



Blockchain & The Future of Real-Time Payments

Prepared for  **Fides**
Reach Further. Connect Faster.



Agenda

1. Payments Today
2. Intro to Blockchain & DLT
3. Leveraging DLT for Payments
4. Sample Use Cases
5. Impact of Payment Friction
6. Digital Assets and IoV
7. Q&A



Today's Inefficient Payments Networks



DISPARATE

Different tech, systems of record, messaging and rules

SLOW

1-3+ days to settle across numerous intermediaries

OPAQUE

Poor data flow inhibits information transparency

EXPENSIVE

High processing costs limit addressable market and servicing



Domestic Payments are Settled Through a CCP

ACH, FPS, CHAPS, etc.



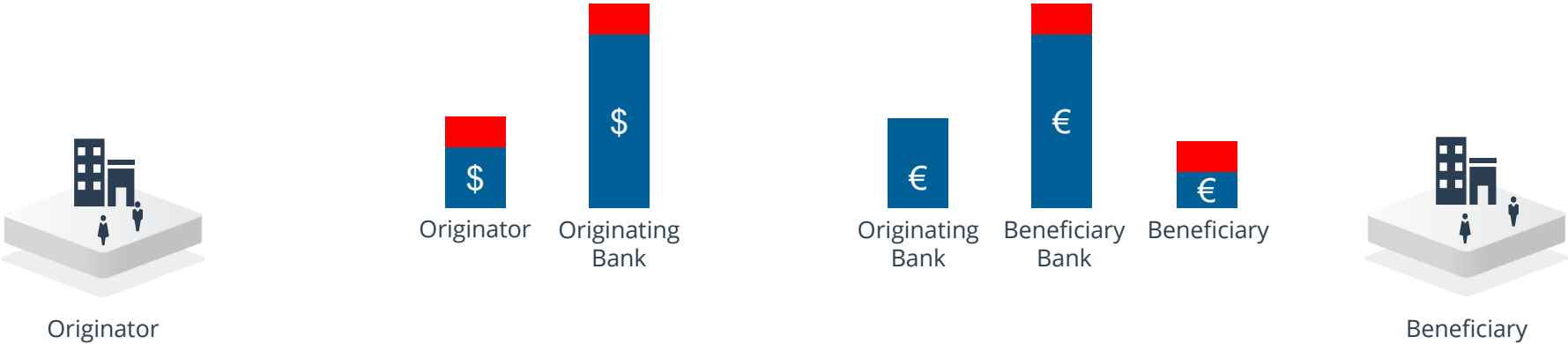
There is no Universally Accepted CCP for Int'l Payments

This makes international payments difficult



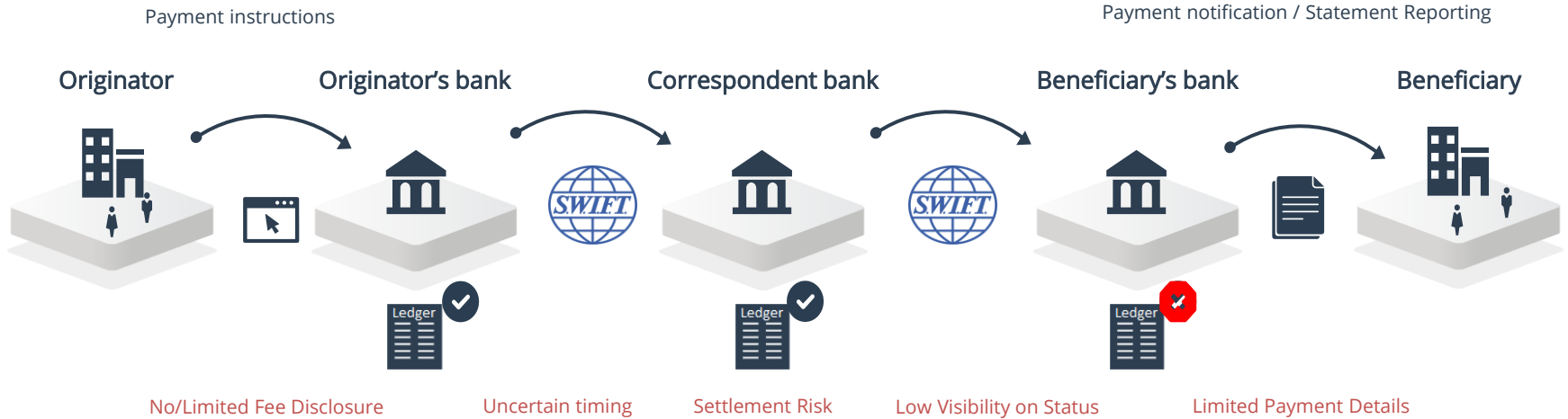
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Sample Cross-Border Payment Today

