

ECB workshop on the Future of B2B Payments



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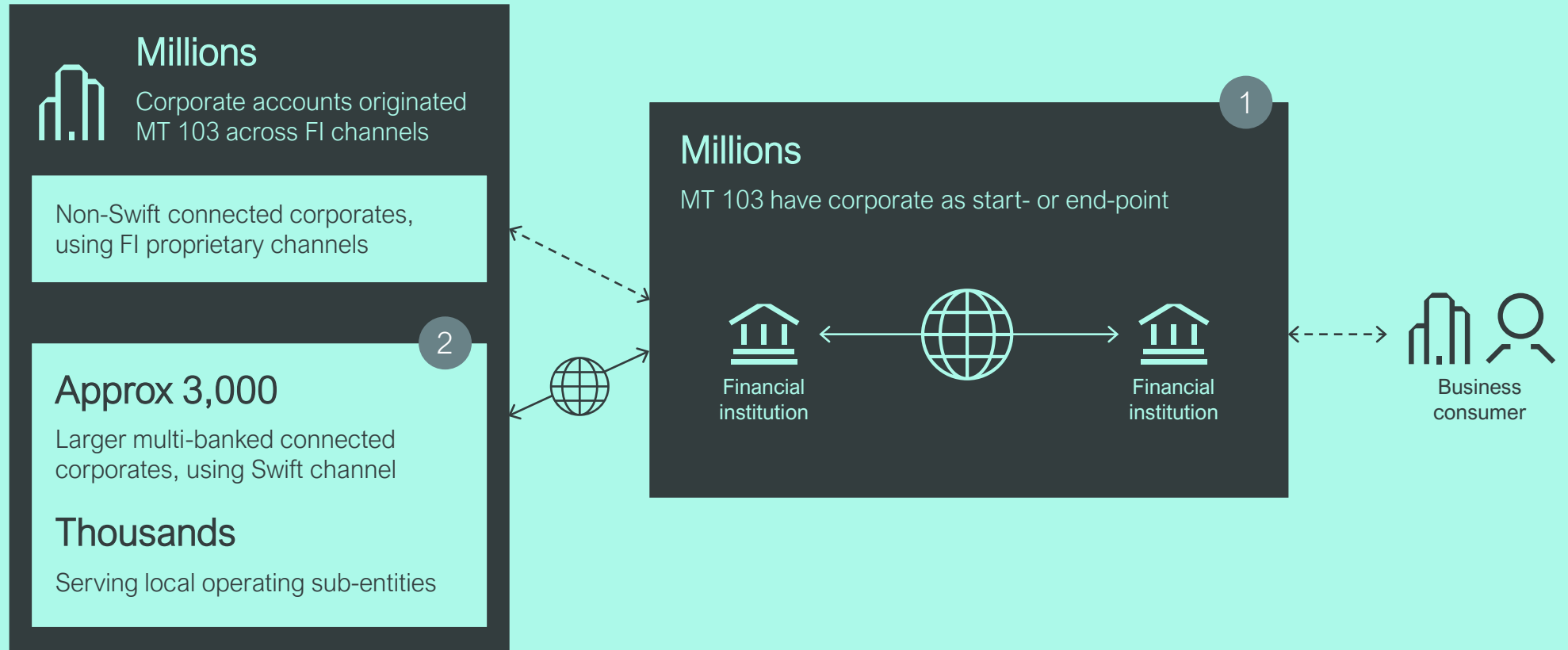
Confidentiality: **Public**

Context: B2B payments today

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Swift currently serves corporates' needs for B2B payments

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Three reasons to focus on corporates

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Swift's strategy is to drive instant and frictionless transaction experience end-to-end.

Supporting corporate business of financial institutions (FIs) is core element.

For **both** connected and non-connected corporates.

