CBDCs

Hyperledger Fabric for Central Bank's Digital Currency

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AGENDA

- What are CBDCs?

- Key Features of CBDCs

- Why Hyperledger Fabric?

- Logical Architecture

- Technical Architecture

- Demo

- Future Considerations

- Benefits

- Possible Consequences

WHAT ARE CBDCs?

Central Bank Digital Currencies (CBDCs) are digital forms of central bank money that serve as legal tender. Unlike cryptocurrencies like Bitcoin, CBDCs are issued and regulated by central banks.
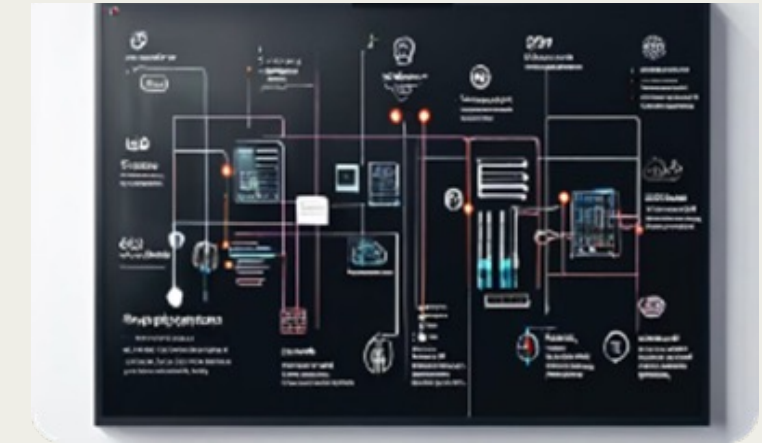
Features	Cryptocurrency	CBDCs
Issuance & Control	Typically decentralized and not controlled by an entity	Issued and regulated by a country's central bank
Purpose & Design	Designed to operate as alternative forms of money, independent of traditional financial system	Designed to complement existing fiat currencies, integrating with existing financial system
Anonymity & Privacy	Provides varied levels of anonymity and privacy	Less anonymity and can be traced

CBDC's (Central Bank Digital Currencies)   VS   Cryptocurrencies

Digcey

THE FUTURE OF MONEY

KEY FEATURES

Security

Interoperability

Transparency

Programmability

Efficiency

WHY HYPERLEDGER FABRIC?

•**Permissioned Networks:** Ensures that only authorized participants can join the network, aligning with regulatory requirements for CBD

