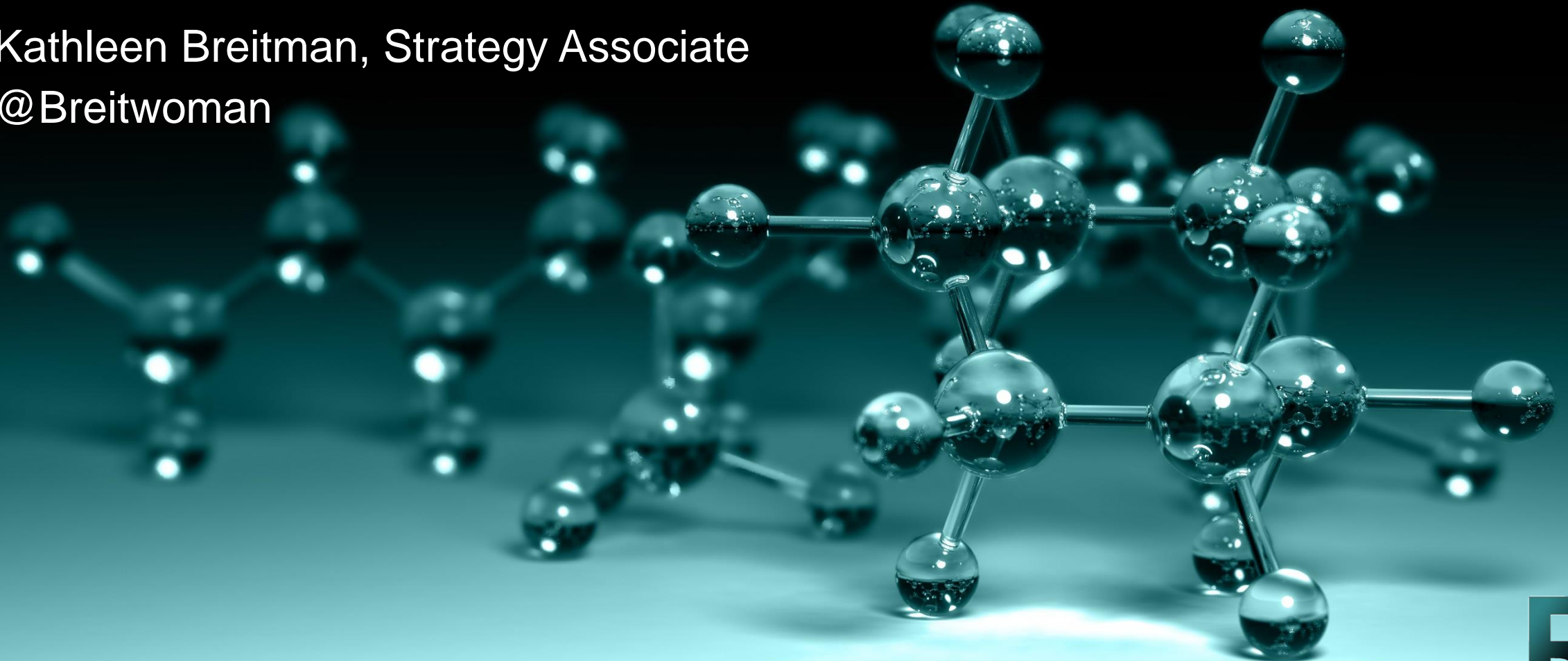


An Introduction to R3

Kathleen Breitman, Strategy Associate
@Breitwoman





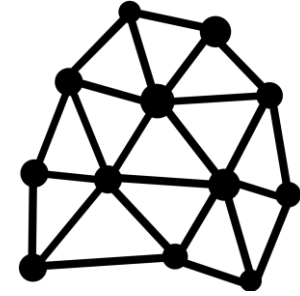


Introduction to Distributed Ledgers

A Brief Overview of the Technology & Potential Benefits

Distributed Ledgers at a Glance

Distributed ledgers are records of consensus with a cryptographic audit trail maintained and validated by several separate nodes



Consensus mechanisms evaluate information provided by participants to ensure consent among all relevant parties in an entry

