

ENTERPRISE BLOCKCHAINS LIVE 2020

Virtual Conference
April 22, 2020 | 3:00 pm CET

Event
Partners:

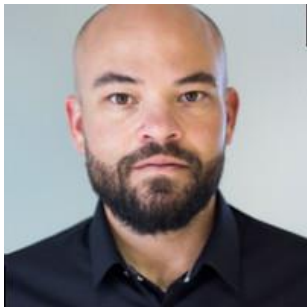


DAML



ENTERPRISE BLOCKCHAINS LIVE 2020

Hosted by:

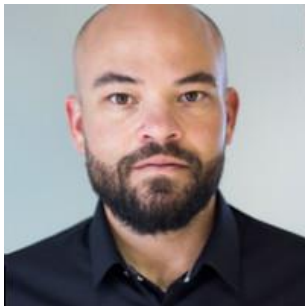


Aviv Lichtigstein
CEO and Founder



Enrico Camerinelli
Industry Analyst

WELCOME



Aviv Lichtigstein
CEO and Founder

101 Blockchains is the world's leading online independent global network for Enterprise Blockchain Practitioners

We don't sell blockchain. We help corporate executives understand and decide
How the technology fulfills their business needs and objectives.



Trusted



Strategic



Practical

WOMEN IN ENTERPRISE BLOCKCHAINS

Virtual Conference

May 20, 2020

3:00 p.m. CET | 9:00 a.m. ET

[Register Now](#)



101 Blockchains

2020 EDITORIAL CALENDAR

April

**Enterprise Blockchains
Live 2020**

May

**Women in Enterprise
Blockchains**

Jun

**Trade Finance
Blockchain World**

July

**Enterprise Blockchains
Strategy & Management**

August

Supply Chains

September

Financial Services

October

Blockchain as a Service

November

Government Programs

December

Looking into 2021

A big
thank-you
to our
Partner
Sponsors



ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda

Opening speech

Keynote: Building Business Opportunities With Distributed Applications

Panel- Technology

Keynote: Going Global with Blockchain

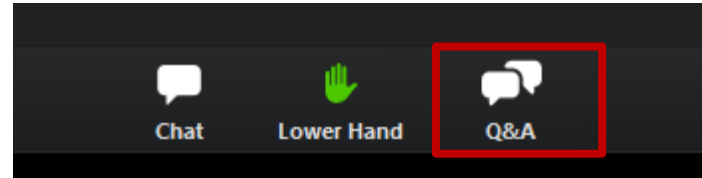
Panel- Strategy

Keynote: Management Running Enterprise Blockchain Networks

Panel- Management

End of Conference- Closing remarks

Use the **Q&A** channel to ask your questions



A few
housekeeping
tips

Use this LinkedIn Group to **network**



<https://www.linkedin.com/groups/12400295/>

Coopetition in Blockchain

Team-building for the 21st Century



Dale Chrystie

Blockchain Strategist at FedEx, Chairman - BiTA Standards Council

Coopetition



IN BLOCKCHAIN

Team-Building for the 21st Century





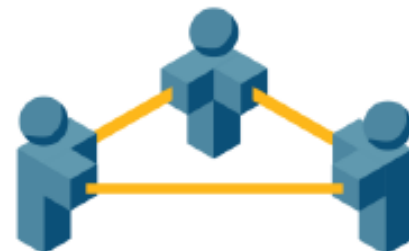
Bitcoin



What's Blockchain



Blockchain Dust



Consortiums
For All



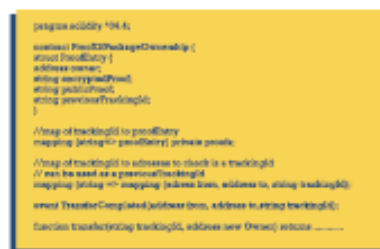
Blockchain =
Internet = \$\$\$



Sorry, What's
Blockchain Again?



"We're Gonna
Wait."



Neither Smart,
Nor a Contract



Middlemen
Forever



"Coopetition?
I Don't Think So."



“We’re quite confident that **Blockchain** has big implications in supply chain, transportation and logistics. It’s the next frontier that’s going to completely change worldwide supply chains.”

- **Frederick W. Smith, FedEx Founder/Chairman**

“Our greatest realization this past year is that in order for #blockchain to be transformative, it will need to be **much bigger than us.**”

- **Robert B. Carter, FedEx CIO**





Blockchain



IS USELESS

   *BORING*



this is BETH

Beth is a human.

She has a digital twin. Her purchasing tendencies and history are represented in smart contracts (blockchain), IoT, AI, etc.

Beth is also a machine.

EXAMPLE "if, then" statements...

```
! If on-time transit, and
! If correct temperature range, and
! If correct humidity range (etc.), THEN
! You will pay me (micropayment ASAP)
Or
! If on-time transit, THEN
! Do not file an MBG claim
Or
! If product "ABC123" is available below $xx.xx,
  purchase up to ten items, THEN
! Place those items on the website +20%
```

```
pragma solidity ^04.4;

contract ProofOfPackageOwnership {
    struct ProofEntry {
        address owner;
        string encryptedProof;
        string publicProof;
        string previousTrackingId;
    }

    //map of trackingId to proofEntry
    mapping (string=> proofEntry) private proofs;

    //map of trackingId to addresses to check is a trackingId
    // can be used as a previousTrackingId
    mapping (string => mapping (address from, address to, string trackingId)) private transfers;

    event TransferCompleted(address from, address to, string trackingId);

    function transfer(string trackingId, address new Owner) returns (.....)
```



Peer-To-Peer Technology



Middlemen
Forever

The C-Suite





Standardization:

Enhanced network effects

Increased adoption

Q

A



Cooperating to develop the
non-competitive, open source
platform on which blockchain
will be based



CO • OP • E • TI • TION





PRESIDENTIAL MEMORANDUM

Memorandum on
Combating Trafficking
in Counterfeit
and Pirated Goods

ARTICLE: FedEx CIO:

It's time to mandate
blockchain for
international shipping

Combating Trafficking in Counterfeit and Pirated Goods





“The information about the package is as important as the package itself.”

- Frederick W. Smith, FedEx Founder/Chairman, 1978



1,000



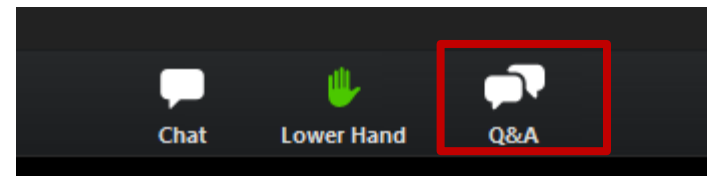
1

BETH
has a digital twin



Q&A

Use the **Q&A** channel to ask your questions



ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda

Keynote: Building Business Opportunities With Distributed Applications

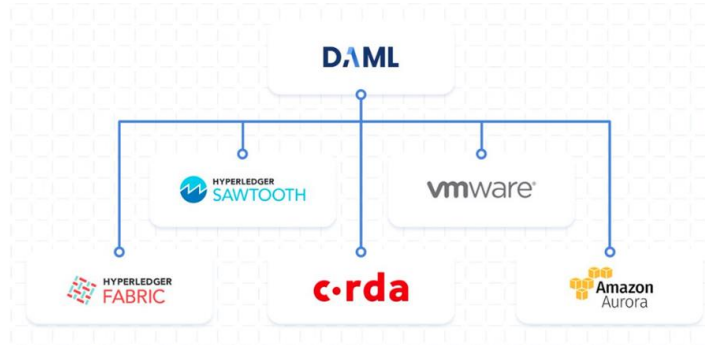
Keynote: Building Business Opportunities With Distributed Applications



Bernhard Elsner

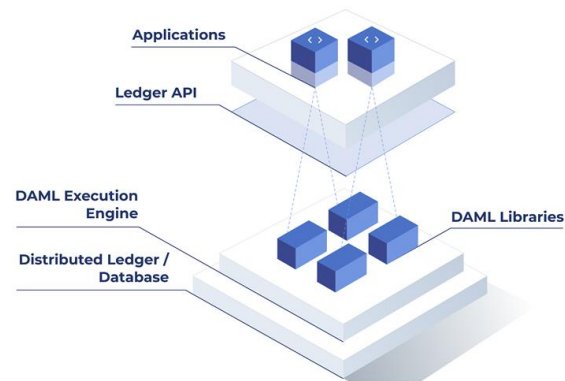
Product Lead, Digital Asset

DAML : Distributed Applications in days not years



Write once, deploy anywhere

DLT, Blockchains, Crypto Databases, RDBs



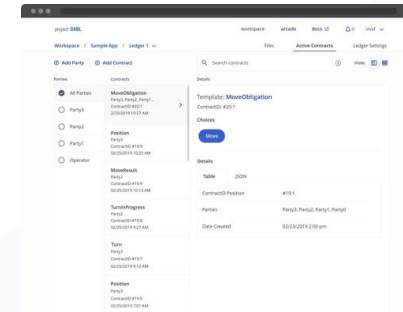
Developer Focussed

Tooling for complete full-stack applications.



Scales from PoC to national infrastructure

Open Source, Backed by global innovation leaders



project: **DABL**

Get to market first, stay there longer

Cheap, fast, complete application platforms



What's a distributed application?

Distributed in terms of



Infrastructure



Trust



Control



Knowledge



Every Large
Application



Messengers with
E2E encryption



Distributed Social
Networks



P2P Messaging



Blockchain's great contributions are **consistency and integrity**
Smart Contracts' great contribution is a **shared understanding** of the system.

Example: Digital Money

The original Blockchain app

- High Value
- Distributed in most respects
- Consistency is crucial
- Simple
 - The state is a fixed (or controlled) quantity allocated to addresses
 - A state transition is a quantity preserving change to the allocation
 - Everything else is there to enable infrastructure and security



5112

Carbon Copies

on CoinMarketCap, Feb 12th 2020

Why?

847

Infrastructures

on CoinMarketCap, Feb 12th 2020
Based on the number of Coins



Cost

vs

Value

Application Logic

Value creation takes only a small fraction of the overall effort

Boilerplate

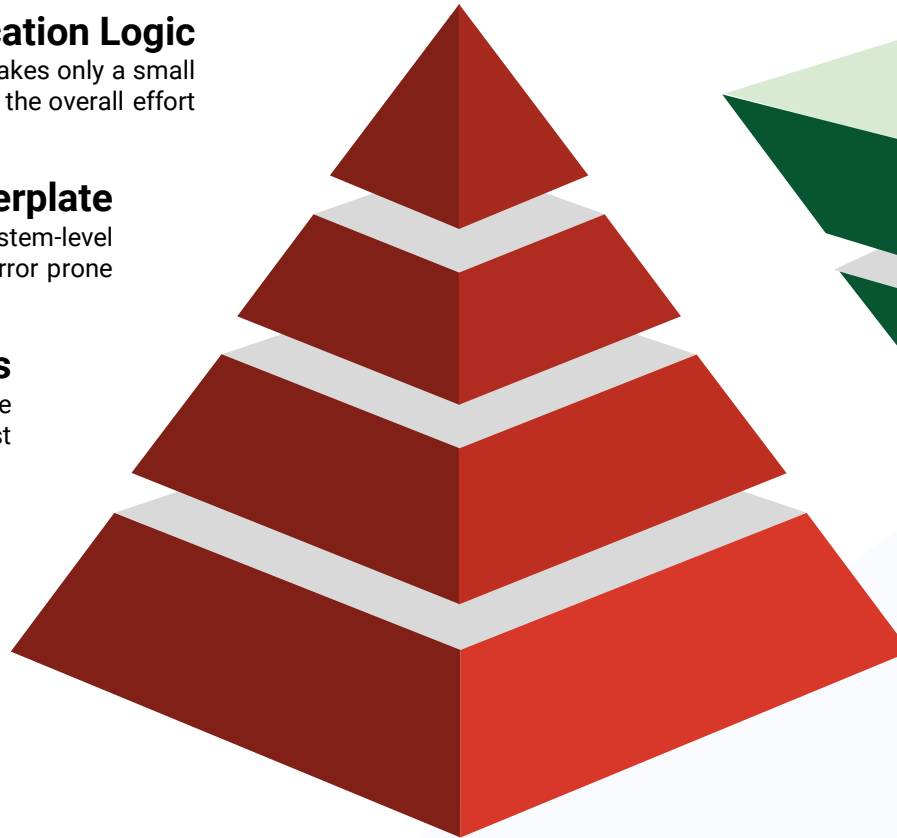
Developing apps using system-level programming is slow, and error prone

TechOps

Deploying, and maintaining infrastructure is a major cost

Infrastructure

Building an enterprise grade distributed ledger infrastructure takes years and costs millions



Historic parallels

1960s

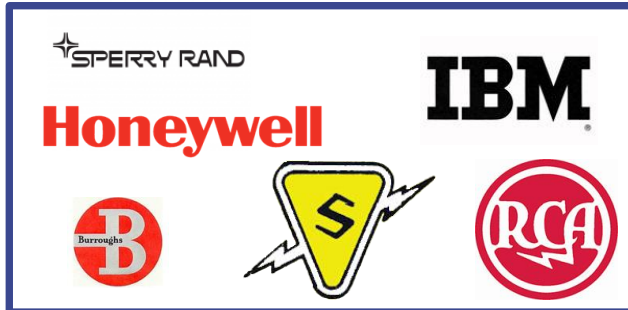


Image Credit: NASA

1990s



Image Credit: Museums Victoria

2020s

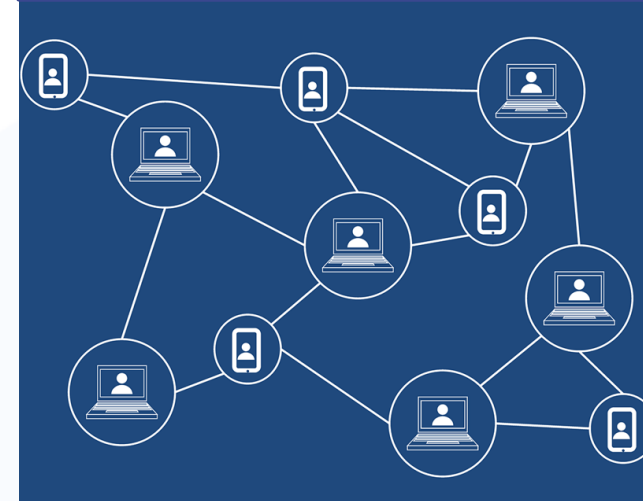
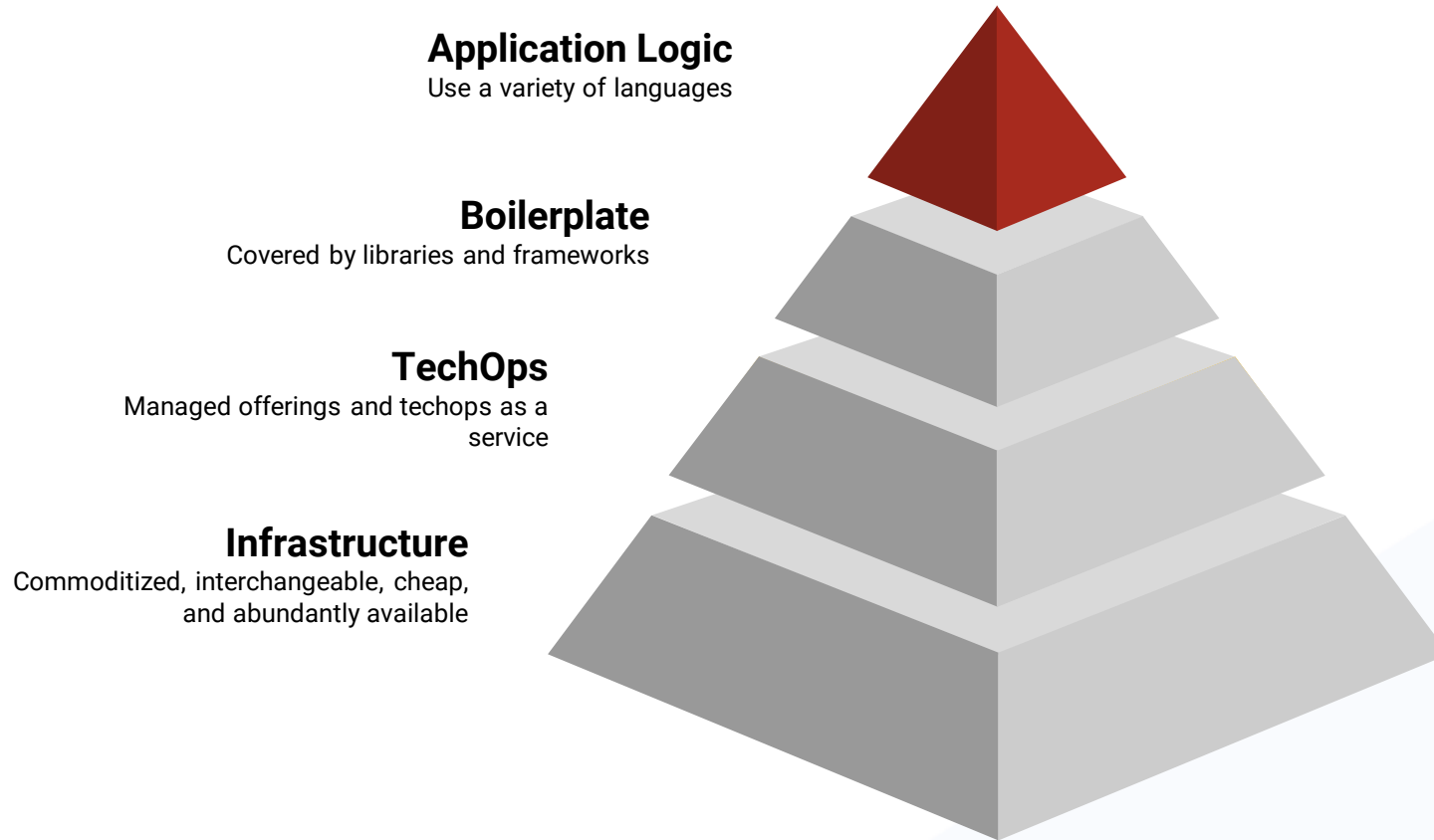


Image Credit: Pixabay

Putting value first needs abstractions

It requires confidence that the foundation can follow later



Full-Stack apps in minutes
PoCs in days

Established practices
CI/CD as standard
Containerisation

No early commitment
Low risk of lockin
Managed offerings

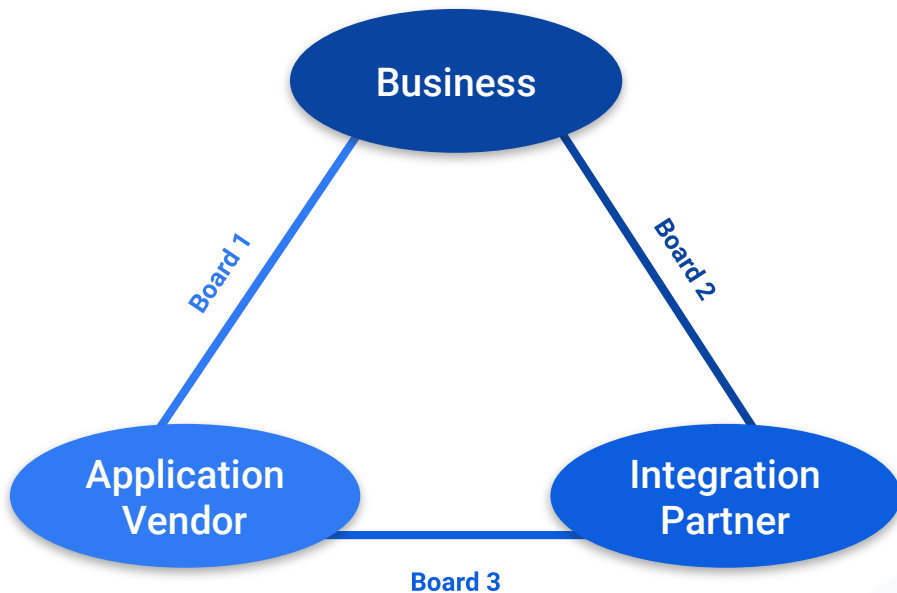


A silly example? Kanban

- Medium high value - Market leader ~\$425M
- Typically centralised
- Privacy more important than consistency
- Some complexity



Image Credit: Jeff Lasovski. Modified by Opensource.com. CC BY-SA 3.0.



