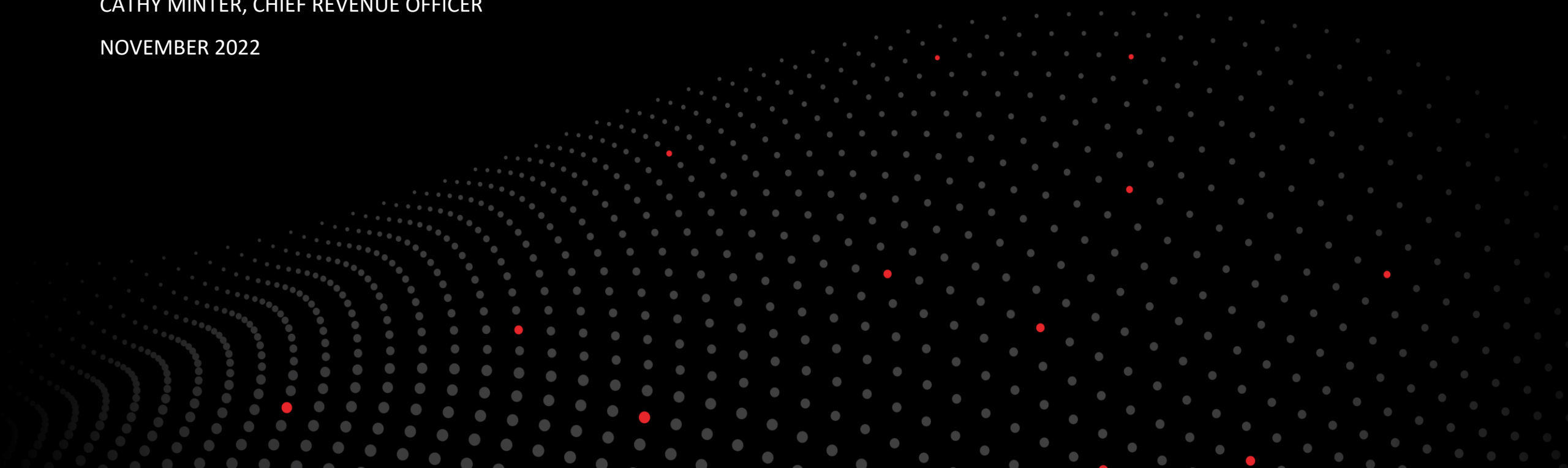




Capitalizing on the new digital economy

CATHY MINTER, CHIEF REVENUE OFFICER

NOVEMBER 2022





Cathy Minter,
Chief Revenue Officer,
R3



Financial services is still the largest industry in the world—yet challenges are emerging



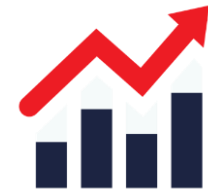
Unsustainable operating costs

Billions in daily trading and settlement costs across asset classes



Threat of obsolescence

New entrants, technologies, and decentralization are moving faster than traditional financial markets and organizations



Growing technical debt

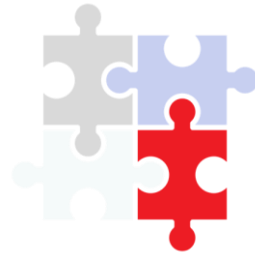
Classic 'hub-and-spoke' systems are outdated and require organizations to bear the burden of building, maintaining and securing applications

By embracing the new digital economy these challenges can be turned into opportunities



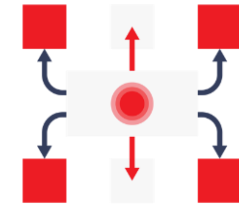
Create new financial instruments

Tokenizing assets and currencies enables fractionalization thus creating new sources of liquidity



Smarter workflow and business processes

Digital assets and currencies can be governed and orchestrated so that they can be traded frictionlessly, with trust and settled in real time



A scalable, distributed infrastructure

Centralized models are evolving into distributed networks where the level of decentralization is within the organization's control

R3's collective **Power of 3** de-risks innovation



Trust Technology

R3's trust technology foundation—Corda and Conclave—power solutions that deliver digital trust.

c·rda

conclave



Connected Networks

Trusted partner to the world's leading institutions—banks, FMIs, global systems integrators, cloud providers and fintechs.

