



**Barry** Childe

HSBC Director, Innovation and Investments

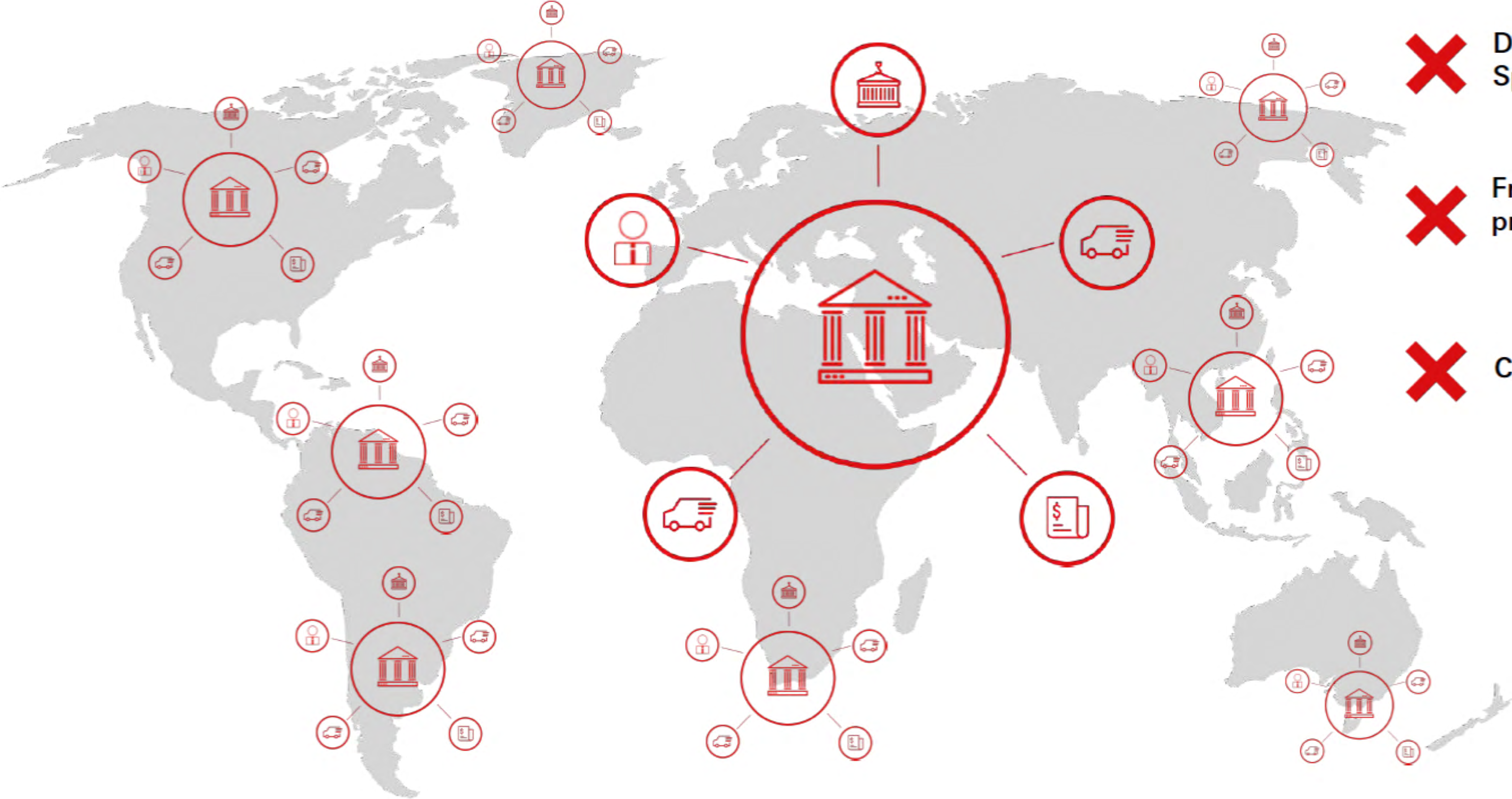
**Joshua** Kroeker

HSBC Blockchain/DLT Lead, Global Commercial Banking

**Duncan** Wong

CryptoBLK Founder, CEO, Cryptographer

Current state of business networks:



**✘** Disconnected Specialist Systems

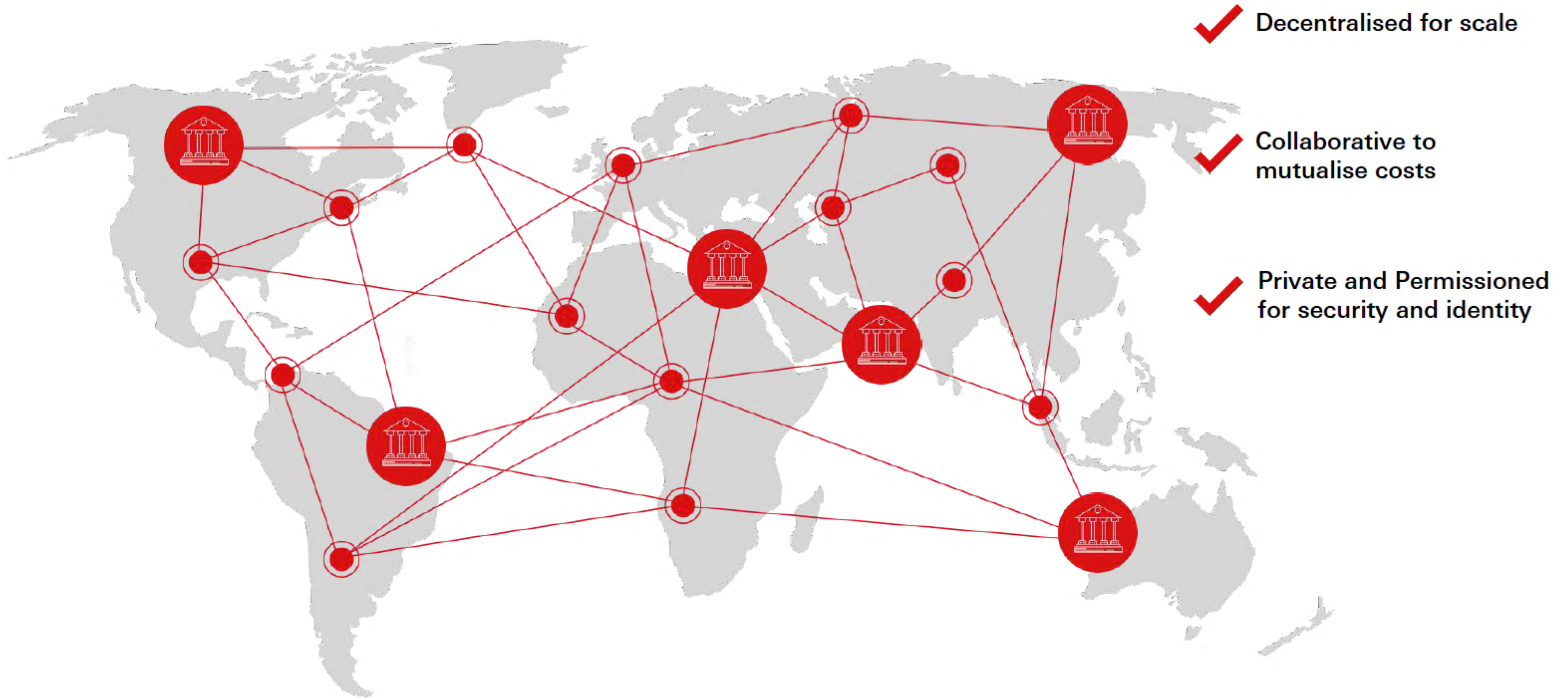
**✘** Fragmented processing

**✘** Costly and slow



## Networks of tomorrow can utilize DLT to connect and collaborate

---