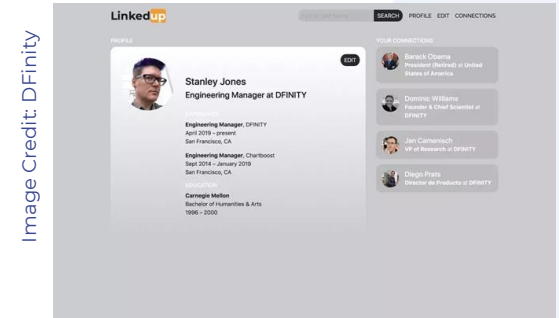
What's the business model of distributed Kanban?

We won't find out if it costs millions to get it into production.



Example II: Social Networks

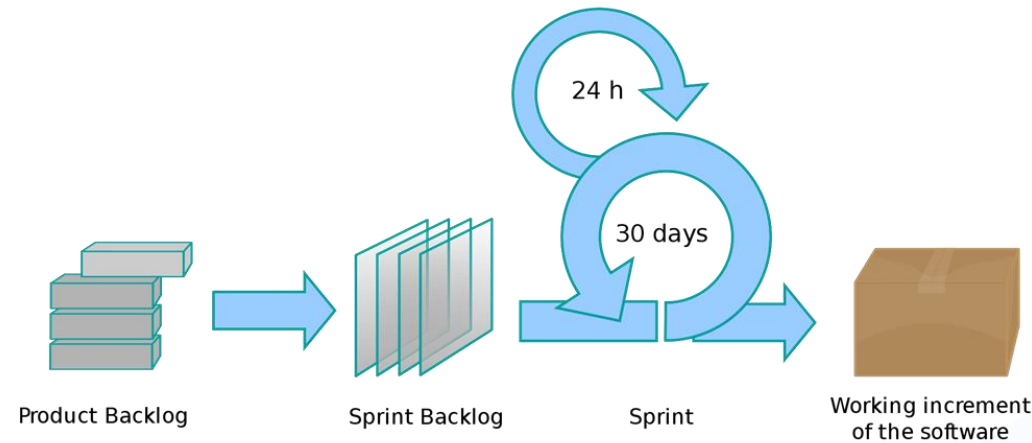
- Very high value
- *Feel* distributed
- Highly centralised business models
- There's interest in decentralised models
 - Common *rules* and *data ownership* at the core
 - New Business Models around cryptocurrencies



**Is Blockchain the
right
infrastructure for
Social Media?**

**Are the business
models driving
the infrastructure
or vice versa?**

Distributed Applications need *Agile*



Test a product hypothesis with minimal resources

Need to choose and lock into expensive infra first

Deliver a complete product to customers

Ecosystems focussed on infrastructure and smart contracts only

Iterate quickly and do regular releases

Blockchain applications are notoriously hard to upgrade

=

=

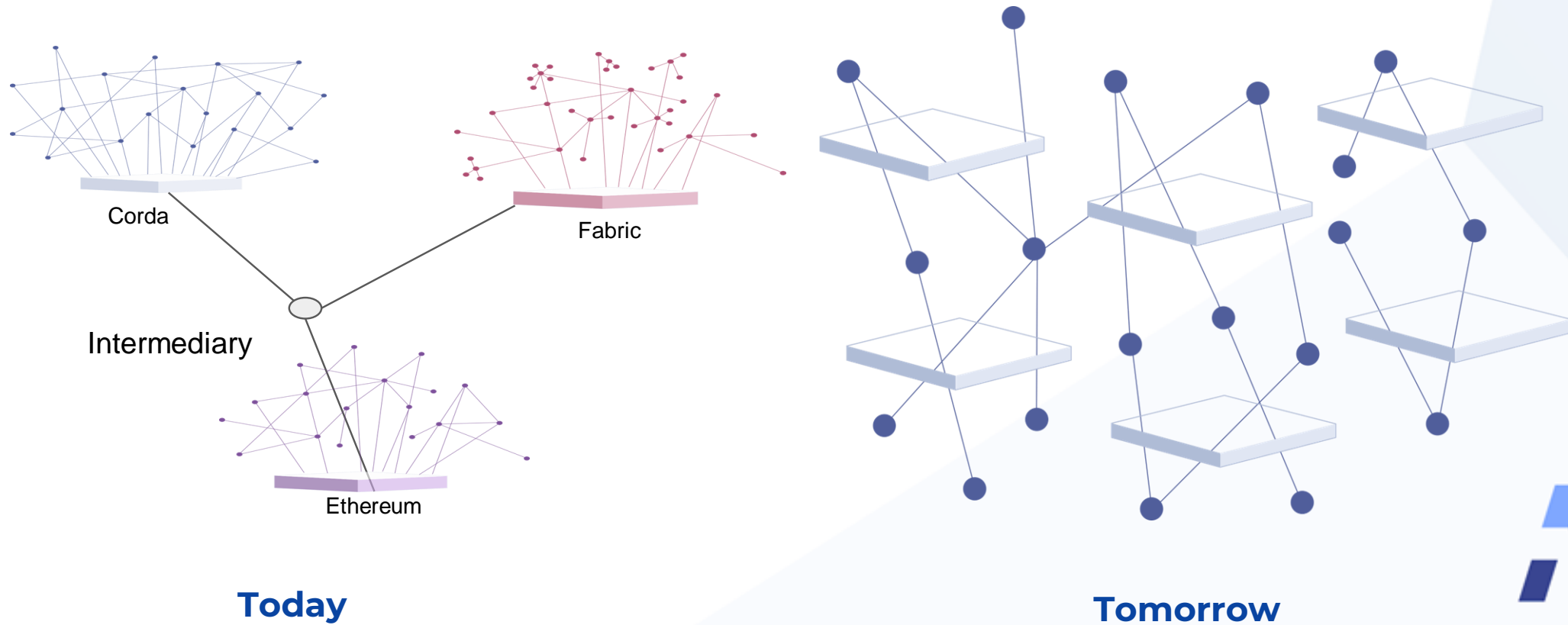
Minimize overall risk and adapt quickly

Risk



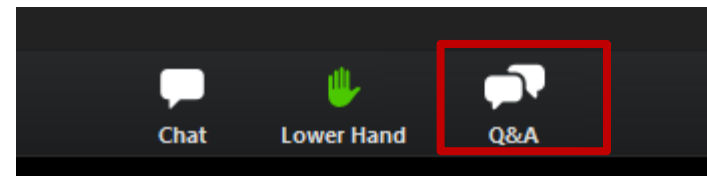
What's next?

Abstracting infrastructure is only part of the story for Distributed Applications



Q&A

Use the **Q&A** channel to ask your questions



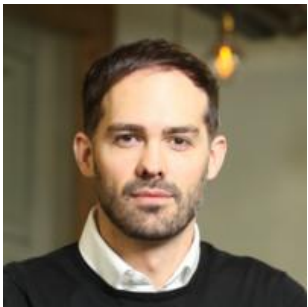
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ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda

Panel- Technology

Taking blockchain initiatives into production



Anthony Day

Blockchain Partner, IBM

- No more PoCs: All the concepts have been proven.
- No more Blockchain: We're building ecosystems or platforms.
- Value case: What's the \$10m problem / opportunity.
- Endurance: Path to production is 12m+.
- COVID will be an accelerator of transformation: Data, Collaboration, Interoperability.

Strategies for how each organization is driving blockchain in their sector



Andrew Knight

International Data Standards Director, RICS

RICS' - Strategy for driving blockchain in our sector

- Our profession measures, reports and provides assurance on real assets across the full property lifecycle supporting:
 - Planning
 - Construction
 - Valuation
 - Brokerage
 - Operations
 - End of life
- Producing insight and research for the profession
- Real estate and property not always seen as using most advanced technologies:
 - Important to show case and work with the profession to understand the opportunities and manage any risk associated with blockchain
- High-lighting use cases in and outside of the sector
- Planning to develop an in-house property attributes portal
- Collaborating on cross-industry application for tracking construction materials



RICS' - Strategy for driving blockchain in our sector

- See as fundamental support for the 'Digital Twin'
- Many potential use cases:
 - Enabling construction materials/supply chain management and traceability
 - Ensuring asset identification and trusted data with a clear provenance for due diligence
 - Increasing speed and quality of land and property due diligence and reducing transaction times
 - Digital certification for transactions and credentials
 - Trusted land registry/cadastral data
 - Fractionization of assets to allow more liquid public listed real estate with secondary market trading
- Challenges however, around:
 - Ensuring data matches the real world asset
 - Lack of data standardisation and availability



Building a viable ecosystem for blockchain transformation

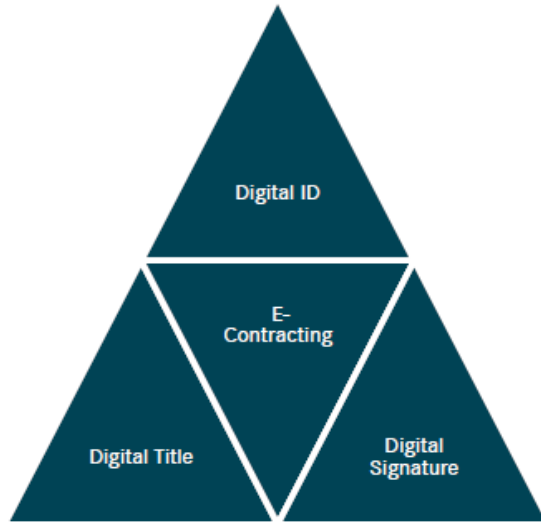


Harry Behrens

Head, Daimler Mobility Blockchain Factory

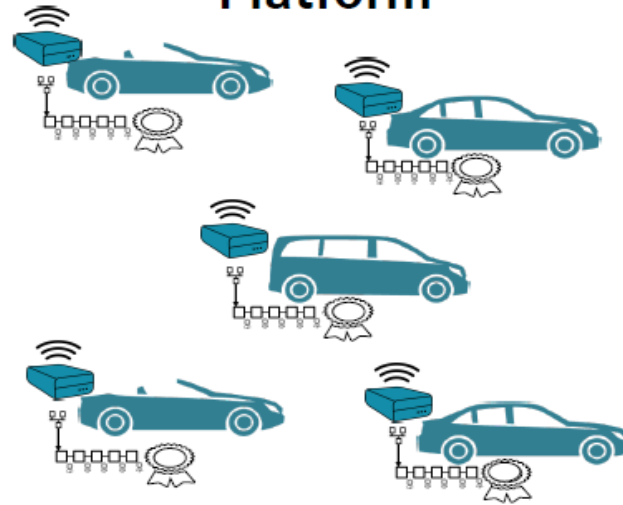
Enterprise Blockchain and DLT rests on three pillars

e-Contracting



Digital identity, digital signature and digital ownership title enable e-contracting for blockchain-driven mobility and financial services.

Mobility Blockchain Platform



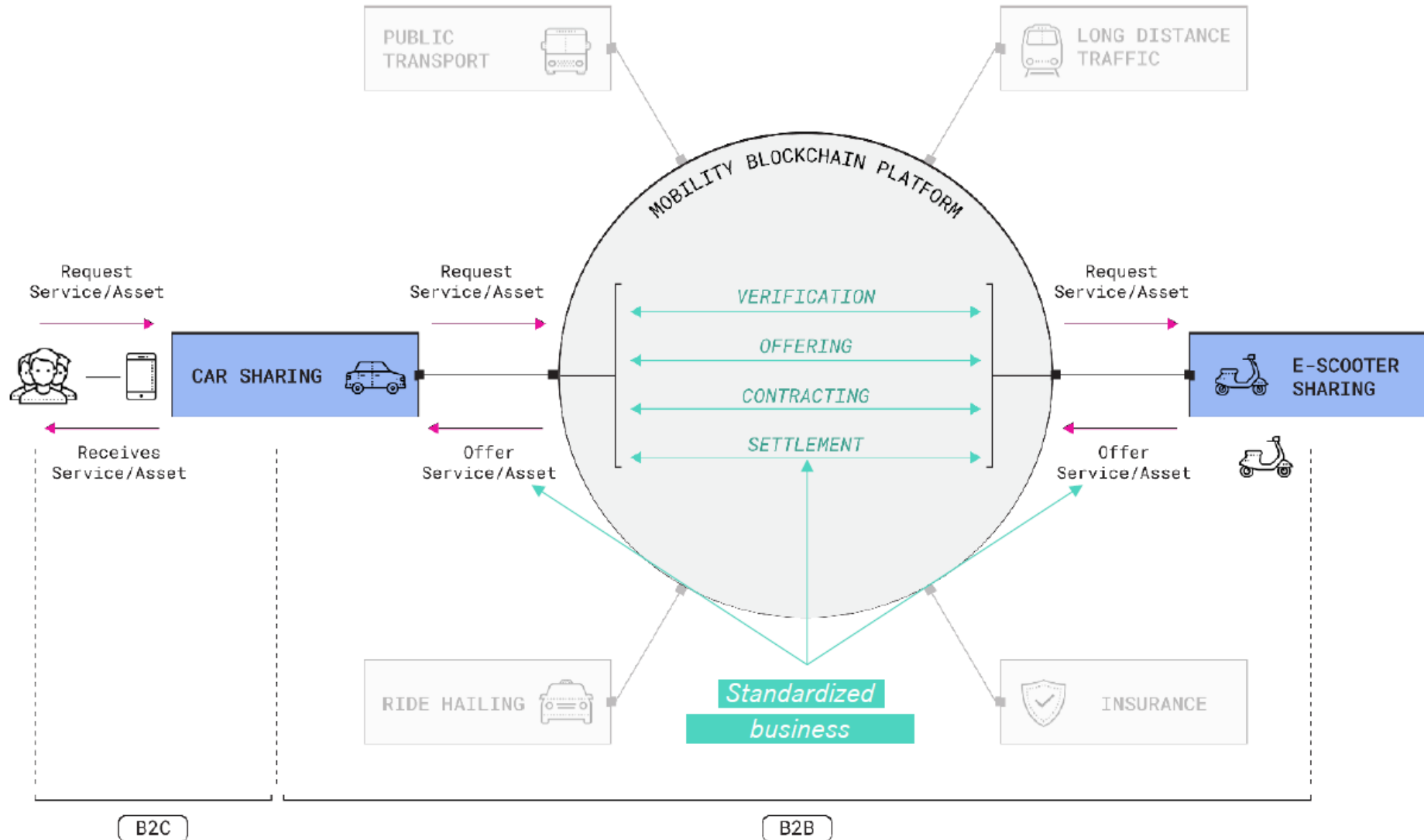
Blockchain & IoT enable vehicles to become trusted data platforms which enable end-to-end mobility services.

Tokenization



Digital securitization and tokenization enable new ways of vehicle financing.

Open interfaces and protocols enable seamless bundling and deep integration for the #FutureOfMobility



- Using the Mobility Blockchain Platform, company A (“car sharing”) can **seamlessly bundle additional services and modes** (“e-scooter”) provided by other service providers on the platform.

