

ESCAP-ARTNET-ITD Trade Facilitation for Sustainable Development Workshop 2019

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Digital Trade Facilitation and Emerging Technologies

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Topics of Discussion

- Digital Disruption
 - Smart Mobile Devices
 - FinTech - E-Banking, Inter-bank Online Payment, QR Code
 - Domestic / Social e-Commerce & Cross-border e-Commerce
- Emerging Technology
 - Blockchain for **Bank Guarantee, Trade Finance & Logistics**
 - Artificial Intelligence / Machine Learning



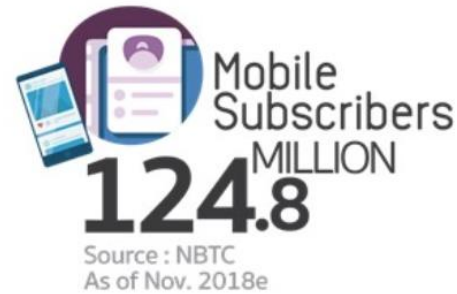


Digital disruption is the change that occurs when new digital technologies and business models affect the value proposition of existing goods and services.

 UBER World's largest taxi company Owns NO 	 airbnb World's largest Accommodation provider Owns NO 	 skype WeChat World's largest Phone companies Owns NO 	 Alibaba Group World's most Valuable retailer Owns NO 
facebook. Most popular Media owner Owns NO 	 SocietyOne World's fastest Growing bank Owns NO 	NETFLIX World's largest movie house Owns NO 	 Apple Google World's largest Software vendors Owns NO 

Digital Disruption / Enabling Environment

- 4G/5G Internet
- Smart Mobile Penetration
- E-Banking
- Interbank Online Payment
- Social Media / Social App
- Digital Platform:
B2B, B2C & C2C e-Commerce





PromptPay
&
QR Code
Services
for
Interbank
Online
Payment

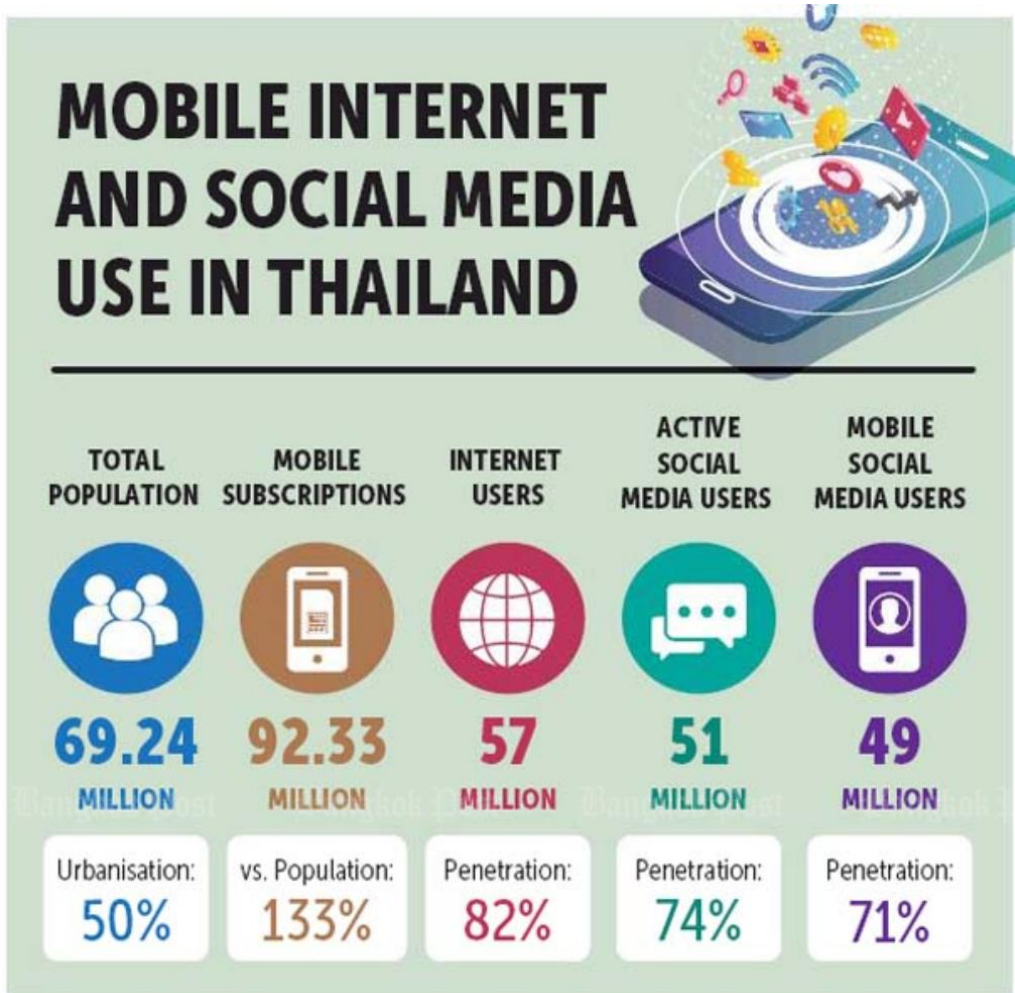
**At any Fresh Markets around the country,
MSME can receive payment online.**

Thailand tops global digital rankings

Global Digital Ranking Report 2019

Thailand ranks

- No.1 for mobile banking users
- 2nd for ownership for cryptocurrency
- 3rd in mobile commerce

