



For a fintech platform tokenizing physical assets

Reimagining the **Diamond** Marketplace with Blockchain

Enabling a dynamic, multi-seller exchange with tokenized assets, real-time negotiations, and transparent trading workflows

By combining blockchain and fintech innovation, **Ccube** built a next-generation platform that unlocks liquidity, improves traceability, and modernizes how diamonds are traded globally.

A Ccube Case Study



Problem Statement

-  **Diamonds lacked standardization, making them unsuitable for regulated investment**
-  **No secure digital link between physical assets and verifiable ownership records**
-  **Investors lacked real-time tools to track asset provenance and manage custody**
-  **Manual verification processes hindered transparency and auditability**
-  **Fragmented and manual negotiation workflows between buyers and sellers**
-  **Absence of a reliable, structured auction mechanism for price discovery**
-  **Limited access to financing options such as loans against diamond assets**
-  **Inconsistent workflows across vendors, leading to operational inefficiencies**

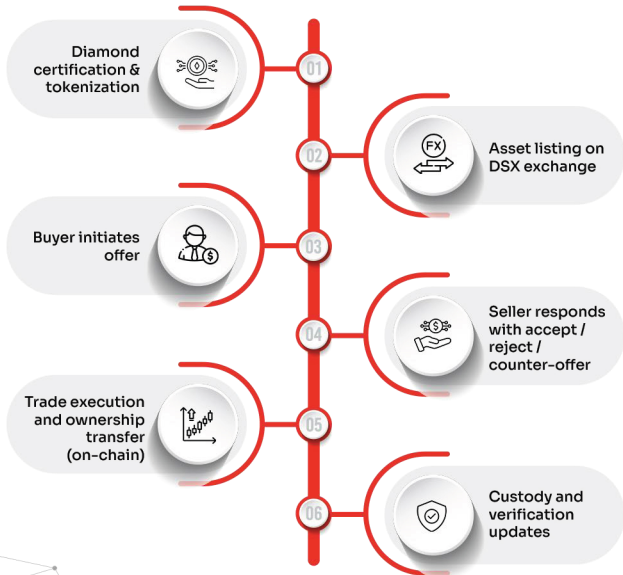
Solution

- » Built a digital marketplace layer for diamond trading, enabling a unified multi-seller ecosystem
- » Enabled real-time buyer - seller negotiations with support for structured offers, counter-offers, and auction-based trading
- » Introduced lending capabilities to facilitate loans and borrowing against diamond assets
- » Integrated multiple vendors and dealers into a standardized, scalable trading workflow
- » Enabled secure wallet and compliance infrastructure for investors, auditors, and custodians
- » Provided real-time verification, custody management, and exchange-readiness for digital assets

Our Tech Stack

- **Blockchain :**
Ethereum, Hedera, Solidity, ERC-721, ERC-20
- **Backend :**
Node.js, NestJS, GraphQL
- **Wallets & Access :**
MetaMask, WalletConnect
- **Frontend :**
React, Next.js, TypeScript
- **Infrastructure :**
AWS, IPFS, Cloudflare, OpenSearch
- **Security & Monitoring :**
mTLS, JWT, Sentry

Process





Engineering Approach: Mindful Vibe Streaming



Focused on rapid iteration & continuous improvement



Built modular, reusable backend services



Prioritized real-world workflows over engineering



Continuously refined trading logic based on real usage patterns



Enabled quality control and dealer-level configurations for import processes



Enhanced search capabilities with fuzzy matching and facet-based filtering



Impact



Tokenized thousands of certified diamond assets



Enabled **multi-million USD** digital commodity trades



Improved auditability and investor trust **via blockchain**



Ensured regulatory compliance with **real-time verification**



Supported global access with **30%+** mobile user adoption



Want results like this?

Book a call to see how Ccube can modernise your platform.

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