Enable rich data via ISO 20022



Achieve overall uplift in experience

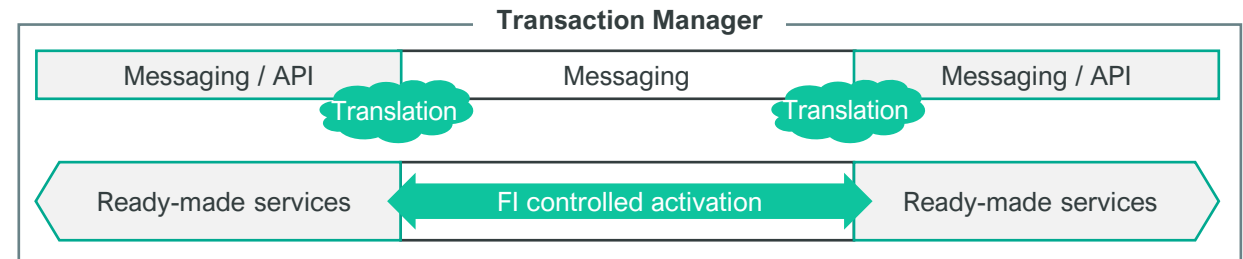


FIs are asking for help



How to achieve this: implementation rests on three key pillars

- 1 Create end-to-end ISO 20022 standard
- 2 Enable FIs to offer ready-made services
- 3 Explore options for non-connected and add value



- High data quality at payment acquisition and reconciliation
- FIs deploy and control Swift experience
- Additional transaction and connectivity services

- Work with key vendors and ERP providers to embed standards
- Further explore, e.g. identity services for non-connected corporates, services that help end-to-end flow with community benefit
- Approach is extendable to other client segments, complementary to digitisation in Trade and leveraging APIs

Insights for the Future: from our recent Phase 2 sandbox

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The latest Swift Phase 2 sandbox initiative, published in March 2024, was one of the largest global CBDC collaborations ever, encompassing 38 institutions from across the world

Sandbox participants, as disclosed :

Central banks

Australia
Czechia
France
Germany
Singapore
Taiwan
Thailand

Commercial banks

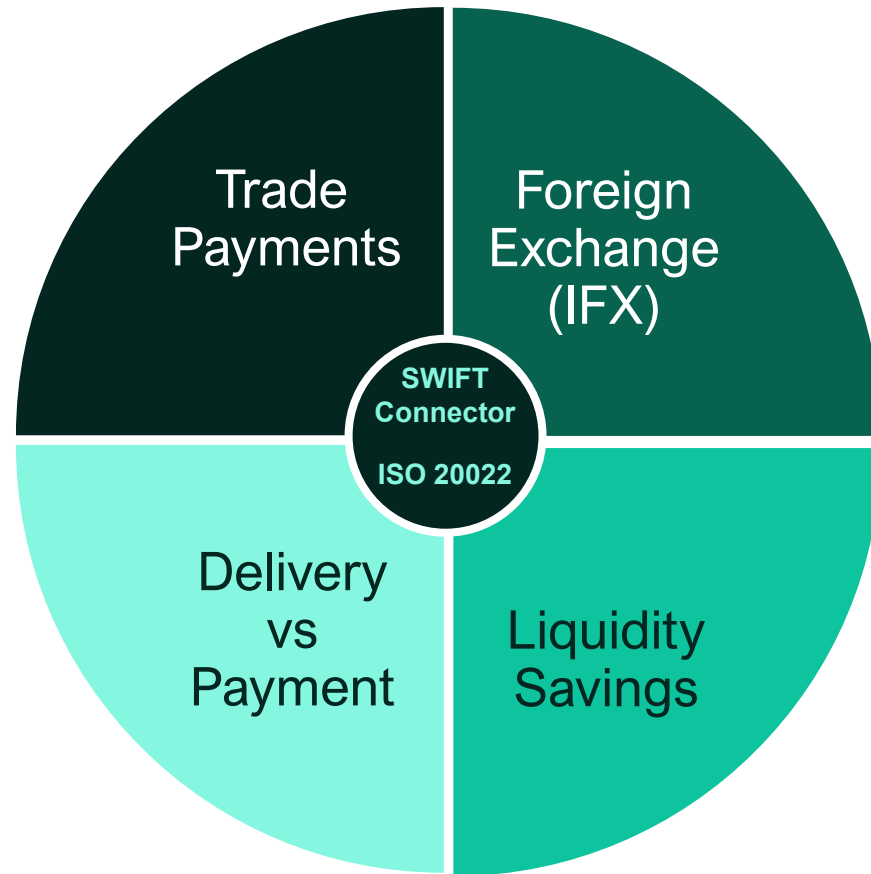
ANZ
Citibank
DBS Bank Limited
Deutsche Bank
HSBC
Hua Nan Commercial Bank, Ltd.
Intesa Sanpaolo
NatWest Group
Santander Bank
Société Générale
Standard Chartered
Sumitomo Mitsui Banking Corporation
The Shanghai Commercial & Savings Bank (Taiwan)
The Standard Bank of South Africa
United Overseas Bank
Westpac Banking Corporation