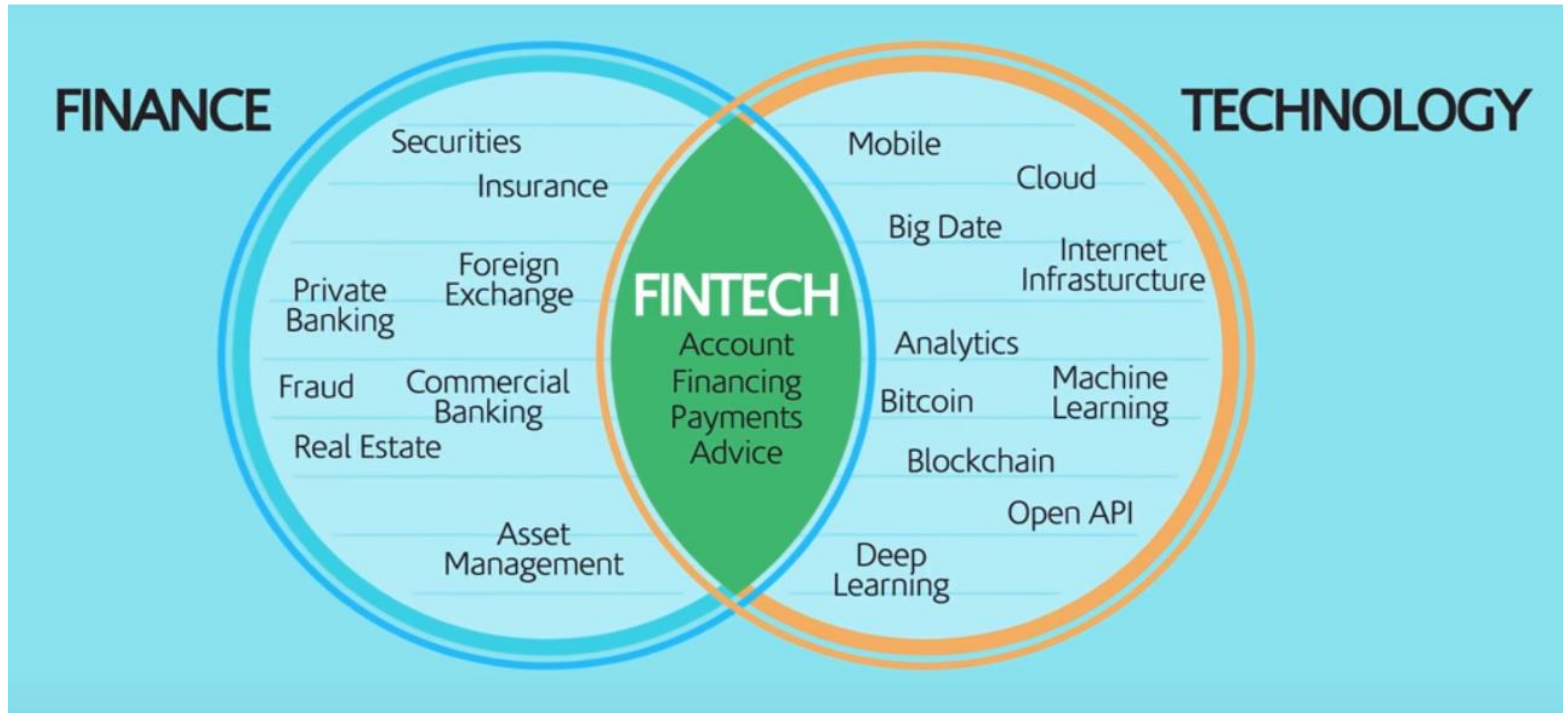


Source: Hootsuite, We are Social

BANGKOK POST GRAPHICS



FinTech



Emerging Technology

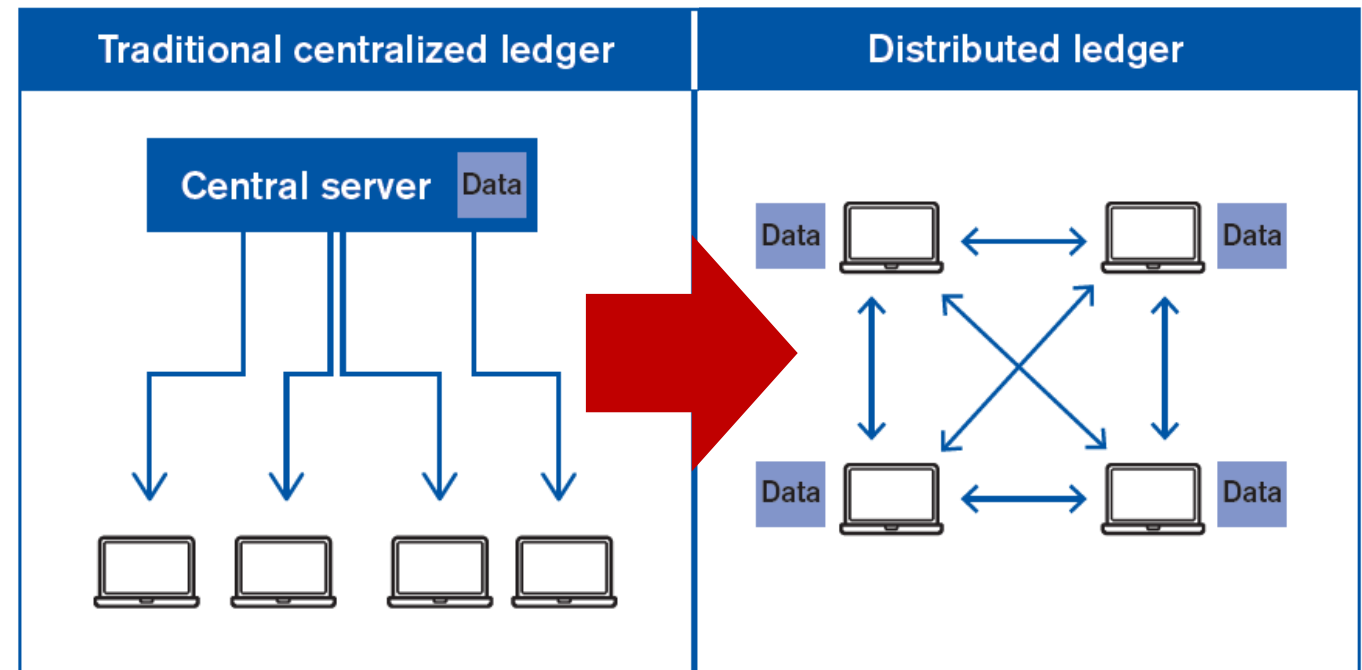
Blockchain for Trade Finance, Logistics, Bank Guarantee