The role of industry bodies in facilitating blockchain's mass adoption

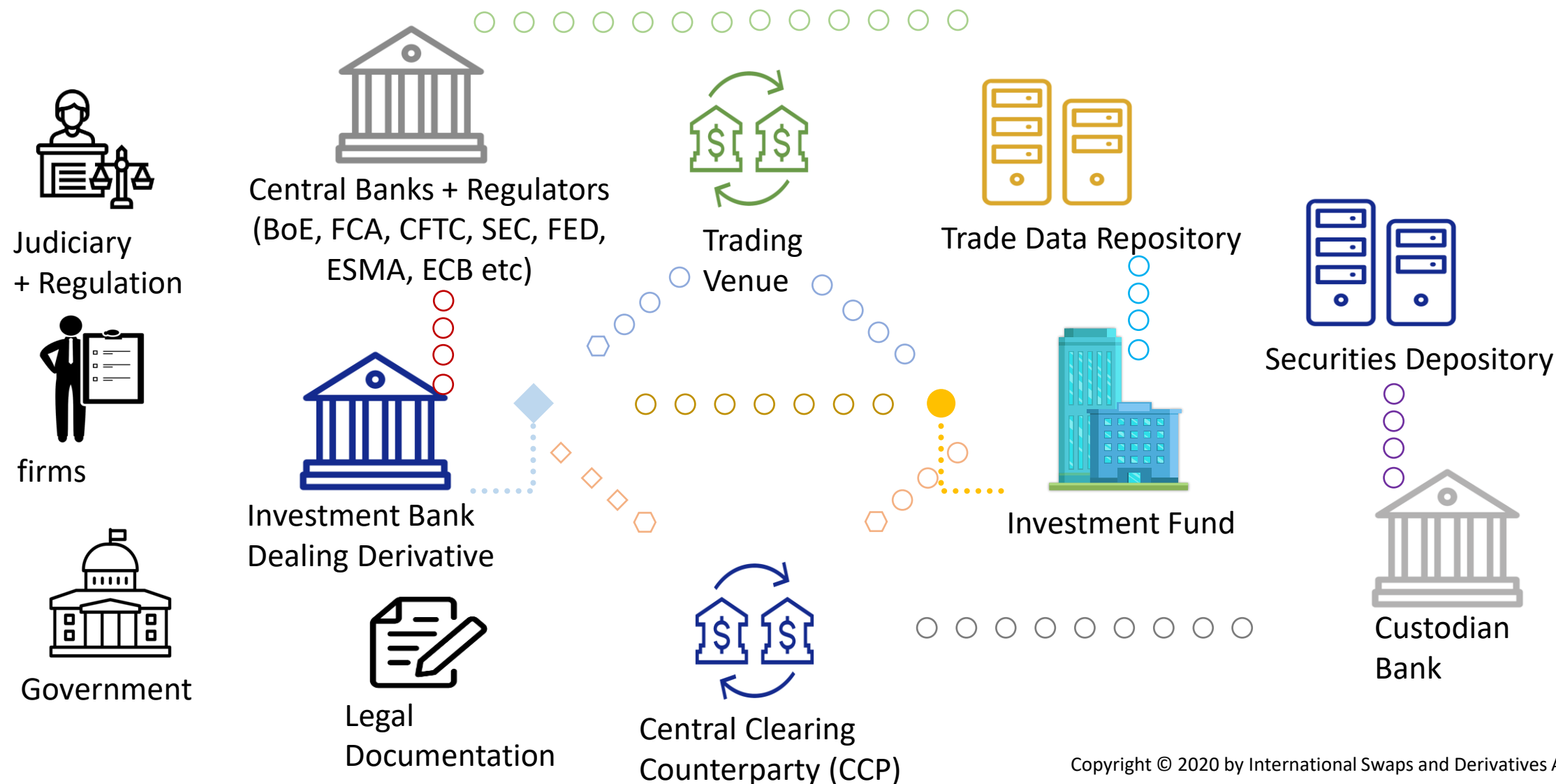


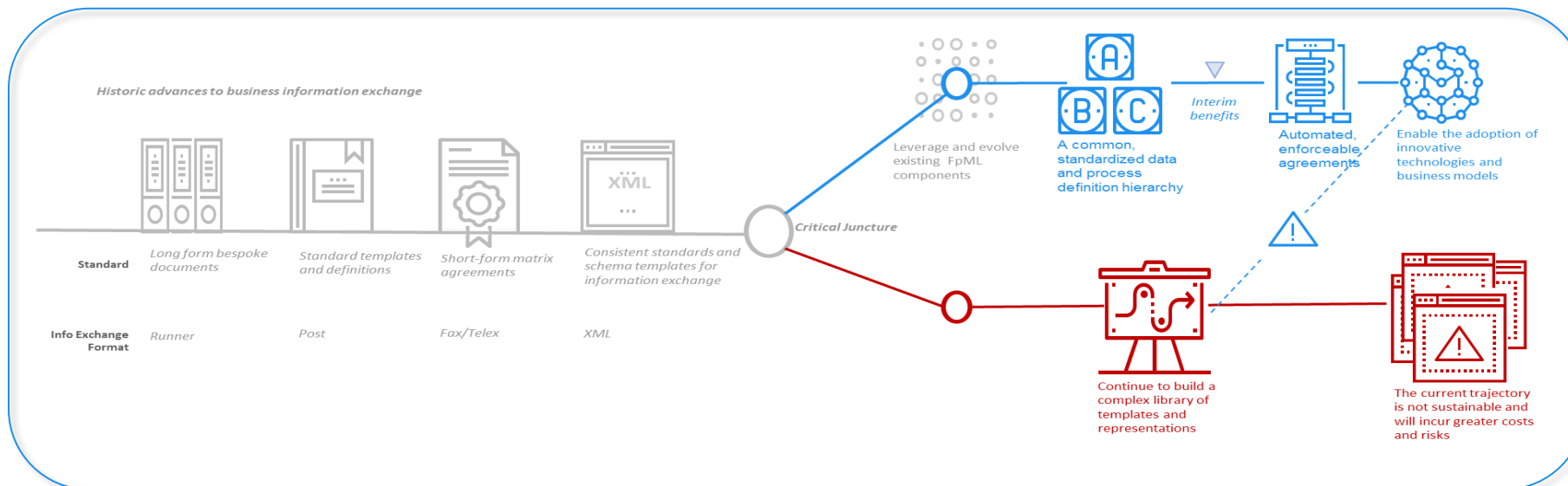
Ian Sloyan

Director, Market Infrastructure and Technology, ISDA

Derivatives Market Infrastructure Challenge

All parties store trade data in bespoke formats and make lifecycle changes to these records in an inconsistent manner





The **derivatives industry has changed significantly** since the first interest rate swap was executed in 1981:

- Growth in products, trade volumes and outstanding notional has seen it become a **multi-trillion dollar market** with outstanding notional of \$544 trillion combined across all asset classes by the end of June 2016.
- Standards initially for the legal documentation, such as the ISDA Master Agreement, provided by ISDA have been the catalyst for this growth.

The industry is at a **critical juncture**:

- The derivatives market has a big problem. The simple fact is that the nuts and bolts that hold this market together are out of date and not suitable for the 21st century.
- The market is beset by complex, manually intensive processes that result in errors and mounting costs. At a time when the industry is looking at where it can cut costs, this isn't sustainable.

An opportunity exists to create standards that **provide an environment for innovation** and promotes the adoption of technology like blockchain, smart contracts and distributed ledgers. Technologies which are increasingly seen as a way for the derivatives industry to realise operational efficiencies and cut costs.

How industry bodies such as ISDA can help?

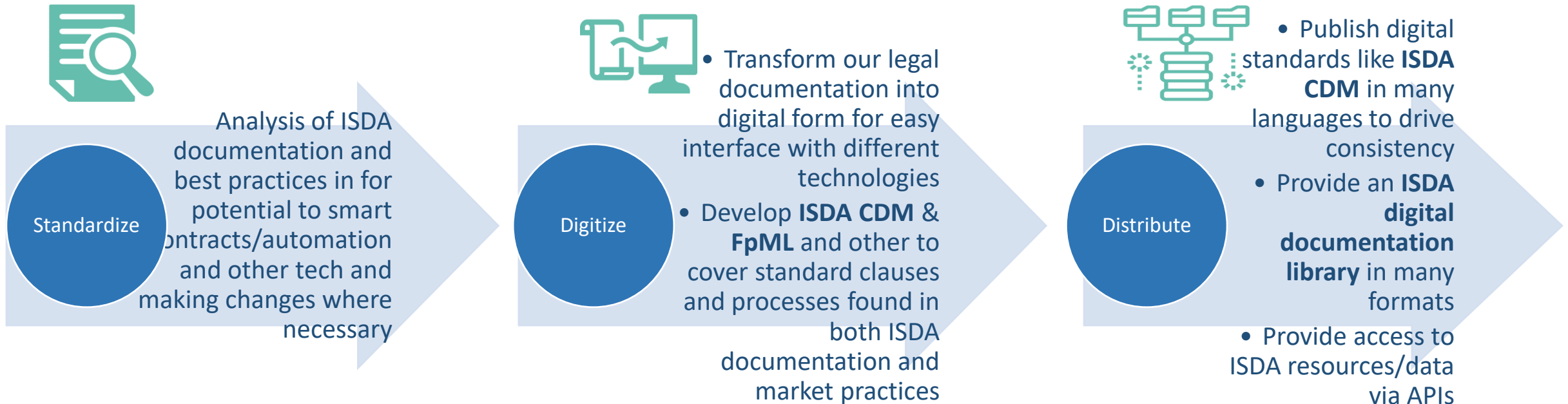
Providing standards we can speed up development of new solutions by allowing providers to focus on what they specialize in – the technology – rather than requiring them to interpret and represent markets and practices.

Standardisation is the prerequisite for the technological revolution to be for the better, and so we fully harness the potential in technologies like blockchain and DLT.

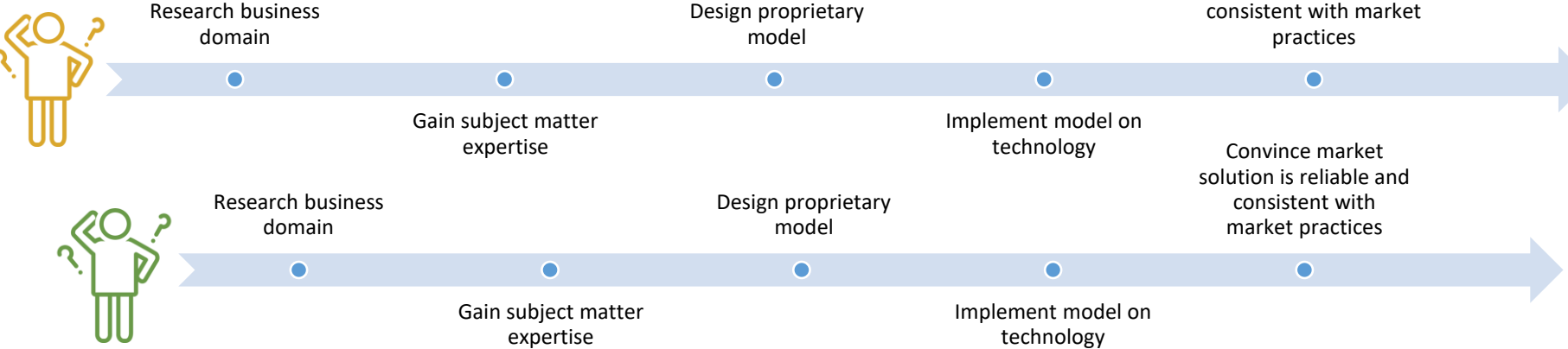
Since 1985 ISDA has developed and continues to develop many of the market standards already!

- However, we need to ensure standardisation is of a level enough for new technology to benefit and automate.
- And, we need to deliver standards in a way that allows new tech to consume and implement them uniformly.

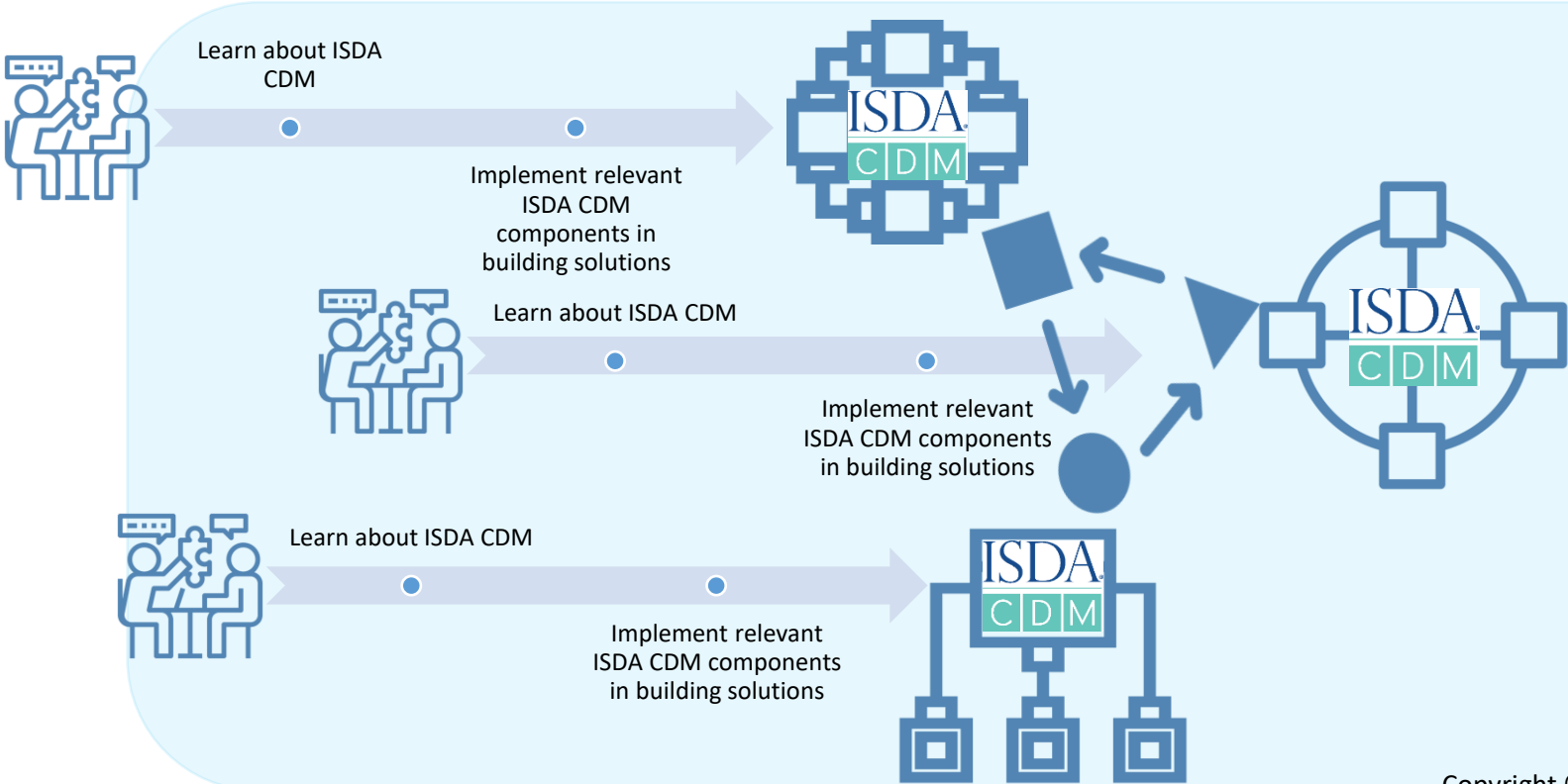
ISDA's strategy to go from delivering market standards as documentation, to delivering standards as code:



Allow providers to focus on what they specialize in – the technology – rather than requiring them to interpret and represent markets and practices



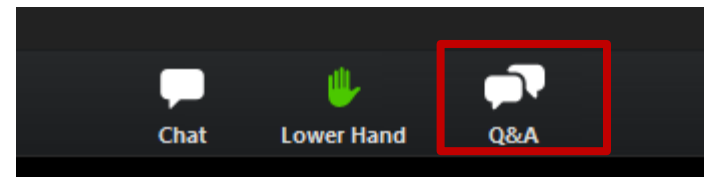
Without the benefit of a common domain model these systems are built on bespoke models and tech, impacting interoperability, taking a long time to market and moreover to gain market’s trust



- By deploying ISDA CDM; these new systems have:
- 1. Interoperability
 - 2. Shorter time to market
 - 3. Association with a recognised market standards set from ISDA

Q&A

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ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda

Keynote: Going Global with Blockchain

Keynote: Going Global with Blockchain- Industry Business Trends



Ryan Rugg

Head of Industry Business Unit, R3

R3 Story: From bank consortium to enterprise software leader

SEPT. 2014 | R3 roundtable held in NY; attended by 8 banks

DEC. 2015 | Consortium grows to 42 bank members

MAY 2017 | R3 secures largest investment for DLT - Series A of \$122M.

APRIL 2019 | Corda Enterprise 4.0 General Availability

NOV. 2016 | Consortium exceeds 100. First release of Corda

JAN 2019 | Corda Network goes live and is governed by an independent, not-for-profit foundation.

MARCH 2020 | R3 grows to 300+ employees globally with 350+ ecosystem companies.

SEPT. 2015 | 9 banks form a partnership with R3 to deliver DLT



Corda Releases Version 4.4



Corda is blockchain for business



Fine-tuned for the enterprise

Corda harnesses the most appropriate elements of traditional blockchain technology and fine tunes them for enterprise usage.



Consensus on the data that matters

Corda is designed to bring participants to consensus on shared facts, removing the need for costly and time-consuming reconciliation.



Privacy with provenance

Unlike traditional blockchain platforms, Corda minimizes information leakage by only sharing transaction data with participants that require it.



Apps for every industry

Corda is the gateway to a vibrant network of blockchain applications for finance and commerce, known as CorDapps, that solve complex, real world problems.



Integrate with legacy infrastructure

Enterprise adoption will be a phased approach and Corda has been built to easily integrate and interoperate with the systems that run your business.



Globally interoperable network

Only Corda enables businesses to transact openly and flawlessly with all their business partners, without trapped assets or islands of information.

Corda Enterprise—additional mission-critical features



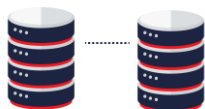
Blockchain Application Firewall

Enables Corda Enterprise to be deployed inside corporate data centers while retaining the ability to communicate securely with other nodes anywhere else in the world.



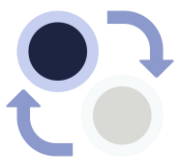
Optimized for real-world corporate IT environments

Includes 24/7 support, predictable release schedules, governance, performance and availability monitoring, enhanced security, high-availability, disaster-recovery and high-performance modes.



Oracle and SQL Server databases

Supports and facilitates seamless integration with industry-standard enterprise databases.



Compatibility

Cross-distribution and cross-version wire compatibility, together with the ability to operate mixed-version networks and a Corda node inside a corporate firewall.



Corda Network

Complimentary access to the world's first universally interoperable blockchain network, supporting multiple CorDapps on the same network, enabled by Corda's privacy model.