Financial market infrastructures

CLS Group
DTCC

The Phase 2 sandbox to explore more complex and market-relevant use cases, using the experimental Swift interlinking solution

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The **Use Cases** were defined and prioritized by the sandbox participants

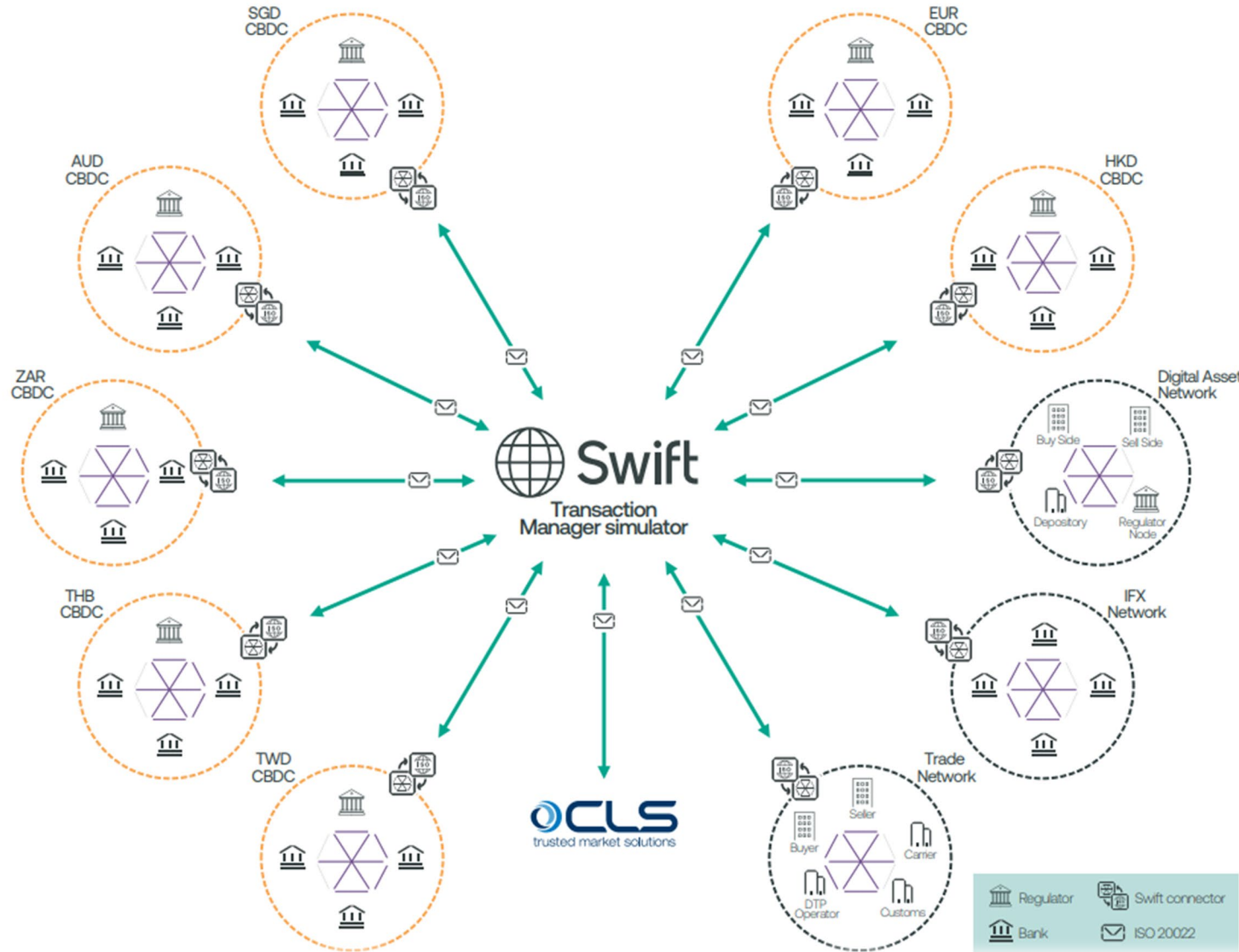
The **Project** was divided into two streams of work, **'talk'** and **'walk'**:

1. Collaborative working group sessions – business and technical focus
2. Hands on exploration in a sandbox environment

The **Activities** were intense over 6 months:

- ❖ Ran 20 working group sessions with an average of 60 participants in each session.
- ❖ Onboarded 125 users from 38 organisations involved for a period of four months

The Phase 2 sandbox was set up to simulate multiple currencies and use cases

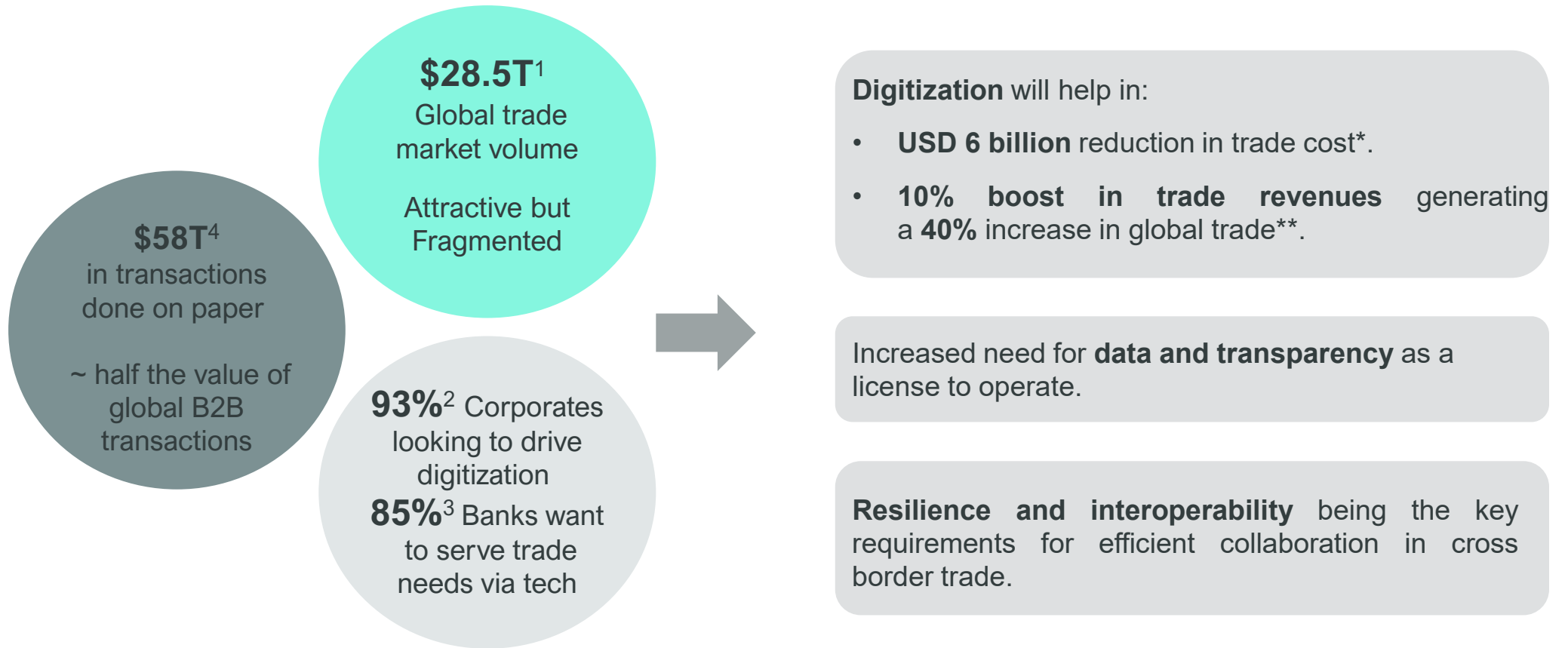


7 simulated CBDC networks

