Quartz Contract Authoring

Background

A typical contract authoring process requires collaboration amongst multiple departments of the contracting firms, such as Procurement, Finance, and Legal, to draft and vet the clauses/sections of the contract. Each clause/section undergoes multiple reviews/updates which are made using a word processing application and exchanged over email, collaboration tools or as hard copies. There is a **risk of incorrect updates** being made to the document, or certain **edits getting missed out, voluntarily or involuntarily**, while finalizing the contract. There could also be deliberate attempts to tamper with the contract by certain parties for their own benefit.

This can lead to **serious issues in enforcing the contract** in future and **potential litigation** between the parties concerned. In addition, the **lack of ability to trace each update made to the contract**, as well as the user who has made the update, can further complicate the matter, in the event of litigation.

Contract Authoring on Blockchain

The above challenges can be overcome through a **private, permissioned Blockchain ecosystem** wherein individual departments are connected as nodes, with privileges assigned to access and update specific sections of the contract. Using the Contract authoring solution from Quartz, the complete contract information, with all the clauses/sections is stored on blockchain and the entire authoring process is carried out on blockchain. This ensures that every change made to the contract is captured with user, time stamp information. The finalized version of the contract is **cryptographically stored** on the blockchain thereby ensuring that it is **tamper-proof**. The ecosystem supports multi-party contracts and can in future also be extended to manage project execution on blockchain. In addition, the solution lends itself well to manage other types of critical documentation – for example land register records, patient medical records etc where **immutability of records** and authenticity of information need to be guaranteed to eco-system participants, in order to create trust and transparency.

Business Benefits

- Non repudiation of contract clauses and terms by participating entities since the complete audit trail is available on blockchain and traceable

- Ability to ensure immutability of records on blockchain, combined with digitization for seamless access.

- Contract terms cannot be tampered with, and possibilities of frauds can be eliminated as the same version of the contract document is available on the blockchain to all the connected entities.

- Real time view of clauses/sections for the contracting organizations, greater transparency.

- Audit Trail for end to end tracking of changes to contract terms and conditions.

The Quartz Advantage

- Standardization through templates: Quartz supports generation of templates comprising multiple clauses/sections. Contracts can be created by simply cloning a template on blockchain, thus saving time

- Data Privacy through Smart Contracts: Quartz ensures data confidentiality, as each node/department will only have access to clauses/sections relevant for them

- Administration and Monitoring of the ecosystem through the Quartz Command Center.

About Tata Consultancy Services Ltd. (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organisation that has been partnering with many of the world's largest businesses in their transformation journeys for the last fifty years. TCS offers a consulting-led, Cognitive powered, integrated portfolio of IT, Business & Technology Services, and engineering. This is delivered through its unique Location Independent Agile delivery model, recognised as a benchmark of excellence in software development.

About Quartz Blockchain Solutions

Quartz Blockchain solutions comprise intelligent Smart contract development kits, and integration solutions to enable development of high quality code for different Blockchain technologies. They help integrate existing solutions easily with ecosystems / industry networks, and enable the deployment of the solution over a robust enterprise class architectural framework called the Quartz Foundation. Quartz also comprises a set of 'Designed for blockchain' business solutions across industries, which enable blockchain-driven transformation.