Gartner Report: Blockchain Evolution

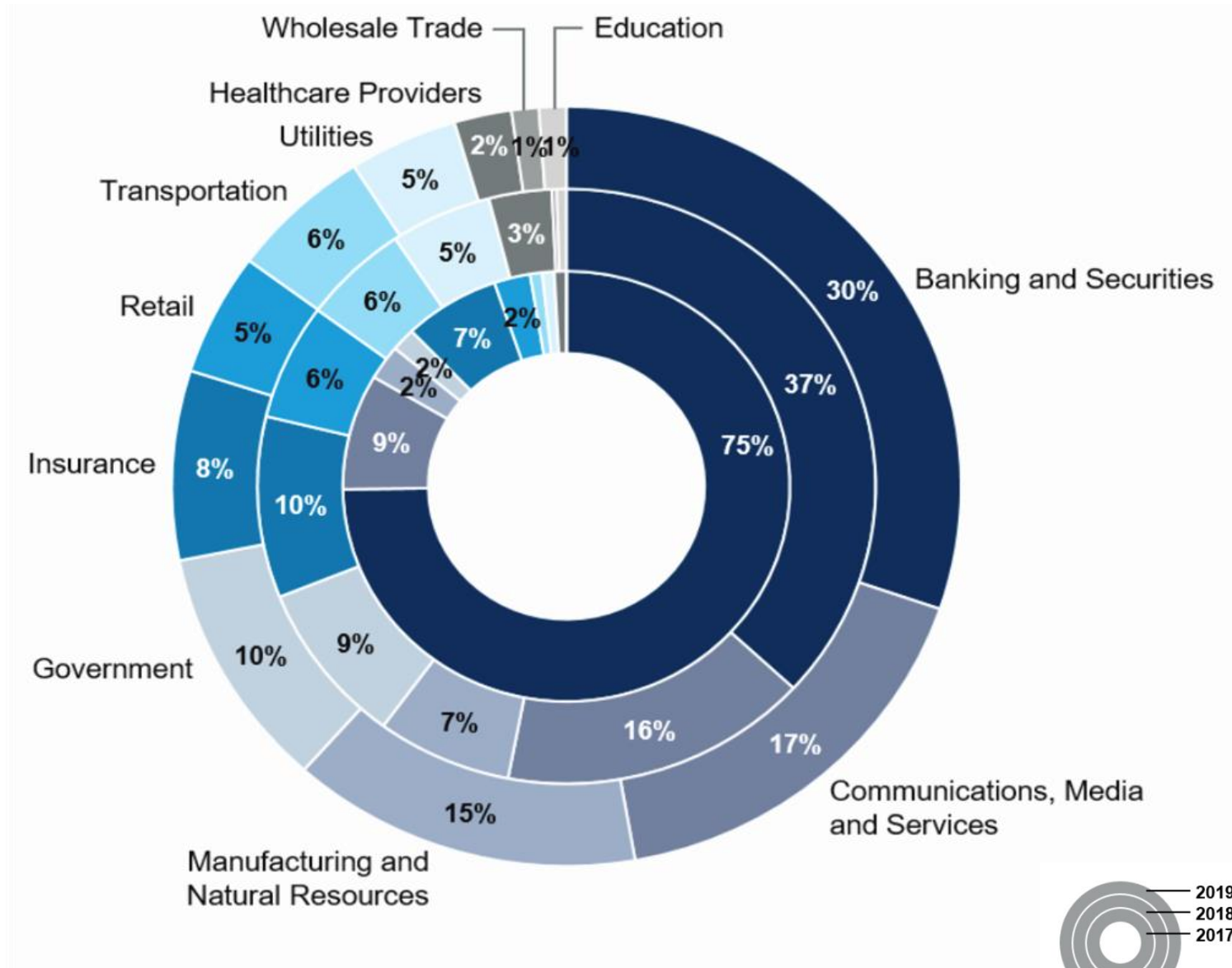
Blockchain Exploration Accelerates in Key Industries Outside Financial Services:

As interest grows, blockchain is moving rapidly in emerging markets, in sectors beyond financial services and in use cases where use can be mandated, and large ecosystems are not required.

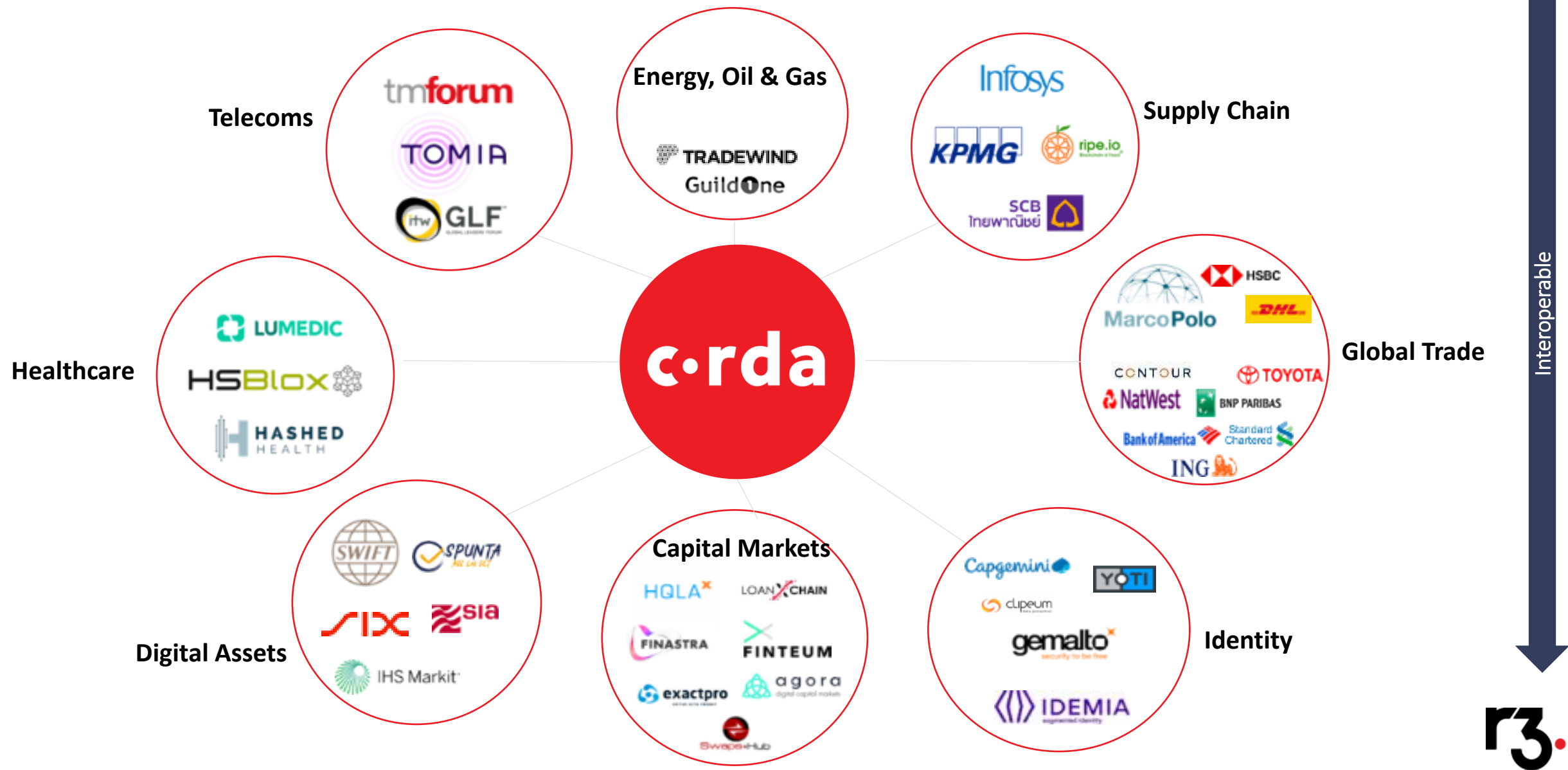
In 2017, over 80% of reported engagements were in the financial services sector. However, in 2019, these sectors account for under 40%.

R3's Key Verticals represent the ecosystem's:

- Energy
- Financial Services
- Healthcare
- Insurance
- Supply Chain
- Trade Finance
- Teleco



Corda Solutions transforming industries



Digital Transformation on Corda

RiskStream



P&C insurance consortium based out of North America with 40+ members. Founded by The Institutes; the leading P&C certification authority in North America. Savings of approx. \$270M over 3 years based on [ROI study](#) for FNOL & POI applications alone

SDX



SDX is a new digital asset exchange. SIX is working with the SNB to explore technological options to make digital central bank money available for the trading and settlement of tokenized assets between financial market participants.

Marco Polo



Marco Polo Network
A bank-focused network of platforms offering ERP-embedded trade and working capital finance applications to their corporate clients. Products available: Receivable Discounting, Factoring & Payment Commitment

Other exciting initiatives...

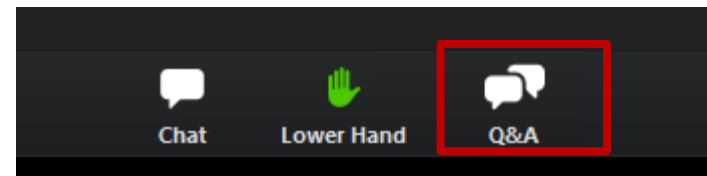
Riksbank: Is building a Central Bank Digital currency (E-krona) on Corda. This is creating a general electronic means of payment, an e-krona, as a complement to cash.



Contour is the result of a multi year collaborative project between a group global and regional banks and R3 to investigate the benefits of enabling Letters of Credit to be processed on a blockchain platform. The banks included Bangkok Bank, BNP, Citibank, CTBC, HSBC, ING, SEB, and Standard Chartered.

Q&A

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ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda

Panel- Strategy

Coopetition in Blockchain

Team-building for the 21st Century



Dale Chrystie

Blockchain Strategist, FedEx; Chairman, BiTA Standards Council

Coopetition



IN BLOCKCHAIN

Team-Building for the 21st Century





“We’re quite confident that **Blockchain** has big implications in supply chain, transportation and logistics. It’s the next frontier that’s going to completely change worldwide supply chains.”

- **Frederick W. Smith, FedEx Founder/Chairman**

“Our greatest realization this past year is that in order for #blockchain to be transformative, it will need to be **much bigger than us.**”

- **Robert B. Carter, FedEx CIO**





“The information about the package is as important as the package itself.”

- Frederick W. Smith, FedEx Founder/Chairman, 1978

Peer-To-Peer Technology



Middlemen
Forever

The C-Suite



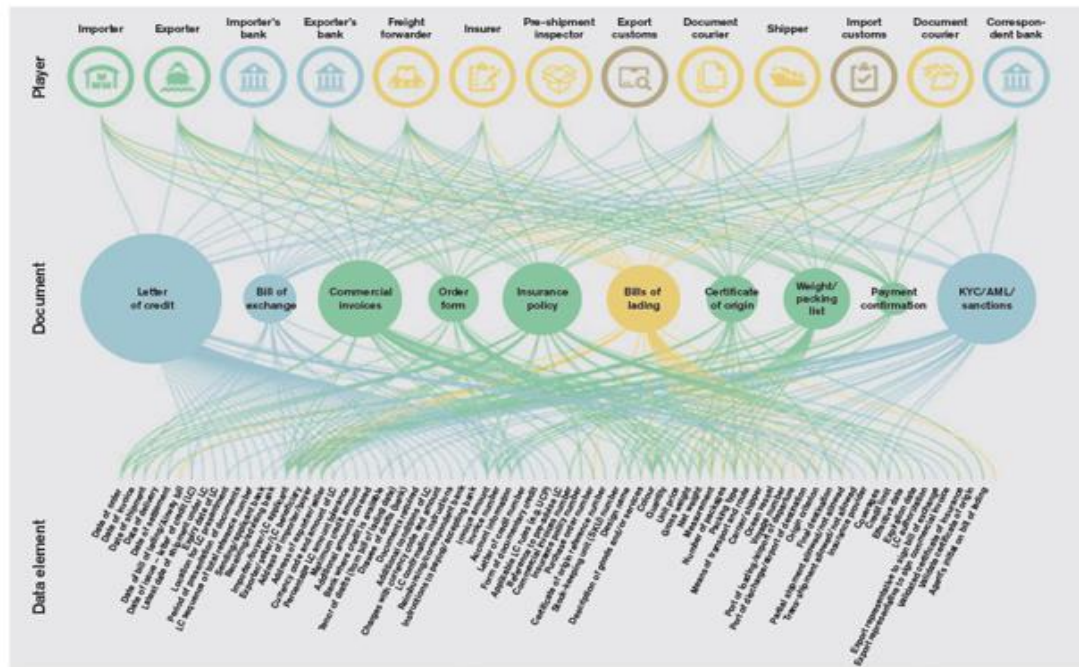
The importance to play in an interoperable and collaborative world



Emmanuelle Ganne
Senior Analyst, WTO

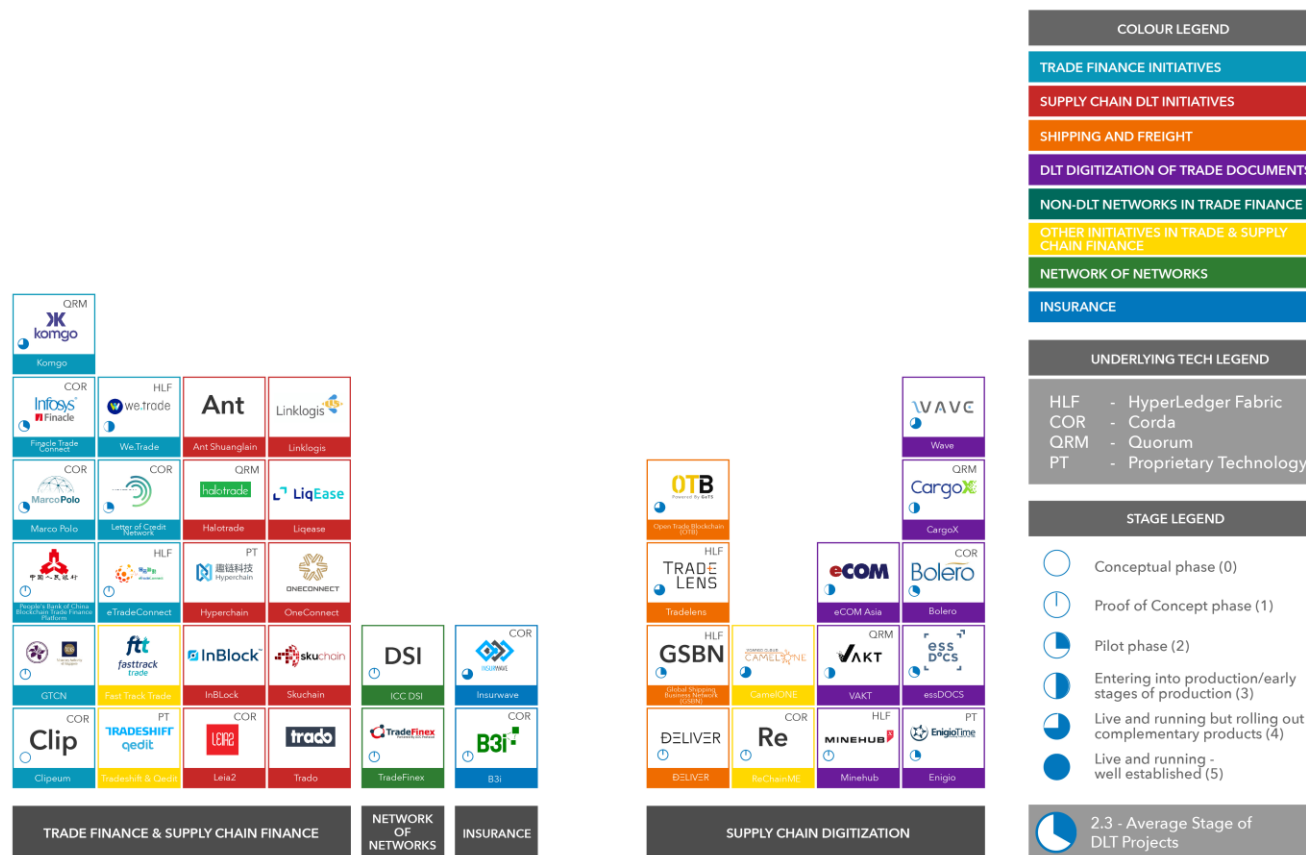
Trade is complex and labour- and paper-intensive

Actors and documents involved in a trade finance transaction



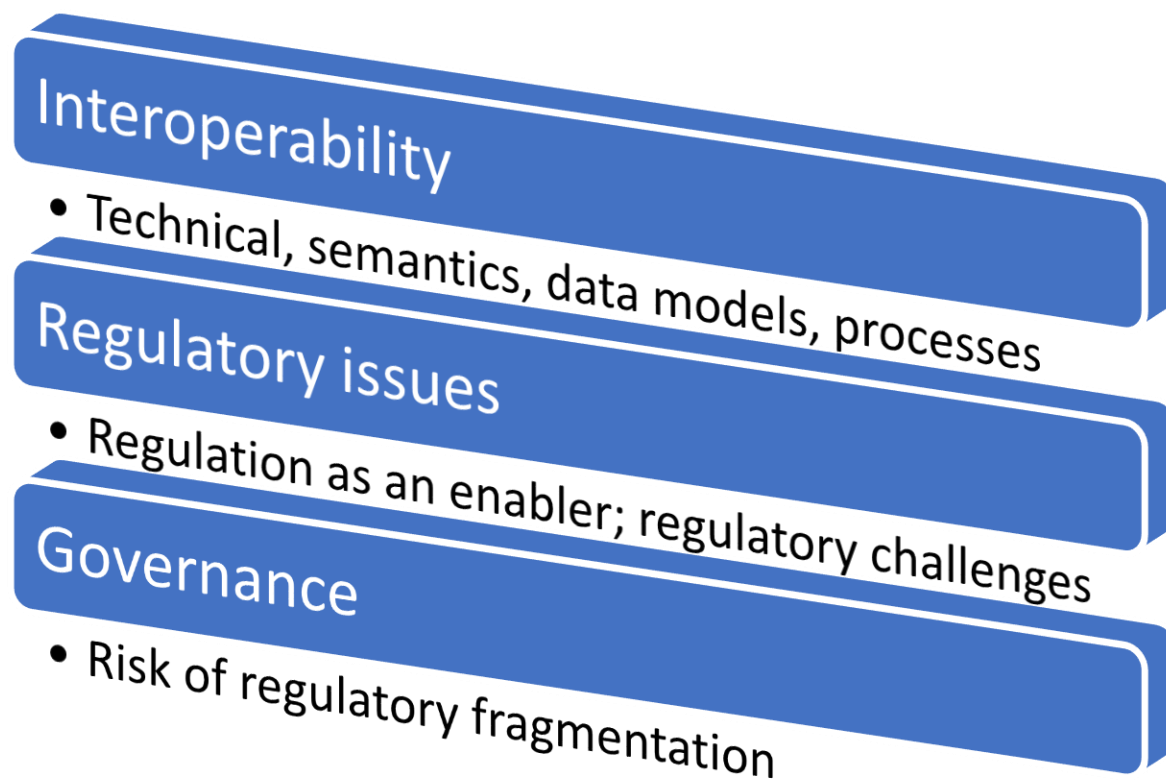
Source: Boston Consulting Group (2017).