3 digital networks – Digital Trade Network, Assets, IFX Network,

1 existing market infrastructure

Why Trade? Strong economic potential to digitise global trade



Expectation is to orchestrate the ecosystem from a standards, rules, and exchange of information perspective.

Source:

¹ Gartner, ² McKinsey, ³ ADB, ⁴ Microsoft

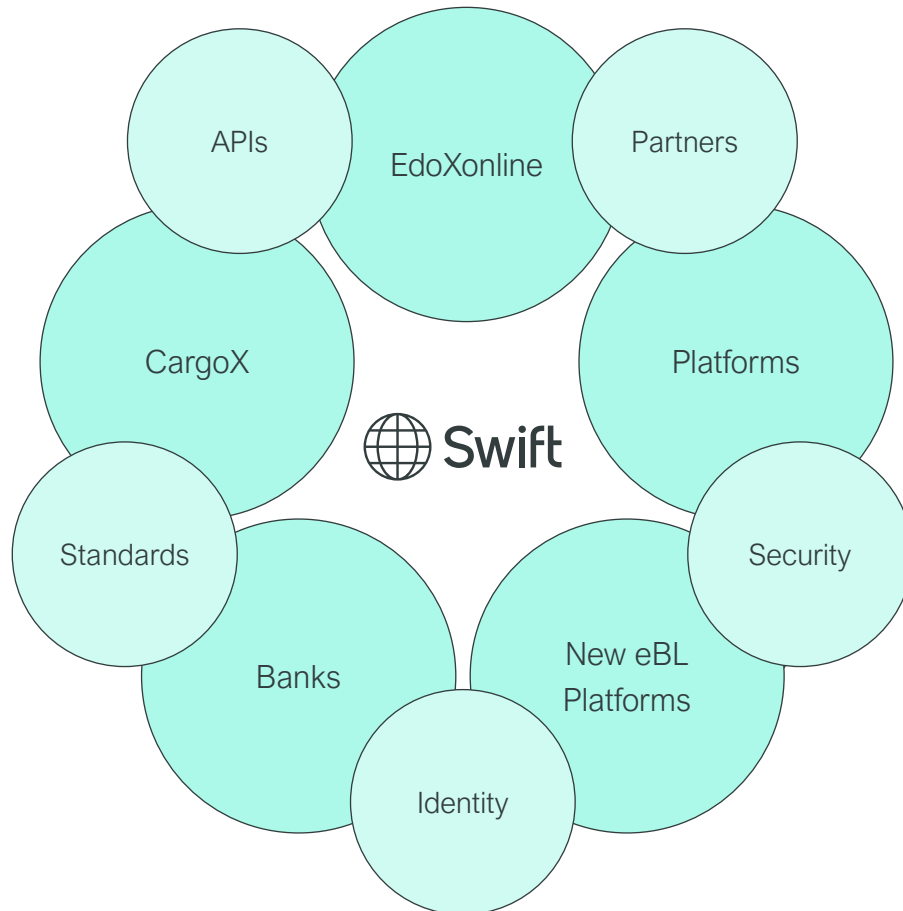
* ICC global trade securing future growth tenth annual edition 2019, Boston Consultancy Group.