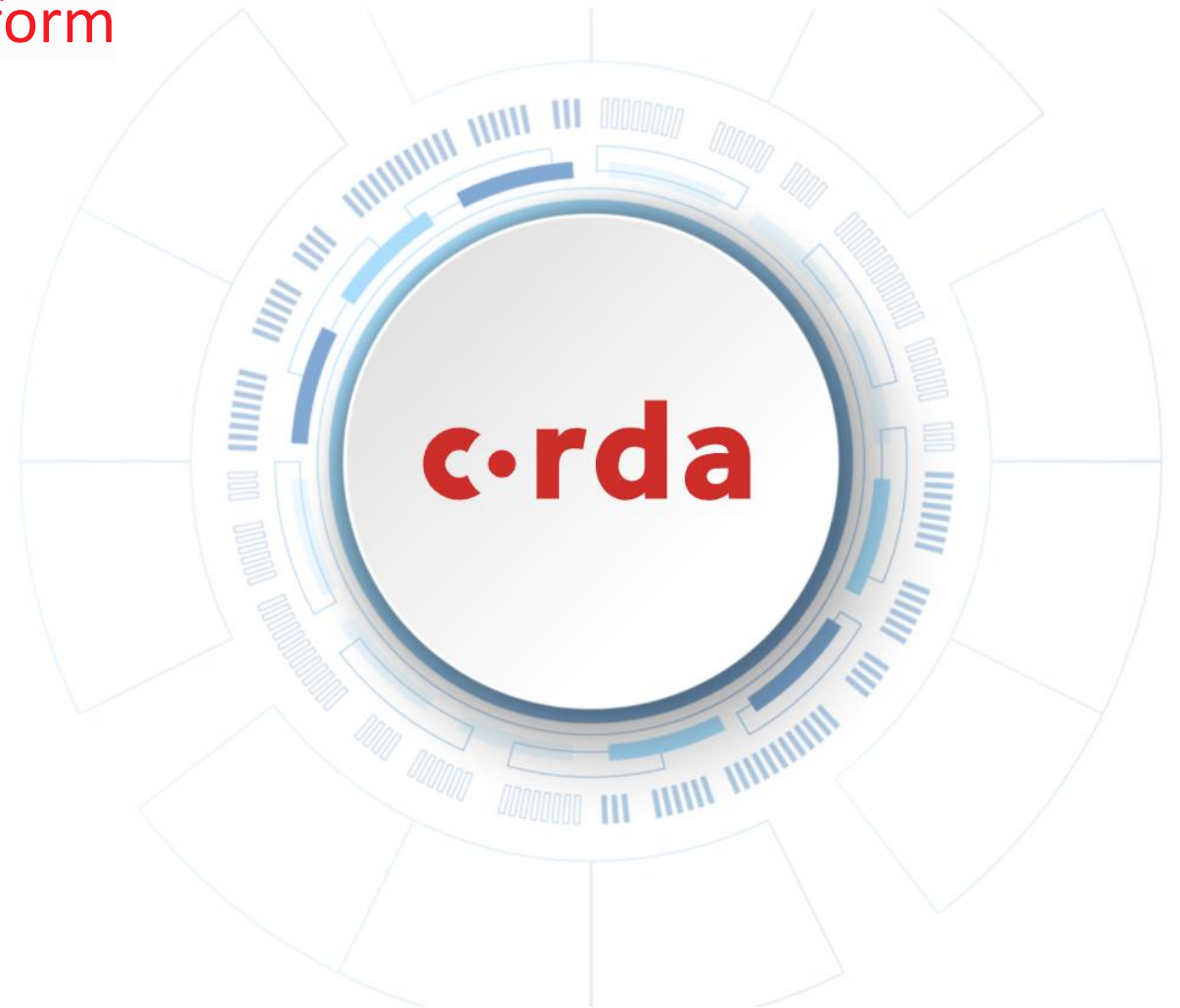


Regulated Markets Expertise

Actively engaged with regulators around the world, deep financial services know-how, and expert professional services.