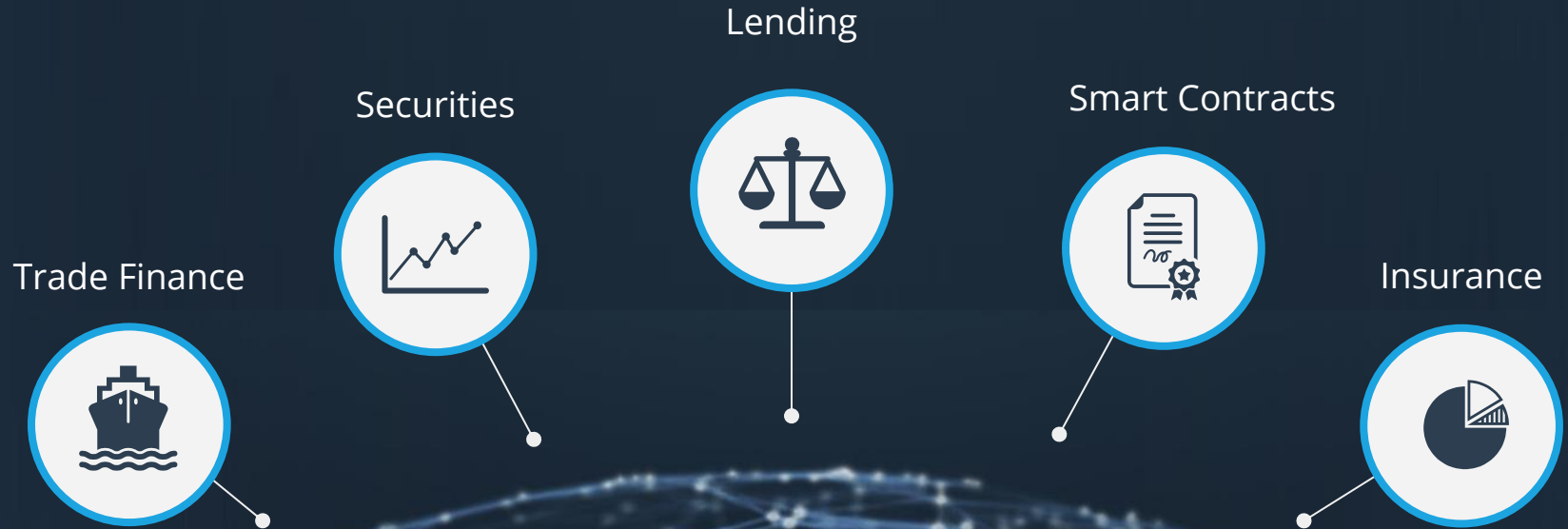
Limited Visibility and Uncertainty Result in Poor Client Experience



What Is a Blockchain?



All Blockchain Use Cases Stem From Payments



What Banks Do Not Like About Blockchain

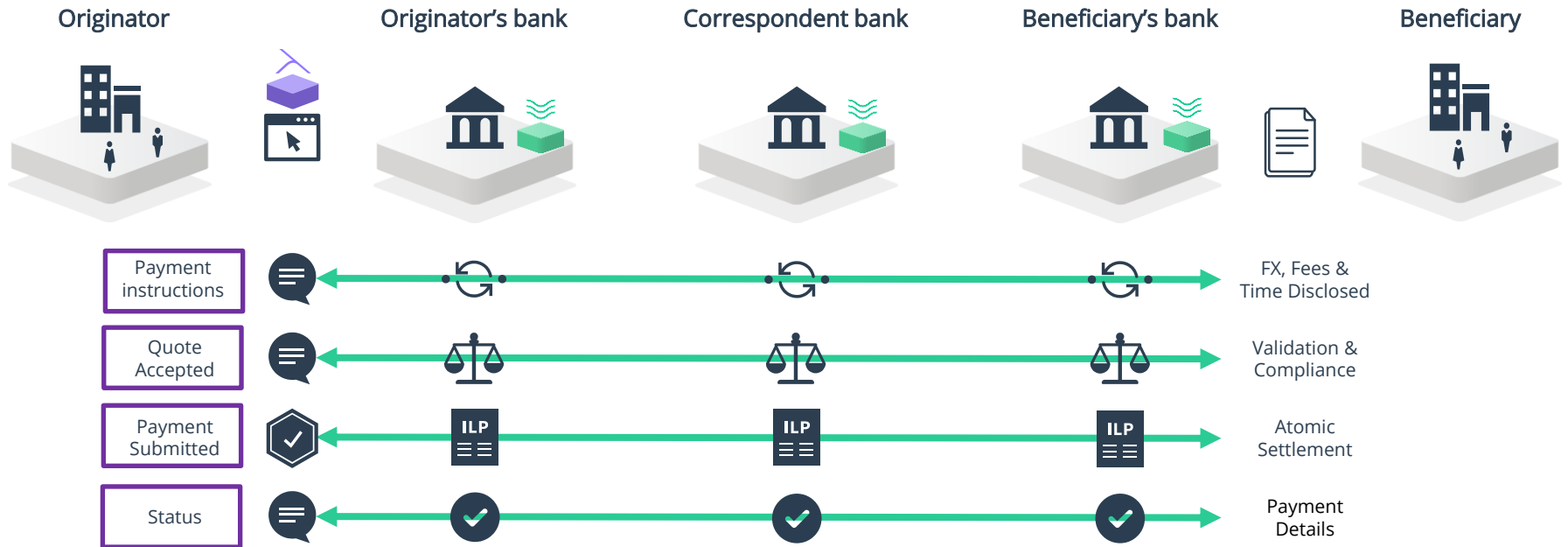
- Scalability (blockchain has a global transaction limitations)
- Transaction Privacy (public/shared ledger)
- Interoperability (blockchain requires everyone to use a single ledger)
- Usage of Digital Assets for Transactions



