TATA CONSULTANCY SERVICES

Reimagining KYC Using Blockchain Technology

Abstract

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

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.

The Know Your Customer (KYC) Process

KYC processes are generally repetitive, inconsistent, and duplicated, leading to high administrative overheads and costs.

Currently KYC documents are:

- Collected and stored internally, using a document management system or internal database
- Shared with multiple external agencies for validation on an individual basis
- Updated by banks in their internal repository upon successful validation and reported to central agencies

However, initiatives by private entities such as The Society for Worldwide Interbank Financial Telecommunication (SWIFT), banking consortiums, and government bodies have led to an upsurge in the number of KYC registries. These registries act as centralized repositories that store all documents and information related to KYC compliance, whereas the central registry stores digitized data tagged to a unique identification number for each customer.

Every bank and financial institution has to perform the KYC process individually and upload the validated information and documents to the central registry. By using the unique ID, banks can access the stored data to perform due diligence whenever customers request for a new service within the same banking relationship or from another bank.

Current Challenges

Here are some major KYC compliance challenges that banks and financial institutions are facing:

- **Data integration:** currently, several third-party data providers and external validation agencies offer data and interfaces to extract the required customer information. However, banks struggle to integrate this data to obtain a consolidated view of the customers. This has led to increasing instances of banks' failure to comply with regulatory requirements, resulting in huge penalties and reputational damage.
- **Expensive technology:** post due diligence, banks need to digitize data in the documents to feed it into the repositories. This is an expensive exercise, as it uses advanced technology platforms.

DTCC AvoxData provides legal entity data, LexisNexis provides information to assess risks of politically exposed persons and sanctions screening, NORCOM provides criminal data, and agencies like CIBIL, Experian PLC, and Equifax, Inc. provide credit ratings. SWIFT launched the SWIFT KYC Registry in December 2014 [1], and more than 2000 banks have already enrolled with it.

- **Evolving regulation:** the KYC landscape is constantly facing new regulation across different jurisdictions (Dodd-Frank Act, FATCA, and MiFID II). Therefore, KYC utilities need to keep updating their guidelines. This increases the need for banks to improve their data collection mechanisms for effective risk management and timely compliance.

- **Fragmented approach:** banks do not have a single, unified KYC system for its various lines of business like wealth management, asset management, and brokerage. Maintaining these multiple systems and integrating different interfaces puts banks under immense pressure and adds costs.

How Blockchain Can Help
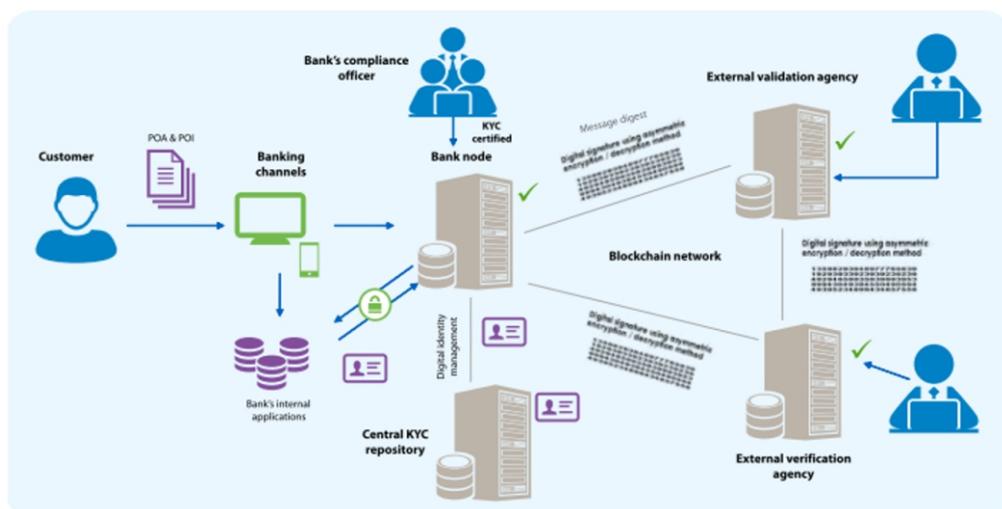

Proposed Blockchain-based KYC Process

Blockchain technology can be used to develop two separate models to enable intra- and inter- bank verification and update processes.

