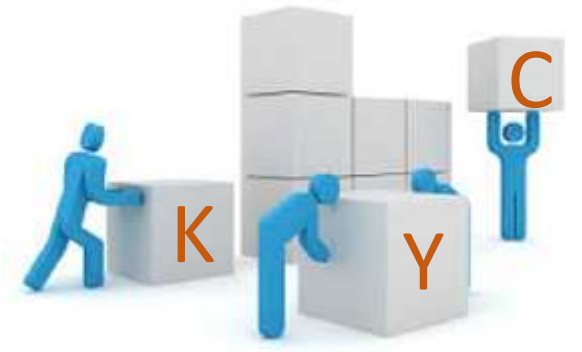
ChainNinja
Blockchain Solutions

Making Blockchain REAL for business



CASE STUDY: Know Your Customer (KYC)

Background

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Current KYC Processes

- ✓ Expensive
- ✓ Inefficient
- ✓ Poor customer experience
- ✓ Up to 50 days to onboard a large corporation through all the necessary checks, with multiple pieces of documentation needing to be produced and verified.

Huge fines are issued for incorrectly discharging KYC responsibilities.

While this is painful for clients, it is also a huge burden for banks for what is a non-revenue generating, non-differentiating process.

Case Study Client Industry:
Finance/Banking

Applicable Industries:

- Health & Life Sciences
- Pharma
- Insurance

AML Checks

- ✓ Large operations teams are needed to handle transactions failing AML checks, and typically these run with a >99% false positive rate, resulting in massive inefficiencies.

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Business Use Case

The industry tried to resolve some of the duplications in KYC by setting up KYC utilities – third-party companies which took on the burden of KYC checks on behalf of the banks (for a fee), and then disseminated each customer's verified documentation to multiple banks as required. This presents a better experience for the customer (they only have to provide documentation once) and a more efficient service for the banks. However, due to a lack of collaboration, four or five competing KYC utilities have emerged resulting in a fragmented market which, while providing some improvements, did not deliver the benefits that could be realized for banks and corporations if a single utility was used.

We have used Blockchain's distributed ledger technology to address these KYC inefficiencies.

Challenges

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Standard KYC Process

Highly redundant and inefficient, resulting in significant friction points

Process Inefficiencies

MAJOR ISSUES

- ✓ Poor Customer Experience - Customers must submit the same documentation multiple times, often with slightly different requirements, with each new registration process
- ✓ High Operational Cost - Institutions must invest in significant man-hours to gather relevant documents and auditing for compliance.
- ✓ Inflexible Technology - Siloed systems often cannot efficiently adapt to the demands of changing regulatory requirements

AUDIT TIMELINE - In the field of retail banking, 37 days is the average amount of time for corporations and 12 days for private individuals to gather documents for compliance

Challenges

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KYC Blockchain

Great potential for Blockchain to improve efficiency in the KYC/AML space

Challenges

- ✓ **Privacy** - corporations will not want ALL Banks or ANY Customer to see their KYC documentation or digital identity if they do not have a relationship with them. Similarly, when corporations exit a relationship with a bank they will want the right to be 'forgotten' – Given the immutable nature of blockchain technology, how will this be managed?
- ✓ **Standardization** – all banks within one jurisdiction are required to conform to the same KYC rules and regulations, so standardization in this domain is relatively simple. However, there are two challenges where increased standardization would further enhance the benefits of using blockchain for KYC
  - ✓ Cross-jurisdictional standardization of KYC requirements across different regional and national regulators
  - ✓ Standardization of the banks' own onboarding checks relating to their own risk appetite and customer profiling
- ✓ **Liability** – if one bank verifies a customer (through KYC checks) and that digital identity is then used by a different bank, who is liable in the event of a fraudulent transaction by that customer? How frequently should customers be re-verified, and who is responsible for that re-verification?

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Solution

ChainNinja built on blockchain's attributes of security, distributed data, and decentralization which provided a potential solution to improving both efficiency and the customer experience by reducing processing costs and enabling the banks to focus on more customer-focused activity

The solution involved a blockchain-based registry, a distributed database of verified customer data, which all banks could access. When the corporation would approach a new bank to open an account the bank will be able to access their pre-verified information from their node on the blockchain.

