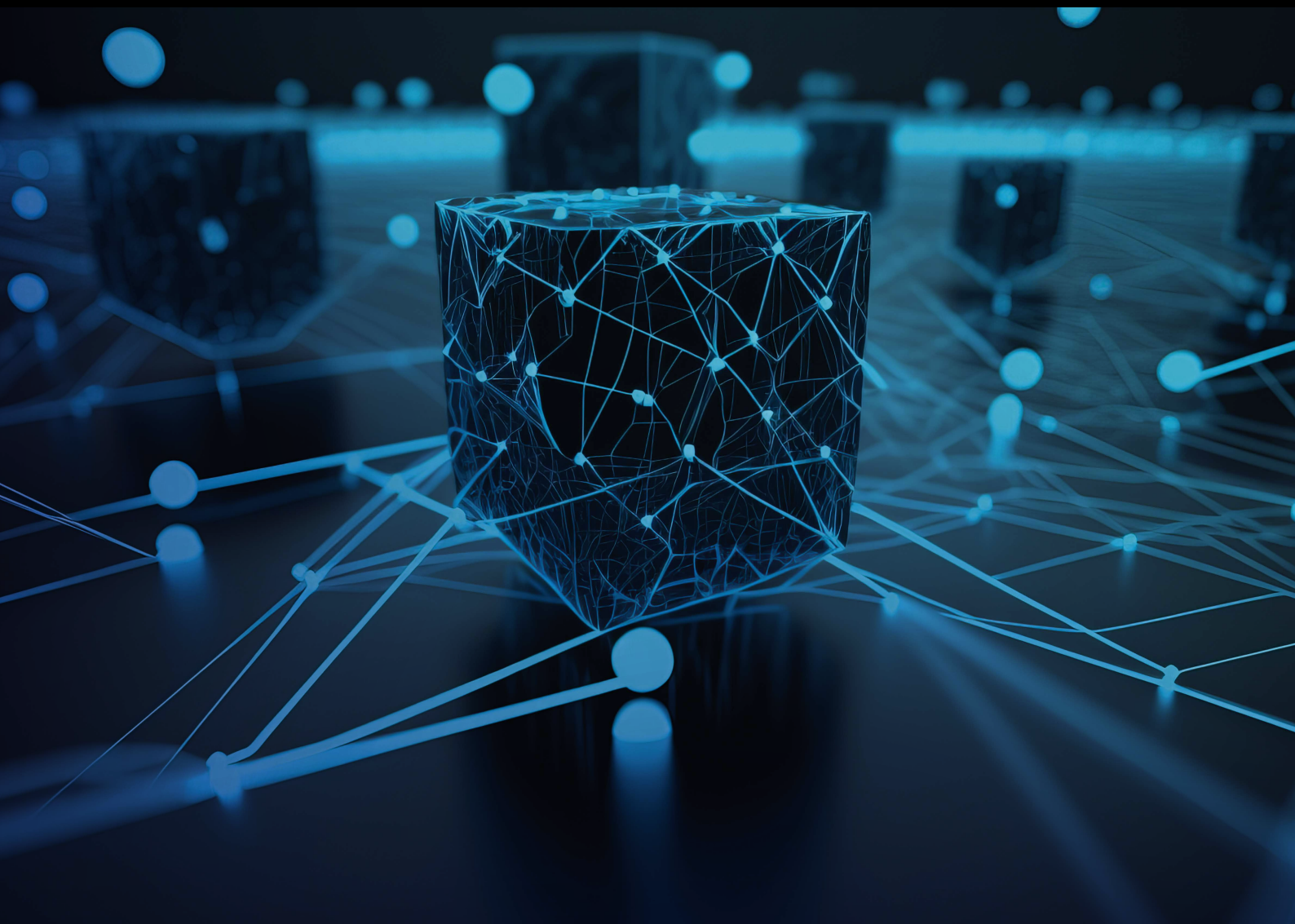




Building on belief

Quartz for Markets



Overview

Accelerated adoption of digital assets has democratized the access of assets to mass market investors. To meet market demand, the wealth management industry needs capabilities to trade digital assets of all kinds. This poses a challenge not only for asset managers, but also for the market infrastructure institutions (MIs), as they are hindered by the lack of institutional-grade infrastructure to support them and their clients throughout the value chain, given its inherent potential for trading across jurisdictions with instant settlement. MIs need a hybrid market model for the end-to-end life cycle of digitized assets, operating under the precision and robustness associated with the traditional system.

Quartz™ for Markets offers end-to-end next generation services around tokenized securities to drive future growth for MIs including exchanges, depositories, central banks, payment infrastructures, private banks, custodians, and issuers.

Support Digital Asset Classes, Attract New Classes of Investors and Drive Growth

Quartz for Markets builds on TCS' position as the largest independent software provider to MIs, with its proven TCS BaNCS for Market Infrastructure and Custody solutions powering the operations of over 50 market-critical institutions across 66 countries.