**Interledger Protocol
Addresses**

Leveraging DLT for Cross-Border Payments

Enabling Real-time Settlement with Bi-Directional Messaging

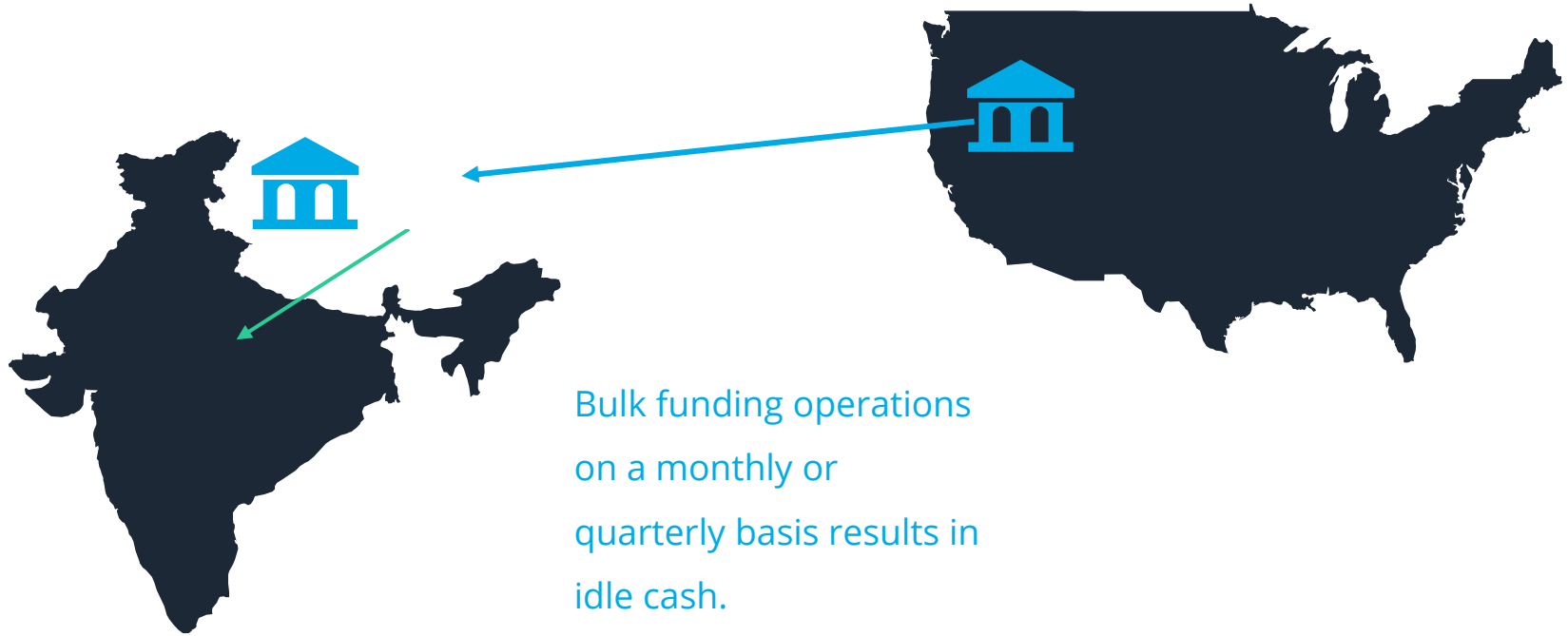




Sample Use Cases

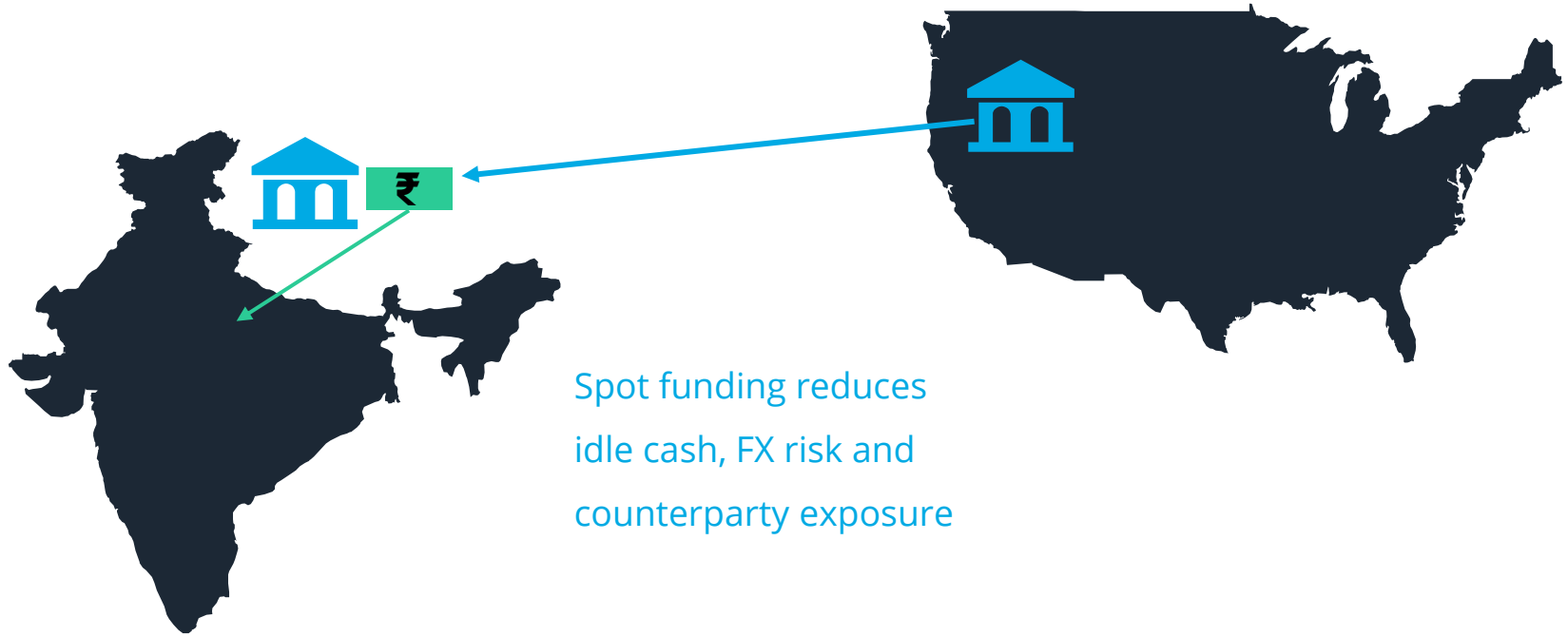
Use Case 1: Spot Funding Operations

Traditional "Bulk" Funding Process



Use Case 1: Spot Funding Operations

Real-Time, Cross-Border Payments Enables a Shift to Spot Funding



Spot funding reduces
idle cash, FX risk and
counterparty exposure





Sweden | United States Corporate Payments



“Ripple’s solution allows our customers to send real-time transfers between their SEB accounts in Sweden and New York. We plan to expand the solution to all geographies and time zones in which we operate.”

