The Premise:
Decentralized Digital Payments
But, Why?

• Resilience, Auditability and Reconciliation

• “Tokenization”: Improves Liquidity, Fractionalization

• Levelling the playing field
Better Resilience
Better Resilience:
No Single Point of Failure

Centralized Operator

De-Centralized Operators
Tokenization

30 Million Dollar Real Estate Tokenized – Oct 2018
Tokenization

- Fractional Ownership
- Liquidity
- Processing
Leveling the Playing Field:
Access to Capital / Services
Technological Advances
Blockchains:
Resilience, Reconciliation, Tokenization

Users

Blockchains
From Payments To General-Purpose Computing

Over 5 million decentralized apps!
Smart Contracts

Users

Smart Contracts (Interacting agents)

Blockchains
Interoperability & Atomicity

Hotel Booking

Flight Booking

Atomic Swaps

Delivery versus Payment
Payment versus Payment

PROJECT UBIN – SGX, DELOITTE, ANQUAN, MAS (2018)
Scalability & Security

- **Scalability (2015)**
  - 10 transactions per second
- **Scalability (2018):**
  - 10,000 transactions per second (e.g. Zilliqa)
- **High Resilience:**
  - 20% - 50% fail. tolerance
- **Latency at high decentralization:**
  - 5-60 seconds
Privacy & Information Controls

• Allow information owners to control:
  – Who share with
  – What computation can be done

• Solutions:
  – Cryptographic methods
  – Trusted Execution Environments (TEEs)
Enabling A New Experience

- **Resiliency** and **Auditability** of Information sources
- Real-time **Reconciliation**
- **Programmable** trust and actions
- Better speech & natural language **Interfaces**
- Smarter **Analytics**
- Strong information **Controls**
- Low barriers to **Innovation**
Questions?