**INTRODUCTION:**

The Know Your Customer (KYC) process, which requires banks to validate and verify primary documents, is an essential part of client onboarding. However, the market is flooded with KYC utilities that help manage these documents and share them with multiple entities, but they add little value.

***Blockchain*** technology, with its concept of distributed, time-stamped ledgers, can effectively help banks improve their KYC process by facilitating near real-time data exchange among various stakeholders for faster and effective validation.

KYC processes are typically repetitive, inconsistent, and duplicated, resulting in significant administrative overhead and costs. Currently, KYC documents include:

* Gathered and stored internally, using a document management system or an internal database
* Shared with multiple external agencies for individual validation
* Updated in banks' internal repositories following successful validation and reported to central agencies

Initiatives by private entities such as The Society for Worldwide Interbank Financial Telecommunication (SWIFT), banking consortiums, and government bodies, on the other hand, have resulted in an increase in the number of KYC registries. These registries serve as centralised repositories for all KYC compliance documents and information, whereas the central registry stores digitised data linked to a unique identification number for each customer. Each bank and financial institution must carry out the KYC process on their own and upload the validated information and documents to the central registry. Banks can access the stored data using the unique ID to perform due diligence whenever customers request a new service within the same banking relationship or from another bank.

**What is Blockchain ??**

A blockchain is a distributed database that is shared among the nodes of a computer network. As a database, a blockchain stores information electronically in digital format. Blockchains are best known for their crucial role in cryptocurrency systems, such as Bitcoin, for maintaining a secure and decentralized record of transactions. The innovation with a blockchain is that it guarantees the fidelity and security of a record of data and generates trust without the need for a trusted third party.

One key difference between a typical database and a blockchain is how the data is structured. A blockchain collects information together in groups, known as blocks, that hold sets of information. Blocks have certain storage capacities and, when filled, are closed and linked to the previously filled block, forming a chain of data known as the blockchain. All new information that follows that freshly added block is compiled into a newly formed block that will then also be added to the chain once filled.

**Why Blockchain ???**

#### Immutability: So, the first property is that it ensures immutability. That is, if you store data on the blockchain, it is guaranteed that the data cannot be changed later. This is critical when you want to trust something or make something more trustworthy. Because if I'm building an application and want to change data, I can change the data and change the data in any way I want because everything is under my control. However, with blockchain, this is not possible.

#### Decentralization: The second intriguing feature of blockchain is that it is decentralised. This means that no single entity has complete control. Blockchain requires a group of nodes to serve as points where all data is stored in a decentralised manner. And these nodes collaborate to ensure that the correct data provenance is maintained, which means that the correct data timeline is maintained.

#### Better Security: Blockchain uses cryptography to add a layer of security to the data stored on the network. The decentralization feature, on top of the cryptography, makes blockchain provide better security than other systems. Cryptography utilized complex mathematical algorithms that are used to secure the data and systems on the blockchain network.

#### Inexpensive: When compared to other technologies, blockchain is less expensive. The elimination of centralised authority eliminates the buffer required to run the network optimally. There is no need to pay a middleman when there is no centralization, which improves cost efficiency. Using blockchain in the supply chain means less paperwork. The paperwork alone is expensive. There are additional costs, such as hiring people to do the paperwork and maintain the intermediaries.

#### Improved Efficiency: Finally, increased efficiency is another reason why blockchain is important. Better security, intermediary removal, and overall better processes are the root causes. Transactions, particularly international transactions, take seconds rather than weeks to complete.