Artificial Intelligence / Machine Learning

What is blockchain?

Blockchain = a distributed “ledger” (records) of transactions

- Temper-proof/Immutable
- Decentralized control
- Highly resilient



A WEF Report (January 2018)



**Blockchain could help
increase the global trade
by 1.1 Trillion USD within 2026**

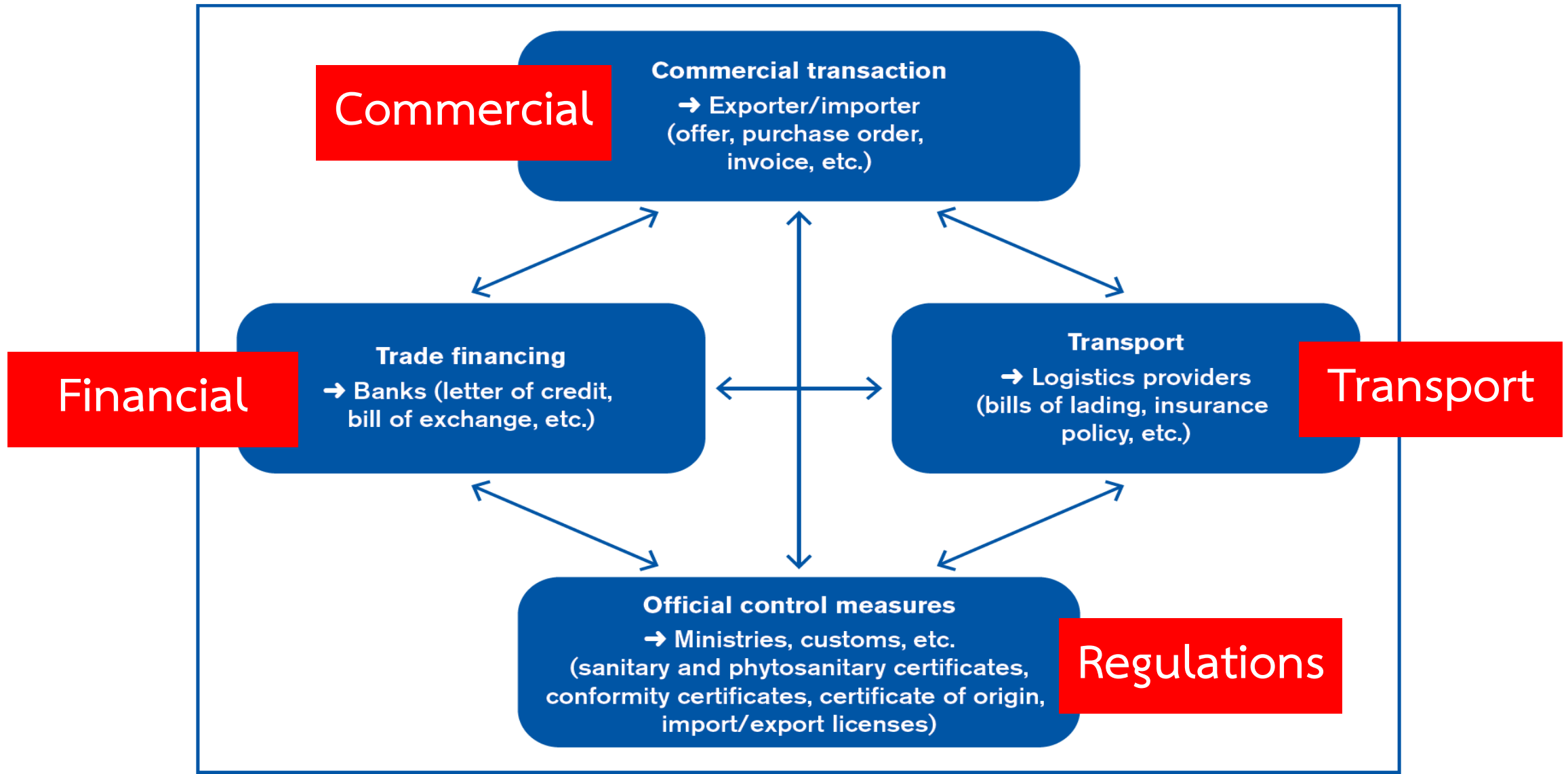
A WTO Report (November 2018)



Can Blockchain revolutionize international trade? **Yes, Highly Likely !**

**Blockchain has the potential to improve global trade significantly.
But the technology alone is not enough,
other challenges (e.g. collaboration, regulations) need to be managed!**

