Completion of Blockchain Technology and Mizuho Digital Currency Trials

[FinTech] Collaboration with Overseas IT Services Provider on FinTech Initiatives

Mizuho Financial Group, Inc. (MHFG; President & Group CEO: Yasuhiro Sato), Cognizant Technology Solutions (Cognizant; CEO: Francisco D’Souza), and Cognizant Japan (President & Representative Director: Tomoaki Takeuchi) have built a new application after completing trials using blockchain technology in cross-border document sharing and a custom digital currency.

MHFG partnered with Cognizant, a US-headquartered global company with expertise in financial services, consulting, and digital transformation, to develop an application focused on enhancing collaboration across the Mizuho group through facilitating data sharing, as well as the issue and transfer of digital currency between Mizuho subsidiaries. The project was designed to test whether a business process as robust as the traditional centralized system can be built at a lower cost.

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**Application framework**

The application allows subsidiaries to both issue currency based on their performance, and freely transfer that currency to other subsidiaries. This in turn eliminates the need for data reconciliation among subsidiaries and the final performance evaluation can be based on the balance of currency held by a subsidiary.
The solution successfully confirmed that a tamper-proof distributed database, one of the key features of blockchain technology, can be leveraged to create an effective platform for information sharing among multiple group companies, resulting in potential cost savings and enhanced usability. Additionally, the project demonstrated that blockchain enables IT infrastructure used by multiple group companies to be implemented swiftly and cost-effectively. Addressing the need to store and manage large volumes of data using blockchain will be among the next objectives of the initiative.

Mizuho will continue to look into and trial applications of blockchain technology in financial services with the intention of becoming an early adopter of the technology.

1: Blockchain is a technology that utilizes a system of consensus formation among participants to enable transactions to take place even in the absence of a trusted central authority. Systems using blockchain are easily auditable, have built-in protection against double entries, and make it virtually impossible to falsify transactions. This gives the technology a wide range of potential applications in financial services, including in payments/settlements and securities; as well as in other areas such as land registration.

2: Smart contracts are protocols that help to facilitate, verify, or enforce the negotiation or performance of a contract. The technology records contracts, as well as any conditions relating to the transfer of assets associated with those contracts, to the blockchain. This allows contracts and other ledger-based asset transfers to be executed automatically when conditions are met.