Corda is R3's flagship trust technology platform

- A performant, scalable, and secure distributed infrastructure
- Enables trading and settling of digital assets and currencies in near real time
- Modular stack—use the whole infrastructure or only workflows and ledger
- A platform that grows with you so you can gradually distribute and decentralize
- Private, permissioned to power regulatory-compliant solutions



400+

Ecosystem participants

375+

Staff in 14 Countries

8

Offices globally






400+

Applications built on Corda

170+

Professional Services projects

Leading financial institutions are starting their digital currency and asset journey

Banks	Financial Market Infrastructures & Exchanges	Fintechs	Corporates
			
Central Banks			

c·rda

conclave

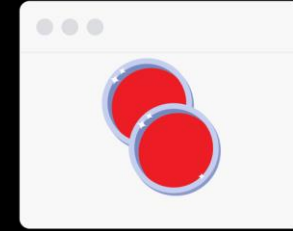
Powering innovation at world-leading institutions

Digital currencies are on the rise



Central Bank Digital Currencies (CBDCs)

- Singapore, Hong Kong and India are all in active trials in-region
- R3 has been active in CBDC use cases since 2016
- Currently engaged with Bhutan, Kazakhstan, and Pacific Islands
- Benefits of CBDCs include
 - Programmability of money
 - Better liquidity management
 - Faster cross-border payments



Fiat-backed Stablecoins

- Banks are creating their own tokens backed by commercial bank reserves
- These tokens can be used to settle obligations intrabank, with corporate clients, and across networks
- Eliminates the delays associated with payment networks

R3 & ADB Cooperation Agreement for cross-border multi-currency securities settlement system PoC



Accelerating our collaborations on ADB-funded and led projects in both CBDCs and CSDs

- R3 and Asian Development Bank have been collaborating since 2020.
- The MOU will support the collaboration in exploring the relevance of DLT for ADB's institutional priorities and in support of its operational priorities.
- Together we will explore DLT use cases across Capital Markets, Digital Assets, Identity and KYC, Sustainability, Trade Finance and CBDCs.

Project Dunbar

CBDCs for international settlement

SOLUTION

- Dunbar team built a multi-currency shared settlement platform on Corda
- Commercial banks accessed CBDCs directly instead of via correspondent banks, streamlining settlement
- Reduced time for KYC/AML, onboarding and compliance workflows

CHALLENGE

- No single platform for cross-border payments, reliant on correspondent banks
- Payment settlement is slow and carries FX risk
- Each central bank has their own set of regulations and autonomy requirements



RESULTS



Faster settlement



Reduced exposure to FX movements



New CBDC access models

Wells Fargo Digital Cash

Intra-bank cross-border digital cash solution in production

SOLUTION

- Allows Wells Fargo to complete internal book transfers of cross-border payments within its global network
- Digital Cash eliminates the reliance on SWIFT and correspondent banks
- Settlement without third parties

CHALLENGE

- Internal book transfers between branches are overly-complex and slow
- SWIFT Payments only run 6-9 hours a day, 5 days a week, impacting international payments experience for customers
- Transfers involve multiple parties and systems and carry high-risk, cost and complexity

WELLS
FARGO

RESULTS



Faster transfer time and reduced costs and points of failure



Irreversible, real near-time settlement and reconciliation



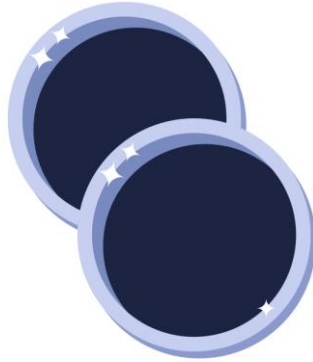
Expanded operating hours with 24x7 transactions

r3.