Source: Blockchain and DLT in Trade: A Reality Check (2019)

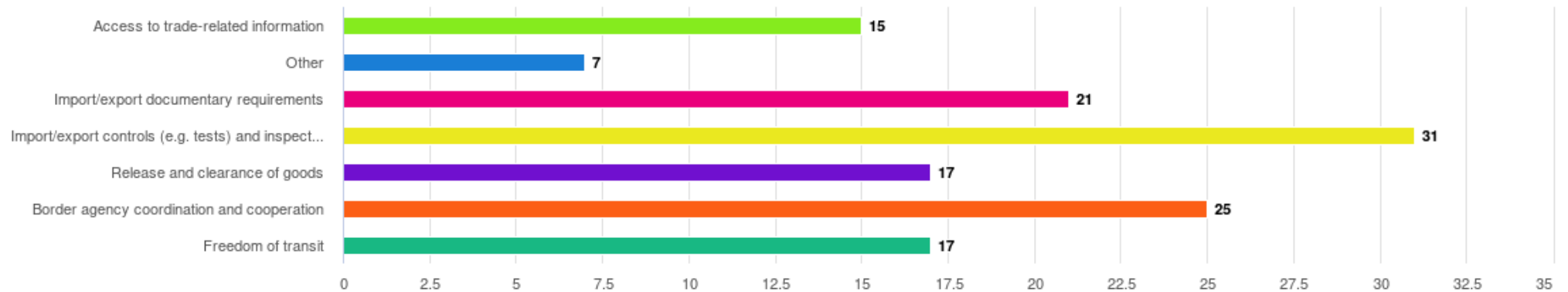
Key challenges to address



→ Interoperability and collaboration are essential

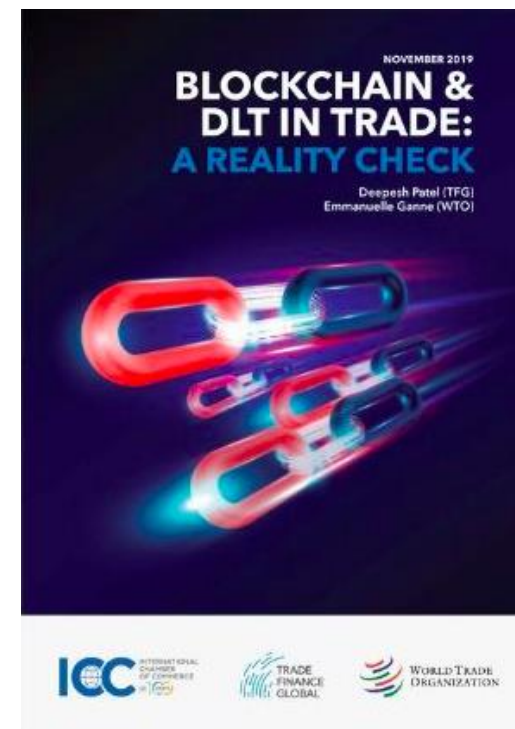
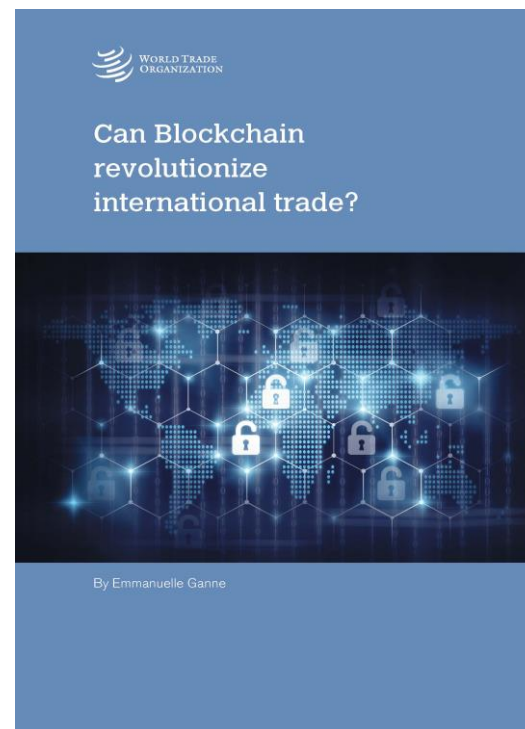
... now more than ever!

Which of the following trade-related processes have become MORE cumbersome or time consuming in the context of the COVID-19 containment efforts?* (Select all that apply)



Source: www.TFAFacility.org

Thank you for your attention!



Inclusive Deployment of Blockchain for Trade



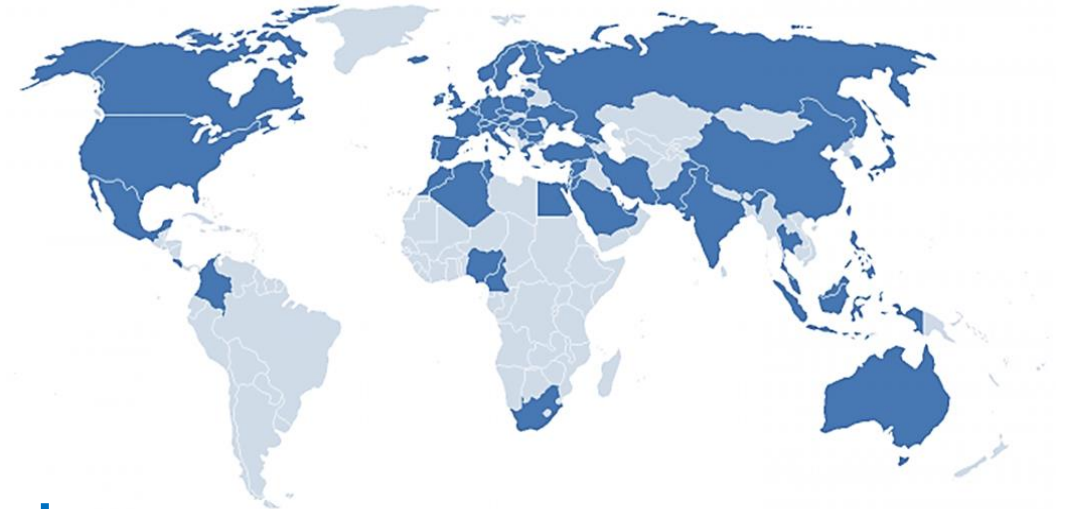
David Bischof

Deputy Director, Finance for Development Hub, ICC

The International Chamber of Commerce (ICC) is the world's largest business organisation representing more than 45 million companies in over 100 countries.



- **Agreement on common definitions by all countries for commercial terms**
 - ICC's Incoterms
- **Development of an international service for arbitration of commercial disputes**
 - ICC Court of Arbitration
- **Development of universally accepted rules and guidelines for international banking practice.**
 - ICC rules on documentary credits e.g UCP 600



In 2017 the ICC was granted **Observer Status** at the United Nations General Assembly

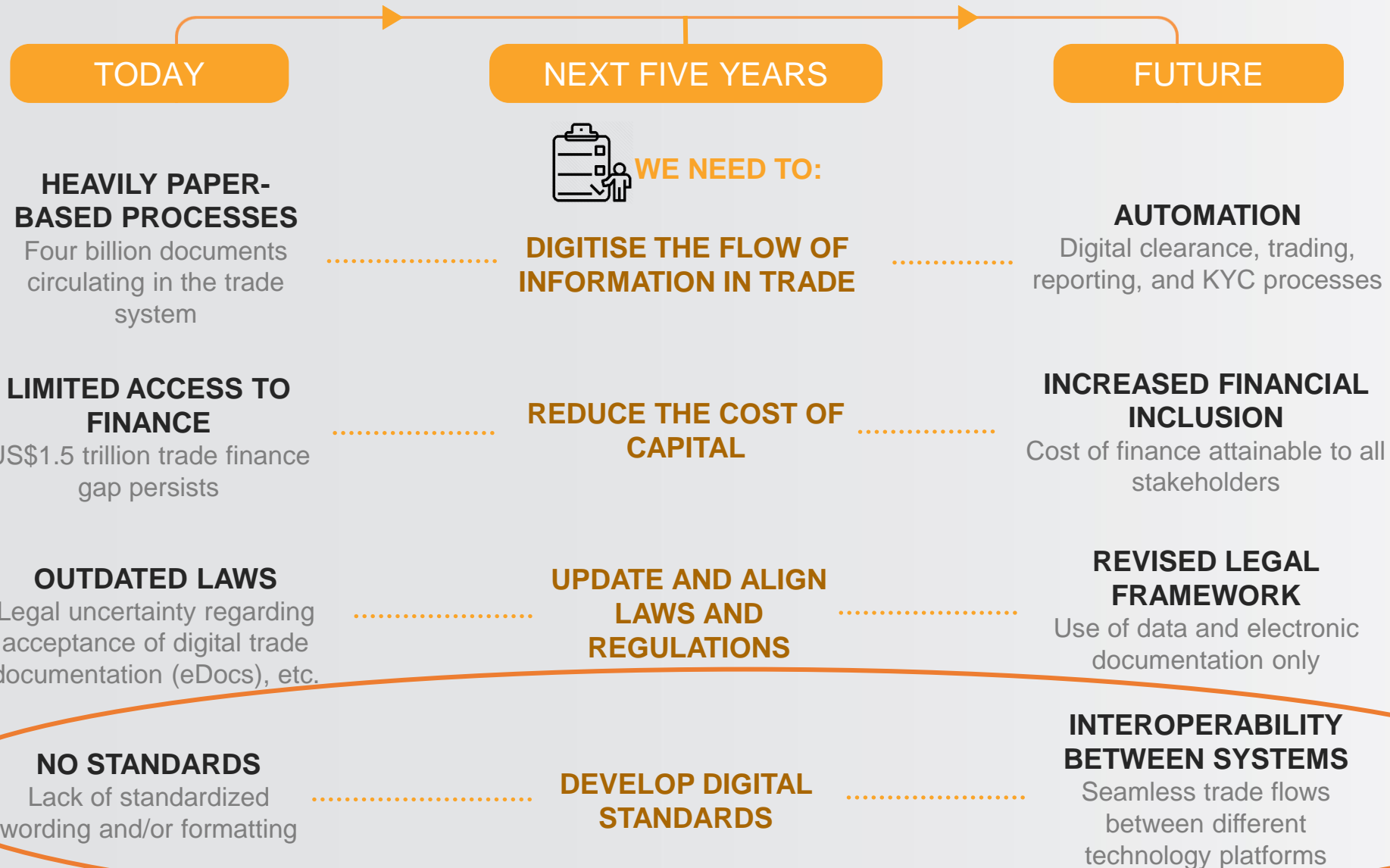
Covid-19 as accelerator for Trade Digitalization



- Historic agreement with WHO to mobilise ICC network to help manage the Covid-19 pandemic
- ICC will support WHO to disseminate latest expert advice to global network
- Will forge collaboration between the private sector, UN and WHO country teams
- ICC will survey members to map corporate response, identify gaps and propose solutions
- Will also ramp up advocacy with govt's to ensure best practices in public-private cooperation during pandemic period

Need for strong action and acceleration of move from analogue to digital trading docs

The ICC Roadmap for Digital Trade in Financial Services





ICC: 7 steps for unlocking national digital trade

Prepare for New Technologies

1. Develop and maintain an open set of smart industry contracts and automated rules
2. Choose trade corridors and industries with which to prioritise pilots

Develop Rules & Standards

3. Modernise digital rules and standards for traditional trade finance
4. Introduce new digital rules and standards for trade finance
5. Establish a repository of best practices to promote paperless trade
6. Build a global digital trade standards initiative

Increase Collaboration with Non-Bank Stakeholders

7. Establish a forum to allow for industry input into ongoing rules discussions
Including corporates, fintechs, shippers, insurers, alternative providers of trade finance, WCO, WTO, UNCITRAL, regulators

GLOBAL TRADE & BLOCKCHAIN FORUM



The **Global Trade & Blockchain platform** is a WTO and ICC initiative to establish a multi-stakeholder dialogue to discuss the practical and legal implications of blockchain for international trade.

- elements in the blockchain ecosystem that work well
- elements that should be improved
- and need to be addressed by the international trade community

Phase 1 - Key issues

Feedback from numerous parties from around the world

1. Data sharing & privacy
2. **Interoperability & Standardisation**
3. Legal framework
4. Knowledge Sharing & Communication

INTEROPERABILITY & STANDARDISATION

- How would the **standards for blockchain network interoperability** be set and who would monitor and own them on an ongoing basis?
- How would the **adoption of these standards** across trade bodies, customs organizations, buyer/supplier and trade services be driven?
- Depending on how successful interoperability is achieved across different blockchain trader networks, could it have an impact on **consolidation** of the various platforms and if so, what would be the **process to consolidate** and who would drive that process?

THE DIGITAL TRADE STANDARDS INITIATIVE (DSI)

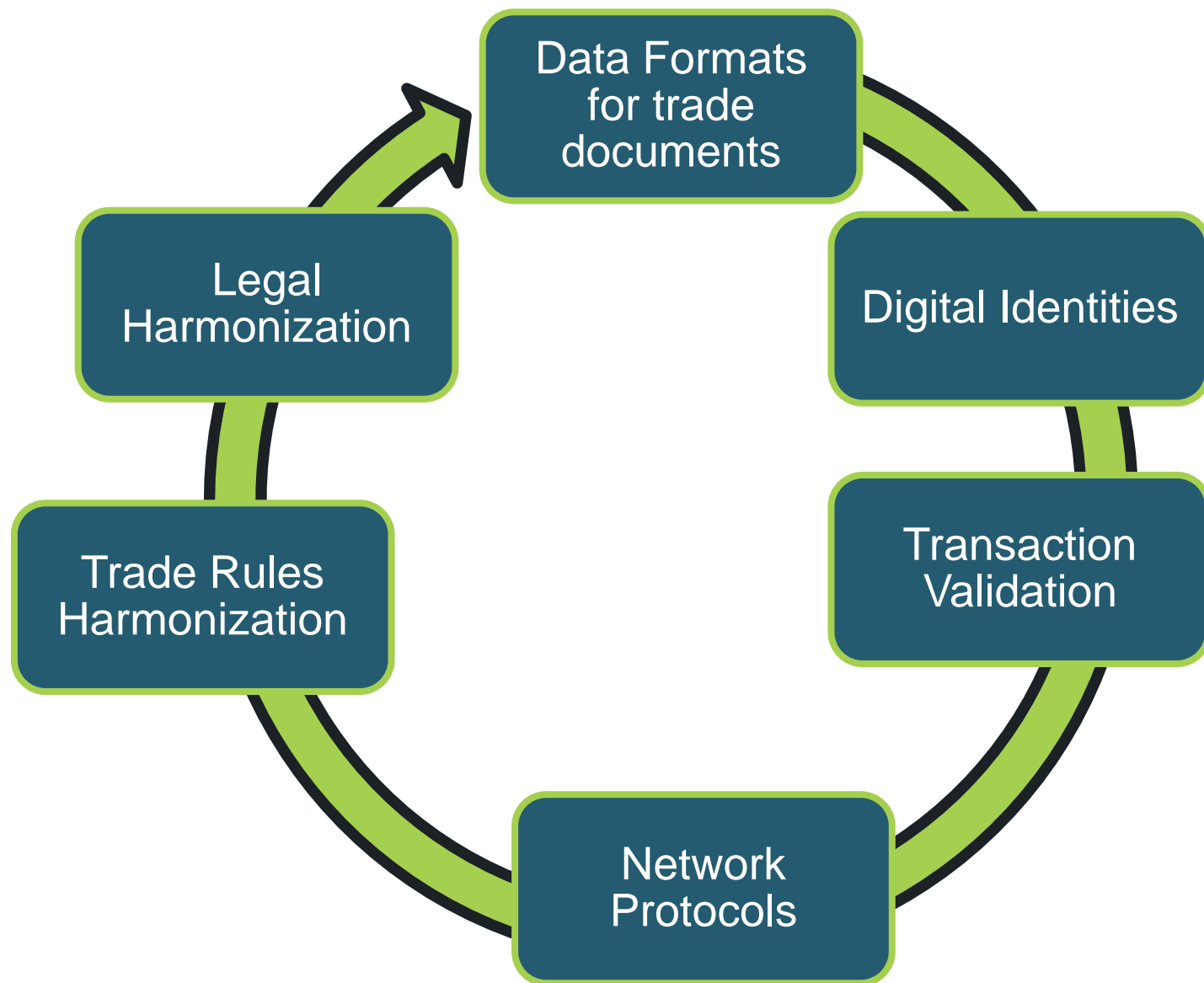
Digital Trade Standards Initiative

- ICC, as part of its mandate in setting rules and standards, is now developing a **Digital Trade Standards Initiative (DSI) to develop cross-industry digital trade standards.**
- Will lead efforts to digitalise trade by creating open trade and technology standards to promote interoperability among numerous blockchain platforms
- Backed by Asian Dev Bank and Singapore, with recruitment of Managing Director underway



Digital Trade Standards Initiative...

- a suite of **open technology standards and protocols** to enable interoperability between digital trade systems, applications, and networks.
- A global **initiative** that coordinates the creation, maintenance, and promotion of these standards and protocols.