With Quartz for Markets, MIs will be able to conduct any or all of the following marketplace activities:

- Convert real-world assets into digital tokens and market them to the world
- Invest in tokenized asset-backed digital tokens for real estate, gold, and art, alongside purely digital assets such as non-fungible tokens (NFTs) and loyalty points
- Manage the full lifecycle of asset-backed digital tokens, including token issuance custody
- Conduct secondary market trading activities through order management, matching, atomic settlement, and surveillance
- Service digital assets with eVoting and general meeting services
- Comply fully with relevant KYC/AML regulations
- Settle with flexibility and liquidity using the customer's choice of fiat currencies, cryptocurrencies, stable coins, and digital currencies
- Interoperate with market infrastructure for equity, fixed income, warrants, and other traditional financial instruments
- The portfolio of solutions supports the full lifecycle of tokenized securities across asset classes, fully integrated and interoperable with traditional market infrastructure.

Quartz for Markets powers the creation of a decentralized ecosystem that helps foster trust, provides a single source of truth for different stakeholders, and enables real-time processing in order to address diverse market needs.

The solution works with public as well as private blockchain platforms and supports multiple token standards such as ERC and R3 Token SDKs. In addition, it includes an intuitive, low code development kit to enable MIs to meet their future needs by extending its capabilities .

“Tokenization democratizes access to assets by turning material as well as digital assets into tokens that can be traded at a fraction of the current cost. This represents an opportunity for MIs to launch innovative new services around tokenized assets, attract new classes of investors and drive growth. Quartz for Markets is a robust, secure and futureproof solution that can support the end-to-end transaction life cycle and instant settlement for a wide range of tokenized assets, including NFTs, which are gaining in popularity and value. We have leveraged our contextual knowledge and extensive industry experience in capital markets to design a solution that seamlessly serves the needs of a broad spectrum of market players and accelerates their growth and transformation journeys.”

—R Vivekanand, Head, TCS Financial Solutions Global Head, Quartz



The solution is being implemented for leading Market Infrastructure and Capital Markets firms across the globe, including:

- Support for bond issuance using DLT for one of the largest depositories in India
- Transaction processing for a leading crypto custody and financial services provider in Switzerland
- Pay-by-Proxy and transaction monitoring for a leading payment infrastructure provider in South Africa market
- Surveillance across multiple asset classes for a central bank in the Asia-Pacific region.

Benefits

Quartz for Markets has been designed for easy integration and interoperability with existing core platforms and third-party solutions, including built-in connectivity with TCS BaNCS for Market Infrastructure and Custody solutions.

- By offering both traditional and tokenized assets flows, your organization can provide better services to your customers.
- Faster settlements help your institutions with more liquidity and a range of economic benefits.
- The simplification and replacement of traditional financial assets with smart contracts reduce the process and cost involved, thus making them more affordable and accessible for your customers.
- The smart contracts permanently record transactions and make them immutable and instantly executed, thereby reducing data duplication and fraud risks.

The Quartz Advantage

- Quartz – the Smart Ledgers™ are targeted at helping organizations across industries to leverage distributed ledger meaningfully for their businesses. The suite comprises Smart Solutions, a set of 'designed for blockchain' business offerings for different industries; the Quartz DevKit, a smart contract development kit to enable programming of high-quality code on multiple blockchain platforms; the Quartz Gateway for the integration of existing solutions with blockchain ecosystems; and the Quartz Command Center that can administer and monitor entire ecosystems. Together, these solutions can help organizations set up truly connected ecosystems that run on blockchain technology, delivering real-time, efficient transaction processing based on a single source of truth on the ledger.
- Quartz solutions are built on co-existence, integration, and interoperability philosophy, enabling seamless integration with third-party solutions, legacy applications, messaging middleware, and various blockchain based systems and networks, thereby reducing entry barriers to blockchain adoption.
- Backed by awards from the Financial Technology Forum (Best New Post Trade Solution of the Year 2022), Asset Servicing Times (Outstanding Innovation Award 2022) and recognition from leading industry analyst firms (ranked #1 Best Performing Fraud Management Solution, ranked #2 for delivery footprint and #3 for its vision and strategy), Quartz can help you operate at the forefront of technology innovation and spearhead DLT adoption successfully within your enterprise and beyond.

Quartz is a startup incubated in TCS to create innovative solutions that leverage the emergence of blockchain technology

Quartz provides foundational technology, tools and business components for creating distributed solutions for varied industries

To know more about Quartz, please write to us at tcs.quartz@tcs.com, or visit our website <https://www.tcs.com/what-we-do/products-platforms/quartz>

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is a purpose-led transformation partner to many of the world's largest businesses. For more than 50 years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge. TCS offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's 469,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

Visit www.tcs.com and follow TCS news [@TCS_News](#).