When a transaction is added to the ledger, the network is almost-instantly privy to this new version

- Distributed ledgers leave behind a cryptographically assured audit trail and timestamp
- All parties in the network keep a copy of their view of the ledger

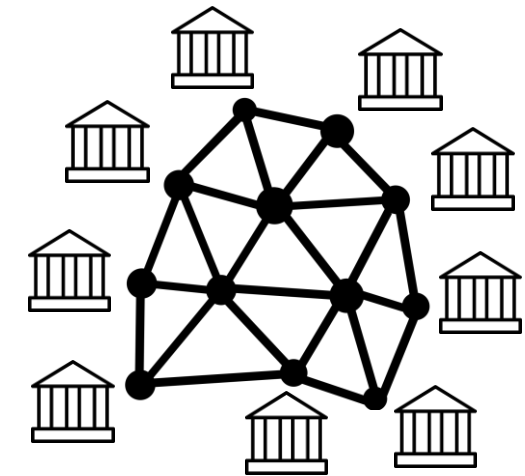
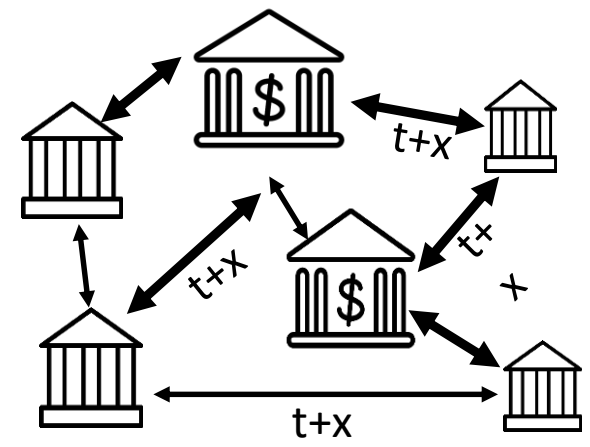
Benefits of Distributed Ledgers in Capital Markets

Distributed ledgers can replace legacy networks by validating, registering & tracking complex transactions in a dynamic, virtual and near real-time marketplace

Current State
 Antiquated back office systems introduce substantial risk from human error



Future State
 Distributed ledgers can validate financial transactions with ease and share these updates

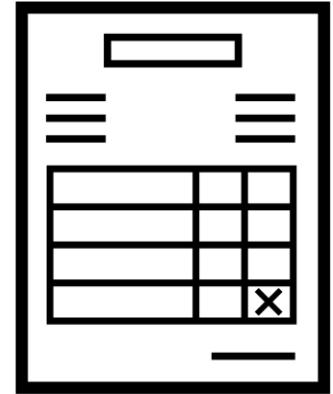


Bottom Line Impact

The benefits of distributed ledger technology are both financial and operational

Risk-management

- Visualize and model risk more easily
- Decreased settlement times → decreased balance sheet risk
- Regulatory compliance would be substantially easier



The R3 model

- Validated transactions are registered by all affected parties
- Allows firms to track and manage risk more dynamically
- Legal and auditing functions at a bank would benefit from a cryptographically assured record of transactions

Use Cases by Function

Financial Institutions



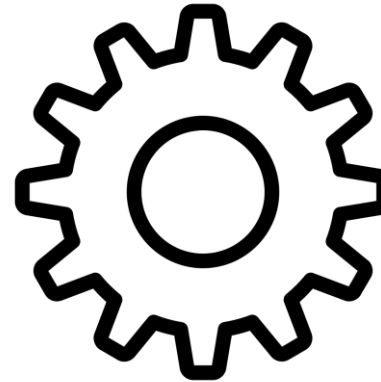
- FX Settlement
- Trade reconciliations
- Transparent Valuations
- Cross Border Payments
- Credit Efficiency
- Loan Settlement
- OTC Derivatives Clearing
- Collateral Management