Blockchain vs Supply Chain



Just Piferrer

Director Supply Chain Management, Eninter Ascensores

Eninter Group: What we are and some signature customers

Founded 1.973

46.000 elevators on duty

70.000.000€ Revenue ⁽¹⁾

>800 employees >500 vehicles

> 10 Companies

> 50 sites (Spain only)

Branches on Italy,

Sitwzerland and Portugal

Main products:

- **Type and capacity:**
 - ✓ Elevators from 225 to > 1.000 Kgrs
 - ✓ Gearless
 - ✓ Hydraulic
- **Product range:**
 - ✓ Automatic doors
 - ✓ Home stair lifts & Dumbwaiters
 - ✓ Residential & High-rise elevators.

Key references:



Circuit de
Barcelona
CATALUNYA



Gran Teatre del Liceu



(1) Consolidated Financial Statement as of Dec'19



Blockchain vs Supply Chain

DevTeam.Space™


WHY US? EXPERTISE ABOUT BLOG SIGN IN HIRE DEVS

DEVTEAM.SPACE PRODUCT DEVELOPMENT BLOG

Explore our in-depth product development tutorials and new technology announcements published by our software development experts

ALL ARTICLES

Can Blockchain Technology Be Hacked?



Blockchain is increasingly taking the world by storm, both in terms of enabling safe forms of electronic currency transfer and also providing a solution to many existing technology problems.

A key advantage of the technology is the protection it offers against hackers.

However, many people don't know whether blockchain can be hacked or not?

If you are an entrepreneur planning to use blockchain in a strategic project, you obviously want to know the answer to this question. To find out, read on!

ARTICLES BY TAGS

Analytics API Backend Blockchain Cloud Computing CRM Data Science DevOps E-commerce ERP Finance Food Industry Gaming HR IoT Marketing Mobile Apps Project Management Real Estate SaaS Software Development Team Management Web Code review Chatbot Identity management

HIRE EXPERT DEVELOPERS

Trusted by 100x of startups and enterprise companies like

SAMSUNG CRYSTAL BALL PONTIAC NEC

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Insights · LATEST THINKING · WEIGHING THE RISKS AND...

Weighing the Risks and Benefits of Blockchain in the Pharmaceutical Supply Chain

JULY 24, 2019

By Dan Brettler, Managing Director, Life Science and Technology Co-Practice Leader

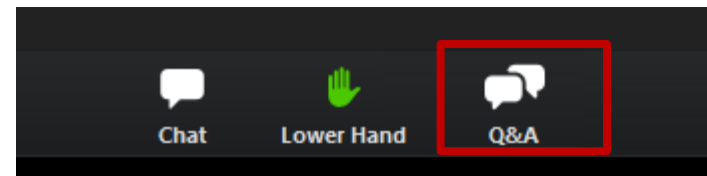
“While the potential benefits of blockchain are limitless, innovating companies must understand that implementing this new technology also brings new areas of vulnerability.”

“Private Blockchains killed the Blockchain spirit”



Q&A

Use the **Q&A** channel to ask your questions



<https://www.linkedin.com/groups/12400295/>

ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda

Keynote: Management Running Enterprise Blockchain Networks

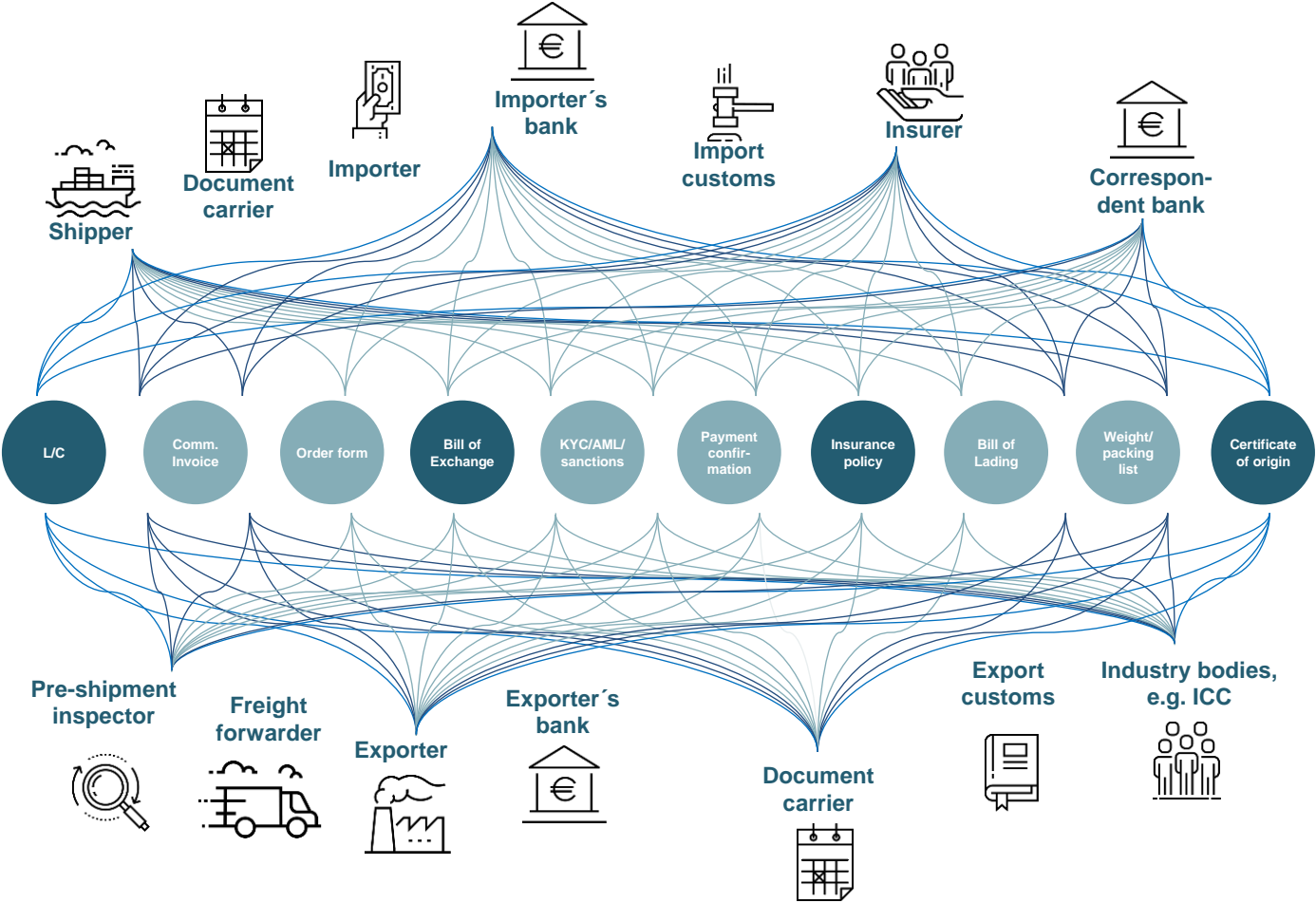
Keynote: Running Enterprise Blockchain Networks



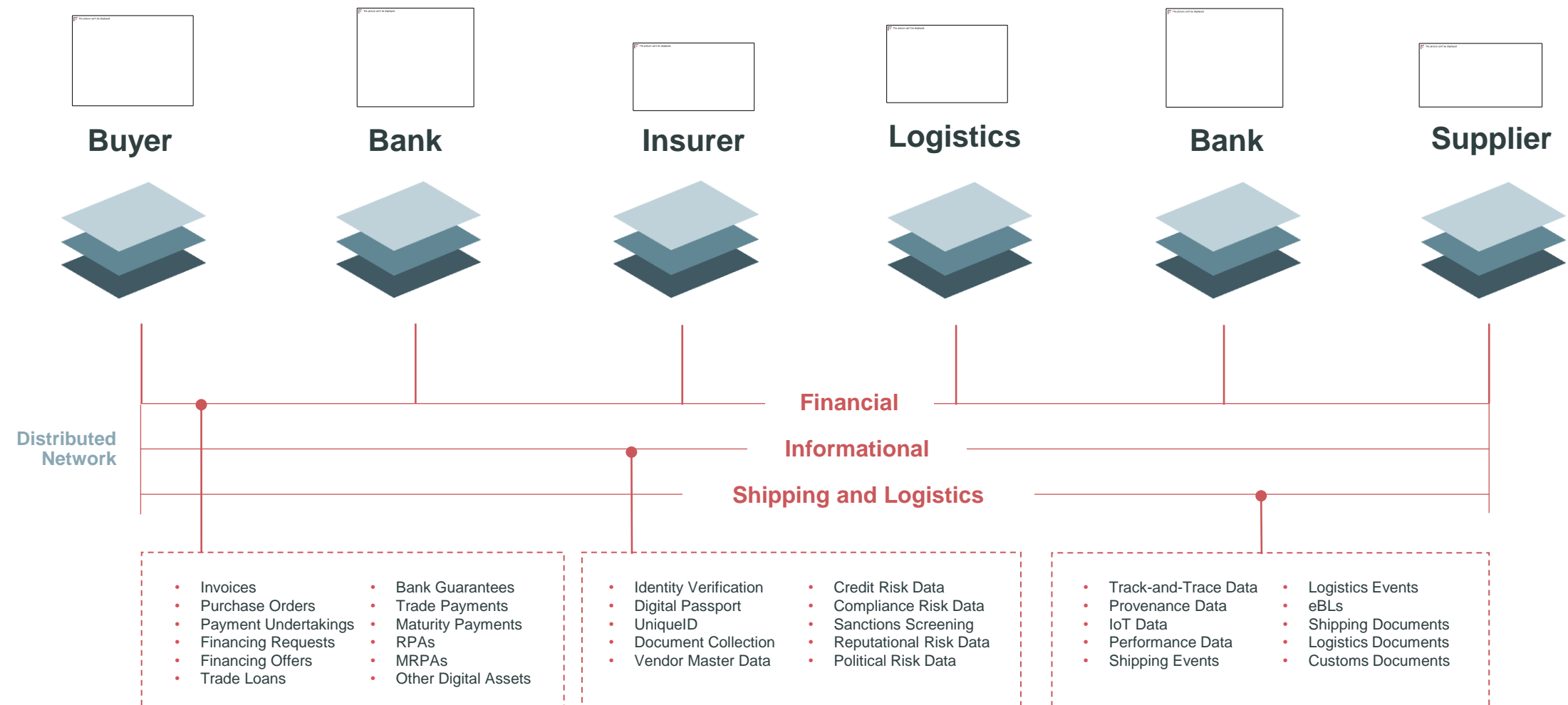
Daniel Cotti

Managing Director, Center of Excellence, Banking & Trade, Marco Polo

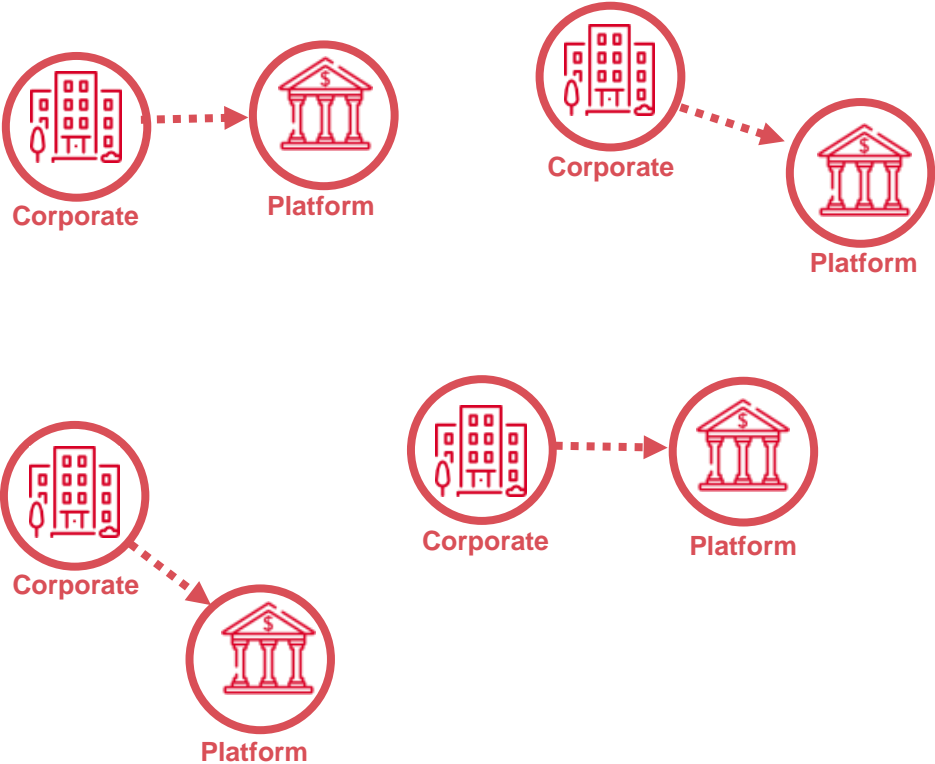
Numerous players, documents and data elements
are involved based on data/document exchange via multiple isolated systems



Convergence of Physical, Financial, and Informational Supply Chains



Trade Finance Industry Challenges



Lack of standards and interoperability give rise to disconnected trade systems that do not speak to one another.



Valuable trade data is trapped in different siloed applications making it hard to collaborate and even harder to verify.



These data issues create situations that can lead to **errors, omissions and compliance** problems.



Reliance on manual and tedious tasks leads to costly and error prone processes.



All these issues result in **large pools of trade assets not accessible for funding** by financial institutions.



Current Situation

Corporate Treasury is constantly looking to improve working capital and repatriate liquidity from group entities to the corporate level.

Managing multiple different working capital finance solutions with multitude of financial partners is time-consuming and difficult to manage efficiently.

The systems currently used by banks and their corporate clients to manage trade and working capital finance are siloed, highly manual, causing a lack of visibility, and overhead costs.

The current setup makes it difficult to change or add new funding partners.

Corporate Objectives



Improve Data Privacy
and Data Residency



Comply with ESG Corporate
Requirements



Increase size of working
capital financing facilities



Increase number of funding
options



Strengthen supply chains and
ensure liquidity to all suppliers

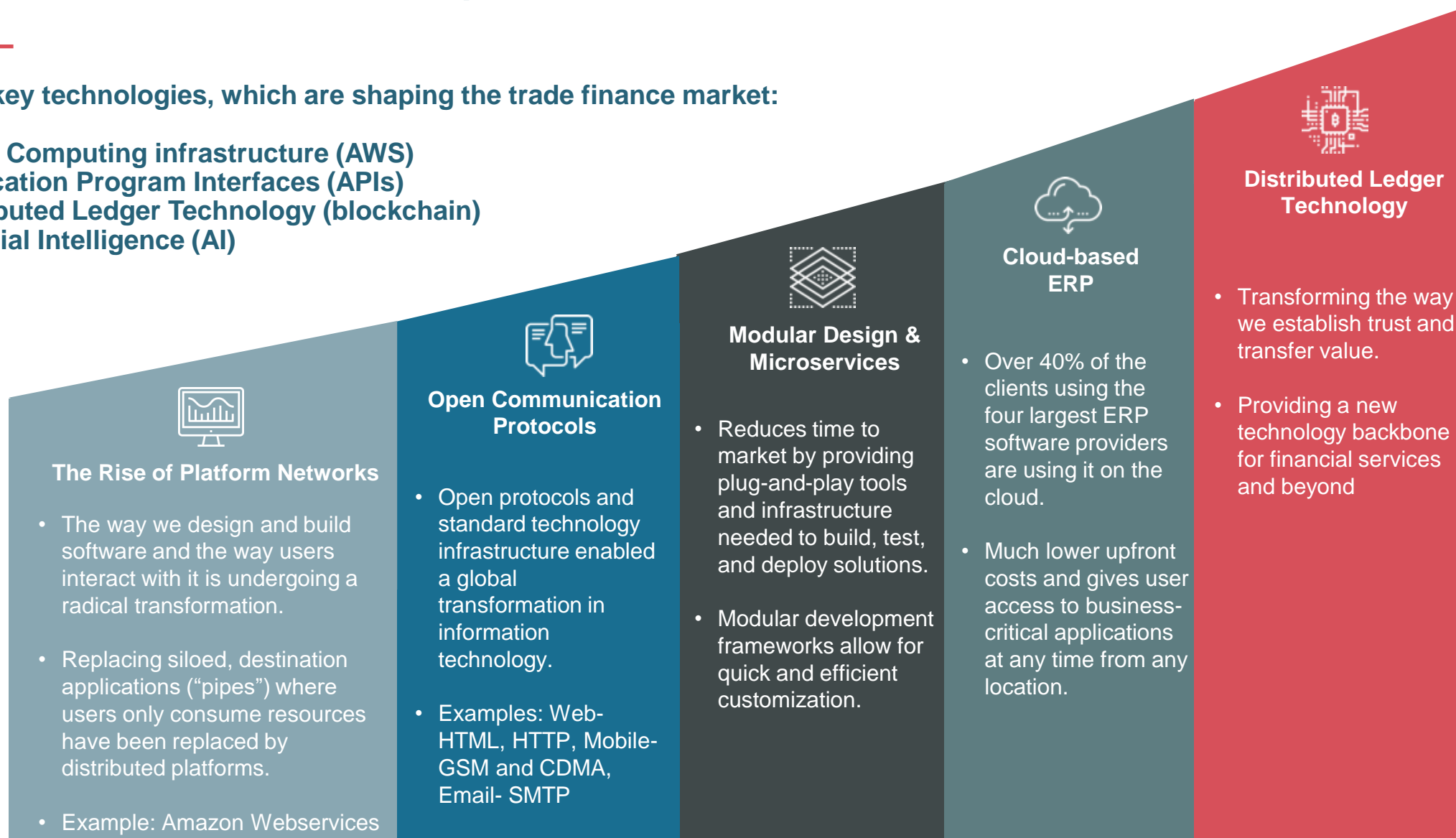


Integrate & automate
solutions with ERP

Transformative Market Developments

Four key technologies, which are shaping the trade finance market:

Cloud Computing infrastructure (AWS)
Application Program Interfaces (APIs)
Distributed Ledger Technology (blockchain)
Artificial Intelligence (AI)



Trade Platform and Network

Any software system, platform, network, application, or any other derivative that facilitates the flow of goods, money, data, and credit in cross-border commerce and global trade.