Trading across borders are cumbersome including **4 main types of transactions**

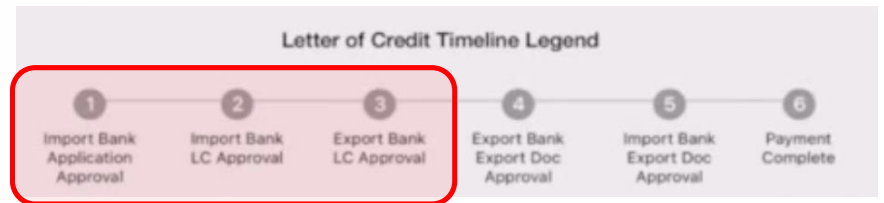
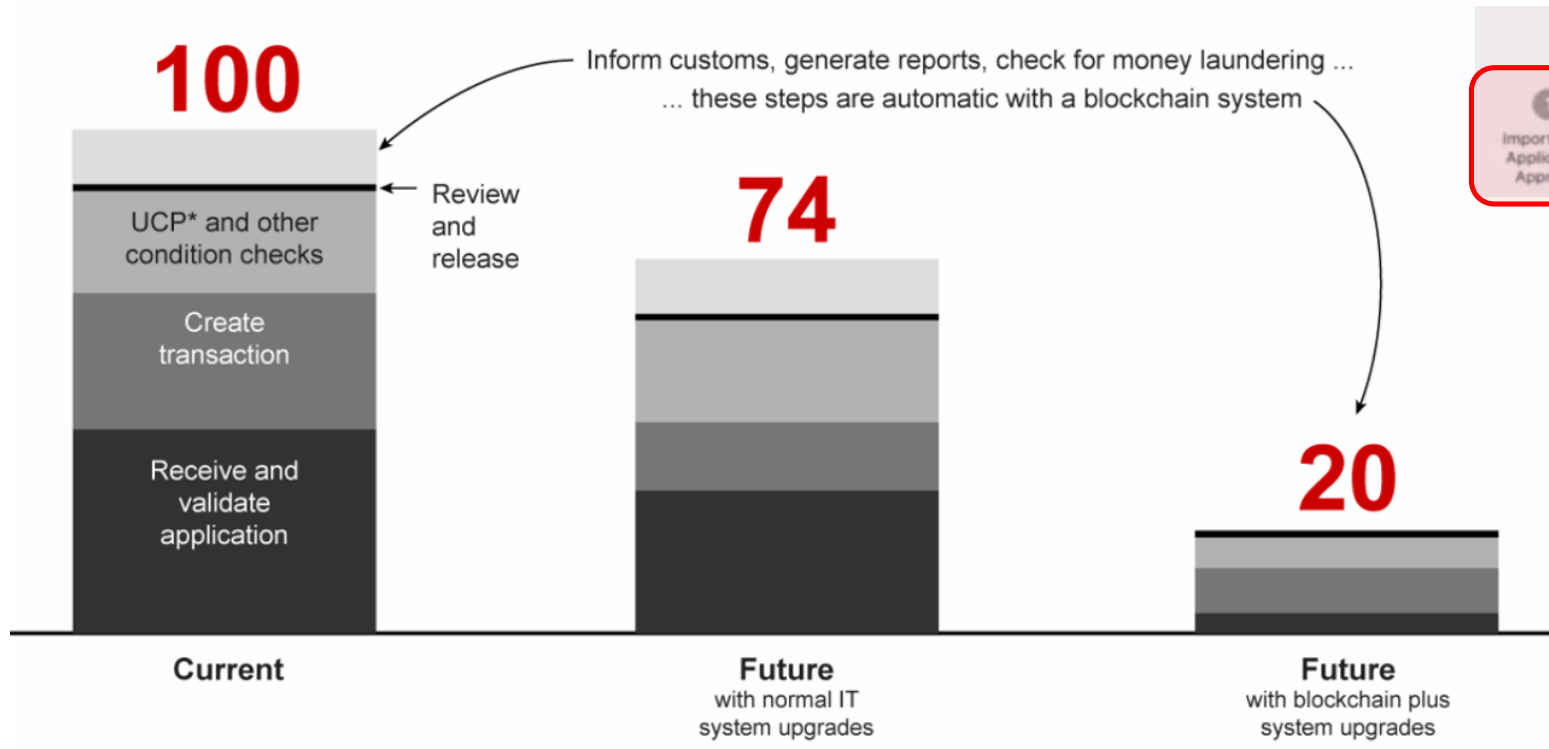


Blockchain for Trade Finance could revolutionize global trade by increasing 1 trillion USD trade by 2026*



Automation through blockchain could reduce letter-of-credit processing time by 80%