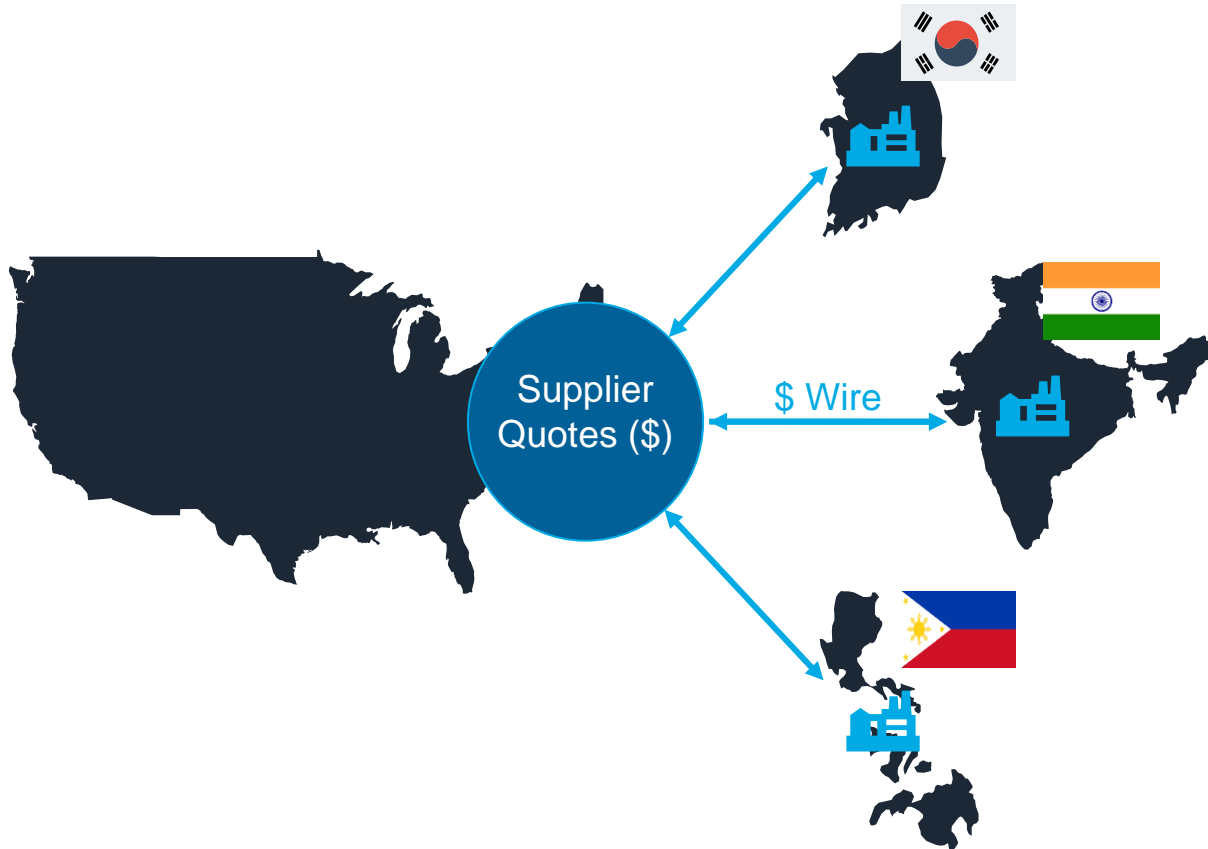
Paula da Silva, Head of Transaction Services at SEB

SEB, a Scandinavian bank, has pursued a corporate payments use case with Ripple on behalf of one of its corporate customers from Sweden to the US. As of Q12018, SEB has processed over **\$1B** in volume over Ripple. With Ripple, SEB has been able to reduce the time to settle from **hours to seconds**.