- **Intra-bank applications:** banks can use blockchain technology to deploy an intra-bank application within the same banking group. This significantly reduces time and effort spent in repetitive due diligence processes. If a new service request requires additional customer information not found in the ledger, the model allows the bank to update the ledger and get it revalidated by external agencies—which essentially translates into re-KYC.

- **Inter-bank applications:** this model requires participating banks to reach a consensus on the validation process to maintain trust and integrity. Bank A plays the role of the originating bank and performs an initial KYC verification for a customer. When the customer approaches Bank B for services, Bank B requests the Bank A to share the KYC

documents. In this way, the blockchain platform ensures secure inter-bank document transfer—enhancing process efficiency, standardizing KYC processes, and performing near real-time customer validations.

- **Centralized blockchain-based KYC:** banks can also be linked to a centralized KYC repository along the lines of the existing KYC registry system. In this arrangement, customer data and documents are stored in the distributed ledger, and the bank that performs the KYC stores all relevant details and generates a unique KYC number. When another bank wants to perform due diligence on the same customer, it can use the unique KYC number to access the central registry and download customer details.

A blockchain-based solution, with its immutable ledger, ease of integration, and considerably lower operational and infrastructure costs, is undeniably a better option as compared to existing registries.
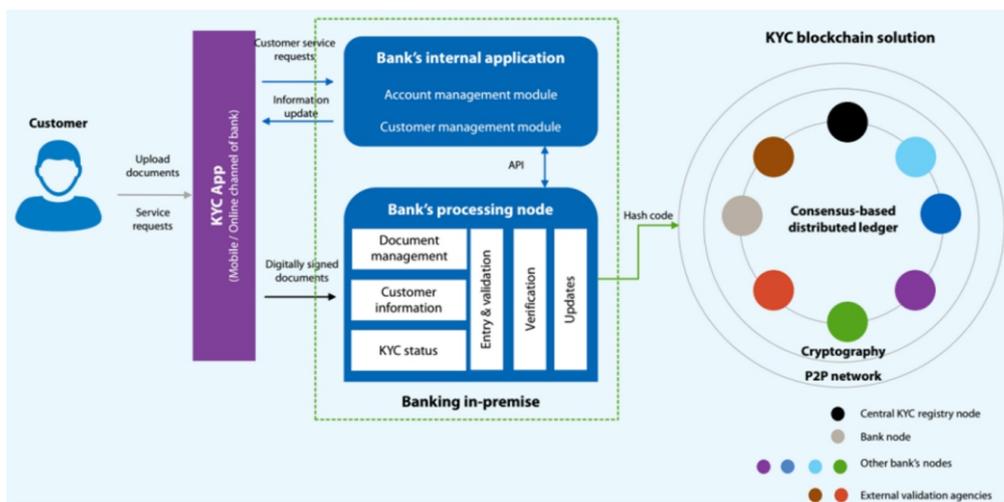
Consolidated KYC as a Shared Service

Offering KYC compliance as a shared service is complicated when we talk about global institutional customers, as different jurisdictions are governed by different regulations. Nonetheless, this option is worth exploring.

After completion of the KYC process, customer details such as legal entity, tax compliance, criminal records, AML compliance, and counterparty information will be consolidated and stored in a distributed ledger. This can then be offered to other banks through a shared services model in return for a fee. As a result, banks will need to do minimal due diligence. KYC utilities currently available in the market could form an alliance with banks to offer this information as a service.

Conclusion

A blockchain-based solution:

- Offers a unique set of advantages that enable the seamless and secure exchange of information between different trusted entities

- Can drive substantial reductions in processing costs, as the infrastructure cost for building the new solution will be a mere 20% of the current KYC processing costs

Centralizing the KYC process will create a common customer onboarding framework, making the entire process a lot more efficient and cost-effective.

References

[1] SWIFT, "SWIFT's KYC Registry surpasses 2,000 financial 2016), accessed June 29, 2016, https://www.swift.com/insights/press- releases/swift_s-kyc-registry-surpasses-2_000-financial institutions

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