Letter-of-credit processing time, indexed

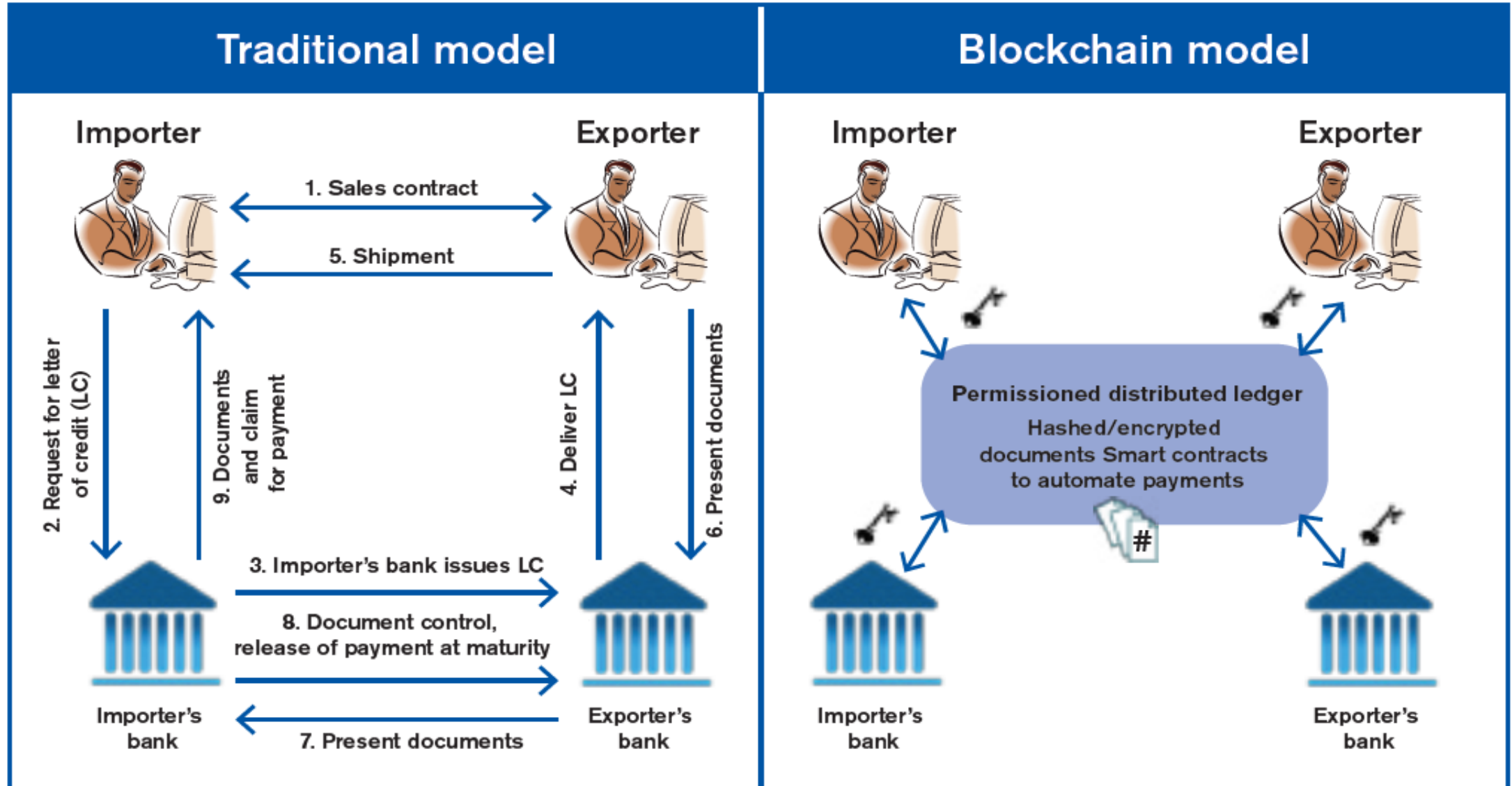


L/C Approval 80% faster

*Uniform Customs and Practice for Documentary Credits
 Sources: Bain & Company; HSBC

* A report during World Economic Forum 2018 (conducted by Bain & Company, and HSBC), from the base of US\$ 16 trillions global trade.

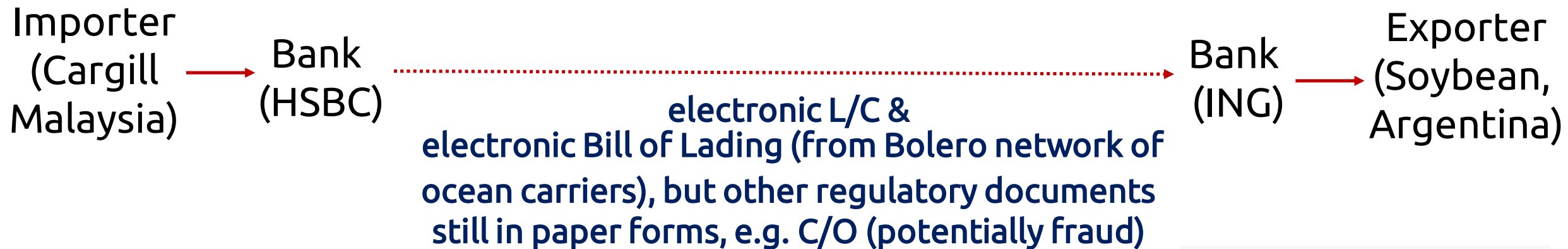
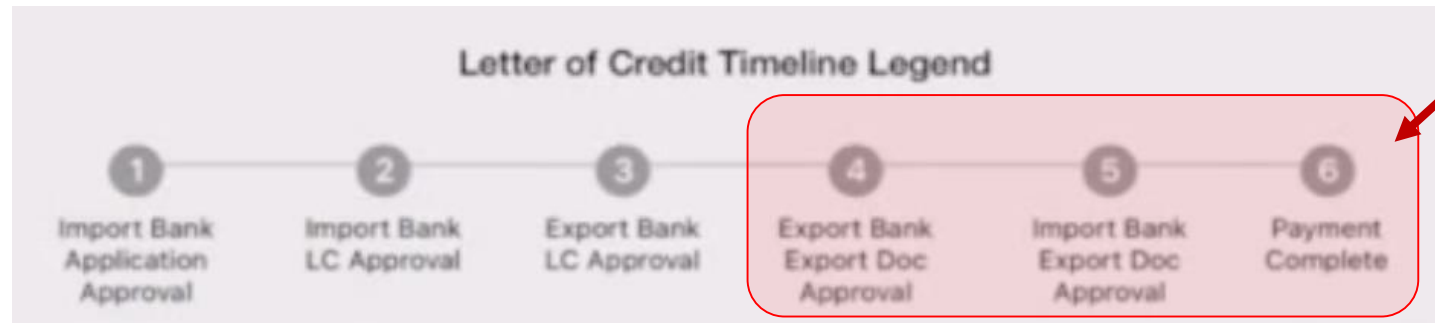
As-Is vs To-be Model