** ICC UK, Dr Rebecca Harding CEO Coriolis. Business case commissioned by ICC UK 2021

Trade Payments use case built on insights gained in first eBL PoC

Enabling interoperability between financial institutions and electronic Bill of Lading (eBL) platforms

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Successfully conducted the eBL POC with 4 platforms and 2 banks (DB and BNY) for an entire eBL lifecycle.

The goal was to validate feasibility to exchange electronic bills of lading and achieve seamless interoperability and integration across banks and trade platforms - thereby eliminating the need for peer-to-peer integration between different participants.

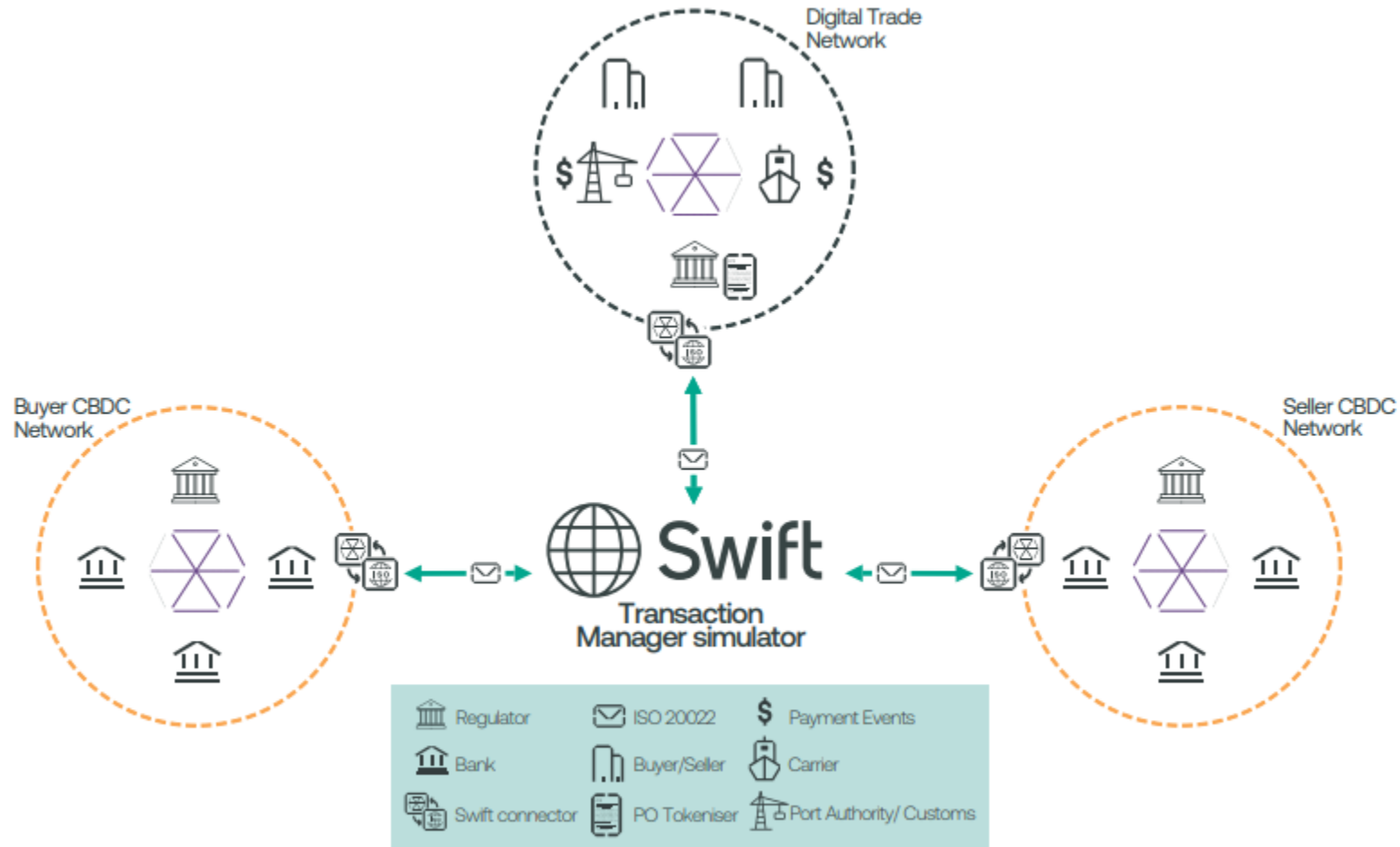
By establishing the technological foundation for interoperability, our solution using a standardized API has the potential to reduce costs and improve efficiency.