## ➤ The trade challenge:

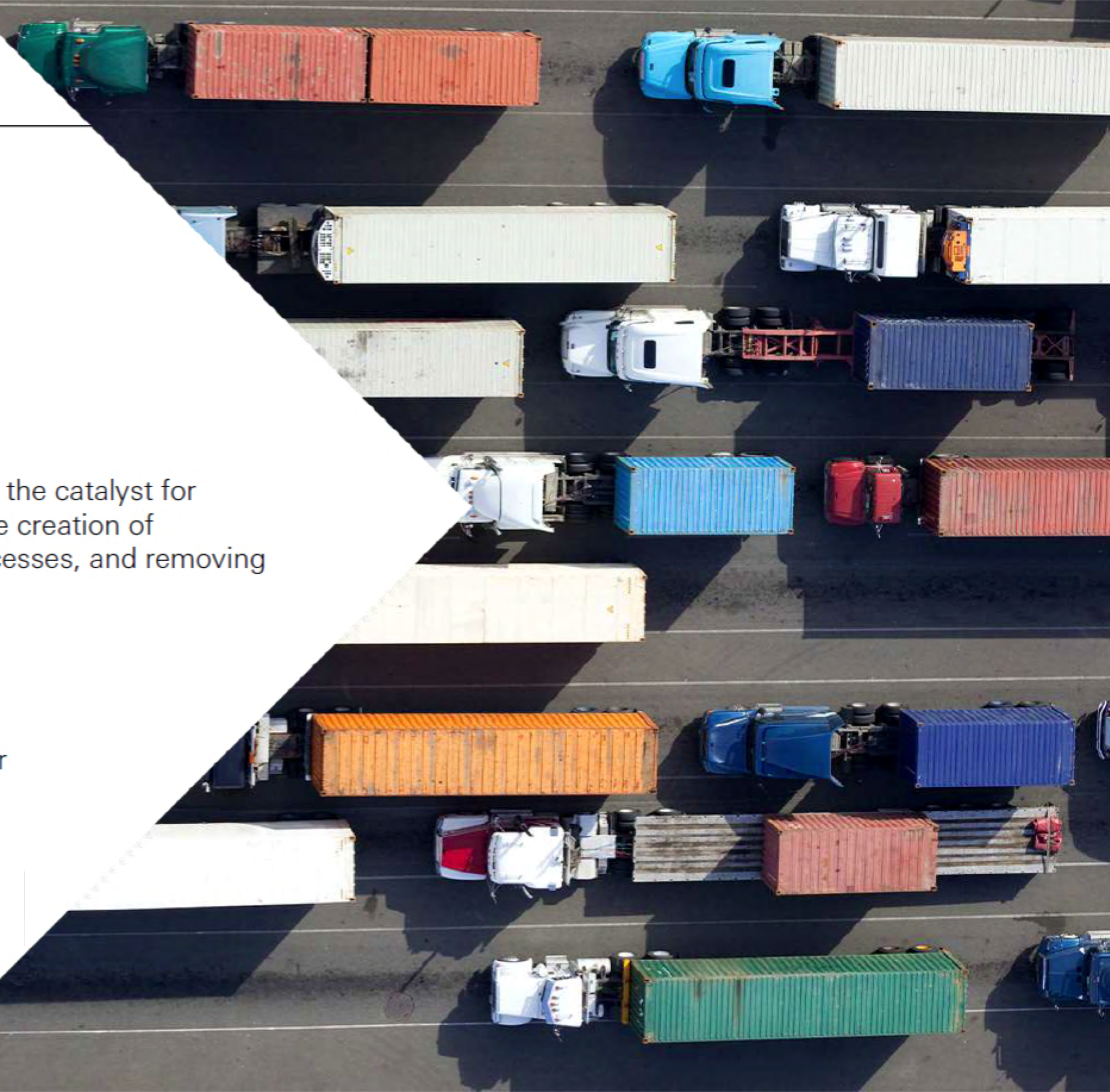
Trade relies on complex cross-border networks where there is no one central party to be the intermediary.