Blockchain for L/C Payment Settlement

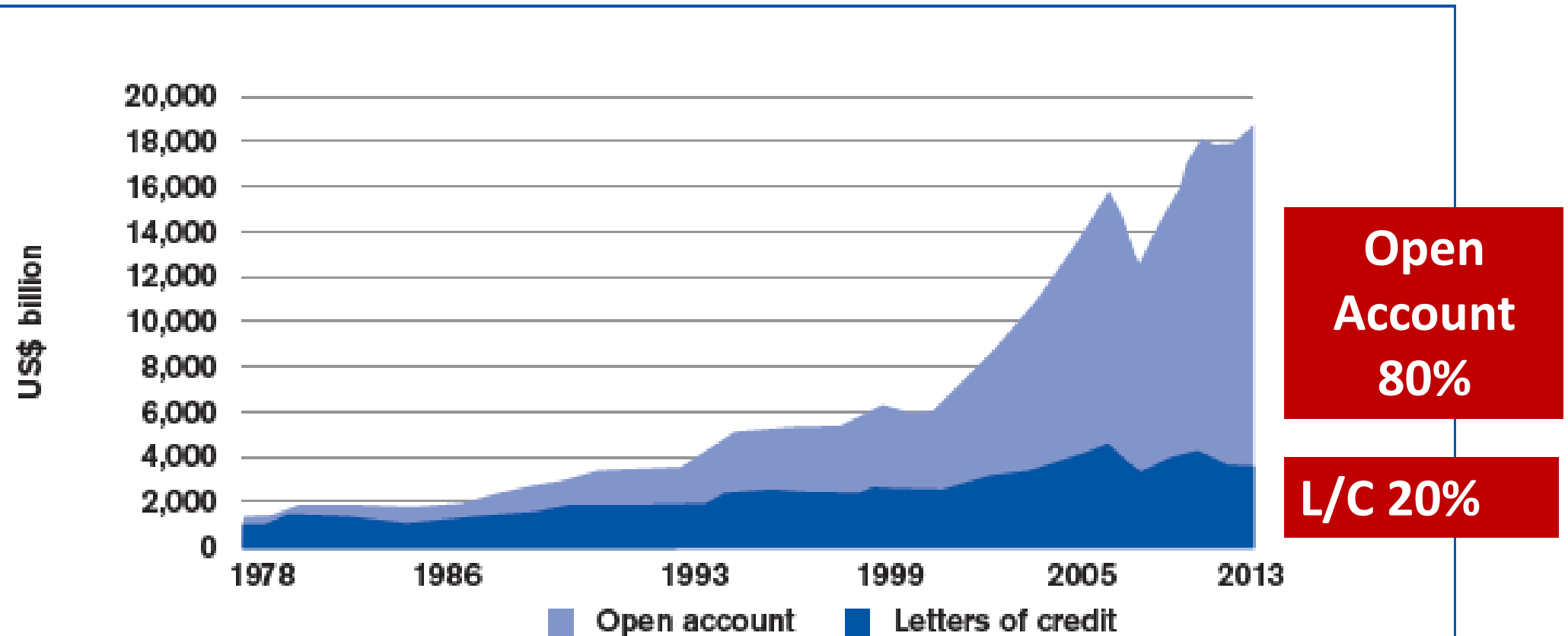
Time reduction from 5-10 days to 24 hours

**Payment Settlement
80%
faster**



* Reference: Voltron (R3 Corda) blockchain platform for L/C Trade Finance

Use of L/C vs Open Account (1978 – 2013)



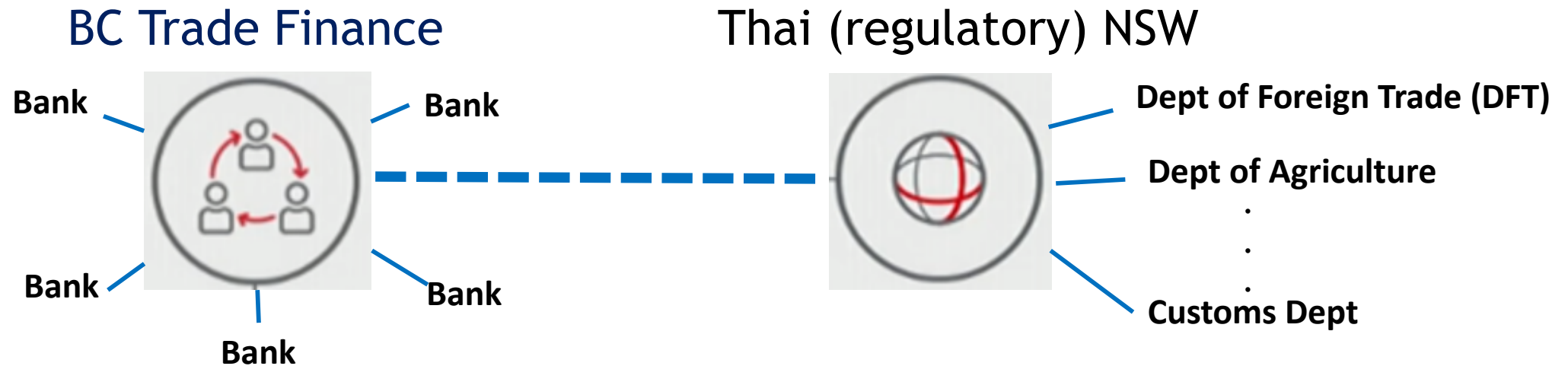
Note: World trade volumes have seen a startling increase in open account transaction over the recent years. Already today more than 80 per cent of the total world trade volume (export) is settled by clean payment. This impressive ratio is expected to grow even further in the future. As a consequence, banks are compelled to offer their corporate clients products that support fully automated processing as well as cost savings combined with payment assurance and financing options.