Swift to support onboarding of eBL platforms as next step.

Swift as a founding member of FIT Alliance is working on raising awareness around adoption of eBLs.

In the Trade Payments use case we simulated a Digital Trade Platform (DTP) that could digitize and tokenise Purchase Orders (PO)

This enabled trade events to automatically trigger payments on the digital currency networks (TvP)



Trade Payments use case generated seven key outcomes

1. Trade lifecycle

The DTP comprised the buyer, seller, carrier, port authority and their respective banks. Through the 'open account' approach, we were able to represent most of the actors present in a trade lifecycle.

2. Smart contracts

The DLT-based DTP allowed us to implement effective smart contracts for capturing trade clauses in a typical trade contract

3. Payment workflows

Event-driven programming implemented on the digital trade network allowed us to automate pre-approved payment workflows between two networks using the Swift Transaction Manager simulator. For payments processed outside operating hours, this meant that the need for manual intervention was reduced. Payment events were programmed based on documentary evidence, such as customs certificates.

4. Fraud risk

We found that tokenising a PO, and managing the lifecycle of a PO token and associated payment events via smart contracts, can reduce fraud and double financing issues. This is made possible because the PO token is escrowed until a pending invoice is settled.

5. Intermediaries

The experiment showed that interlinking multiple digital networks and streamlining payments can help reduce the number of intermediaries needed in cross-border trade payments. Peer-to-peer atomic trade-versus-payment was possible.

6. Trade digitisation

The continued use of ISO messaging standards will help with trade digitisation and bring in a common interoperability layer.