## ➤ Where DLT comes in:

We see an opportunity for this technology to be the catalyst for trade digitisation. DLT will add value through the creation of decentralized networks running automated processes, and removing the need for a trusted central party.

## ➤ How?

- We are experimenting across different customer needs, geographies and technologies.
- By integrating our systems into networks, and networks will form 'networks of networks' to solve diverse problems across segments





## ➤ Letters of Credit

“A key product for world trade, but plagued by paper and digital islands”

- Slow, reliant on central intermediaries
- Costly, non-collaborative
- Even if digital, multiple systems





# HSBC **Voltron One**

A 12 bank venture to digitize Letters of Credit, by bring together HSBCnet, Bolero, SWIFT and disconnected digital islands around one common platform.



### ➤ **A shared process:**

All participants can use a common system  
– no data leakage and fewer errors

### ➤ **Immutability:**

Records can be audited and tracked  
with confidence

### ➤ **A shared truth:**

As transactions progress and amendments  
happen, everyone is kept in sync

### ➤ **Decentralised for scale:**

A complex global network of banks,  
corporates, and trade facilitators





### ➤ Digitisation of Letters of Credit requires digitisation of Bills of Lading

- Electronic Bills of Lading have been in existence for 2 decades, but have not had meaningful adoption
- Existing solutions are functional, but are digital islands not connected to other trade system
- We aim to incorporate eBL's into an end-to-end Letters of Credit process on a decentralized network
- The catalyst for higher truly digital Letters of Credit in the future

### ➤ Digitisation of eBL on DLT

- Requires legal agreement from all parties – we wish to leverage existing standards
- Existing providers of eBL registries can be direct participants on DLT networks





# Voltron One: at the tipping point of adoption

HSBC VoltronOne **APPLICANT** Applicant Huggins Ltd

## CREATE LC REQUEST

← BACK

TO:

ISSUED LC REFERENCE:  ADVISED LC REFERENCE:  APPLICATION DATE (YYMMDD):

FORM OF LC:  APPLICABLE RULES:

EXPIRY DATE (YYMMDD):  EXPIRY PLACE:

PERIOD OF PRESENTATION: WITHIN 15 DAYS AFTER THE DATE OF SHIPMENT BUT WITHIN THE VALIDITY OF THE CREDIT

APPLICANT:  APPLICANT ADDRESS:

BENEFICIARY:  BENEFICIARY ADDRESS:

AMOUNT:  TOLERANCE:

ISSUING BANK:  ISSUING BANK ADDRESS:

NOMINATED BANK:  NOMINATED BANK ADDRESS:

AVAILABILITY TYPE:

PARTIAL SHIPMENTS:  TRANSHIPMENT:

Recent letter credits: 171016-VirusViewFabricCompany  
070125-VirusViewFabricCompany-PCost  
020203-VirusViewFabricCompany-01

Drop us a hint or [Browse](#) to discover thousands

HSBC VoltronOne **BENEFICIARY** Beneficiary Fabric Company

LC NO	APPLICANT	NOMINATED BANK	LC STATUS	VIEW
DPCMAN125056	Applicant Huggins Ltd	Nominton Bank	Advised	
DPCMAN124096	Mashie Electronics Inc	Bo-Fall River Union Bank	Amendment Requested Sanctuary Bankway	
DPCMAN124981	Fibonyakly Association Of Washington	Merrin State Bank	Amendment Requested Sanctuary Bankway	
DPCMAN124096	Fibonyakly Association Of Washington	Merrin State Bank	Amendment Requested Sanctuary Bankway	
DPCMAN124096	Fibonyakly Association Of Washington	Merrin State Bank	Amendment Requested Sanctuary Bankway	
DPCMAN124096	Fibonyakly Association Of Washington	Merrin State Bank	Amended	
DPCMAN124096	Mashie Electronics Inc	Bo-Fall River Union Bank	Demand Presentation Sanctuary Bankway	
DPCMAN124096	Mashie Electronics Inc	Bo-Fall River Union Bank	Demand Presentation Changping check by issuing bank	