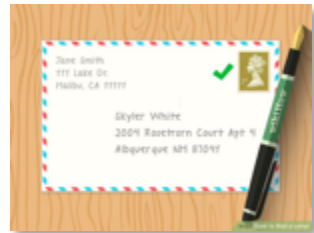
Examples

- core banking systems
- third-party / proprietary trade finance platforms
- corporate ERPs
- accounting software
- e-procurement networks
- e-invoicing networks
- inventory management systems
- warehouse management systems
- payment networks
- logistics management systems
- trade document management systems
- collateral registries

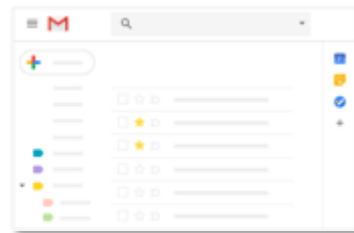
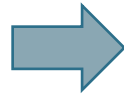
What do we consider a trade platform and network?

- **“I’ll know it when I see it”**

- A leap to do for global trade what the internet did for information.



10% of invoices
are electronic



10% of invoices
are paper

- **An ecosystem in which the majority of global trade transactions....**

- occur entirely digitally
- are facilitated and financed using a standard, open technology infrastructure that connects the majority of participants involved in global trade
- enables trading parties to transact and exchange trade data and assets as seamlessly as one would exchange text messages and emails.

Emerging Networks in Trade Finance

Because of this, the industry is now in search of a new networks.

Such networks require the creation of network effects.

Hence the dramatic rise in the number of trade finance consortia and industry initiatives focused on creating better connected ecosystem.

 **MarcoPolo** Marco Polo Network - Open Account Trade Finance Platform

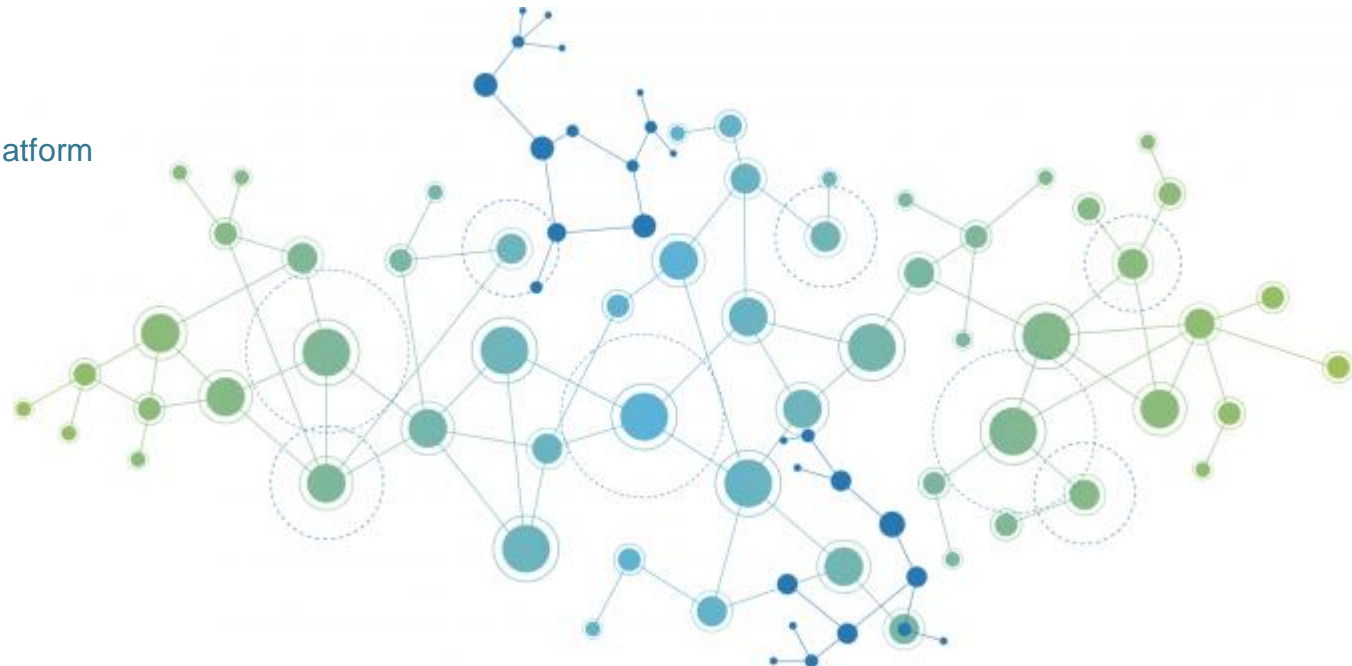
CONTOUR Contour- Letter of Credit/e-Documents Platform

 **we.trade** we.trade - European SME Trade Finance Platform

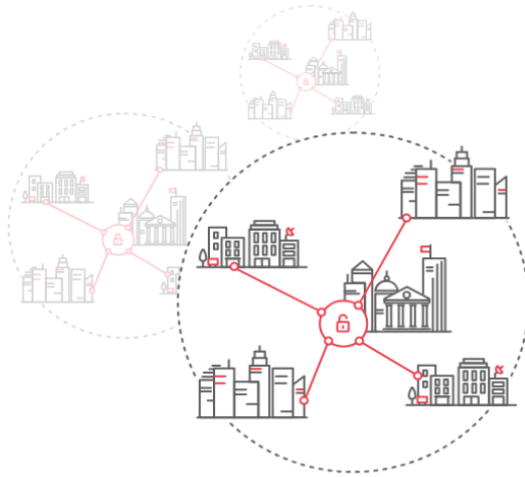
 **CCRM** CCRM – Trade Finance Risk Distribution Platform

 **Komgo** Komgo - Commodity Trade Network

And many more!



Differentiation: “Destination” vs. “Distributed” Platforms



The legacy “**destination**” model has serious technical and business model limitations.

- ✗ Users must come to a **single, central, branded destination** to transact
- ✗ Each new connection requires **bespoke**, costly integration
- ✗ Creates **vendor risk** and a **single point of failure**
- ✗ Vendor owns and controls all data; major **data custody** and **data privacy** issues
- ✗ **Cannot be customized** for each deployment & **limits deployment** options
- ✗ Vendor controls the platform and **intermediates client relationships**
- ✗ **No meaningful differentiation** for users- all using same iteration
- ✗ **Closed model** means users cannot build their own solutions or integrations



The “**distributed**” model, enabling mass adoption and global scale in a way that has not been possible before.

- ✓ Platform is **distributed and run by each entity**
- ✓ **Only one integration required to connect to all participants**
- ✓ **Eliminates vendor risk** and **single point of failure**
- ✓ Network owned by participants; No one single party **owns** distributed network.
- ✓ Allows each user **controls and manages its own data**
- ✓ **Highly configurable** for and by each entity and program
- ✓ Provides **multiple, flexible deployment options**
- ✓ Users **control** their **platform and client relationships**
- ✓ **Open model** allows users to build their own solutions and integrations



Founded in 2017 by a group of leading financial institutions and enterprise technology providers, TradeIX and R3.

Now the **largest and fastest growing** distributed trade and working capital finance network in the world.

Digital platform that allows trading parties to automate and streamline their trade and supply chain finance activities.

30+ Financial Institutions
7 Technology Partners
20+ Corporates



Open and distributed network for trade and working capital finance powered by open Application Programming Interfaces (APIs) and blockchain technology.



Facilitating trade and working capital finance solutions creating better customer experience and seamless data integration, while reducing costs, time and risk.



Marco Polo enables the creation of Trade and Working Capital Finance applications and modules through a collaborative co-creation model of the members.

Successful tested and implemented by over 20 corporates.
Recognized by numerous market awards



The Marco Polo Network – Value Proposition & Benefits



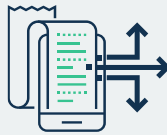
One Network for multiple Trade Finance Solutions

Instead of using different, separate trade finance solutions for your receivables or payables, the ERP-embed-ded Working Capital App allows you to manage your trade finance solutions within your ERP platform and interface.



Works with your existing solutions

No need to change or integrate to various external systems.
The ERP-embedded Working Capital Finance App allows you to work with your existing systems and connect fast and easy with all the banks in the Marco Polo Network.



Access to distributed ledger Technology

The Marco Polo Network allows you to store your trade data securely on the blockchain.
This provides you with secure, distributed data storage and book-keeping, automated contract enforcement, identity management, asset verification and tracking.



Access to Trade and Working Capital Finance

Seamless access to financing products delivered through banks on the Marco Polo Network.

One Access to One Distributed Platform

Connect once-connect to many [COCM]

One single integration and interface with ERP, banks, B2B networks, other value added services

Multiple Working Capital Solutions

Modular applications

Customize and use multiple solutions in the same network

Leveraging Blockchain Technology

Permissioned & secure access

Secure, real-time, peer-to-peer exchange of verifiable trade data and assets thanks to **Corda's** private, **enterprise grade DLT protocol**

Payables Finance

Classical Supply Chain Finance solution but delivered with fully digitized and highly automated workflows with focus on:

- Mass and quick Supplier on-boarding
- Enables reach to tail-end suppliers
- Provide liquidity from a wide range of global and regional trade banks
- Leverage arms-length SPV structure
- Leverage existing MRPA risk mitigation and funding structure
- Leverage existing Capital Markets Notes issuance structure
- Leverage integrated payment solutions

Receivables Discounting

Participants need simple, fast, and secure integrations into their core and back-office systems and the ability to get up and running quickly

- Focus on simple file uploads/downloads from UI
- Enable basic file transfer jobs from buyer ERP
- Support common translations for file formats
- Provide user-friendly documentation

Payment Commitment

New digital trade settlement method between Letters of Credit and Open Account

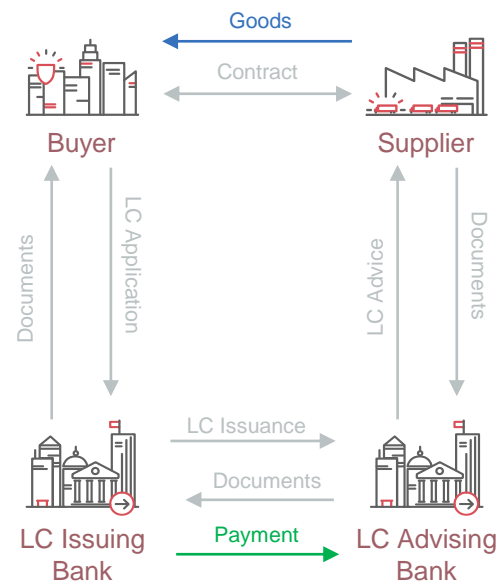
- Irrevocable Payment Commitments (IPC) are issued by Buyers Bank based on exchange and matching of digital trade data (PO's, invoices, shipping data)
- The IPC can get financed by either the buyers bank or sellers bank outside the PC module pending we release financing functionality as part of the PC module.

All three trade instruments offer risk mitigation and liquidity into the Supply Chains through the same connectivity on the Marco Polo Network powered by the Corda DLT and the TradeIX applications.

Payment Commitment – New Digital Trade Settlement Instrument



Letter of Credit (Documentary Trade)



Pros:

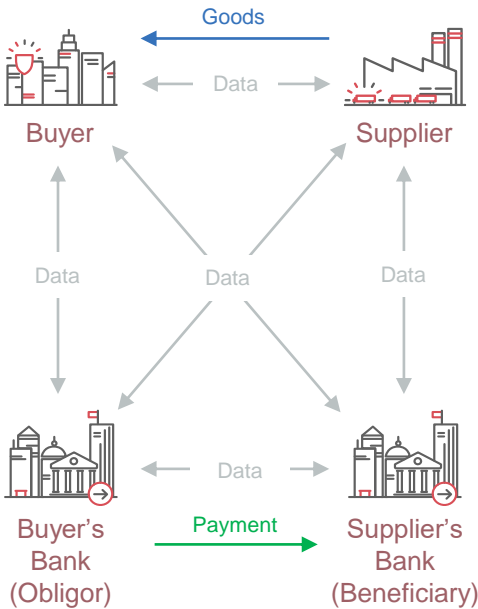
- ✓ Mitigates Risk
- ✓ Can be used as funding instrument

Cons:

- ✗ Slow
- ✗ Complex
- ✗ Costly

Bank provides risk mitigation based on the processing and matching of paper documents (Conditional Payment)

Payment Commitment

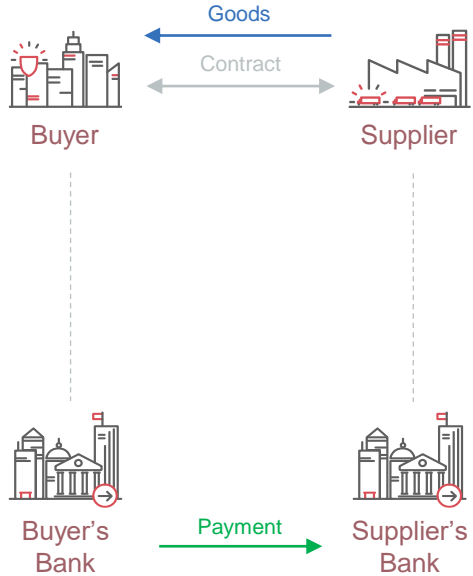


Pros:

- ✓ Fast
- ✓ Simple
- ✓ Low-cost
- ✓ Mitigates Risk
- ✓ Can be used as funding instrument

Bank provides risk mitigation based on exchange and matching of digital trade data (Conditional Payment)

Open Account Trade



Pros:

- ✓ Fast
- ✓ Simple
- ✓ Low-cost

Cons:

- ✗ Risky as no Payment assurance

No risk mitigation. Trade is based on trust between buyer and supplier

Current market conditions

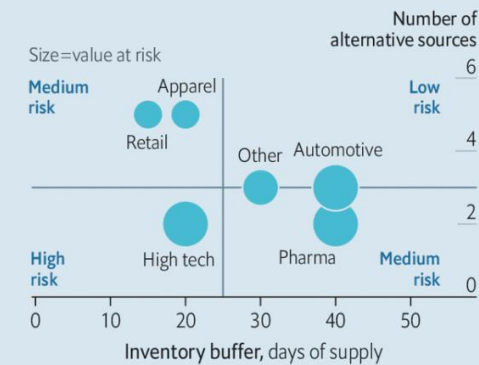
Financial Stress Index

- A measure of the US Department of Treasury
- Takes into account credit conditions, equity valuations, access to funding, value of safe assets and market volatility