Over time, the corporation would be able to upload, amend and delete their information on the blockchain as required. The assumption is made that all banks would use one blockchain network, as opposed to multiple KYC utilities, and would enable near real-time dissemination of updated, verified customer data to all the banks, as well as benefitting from the inherent increased security that blockchain delivers through cryptographic hashing

Blockchain created the ability to create, and subsequently use, digital identities. Once a corporation has had their documentation verified once, a digital identity could be created for that customer – this is essentially their digital passport for transacting in financial services and would be appended to every transaction they undertake, effectively 'signing' the transactions for them. This digital identity would store all relevant information about the customer from addresses, account details, director's details, PEPs, etc. which could be used during AML / transaction monitoring, thus increasing the accuracy of the monitoring and reducing the likelihood for false positives.

Taking this further, banks that positively identify a fraudulent transaction could distribute details of that transaction globally to all connected banks, thus preventing the opportunity for further fraud.

Though the benefits of KYC Blockchain may not appear to be large enough to justify the significant effort required to implement this change across the industry – as with the majority of blockchain use-cases, benefits are magnified through the network effect.

The more banks that sign up, the greater the efficiencies can be realized.

Using A Digital ID

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Provides significant benefits over the simple usage of blockchain for KYC

Increased transparency for regulators as both the immutability of the blockchain, and the opportunity for regulators to have nodes on blockchain networks, support the ability to get a full, transparent audit trail of all transactions.

BENEFITS

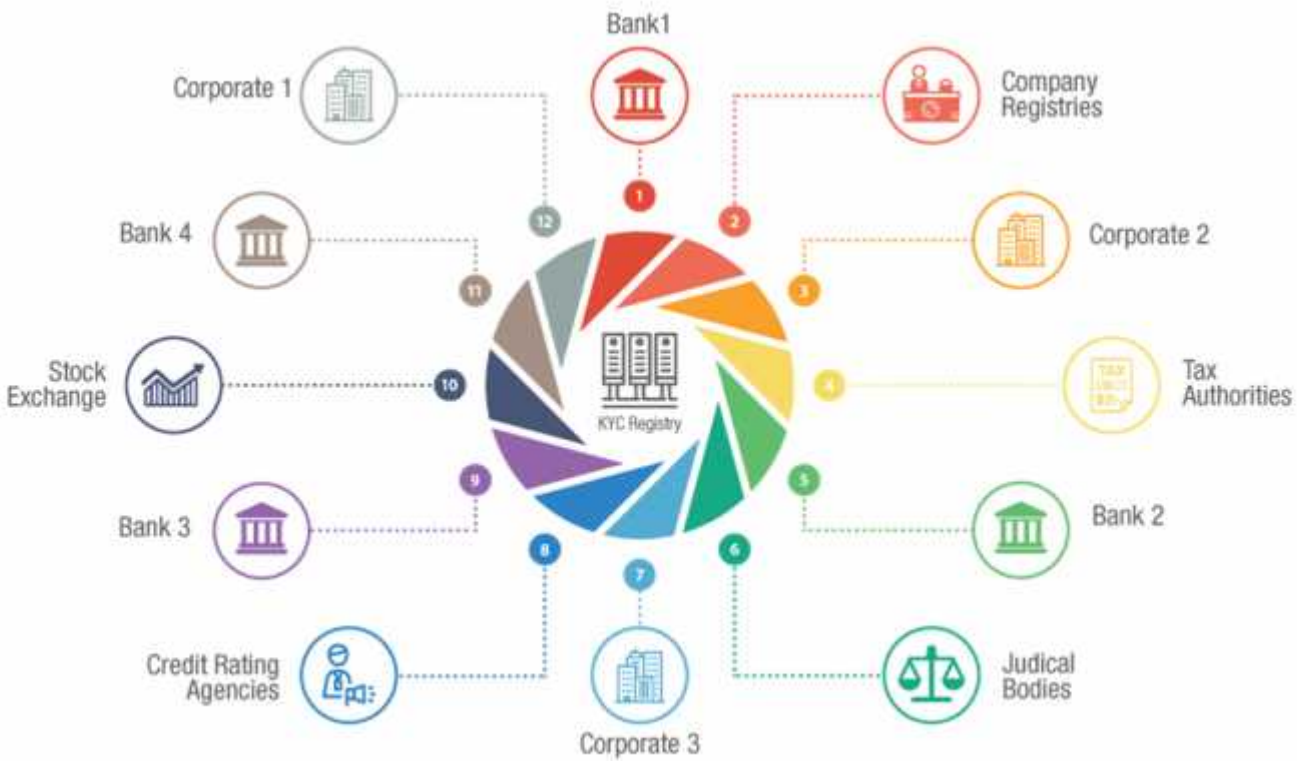
Reduced operational costs for banks through not having to KYC-check every customer (if they've already been checked and given a digital identity), and fewer operational staff needed for handling false positives.