**Duncan Wong**  
**Andrew Hon**

Founder, CEO, Cryptographer

Founder, CTO

*@Hong Kong Science Park*  
*R3 Technology Partner*  
*HSBC Global Blockchain Delivery Partner*

*Revolutionize FinTech with Cryptography and DLT*





# CryptoBLK - About Us

March 2015

Dr. Duncan created **ASTRI** FinTech group,  
Hong Kong's largest R&D Center.  
30 of the 150 FinTech engineers formed a  
**Blockchain** team led by Andrew.



November 2016

The Blockchain team published a  
DLT Whitepaper under the  
commission of the **Hong Kong  
Monetary Authority (HKMA)**.





# CryptoBLK - About Us

March 2017

Won the [HKICT Best FinTech Gold Award](#) for a DLT-based Property Valuation platform pilot run with the Bank of China (Hong Kong)



September 2017

Built a Corda-based cryptocurrency DLT-hybrid system for a major Hong Kong e-wallet companies



April 2017

CryptoBLK was formed



October 2017

- HSBC Blockchain delivery partner
- Full gear on HSBC **Voltron One**







# CryptoBLK - About Us

January 2018

Hong Kong Insurance Industry  
technology partner



**Today**



Launch a Corda-based  
Property Valuation and  
Management System



Your trusted property valuation solutions.









LOGIN

[Forgot password?](#)

Powered by CryptoBLK Limited

Your trusted property valuation solutions.





# Topaz: Features



## Statistics

Get up to date information on various property sectors with market analyses



## Privacy

Access to reports and mortgage data only given to authorized individuals



## Tamper-proof

Valuation reports and inspection records are placed onto Corda



## Efficiency

Decrease lag times for receiving valuation figures and reports with Topaz messaging

## Transact

Make informed decisions and choose reports to purchase from various surveyors



## Mortgage Alerts

Peer-to-peer sanitized information provided by other banks and lenders allow informed decision making for lenders





# Topaz: a Corda-based property valuation and management system

## Audit

Data on Corda facilitate private and public organizations such as central banks on risk & compliance management

## Records

Information placed on Corda provides an **immutable record** which safeguards data integrity and prevents fraudulent occurrences



## Secure Data Sharing

Data sharing is limited to among different stakeholder groups in order to protect sensitive data

## Data Privacy

Private data collected will have their **footprint, a cryptographic hash of the data**, placed on Corda thereby allowing only users that already hold the private data to have access

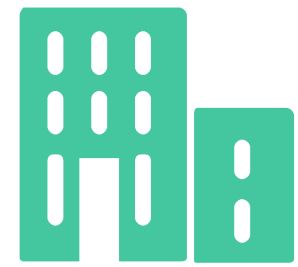
## Distributed

Topaz system is **highly available** and scalable.





# Topaz: Milestones



**June 2017: Design & Implementation**

Topaz platform development began



**December 2017: Pilot Runs**

Pilot runs for banks and surveying firms began



**March 2018: CordaCon Tokyo**

Official launch Topaz and begin free trials



**August 2017: Partnered with Industrial Experts**

Partnered with PropTech experts





# Topaz: Roadmap



## 1H2018: Open for your trial!

Contact us and get onboard to try out this Corda-based Topaz system.



## 2H2018: Platform Enhancement

Expand the scope to cover other stakeholders in property valuation and trading, including solicitors, land registry, real estate agent, etc.



## 2019: Platform Enhancement

Continue expansion plans on a global scale, with fine tuning for individual countries and geographical locations





*R3 Technology Partner  
AWS Activate Supported  
Microsoft BizSpark Partnership  
HSBC Blockchain Delivery Partner  
Member of HKSTP Incu-Tech Program*

# Thanks!

## Q&A



[contact@cryptoblk.io](mailto:contact@cryptoblk.io)



[www.cryptoblk.io](http://www.cryptoblk.io)