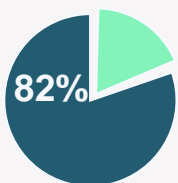
Supply chain risks per industry

Source: Economist



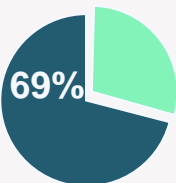
Small Business Survey

Level of Concern



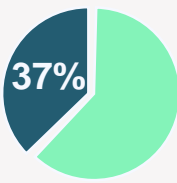
Extremely Concerned

Decrease in Demand



Large Decrease

Supply Chain Impacts

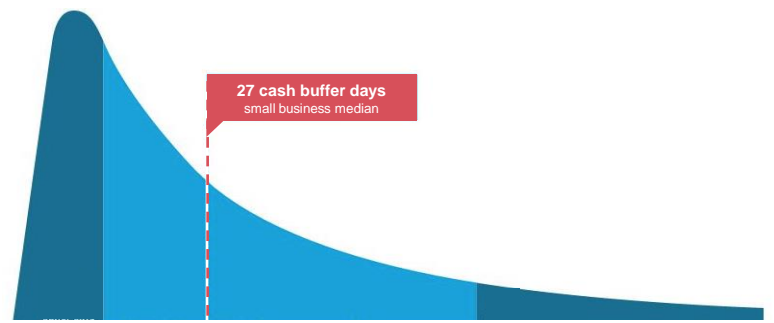


Suppliers and Own Business Affected

Source: US SBCE

Cash buffer days in reserve

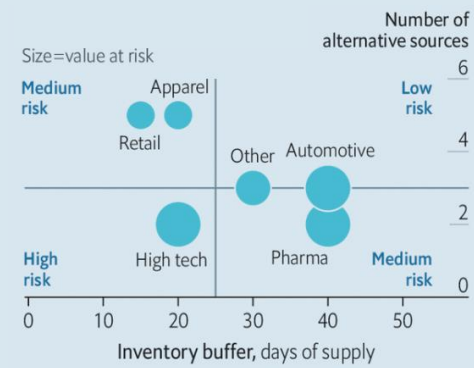
Source: JP Morgan



Cash buffer days

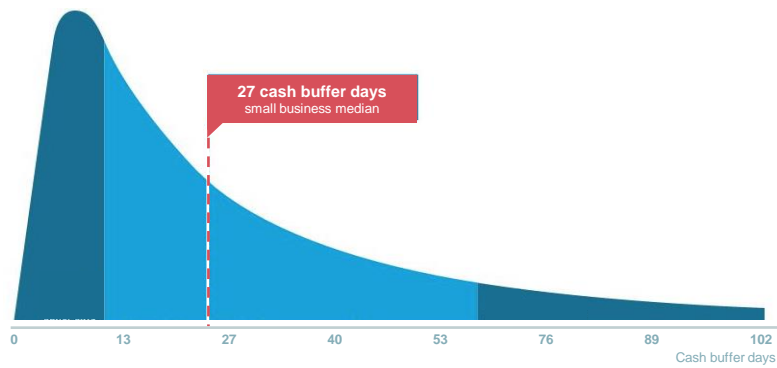
Supply chain risks per industry

Source: Economist



Cash buffer days in reserve

Source: JP Morgan

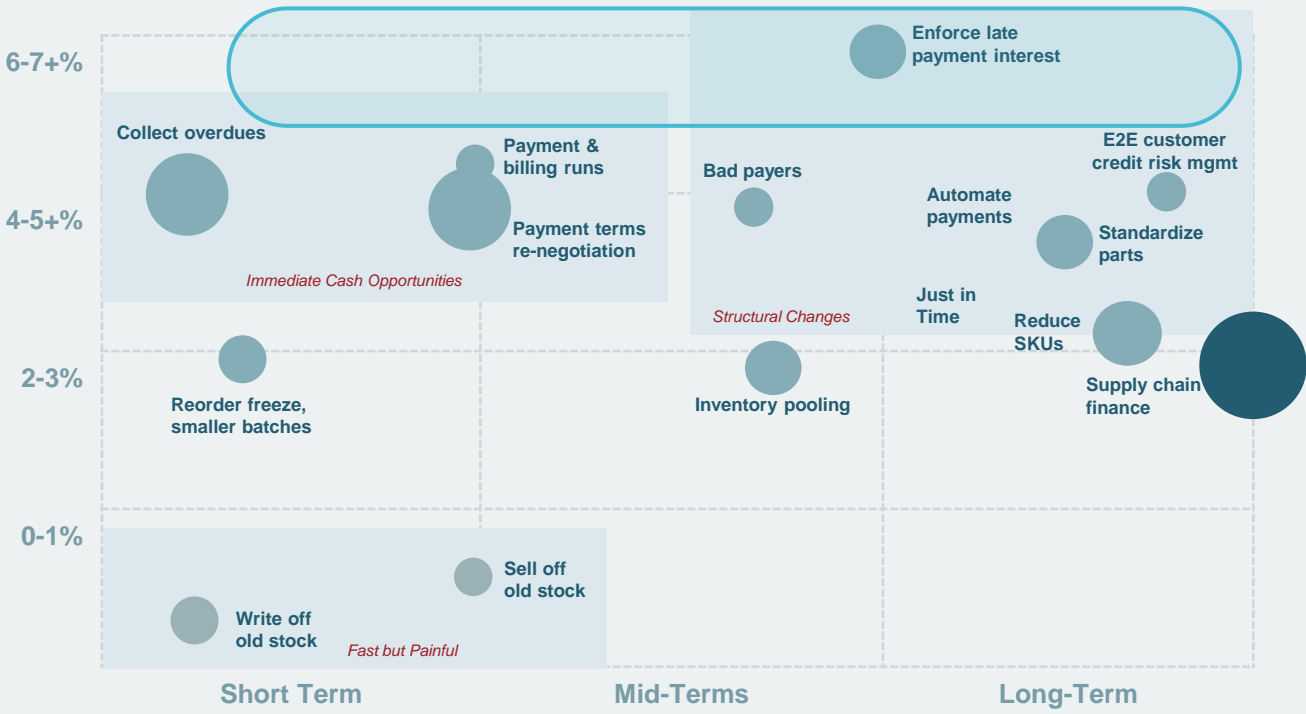


Effect of cash flow initiatives

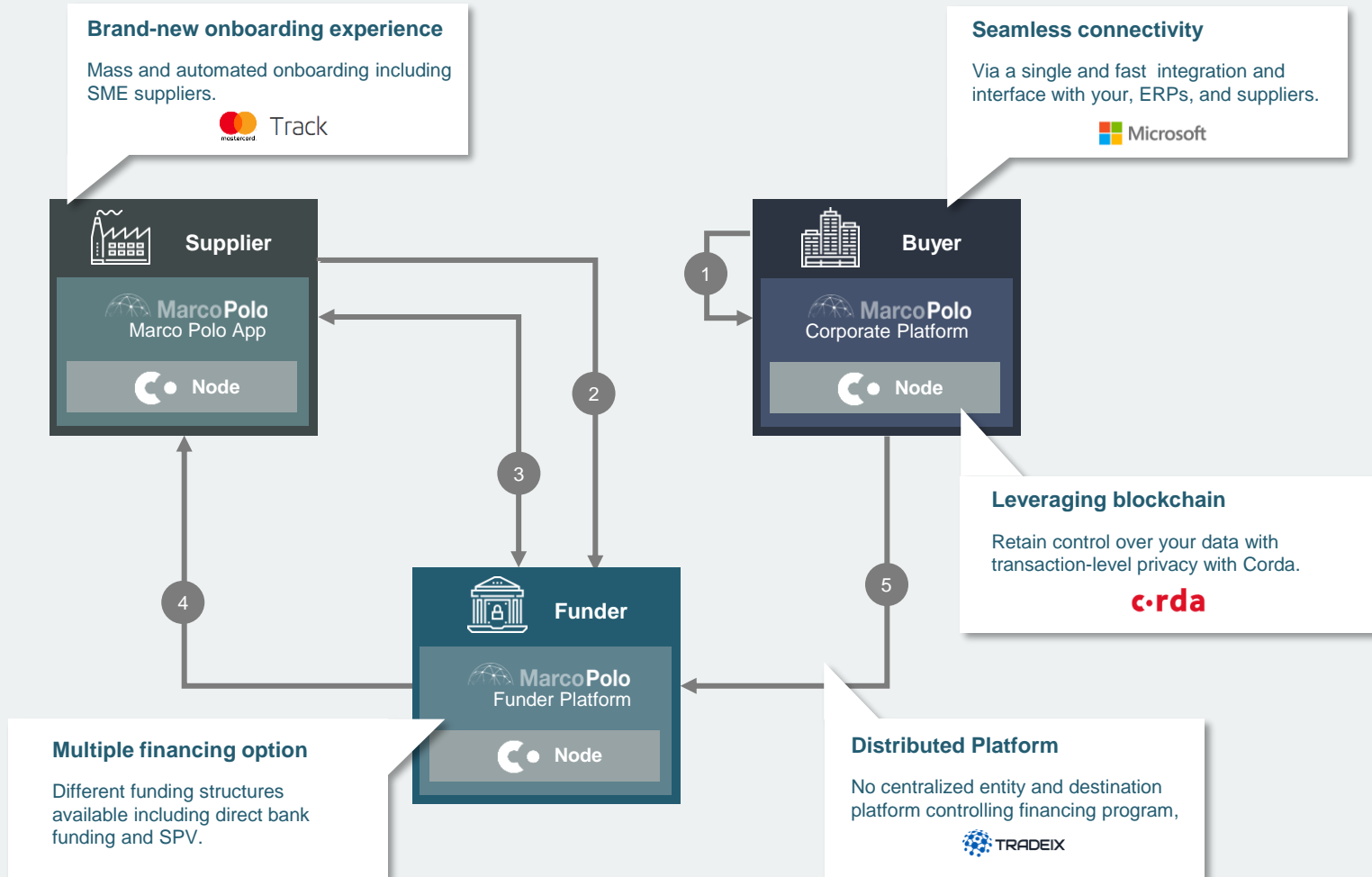
Source: McKinsey & Company

Bubble size represents cash impact

Non Trade Finance Traditional Trade Finance & Payment Solutions Marco Polo SME Early Pay



Marco Polo SME Early Pay Initiative – Payables Finance



Process Steps

- 1 Buyer uploads approved invoice
- 2 Supplier submits funding request for approved invoice(s)
- 3 Funder submits funding response and supplier accepts it.
- 4 Funder pays Supplier the invoice amount less a discount fee for early payment. Invoice ownership is transferred to funder.
- 5 At maturity, Buyer pays funder the full invoice amount.

Supplier Benefits

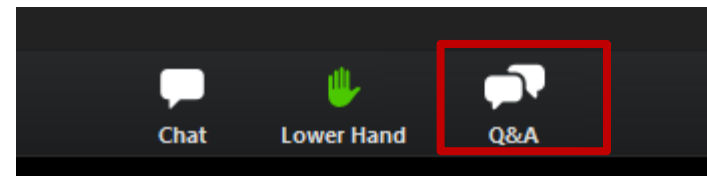
- A/R↓ DSO↓ Working Capital↓
- Off balance sheet, non-recourse financing
- Leverage buyers strong credit rating
- Certainty of payment (forecasting)
- Visibility into payment details

Buyer Benefits

- Maintain DPO and Working Capital
- Standardize payment terms
- Reduce risk in supply chain
- Improve supplier relationships

Q&A

Use the **Q&A** channel to ask your questions



<https://www.linkedin.com/groups/12400295/>

ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda

Panel- Management

Treasury Topics on Blockchain



Ignacio Sanchez Miret

Chairman Fintech Committee, AFTE. The French Association of Corporate Treasurers

» What is your interest in blockchain and what are you working on.

The financial industry isn't interested in alternative money and digital currencies. It's interested in the distributed ledger. It could replace the entire technological back end of dematerialized securities in real time, without reconciliations and lots of controls. *Robert Sarns (founder of Clearmatics)*

» List of projects we are working on



What

1. Platforms on loans and guarantees with pool of institutions
2. KYC with banks
3. Instant Settlements
4. Secured payments control
5. Trade finance



How

- Leadership of proof of concept
- Lobbying on Corporate voices for technological choices
- Networking with European peers
- Participating on trials
- Following latest news

107

» What is the business impact of blockchain you expect, and why you decided to approach the technology for your company/ clients

- Accept crypto-currency as a means of receiving payment
- Use crypto-currency as means of cross border payment
- Use blockchain as a vehicle for smart contracts
- Use blockchain for securing relationships with partners / customers
- Use blockchain as means of replacing processing platforms

How C-Level Executives approach blockchain



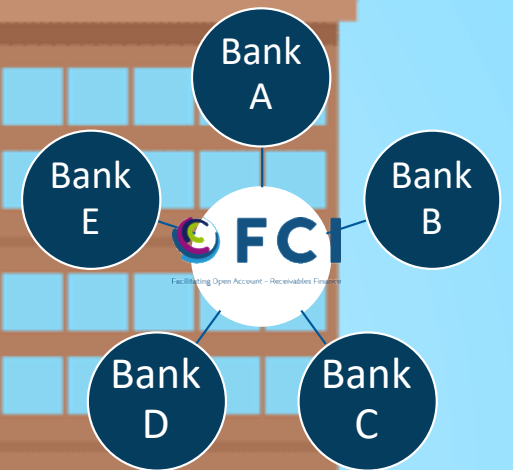
Peter Mulroy

Secretary General, FCI

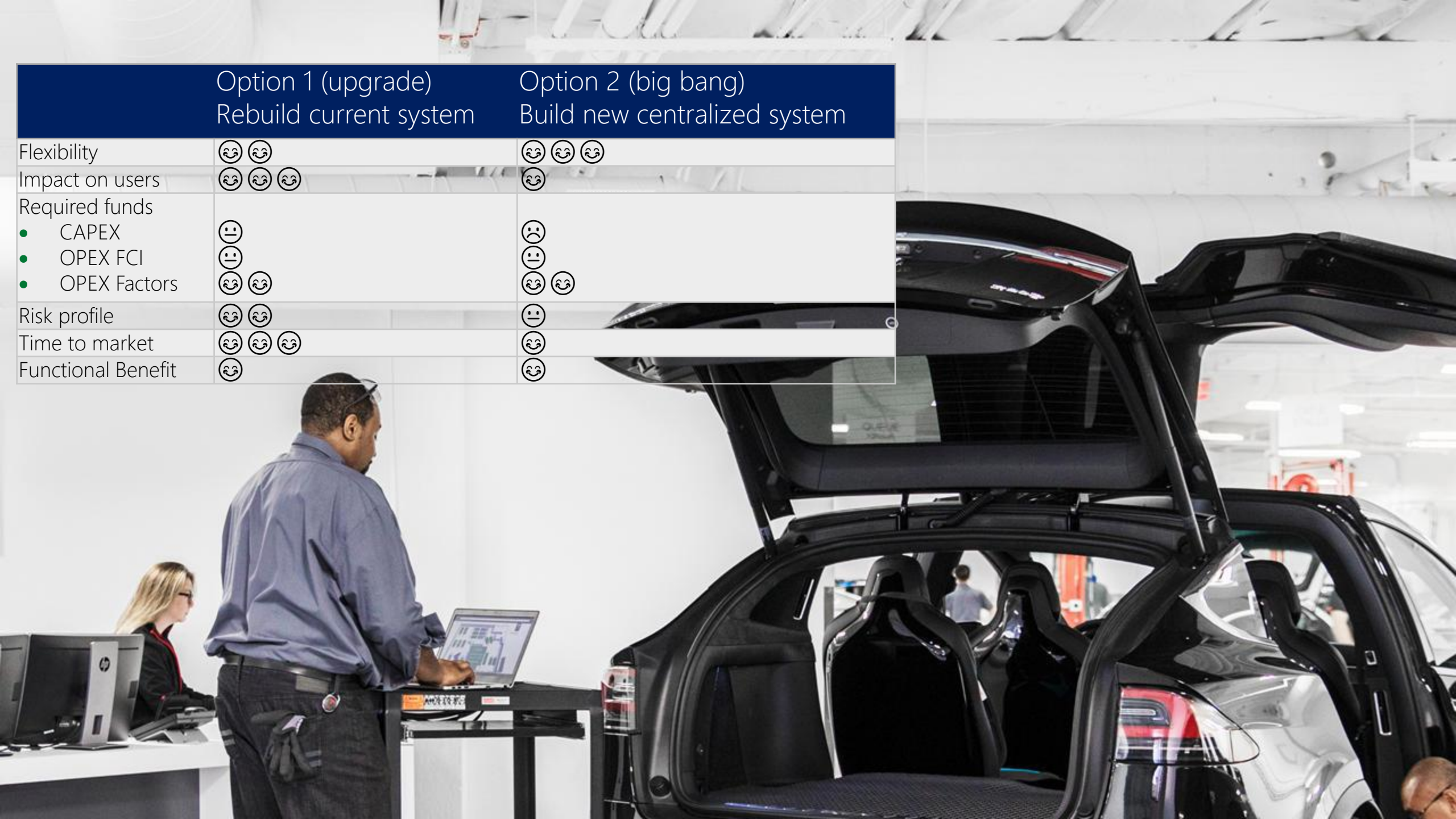
Towards Blockchain -Ready Factoring

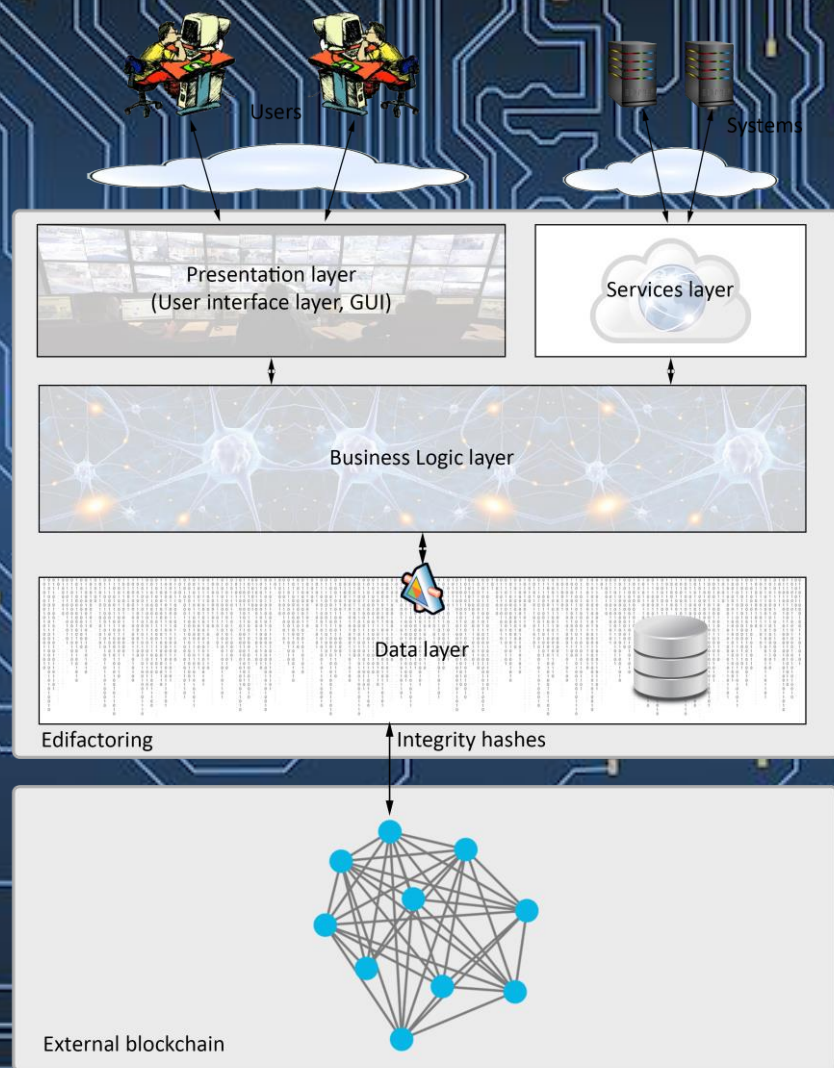
Technology Refresh

- A modern look-and-feel
- Highly increased maintainability
- Modern software technology
- Possibility of additional functionality (buyers/sellers, app, etc.)



| | Option 1 (upgrade) Rebuild current system | Option 2 (big bang) Build new centralized system |
|--------------------|--|---|
| Flexibility | 😊😊 | 😊😊😊 |
| Impact on users | 😊😊😊 | 😊 |
| Required funds | | |
| • CAPEX | 😐 | 😐 |
| • OPEX FCI | 😐 | 😐 |
| • OPEX Factors | 😊😊 | 😊😊 |
| Risk profile | 😊😊 | 😐 |
| Time to market | 😊😊😊 | 😊 |
| Functional Benefit | 😊 | 😊 |

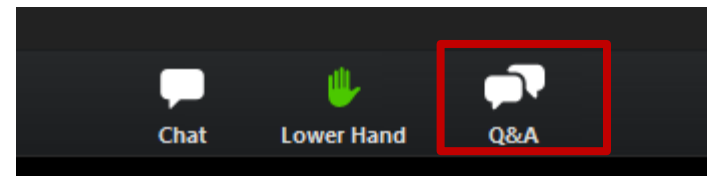




*Alternative:
Blockchain
Secured*

Q&A

Use the **Q&A** channel to ask your questions



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ENTERPRISE BLOCKCHAINS LIVE 2020

Program Agenda



End of Conference- Closing remarks

A big
thank-you
to our
Partner
Sponsors



WOMEN IN ENTERPRISE BLOCKCHAINS

Virtual Conference

May 20, 2020

3:00 p.m. CET | 9:00 a.m. ET

[Register Now](#)



101 Blockchains

2020 EDITORIAL CALENDAR

April

Enterprise Blockchains
Live 2020

May

Women in Enterprise
Blockchains

Jun

Trade Finance
Blockchain World

July

Enterprise Blockchains
Strategy & Management

August

Supply Chains

September

Financial Services

October

Blockchain as a Service

November

Government Programs

December

Looking into 2021



101 Blockchains

ENTERPRISE BLOCKCHAINS LIVE 2020

Virtual Conference
April 22, 2020 | 3:00 pm CET

Event
Partners:



DAML



101 Blockchains

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