Opportunities across the digital asset lifecycle

Improvements

- Faster settlement, reducing counterparty and credit risk
- More efficient securities issuance, servicing and redemption
- Increased liquidity access
- Global, 24x7 marketplace
- Programmable, immutable transactions
- More diverse investor portfolios



Technological Innovations

- Divide and digitize illiquid assets such as commodities, real estate and private investments
- Tokenization is rewriting securities issuance to create efficiencies and reduce risk
- Leverage smart contracts and workflows to trade frictionlessly
- Built-in capability for progressive distribution

DTCC

T+1 settlement acceleration platform

SOLUTION

- Corda underpins DTCC's settlement acceleration platform which is operating at scale
- Reduces settlement times for U.S. Equities from two days post trade (T+2) to T+1
- Potential to fully integrate into the U.S. clearance and settlement processes

CHALLENGE

- U.S. Equity Market is demanding faster clearing and settlement services
- Need to modernize settlement clearing processing and ensure their relevance in capital markets for years to come

DTCC

RESULTS



Reduced settlement time to reduces counterparty, credit and default risk



Move to T+1 could reduce \$13.4 billion held by its members in margin each day by 41%



Impactful shift in how capital markets operate

Digital Vault

Private placement securities solution

SOLUTION

- Gives investors real-time access to records of securities bought on private markets
- Allows creation of a seamless workflow throughout the entire lifecycle of private placements from months to days
- Corda chosen due to asset agnostic, scalability, privacy, and ease of auditing

CHALLENGE

- Margin under pressure due to heavy administration costs associated with private placements operations
- Held on paper, Lack of standardization, archaic and outdated system
- Investor access difficulties and inefficient causing significant delays



RESULTS

\$20B

Valued assets during launch



Cutting down administration costs and delays from issuance to participation

\$7.7T

Target market



New entrants are also building networks that banks and corporates can participate in



Trading ecosystem that removes barriers to finding, sharing and trading corporate bonds



Digital trade network that allows participants to create and manage letters of credit transactions in real-time



Digitizes precious metals and the entire end-to-end value chain from mining to transport to investment



Tokenizes securities (gov't and corporate bonds) at multiple custodians and enables atomic transfer of ownership



Smart bonds that automate the bond lifecycle from issuance to redemption via smart contracts



Short-term lending platform which brings together institutional lenders and borrowers