•**Customizable Smart Contracts:** Allows central banks to tailor the digital currency's functionality to their specific needs.
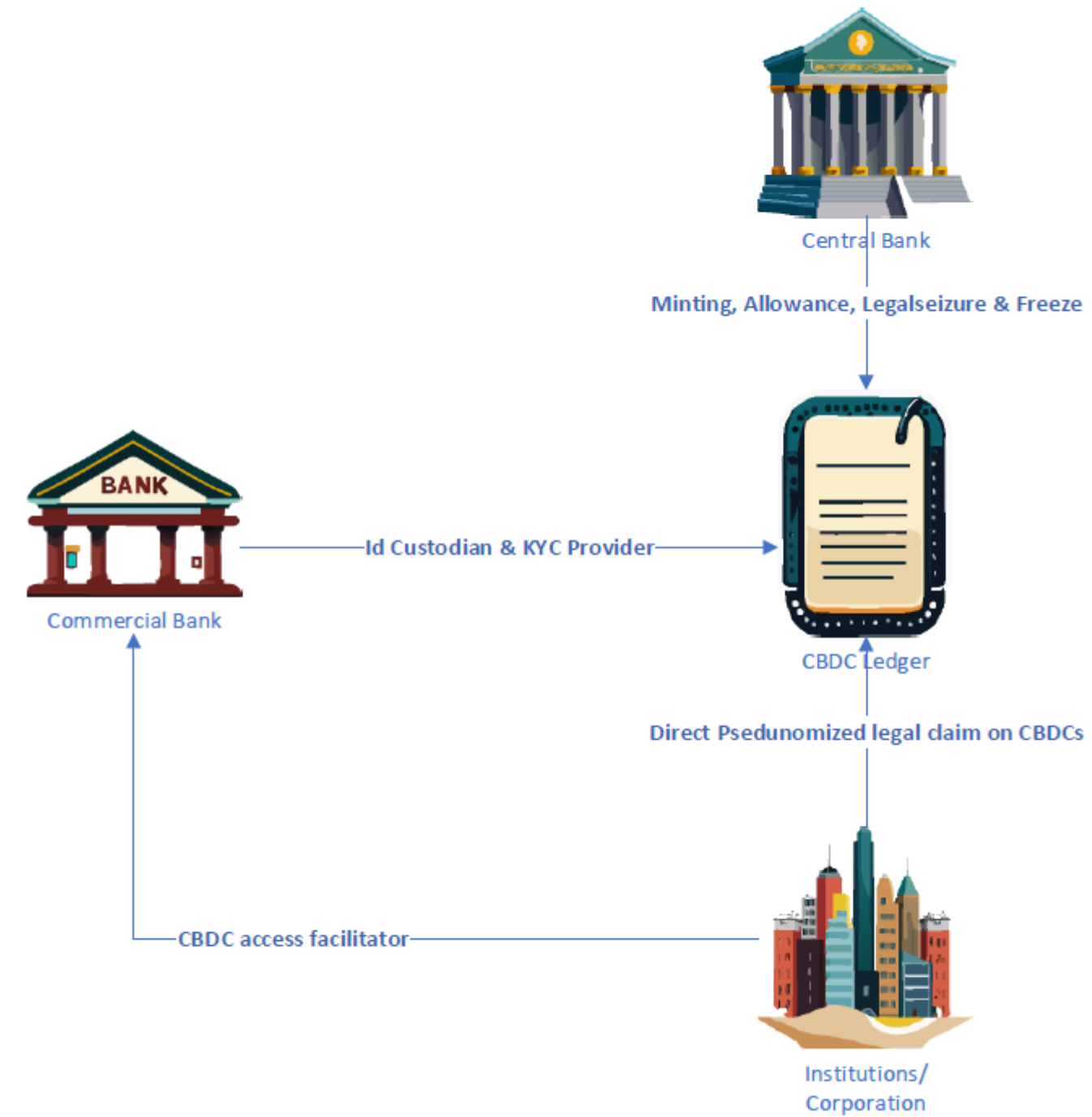
•**High Throughput:** Capable of handling large volumes of transactions, essential for national-scale digital currencies.