Regulators



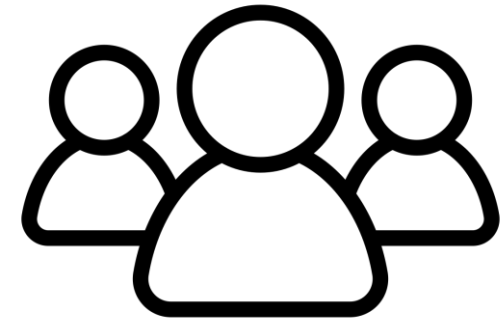
- Compliance Reporting
- Risk Visualization
- Basel III Compliance
- Client Fund Transparency
- Know Your Customer / Anti-Money Laundering
- Trade reporting

Operations



- Client Onboarding
- Intracompany Settlement
- Normalize reference data
- Timestamping
- Account Portability
- Broker Fraud Identification
- Securities Agreements as Smart contracts

Individuals



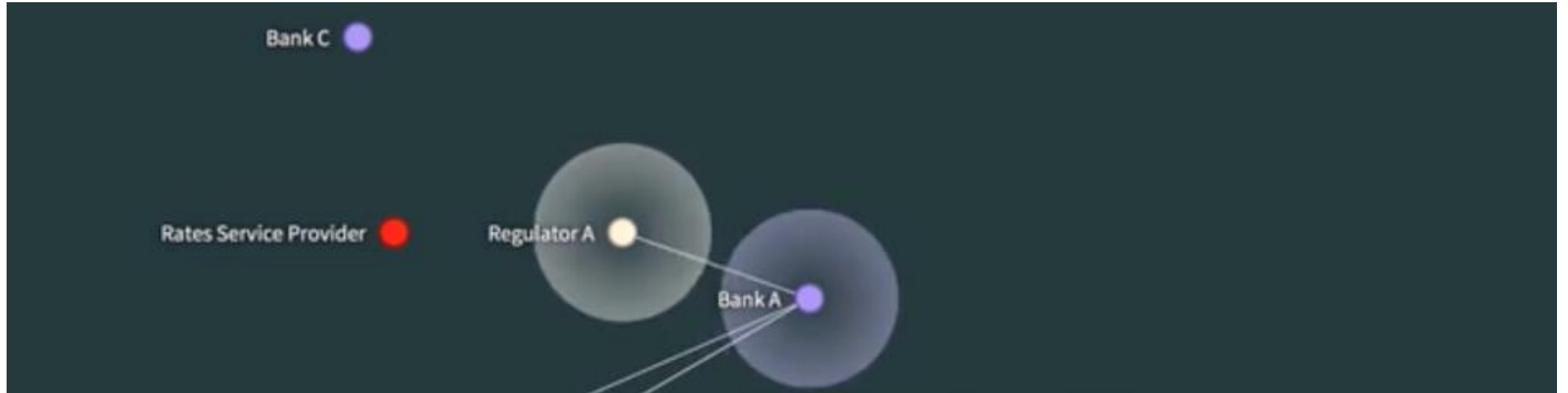
- Crowdfunding
- Virtual Identity
- Credit Scoring
- Cross Border Remittance
- Vault/Escrow Services
- Customer Deposit Cost
- Peer-to-Peer Lending

Our Future: R3 Corda


R3 Corda

- Introduced in the spring, R3 Corda is our approach to distributed ledger technology
- Notable features:
 - Privacy first: only parties pertinent to a transaction can see associated data
 - Business logic relevant to FIs is native to the engineering of Corda
 - Suited for recording agreements and enforcing contracts among consenting parties

R3 Corda



Template Editor
Agreement Editor
Trade Entry
Trade Affirmation
Trade Viewer



Trade ID: TRADE102
Date: 2017-03-30

Confirmation & Agreements

Floating Schedule

Fixed Schedule

Fixed Leg	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="background-color: #f00; color: white; padding: 2px 5px;">MA</div> MASTER AGREEMENT <div style="background-color: #f00; color: white; padding: 2px 5px;">S</div> SCHEDULE <div style="background-color: #f00; color: white; padding: 2px 5px;">CSA</div> CSA </div>
Fixed Rate Payer	Bank A
Notional	USD 15,900,000
Payment Frequency	SemiAnnual
Base Currency	USD
Eligible Currency	USD

Questions?

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