracts results in:

- **Faster Cycle Time:** The efficiencies gained are expected to speed the trade finance cycle by an order of magnitude. Transactions that took months can be reduced to days.
- **Reduced Fraud:** Blockchain enables all participating banks to audit and access the underlying collateral in a secure, distributed database, which reduces supplier fraud.
- **Reduced Costs and Fees:** Common trade-finance platform that enables banks, rating agencies and suppliers to share information will result in greatly increased efficiencies. Payments transfers using digital currencies dramatically reduce third party fees, saving the industry billions of dollars.

Contact us at Inquiry@Komhar.com

Use Case: Reduce Cost and Improve the Mortgage Execution Experience

The mortgage value chain is highly fragmented with various government organizations, real estate, financial and legal intermediaries involved. It is still predominantly paper-based, manual and prone to processing errors. Blockchain technology has the potential to revolutionize the entire mortgage industry - financial institutions stand to gain from reduced costs throughout the mortgage value chain and more efficient interactions with suppliers, agents and customers. The early adopters also have the potential improve customer experience and retention and to win additional business from tech-savvy customers, who expect financial services to be simple, fast and transparent.

As a decentralized, contract-based transaction management system where loans and related payments and approvals are linked together; mortgage origination, initiation and execution is ideal for blockchain. A permissioned mortgage lending blockchain can dramatically reduce costs, fees and fraud; and improve efficiency, transparency and certainty along the whole transaction, for all parties.

The Komhar Blockchain Accelerator for Lending brings the power of blockchain technology to Improve the Entire Mortgage Value Chain

Firms who can embrace the new technology gain access to more efficient distribution and execution networks for their financial transactions and shared eco-systems with their customers, partners, suppliers and regulators. The Komhar Blockchain Accelerator for Mortgage Lending financial institutions how blockchain systems can decrease processing times and reduce errors, resulting in:

- **Reduced costs** : By automating and securing the mortgage lending processes, a blockchain-based system co-ordinates and identifies the agents and intermediaries and could reduce operational costs, fees and fraud for financial institutions. We estimate savings of \$177 million on a loan book of \$97.7 billion for a typical mortgage lender.
- **Improved workflows**: Blockchain technology is expected to reduce total transaction time throughout the mortgage value chain by 25%, to 30 days from 40. If national governments establish a blockchain-based title registry, this is expected to fall a further 25%, to 20 days.
- **Enhanced customer experience**: Customers want to be served efficiently, securely and transparently in what, for many, is the largest transaction of their lives. The inherent identity, security and audit trail features of blockchain gives more control to buyers and borrowers, providing full visibility of progress and intermediary activities. The customer experience can be improved through:
 - Improved loan search and credit qualification checks and approvals
 - Faster asset appraisal, insurance and loan security
 - Easier document exchange, disclosure and due diligence

- Reduced fees along the mortgage value chain
- Increased certainty and reduced fraud during loan funding approval; cash transactions with sellers and intermediaries; and completion of asset and title exchange

Contact us at Inquiry@Komhar.com

Use Case: Global Payments

The blockchain buzz is the most intense in the payments space. But blockchain is not the missing piece for consumer payments. The payments innovation that banks can look to solve lie in any global payment transaction involving a currency conversion: global intra-bank transactions, remittances or peer-to-peer global money transfers, institutional payments such as global corporate payrolls or FX transfers through correspondent banking and SWIFT.

Blockchain payment technologies like Ripple can add tremendous value in the global sphere by bringing multi-day settlement cycles down to real-time, enhancing operations around global currency conversions, improving anti-money laundering data and more.

Blockchain-based payments using the Ripple network can dramatically reduce the costs of international financial transactions by eliminating intermediaries, including correspondent banks. Banks can use the network for remittance payments between individuals and for interbank transfers within a multi-country financial institution.

Komhar's implementation takes advantage of the Ripple network's ability to set up trusted relationships, its market makers that provide optimal FX rates, and the network's secure distributed ledger and cryptocurrency. Together, these elements enable fast, secure and low-cost transfers between international currencies and provide:

- **Reduced costs and fees:** Because transactions flow through the Ripple network rather than a network of correspondent banks, intermediaries charging fees are eliminated. Ripple's fees are low. FX rates for conversion between Ripple's currency and origin and target-country currencies are guaranteed to be among the best.
- **Faster settlement:** Transactions on the Ripple network take place immediately. Komhar's Ripple wallet interface enables a financial institution and its customers to make transactions easily and see the resulting transfer and balance changes.
- **Greater security:** Komhar's Ripple network implementation guides a financial institution through the process of setting up trust relationships between network participants on Ripple's secure distributed network. This function reduces counterparty risk while the blockchain ledger makes transactions highly secure and verifiable by all network participants.

Komhar can help you integrate Ripple infrastructure into your existing payments flows to improve a bank's payment process. Contact us at Inquiry@Komhar.com

Use Case: KYC / AML Utility

Komhar's Blockchain Accelerator for KYC builds on the industry's progress and reinvents the existing KYC utility operating model to obtain critical mass, to reduce operating and compliance costs and to improve customer experience. The KYC utilities blockchain model of the future will deliver critical mass to multiply cost savings across the industry, which will in turn present the leading KYC utility with self-perpetuating market leadership. We are building the next-gen KYC utility on blockchain.

The Komhar Blockchain Accelerator for KYC Blockchain delivers disruptive change by uniquely solving many technology challenges at once. The key operating model enhancements include:

- **Distributed client data collection delivers critical mass:** Banks will regain ownership of the end-to-end client interaction. Instead of the KYC utilities asking new corporates to consent to sharing their client data, member banks would ask their existing corporate clients for consent to share onto the utility. When another bank requests access to the profile, the corporate confirms its acceptance to share the originating bank's KYC profile. The originating bank sells the KYC-complete profile, delivering a major contribution to critical mass.
- **Standardization and automation of policy and operations:** Building on recent progress on KYC policy standardization and with increasingly digital data collection, blockchain can use smart contracts to execute operational and control processes. For example, daily updates of client data from authoritative sources could gradually reduce the requirement for periodic reviews. Where it can be standardized across the industry, KYC controls and workflow routing would be codified into smart contracts and executed automatically. Greater digitization could also enable multilingual solutions via smart contracts and translation tools.
- **Centralization of risk and controls:** Banks and regulators can achieve tighter control and reduced regulatory risk by limiting human input and driving standardization across the industry. Direct feeds from authoritative sources into the corporate profiles better reduce fraud risk and the scope for human errors, compared to physical documents or customer-entered data fields. Blockchain can enable the constant auto-capture of client data and centralization of sanctions and politically-exposed person (PEP) screening. Key regulatory concerns, such as banks' processes to allocate anti-money laundering risk ratings, could be automated through more objective criteria, avoiding the race-to-the-bottom approach that has drawn regulatory fines in the past.

Komhar can help leverage Core Blockchain Technology to Improve KYC Experience using the core blockchain functionalities to completely reinvent the KYC utility technology architecture:

- Blockchain's distributed database enables permissioned nodes (the participating banks) to access, edit, contribute and validate corporate profile data in a trustless environment.
- Blockchain's smart contracts enable automation of industry standard KYC and AML controls and perform data validation checks.

- The immutable, permissioned and distributed nature of the database removes the single point of failure for cyberattacks.
- Private keys and encryption segregate and restrict client data to the appropriate viewers with data privacy and transfer laws enforced by code.

Contact us at Inquiry@Komhar.com