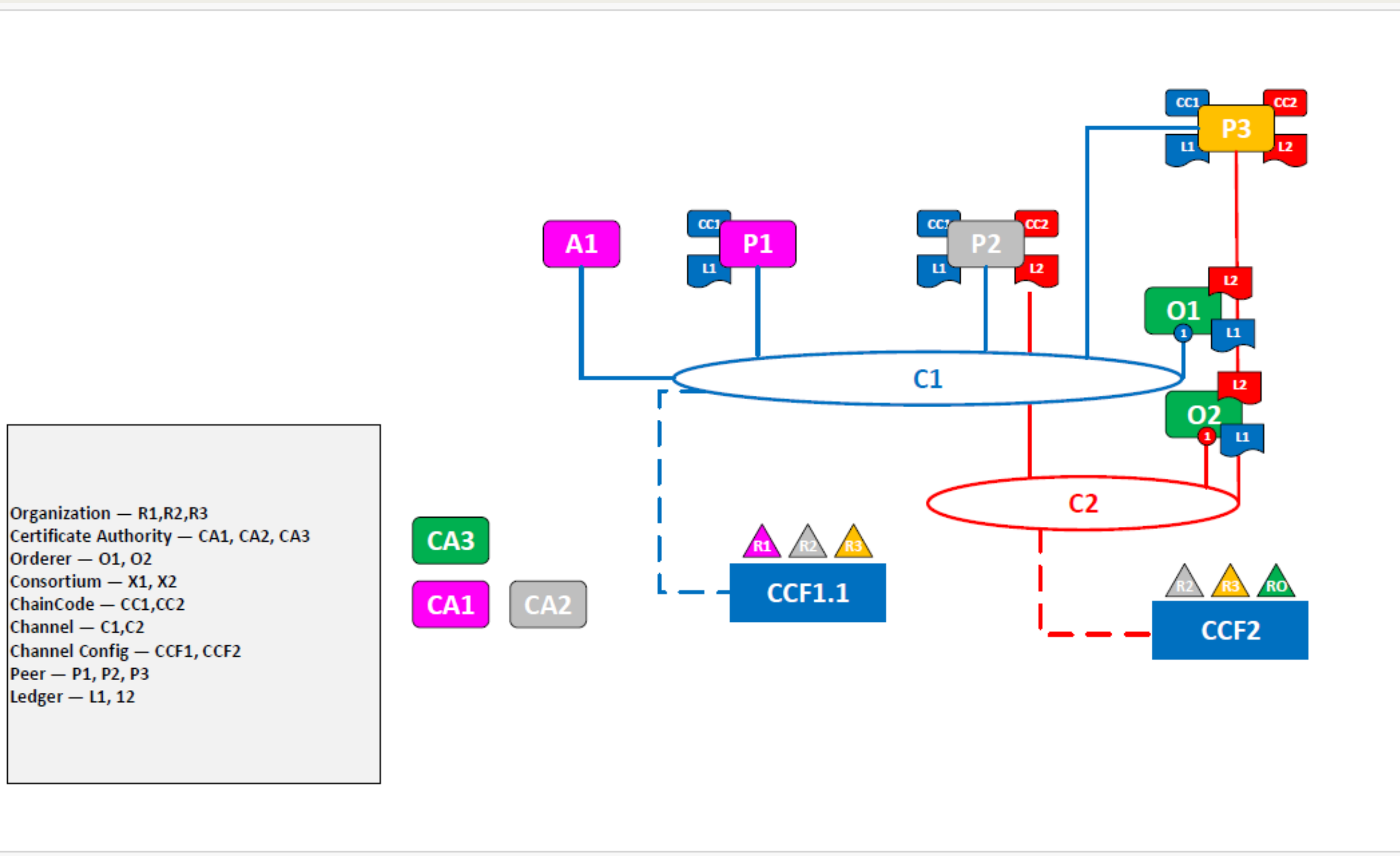•**Private Channels:** Provides customizable and private channels for peers to communicate securely and privately

