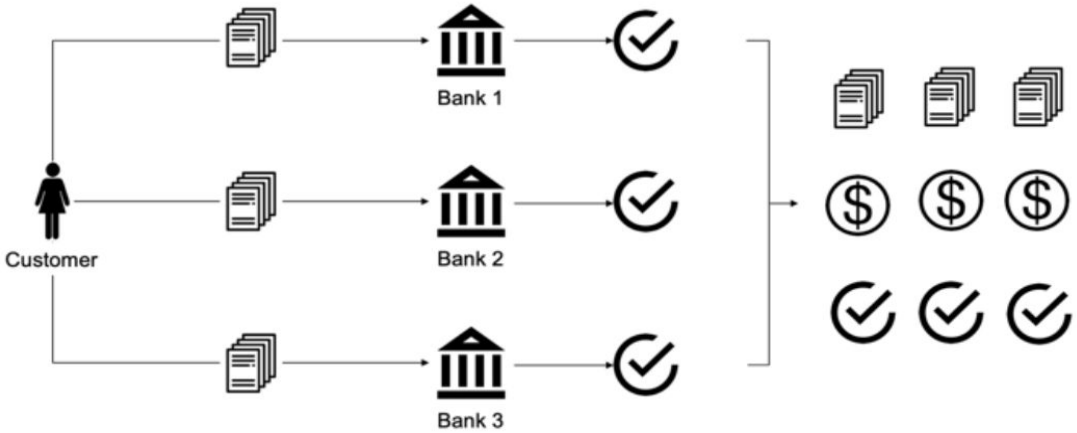
Problem Statement

Optimized KYC System Based on Blockchain Technology:

The know-your-customer (KYC) process that financial institutions (FIs) are obliged to follow whenever they establish a financial relationship with a new customer represents a significant financial burden for FIs but creates no productive added value. The KYC process is made up of a series of routine tasks that, when carried out, are meant to verify the lawfulness of a potential customer's activities. Every FI needs to follow the KYC process before even starting to work with a new customer. We propose and program a blockchain-based system that reduces and shares out among the financial institutions that work with a customer the costs of the KYC process and also makes it possible for FIs to dynamically update information related to customers.

Current KYC Scenario

In current KYC scenario, if one customer works (or intends to work) simultaneously with *n* FIs, the KYC process for that customer will be repeated *n* times. Although each FI is responsible for its own KYC process and must conduct due diligence independently of other FIs, a core portion of KYC due diligence is a routine process that is carried out in parallel by all FIs that work (or intend to work) with the same customer. Thus, costly tasks are carried out repeatedly and in parallel whenever a customer works with two or more FIs.

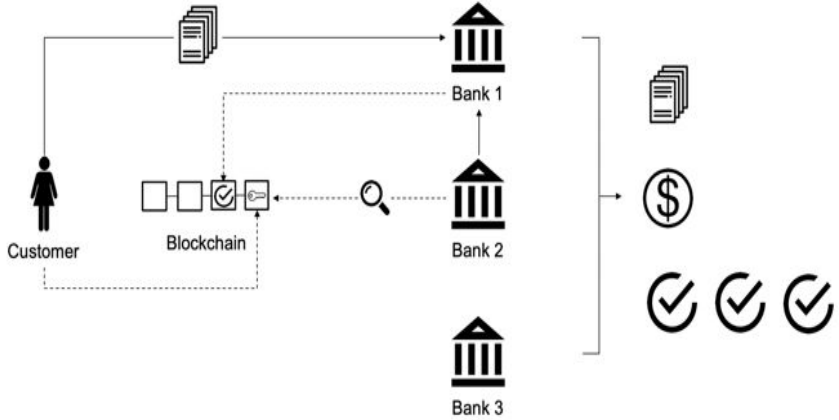


Why do we need Blockchain for Identity?

- **Data insecurity:** At present, we store our most valuable identification information on centralized government databases supported by legacy software operate with numerous single points of failure. Large, centralized systems containing the personally identifiable information (PII) of millions of user accounts are incredibly appealing to hackers.
- **Fraudulent identities:** Users juggle various identities associated with their usernames across different websites. There is no standardized way to use the data generated by one platform on another platform. Furthermore, the weak link between digital and offline identities makes it relatively easy to create fake identities. Fake identities create fertile ground for the phenomena of counterfeit interaction, which can help in the perpetration of fraud and lead to inflated numbers and lost revenue.
- **Lack of Control:** Currently, it is impossible for the users to have control over the personally identifiable information (PII). They do not have an idea of how many times PII has been shared or used without their consent. Moreover, individuals do not even know where all their personal information has been stored.

Project Abstract

In this system, there are two sides, one is client side where the customer can upload his/her required KYC documents (adhar card, pan card etc) and other side is Financial Institutions side (banks, colleges, etc.) where FI can search for their the customers based on their ID and send request for KYC documents required. The KYC process need to carry out only once. When that customer approaches another FI with the aim of establishing a financial relationship, this second FI can see, by consulting the blockchain, that the KYC process has already been carried out (in this case by the first FI) and can thus focus solely on certain, limited aspects of KYC (namely, understanding the customer's activities) and does not need to perform routine, mechanical document Verification.



BUSINESS **PROBLEMS**

- A lack of standardization in methods for collecting information from the customer.
- The process of customer onboarding is too costly and slow, resulting in loss of business.
- Unavailability of data sharing option to other banks.
- Data security of the information shared by the customer.
- Unavailability of customer data repository leads to a time-consuming verification process.

SOLUTIONS **WE PROVIDED**

- We have developed a blockchain-based platform for collecting information from customers where multiple banks and third-party verification agencies can onboard as Blockchain node.
- Bank can send the applicant info for verification to third party agency and on successful paperless verification, the bank can quickly onboard the customer.
- The platform helps to share verified customer data with other banks where all transactions between banks recorded in the blockchain network as a single point of truth.
- The platform is developed on the R3 Corda framework which confirms that data sharing only visible between two parties.
- The digital wallet provides the customers and bankers a space to upload all the important documents for future use and download them whenever required.

Advantages of using KYC System Based on Blockchain Technology:

- **Cost and Security:** The result is a programmed, stand-alone solution that can be implemented by FIs to reduce the cost of the KYC process without requiring any central instance to store the customer's data, and in which FIs share the initial costs of the KYC process as well as the running costs of keeping the information about customers up to date. Our system increases the levels of security and regulatory compliance in the KYC process and significantly reduces the cost of that process for all parties involved.

- **Decentralized:** No personal identification documents of the users will be stored in a centralised server

- **Consent:** A blockchain identity management system will not store any users information. Moreover, the system uses Smart contracts to enable the controlled data disclosure