We.Trade & Marco Polo are two example blockchain platforms for Open Account Trade Finance

**SME's could access to more finance for trade
(with less risks, and better transparency of blockchain)**



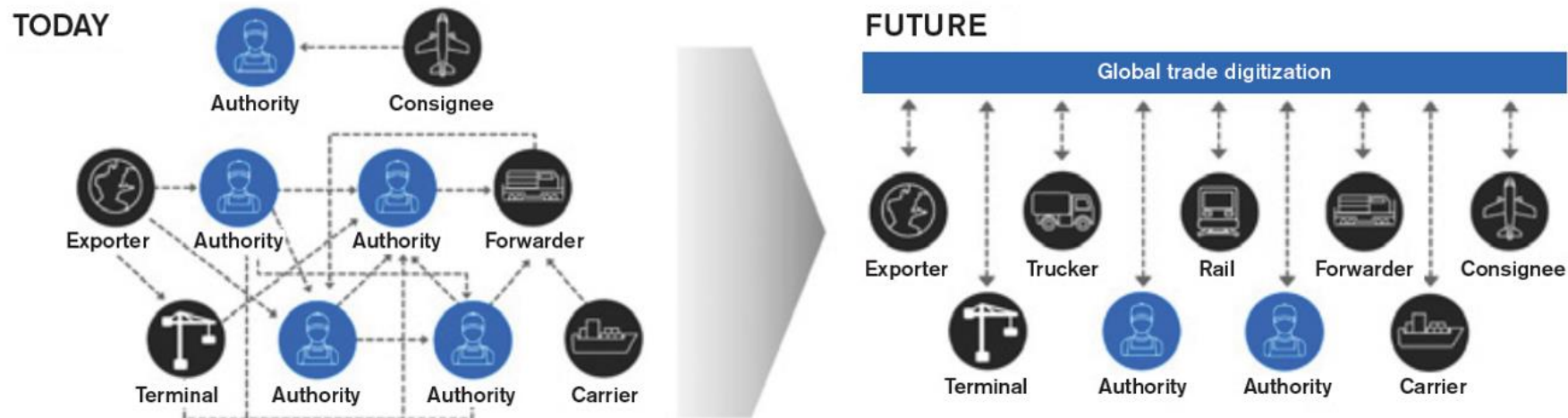
A pilot project to connect Bank-to-Bank L/C Blockchain with Thai NSW (2019/2020)



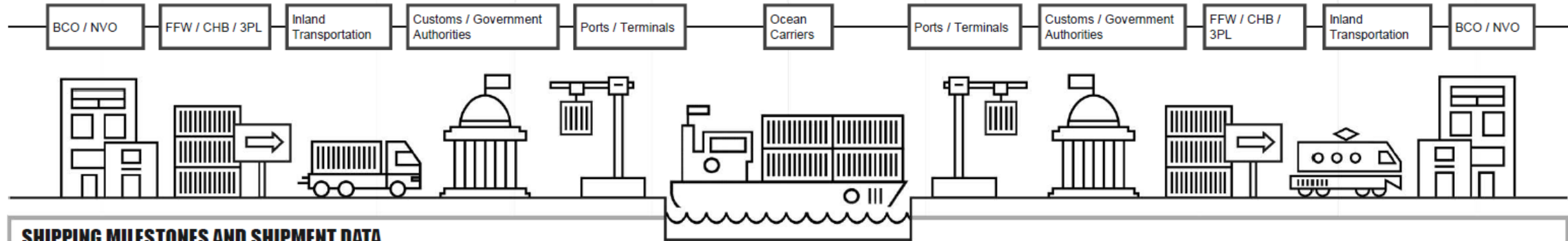
- Sending electronic Certificate of Origin (C/O) & Export Certificates (from DFT) to Blockchain Trade Finance L/C & Open Account to improve transparency, trust/confidence, speed up procedures.
- **Collaboration Agencies:** DFT, Customs Department, CAT Telecom (NSW Operator), Bank of Thailand, Thailand BCI (Blockchain Community Initiative)

Blockchain for sea freight

- **Collaboration agencies:** Customs Department, Bangkok Port/Laem Chabang Port, Port Authority of Thailand, Maersk-IBM TradeLens
- Developing a blockchain pilot platform for facilitating ocean freight
 - automatic and immutable tracking tool, which will lead to a more secure, transparent, efficient, and simpler workflow, with near real-time information sharing