Use Case 2: Vendor Payments

Common Practice - Bidding in Buyer Functional Currency

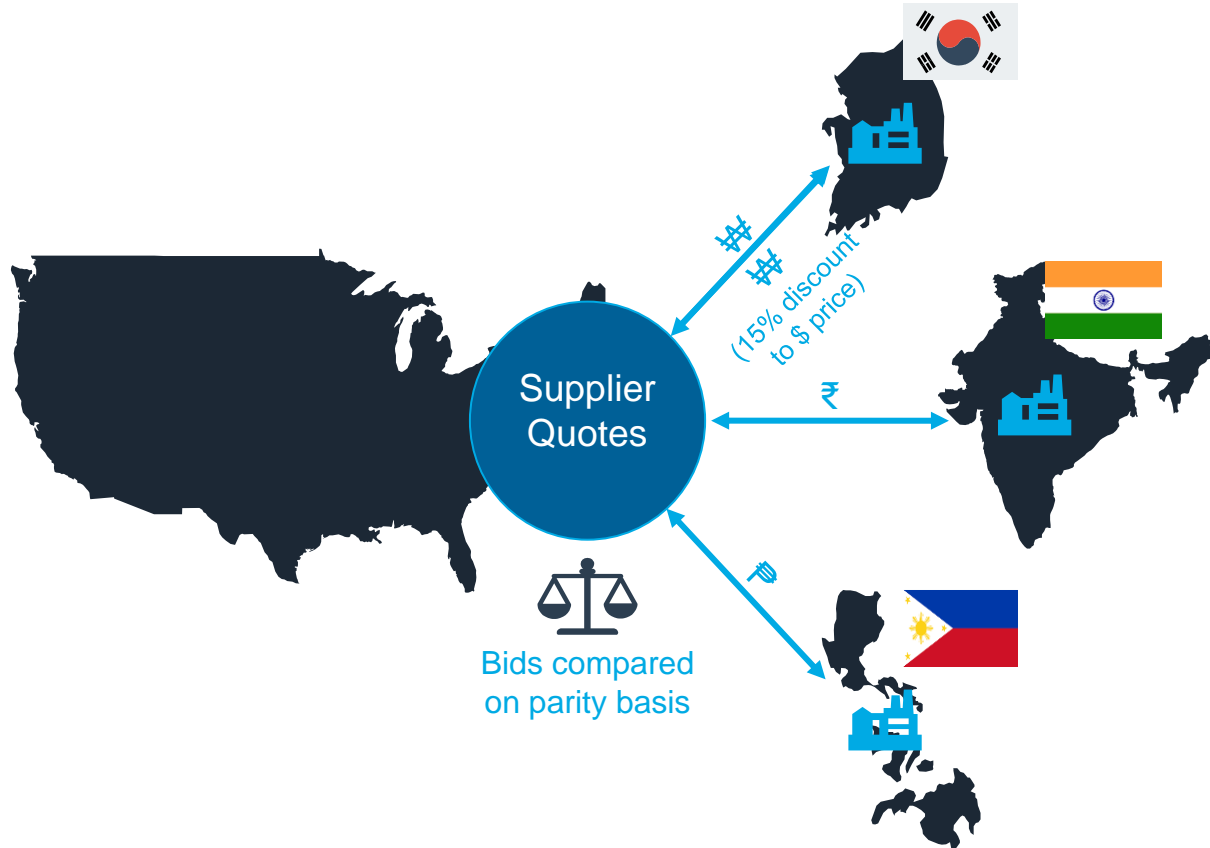


Many corporates will require international vendors to bid only in their functional currency, pushing FX costs to suppliers.



Use Case 2: Vendor Payments

Recommended Process - Supporting Local Currency Pricing



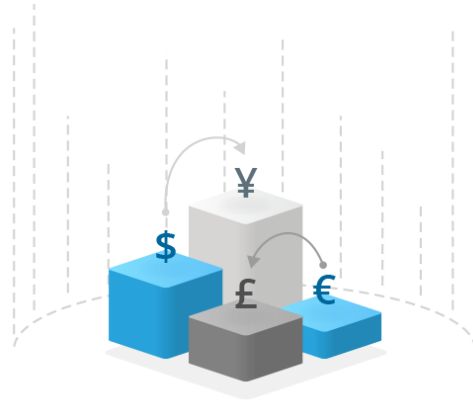
Supporting bidding in multiple currencies can result in lower supplier costs.



AMEX | Ripple

AMEX is building their **SME and corporate customers' supplier payments** on RippleNet, creating a global network of clearing partners around the globe.

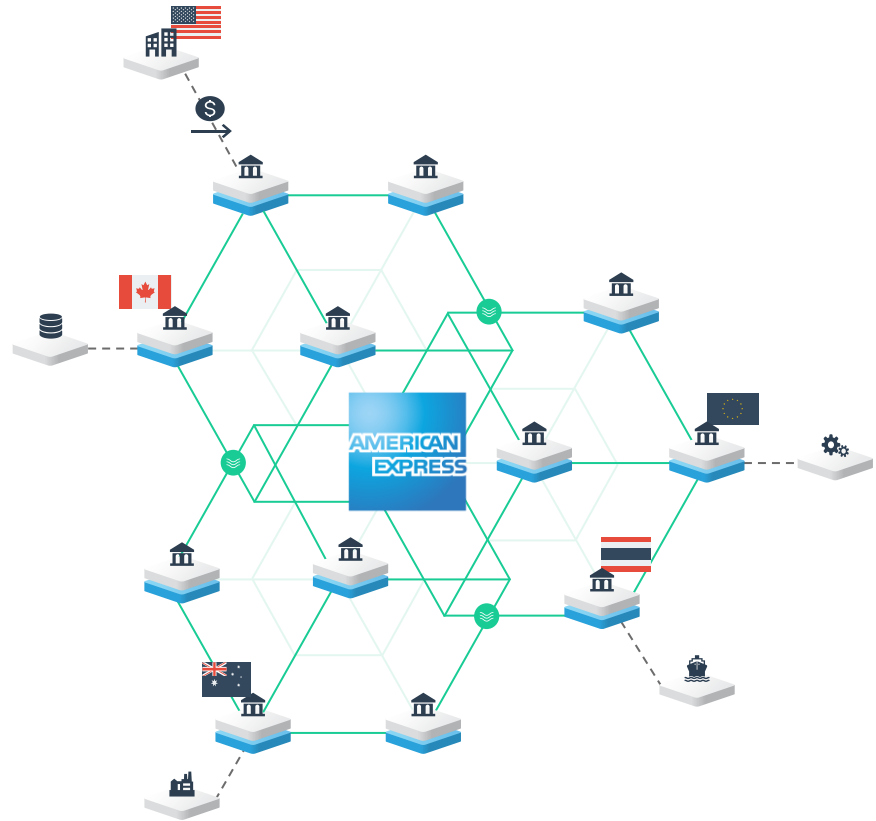
This SME-tailored service is targeted to **improve servicing and drive customer acquisition**. By using Ripple, AMEX speeds the time to market, lowers their cost and delivers a better customer experience.