7. Interoperability

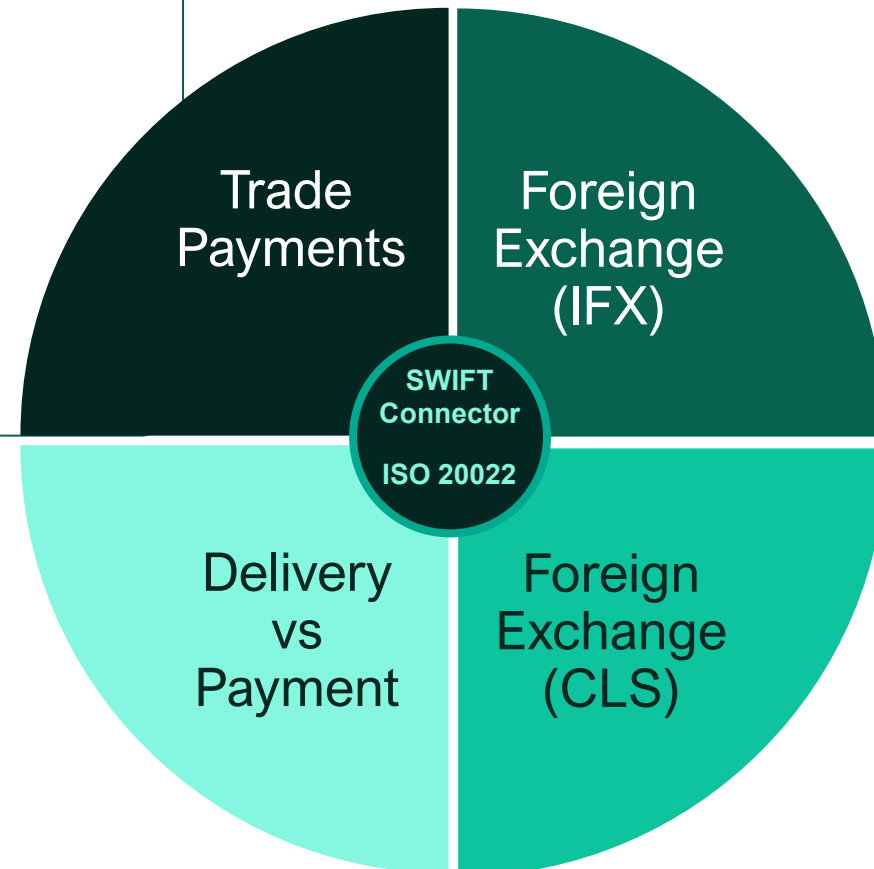
Ultimately, the experiment demonstrated seamless interoperability between different digital networks across technology stacks using the Swift connector.

Trade Payments could significantly benefit from digitisation and tokenisation

Digitisation and tokenisation of Trade has clear potential to **improve efficiency, reduce costs & fraud.**

Participants also highlighted the potential of this solution to **reduce trade payment delays** and **enhance trust** among trade parties.

Orchestration & straight-through processing of trigger-based payments across trade platforms, banks and wider trade ecosystem is possible



Considerations for digital euro or wholesale central bank money settlement (ntwCeBM)

1. Programmability and ability to trigger and orchestrate transactions is a requirement

Delivery of efficiency benefits in Trade and other use cases depends on these capabilities

2. Payment platforms need to include escrow or earmarking functionalities

TvP, DvP and PvP transactions all rely on an 'escrow and release' type of functionality. This could be delivered using either DLT or non-DLT technology

3. Interoperability is key

Payments are usually 'for' something, so new payment platforms need to be able to link with trade, securities, existing payment platforms...

Interoperability is hard – but necessary. There is no single model, but these initiatives gives us confidence that emerging networks can be supported through a standardised approach

Guiding Principles for interoperability

Interlinked networks

Interlink new digital networks, agnostic to asset class and technology choices

1

Single point of access

Enable institutions to leverage existing channels to reach new networks and reduce overhead

Global Interoperability

3

2

Avoid 'digital islands'

Ensure new digital networks can not only connect to each other, but to the existing financial system (e.g. using a common language such as ISO 20022)

How we are moving forward

1. Enhancing the Swift experimental interlinking solution (Innovation-led)

Support continued market experimentation by enhancing the Swift connector to support additional Payment-versus-Payment (PvP) and DvP use cases, while adding functional enhancements and new technical capabilities

2. Developing real-world solutions for digital assets (Product-led)

Support for testing of live movements of assets and value - as announced in our [recent article](#).
Aim to be available for DvP and PvP use cases by 2025

3. Demonstrating how we could interlink other networks (Innovation-led)

For example, as bank-led tokenised deposit networks. Together with supporting community efforts to further innovate in this area, both by participating in industry initiatives and by contributing to network capabilities



Swift