Enhanced customer experience - having to submit documentation once, increased security (less opportunity for identity theft), and fewer transactions being flagged as false positives and stalling transaction flows. In due course, a digital identity could be used across many industries, not just for financial transactions.

Increased security through near real-time distribution of updated KYC documentation, verified digital identities, and the opportunity to share, in near real-time, fraudulent transaction details.

Meets National and International legal standards

Logical


Bank1
Corporate 1
Company Registries
Bank 4
Corporate 2
Stock Exchange
Tax Authorities
KYC Registry
Bank 3
Bank 2
Credit Rating Agencies
Judical Bodies
Corporate 3

Technical

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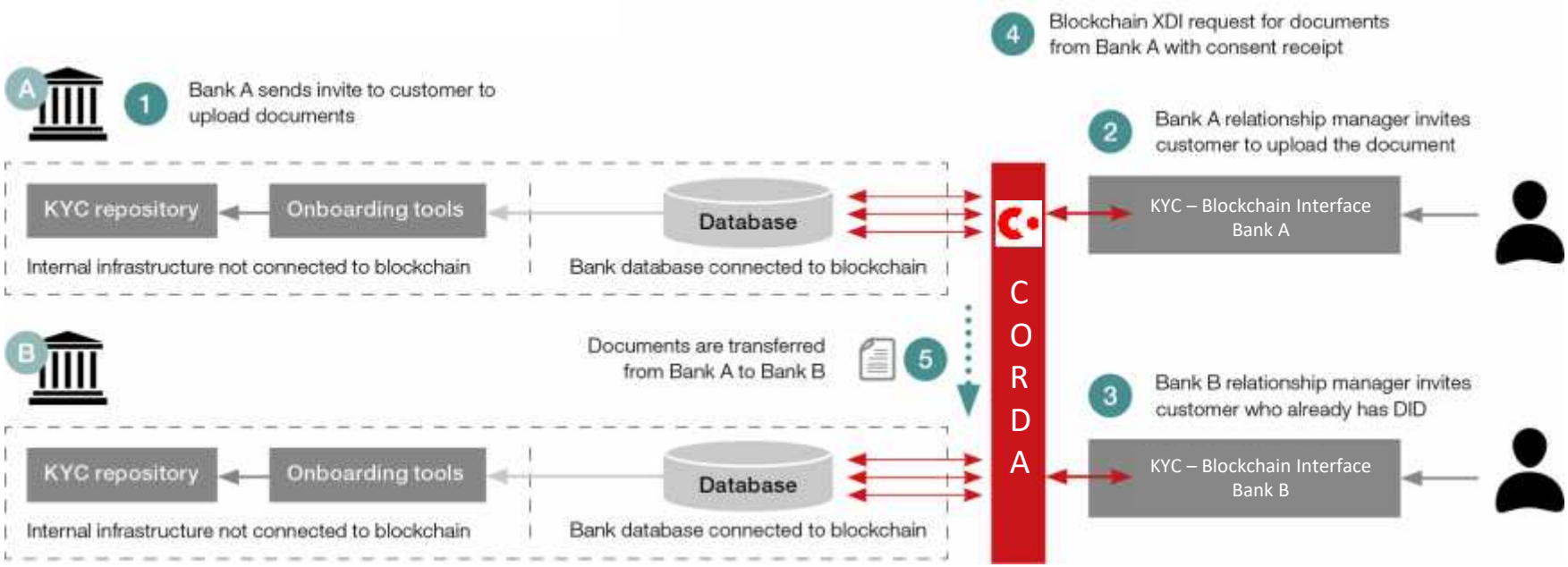

ChainNinja = Results

CASE STUDY: Know Your Customer (KYC)

- ✓ Custom End to End Solutions
- ✓ Specialized Blockchain's
- ✓ Collaborative, Agile and Efficient
- ✓ Open Platform and Open Governance
- ✓ Regulatory Compliance
- ✓ Coexistence with Adjacent Systems

Sanjay Kumar, CTO provides strategy and architecture consulting, business use cases applicability assessment, Blockchain tools selection, developing PoCs using open source frameworks for both public and private Blockchain platforms.