LOGICAL ARCHITECTURE

Central Bank
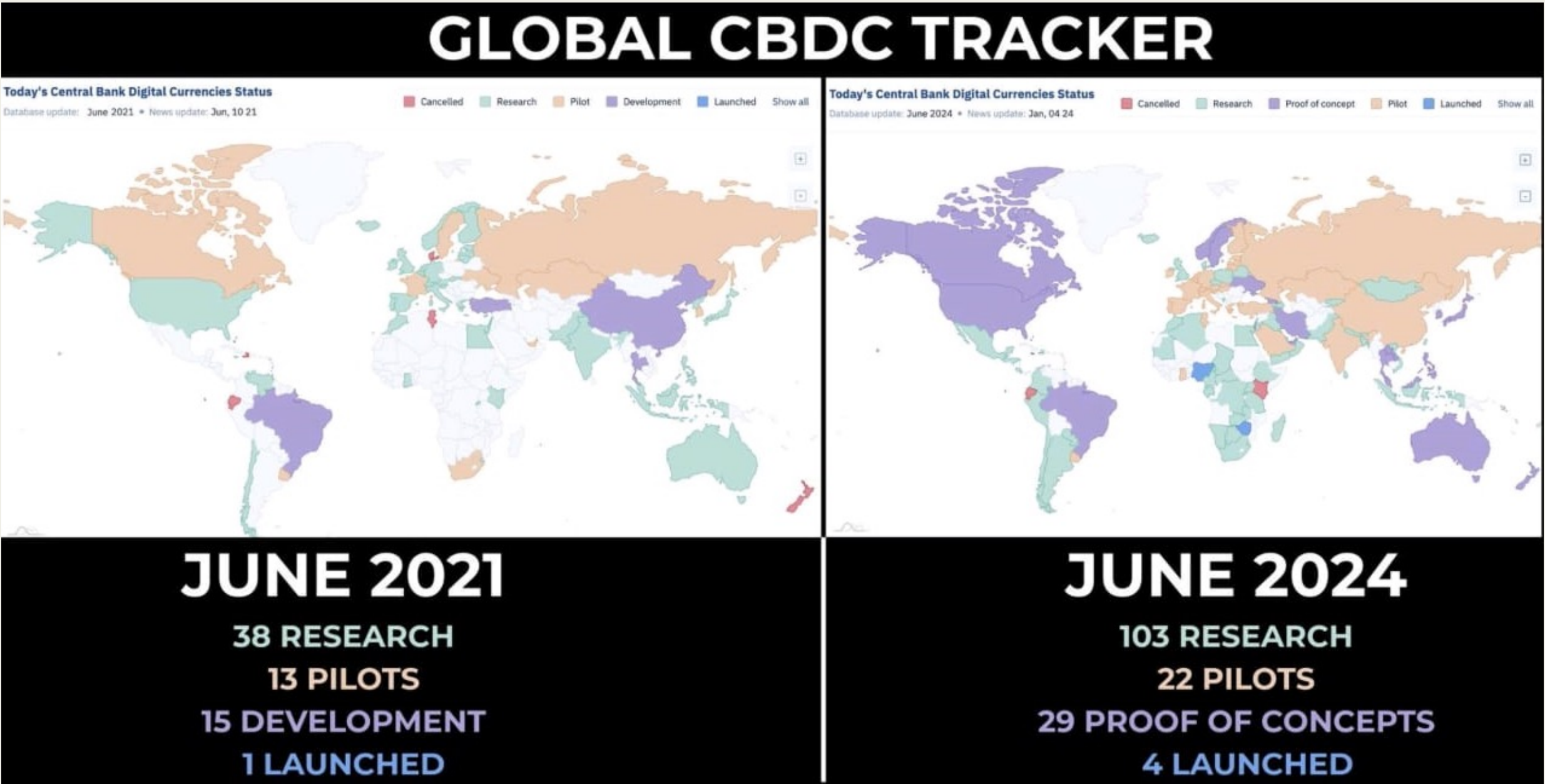
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Id Custodian & KYC Provider

Commercial Bank

CBDC Ledger

Direct Psedunomized legal claim on CBDCs

CBDC access facilitator

Institutions/
Corporation

TECHNICAL ARCHITECTURE

Organization — R1,R2,R3
Certificate Authority — CA1, CA2, CA3
Orderer — O1, O2
Consortium — X1, X2
ChainCode — CC1,CC2
Channel — C1,C2
Channel Config — CCF1, CCF2
Peer — P1, P2, P3
Ledger — L1, 12

DEMO

FUTURE CONSIDERATIONS

BENEFITS

Enhanced Security

Faster Transactions

Improved Transparency

Traceability

Cost-effective & Environment Friendly

POSSIBLE CONSEQUENCES

Stepping on the toe

Viability

Zero Anonymity

Retail CBDCs: Not a child's play

Thank you!

FEEL FREE TO ASK QUESTIONS!

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