Blockchain for end-to-end ocean freight transactions

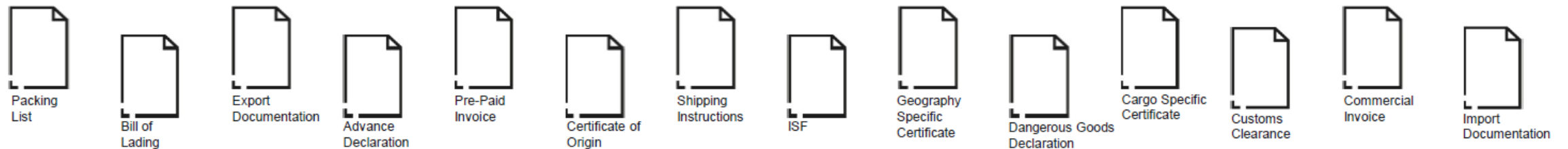


SHIPPING MILESTONES AND SHIPMENT DATA



Not exhaustive list of milestones managed by platform

STRUCTURED AND UNSTRUCTURED DOCUMENTS



Not exhaustive list of documents managed by platform

TRADELENS BLOCKCHAIN BUSINESS NETWORK

**THE PLATFORM IS AN OPEN AND NEUTRAL INDUSTRIAL SOLUTION -
UNDERPINNED BY BLOCKCHAIN TECHNOLOGY**

Expected Benefits of Blockchain in Thai Customs

To manage the risk of ship consignment

To reduce the paperwork and information entries

To involve in the global trade by reporting the status of customs clearance

To expedite the electronic transactions and ensure the data security

Blockchain for Bank Guarantee

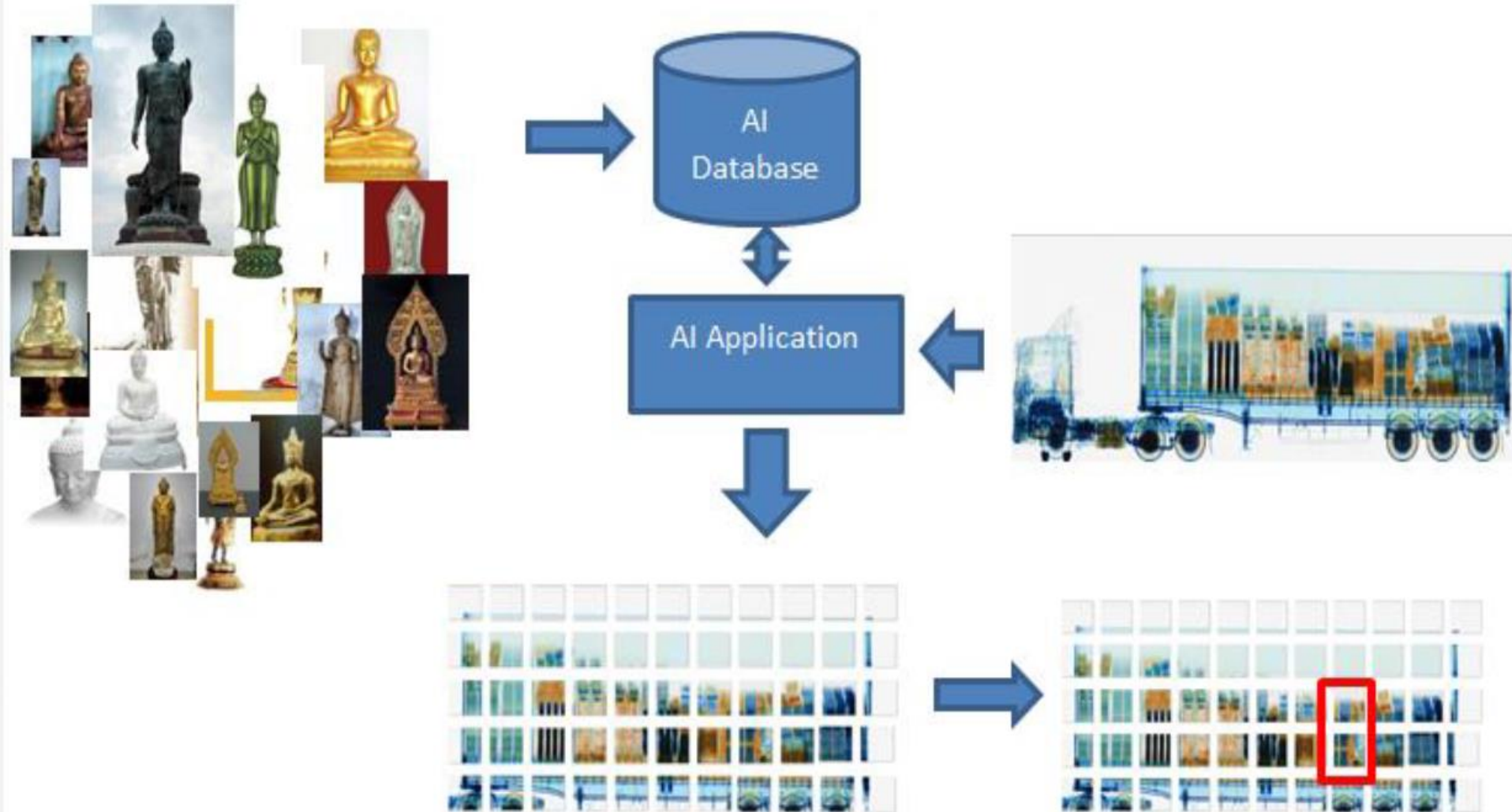
- **BCI (Thailand Blockchain Community Initiative)** - 22 Commercial Banks, Bank of Thailand (BOT), State Enterprises & few large-scale business have started using electronic Bank Guarantees on blockchain
- Piloting under BOT's regulatory sandbox since last year, it is planned to be adopted this year (2019).
 - Each year, ~500,000 BGs are issued for about 1.3 trillion baht
 - BGs on blockchain could reduce cost, improve transparency, increase accuracy, and resist fraud.

Artificial Intelligence / Machine Learning at China Customs

- Application of automatic image recognition
- The system can detect 120 Iphones (smuggled goods) in the photo (from X-ray machines).



Artificial Intelligence Pilot Project in Thai Customs



Benefits of AI to Thai Customs

To precisely examine the smuggled goods

To identify products required the permit to import or export

To extend the performance of the X-Ray system for import/export goods

Q & A

Thank you for your interest