Next Gen Technologies

Readiness for 2020 & Implications

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Welcome...

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The world in 2020

Collaborative Payment Platforms

Infrastructure Rationalization

- P2P paradigms
- Cool vs. creepy
- It's in our DNA
- Gamification
- Disruption
- Table stakes
- Big data
- Brick and mortar
- Ecosystem
- Innovation
- Partnership
- Frictionless
- Game-changing

Financial Technologies and other FSI's and Third Party Payment Providers

Developer Portal and AppStore
Data Lake and Payment Hubs
Bank Account
Banking Platform

Online Payment Infrastructure Integration

- Hardware Integration
- Order Contracts
- User Data Analytics
- Account and Invoicing Management
- Unified User Experience

Offers & Promotions
Payments
Loyalty
Order Contracts
### The world in 2020

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Bradley Wilkes - WingCash

Bradley Wilkes
CEO
WingCash/OPN
Project Jasper

A Bank of Canada Blockchain Experiment

The views expressed in this presentation are my own and not necessarily those of the Bank of Canada.
Motivation

To realise the promised benefits of DLT, do we need central bank cash on ledger?

- Cost savings/efficiencies
- Improved Resilience
Lessons Learned: Phase 1 and 2

- Unlikely to be net benefits using DLT over a centralised system for the *sole* purpose of interbank payments
- Benefits more likely to come from enabling efficiencies in the broader FIs and FMIs via simplified processes (e.g. back office reconciliation)
- LSM implementation is complex – inherently centralised functions in decentralised systems is tricky
To investigate securities settlement DvP using central bank cash on a DLT

- Efficiency gains?
- Improved integration of FMIs?
SCOPE & OBJECTIVES: SOLUTION OVERVIEW

The POC demonstrated the core mechanics of post-trade settlement and payment on a single DLT platform.

**Participation**
Simulation of Bank of Canada, CDS, Payments Canada, LVTS member banks and CDS members in a private DLT network.

**Tokenization**
Tokenization and notarization of cash deposits as cash Digital Depository Receipts (DDR) and equities holdings as asset DDR’s.

**Credit extension**
LVTS members can extend credit to non-LVTS members in the form of a DDR transfer for the purposes of settlement.

**Settlement**
Batch net settlement executed on ledger based on settlement positions and (off-ledger) collateral sufficiency of each participant.
Key Lessons Learned: Phase 3

- DLT facilitated the integration of FMIs to achieve DvP1 with only DvP2 liquidity requirements
- DLT operational cost savings for participants still uncertain when only post-trade settlement is on ledger
- Demonstrated that cash and equity systems can have different participants through the use of doorman service, notary involvement, and smart contracts
Key Lessons Learned: Phase 3

- **Credit extension** needed in current system and DLT system to ensure necessary liquidity

- Small extensions or rebuilds of current systems using DLT is unlikely to show significant improvement; may only be through a **complete revisioning** of the financial system that DLT can deliver significant **cost savings** and **improved functionality**
Next Steps

- Partnership with Monetary Authority of Singapore and the Bank of England to examine cross-border payments using DLT: Jasper meets Ubin
  - What are the current pain points?
  - What are the potential efficiency gains offered by DLT?
Powering The Future of Credit and Identity

Spring is building a decentralized network for identity and credit to serve as the foundation for a more transparent, secure, and efficient delivery of financial services.
Q & A topics

Placing bets
- Business models
- Cost of doing nothing
- Absorption capacity

Platformization
- Coopetition
- Network Markets
- New white spaces

Interoperability
- Horizontal vs. vertical
- Standards
- How to get there

Trust
- Liability
- Smart Contracts

On/Off ramps
- GIGO
- IoT – the magic bridge?
Questions?