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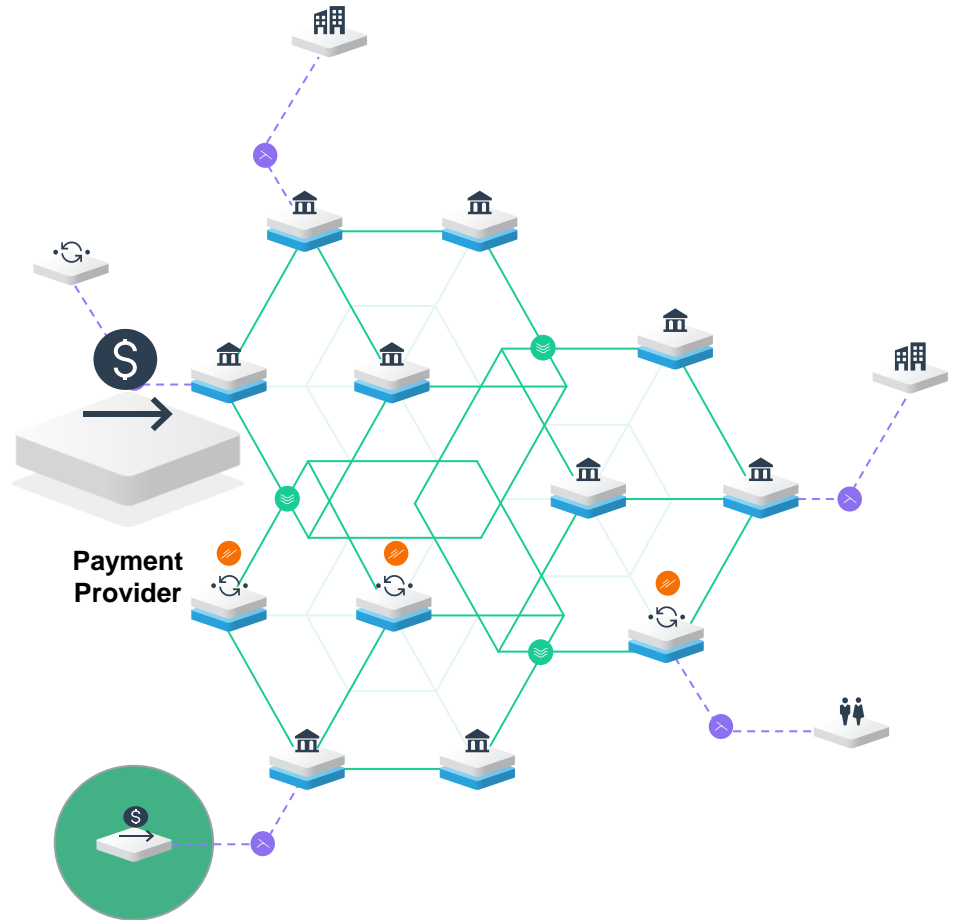
This SME-tailored service is targeted to create a **differentiated service and drive customer acquisition**. By using Ripple, AMEX speeds the time to market, lowers their cost and delivers a better customer experience.



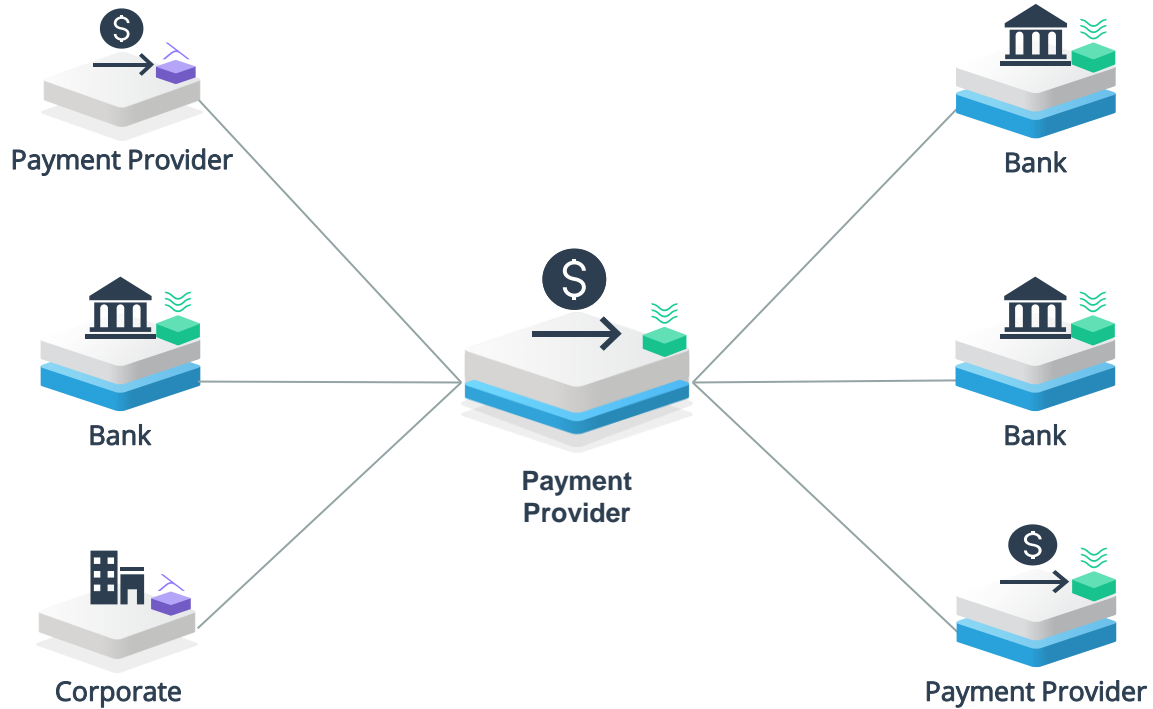
Standard APIs

Many customers join RippleNet to create **new payment corridors** that help them improve their customer experience by reducing the cost, or improving on the customer experience.

This is done with the goal of driving new revenue.