Connect with R3

No matter where you are on your digital journey,
R3 can help

sales@r3.com

r3.com | corda.net



Thank you

r3.com | corda.net | conclave.net



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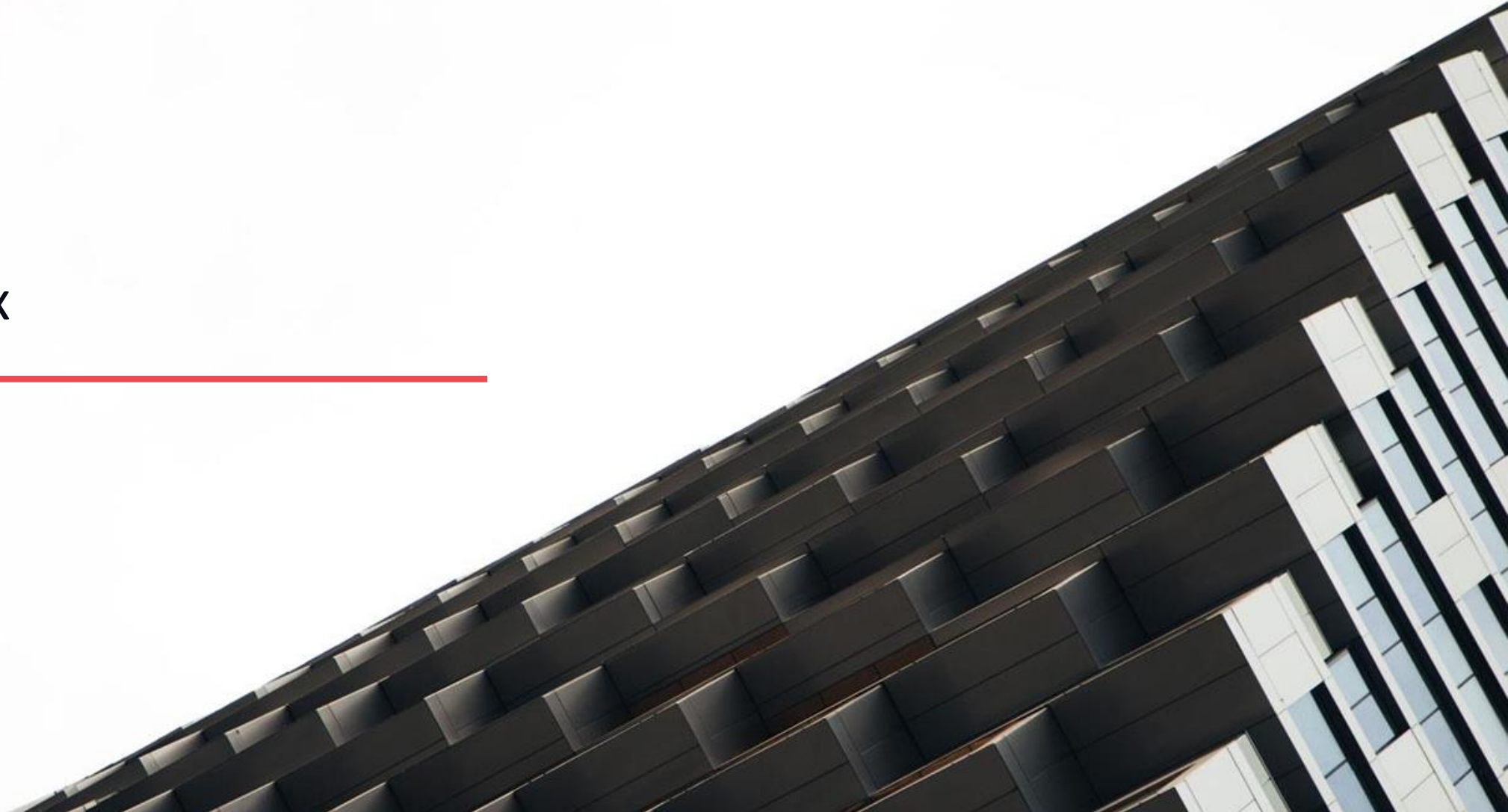
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Appendix



Digital assets use cases: The path forward for FMIs

Digital Market Infrastructures

Replace legacy technology with DLT to modernize trading, clearing and settlement.



Foundational Improvement

Settlement Acceleration

Purpose built infrastructure to accommodate post execution lifecycle from "match to settle" workflow through single mutualised infrastructure



Ecosystem Improvement

Digital Asset Lifecycle Management

Enable issuance, movement and servicing of digital bonds, equities and warrants. Privacy, integrity and authenticity of data processed and managed on a Corda ledger is preserved throughout its entire lifecycle.



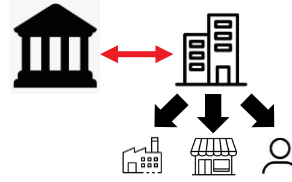
Product Innovation

Rising interest in fiat-backed stablecoins from banks and FMIs

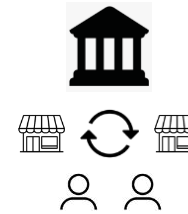
Fiat-backed Stablecoin Models



Intra-Bank Transfers



Embedded Finance



Bank + Retail Ecosystem



Inter-Bank/FMI

Crossborder Book Transfers

Stablecoin-as-a-service for corporate customers

Retail loyalty tokens across merchant network

Inter-FI/FMI settlement

Example Use Cases



J.P.Morgan



J.P.Morgan



How R3 can help

Enabled by Corda + Stablecoin Accelerator + Professional Services Engagement