Creating a Connectivity Standard





Operational Impact of Cross-Border Payment Friction



Reconciliation



Idle Cash



Supplier Terms



Shipping Delays



Payments Fraud



Red Tape



Forecasting



Excess Fees



Digital Assets and The IoV



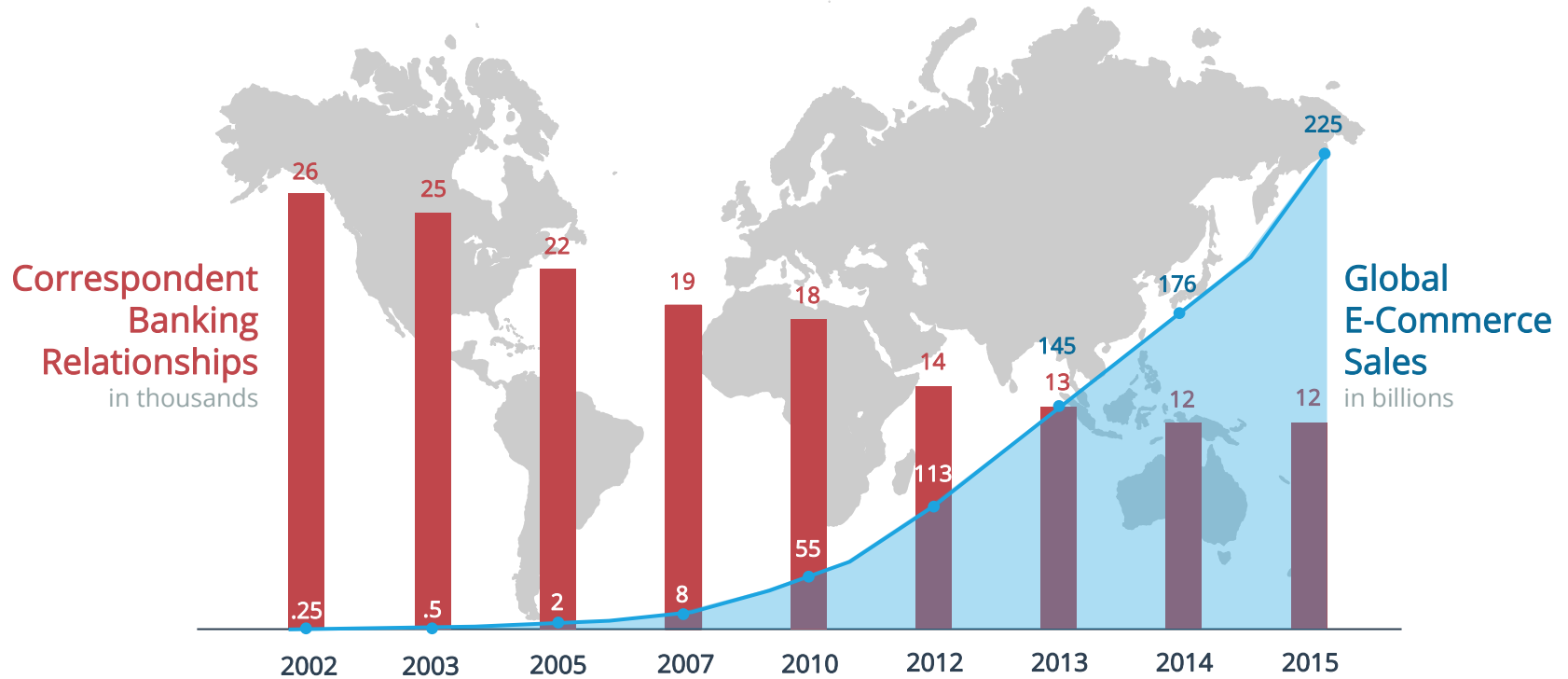
A world map with a network overlay of white lines and dots connecting various points across the continents, symbolizing global connectivity and data flow.

OUR VISION

The Internet of Value:

Enable the world to move money
like information moves today.

Global Payment Demand on the Rise as Global Banking Reach Decreases





Digital assets eliminate the need for nostro accounts or pre-funding foreign accounts



Sample Digital Asset Payment Using XRP



0. Quote estimate for USD->MXN payment
1. Instructions for USD->MXN payment

2. Exchange USD for XRP
3. Withdraw XRP to receiving exchange

4. XRP settled across XRP Ledger

5. Exchange XRP for MXN

6. Initiate local rail payout in MXN

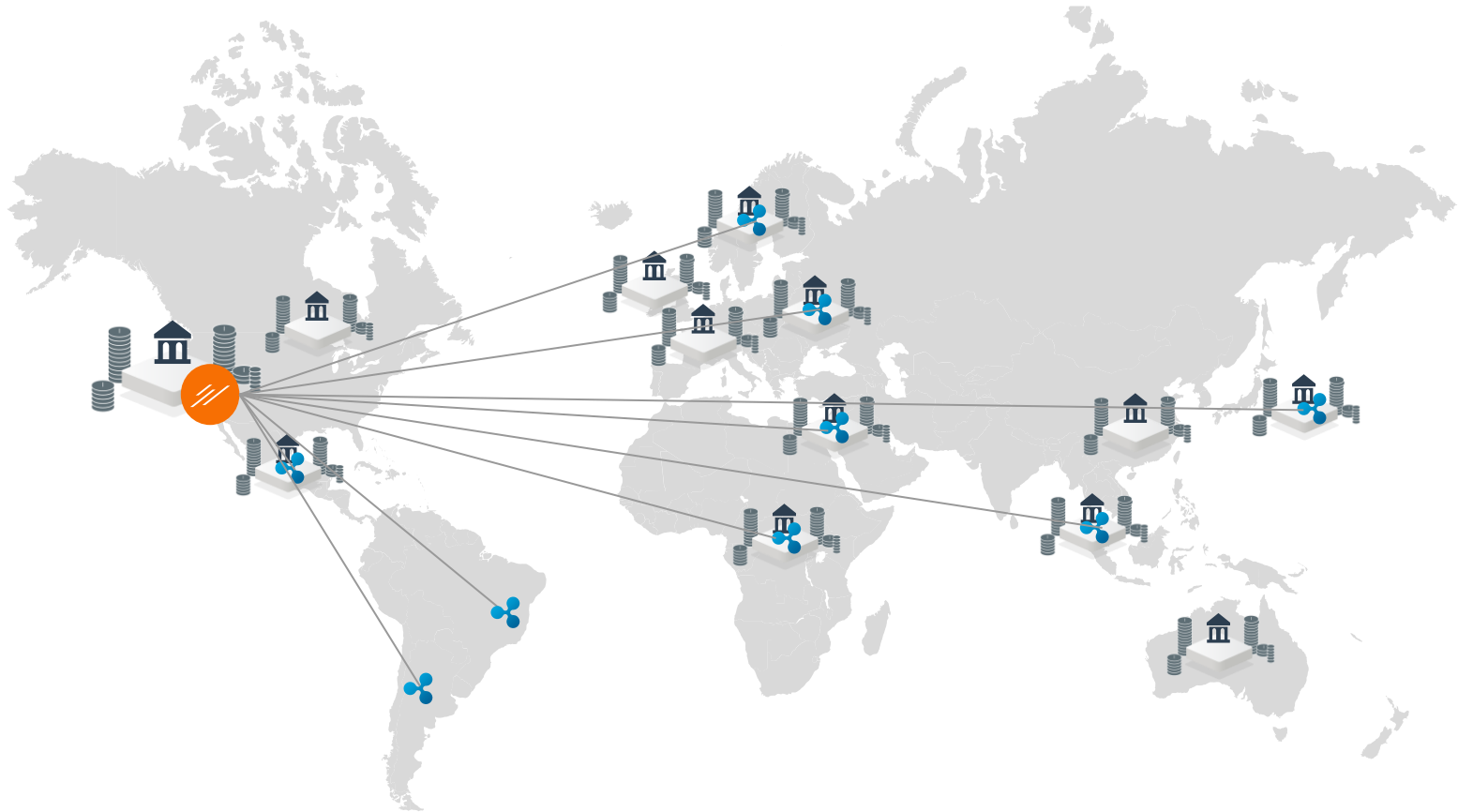
XRP exposure time = ~6 seconds

Total Transaction time = ~2 minutes

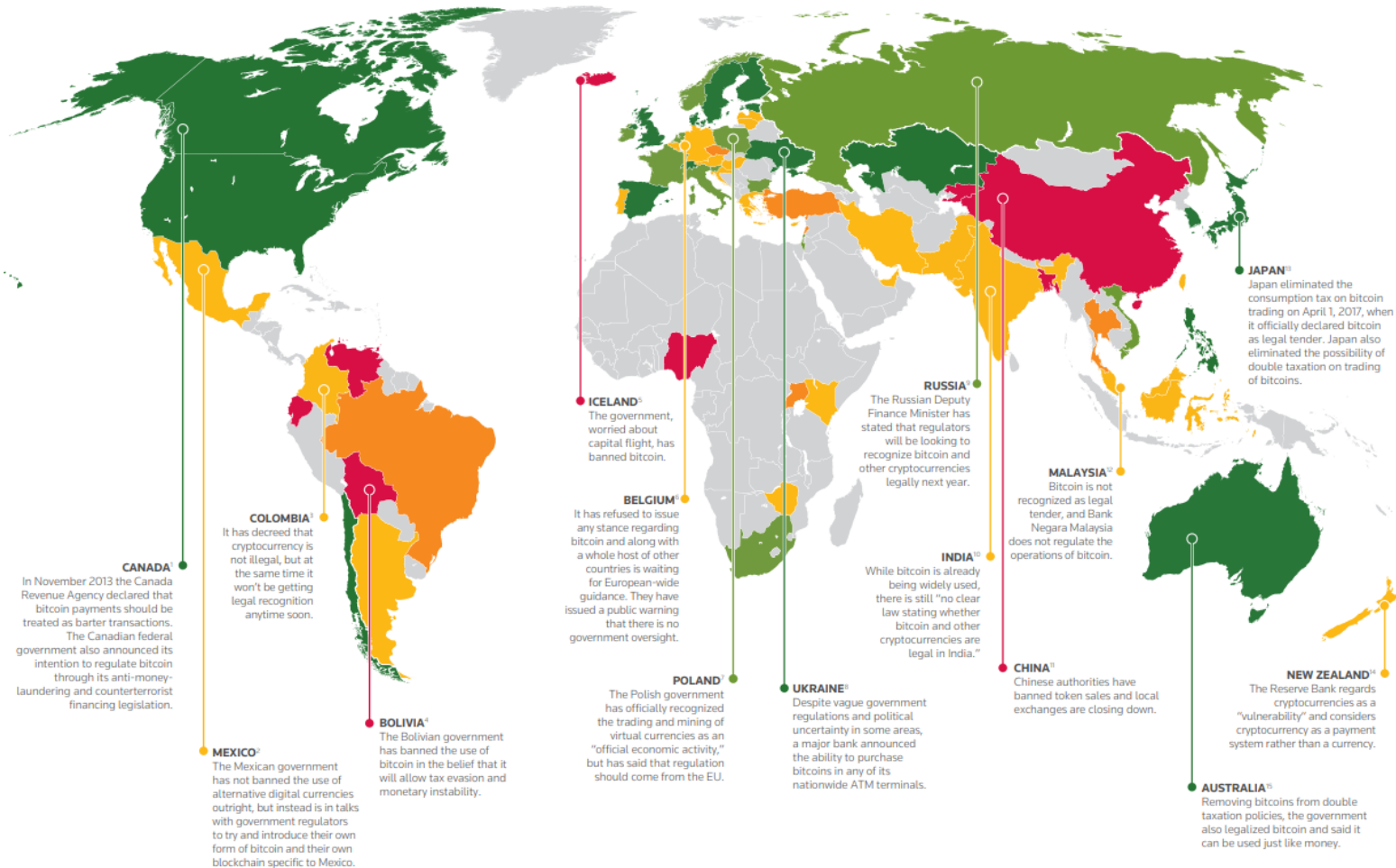


Digital Asset Super Highway

The Current State and Path to Broader Adoption



A WORLD OF CRYPTOCURRENCIES



Q&A

