ASEAN IPA Conference 2019

Tech, Trade and Transformation – ASEAN's Future

27 April 2019

Professor Locknie Hsu

Topic

Tech – ASEAN's Future

How technology (e.g., artificial intelligence, blockchain, big data) is reshaping the IP landscape (eg, privacy, traditional concepts of IP rights, computer generated innovations/works) and the practice of IP

http://www.aseanipa.org/attachments/article/711/Brochure%20v%2013.pdf

Context: Cross-border Trade
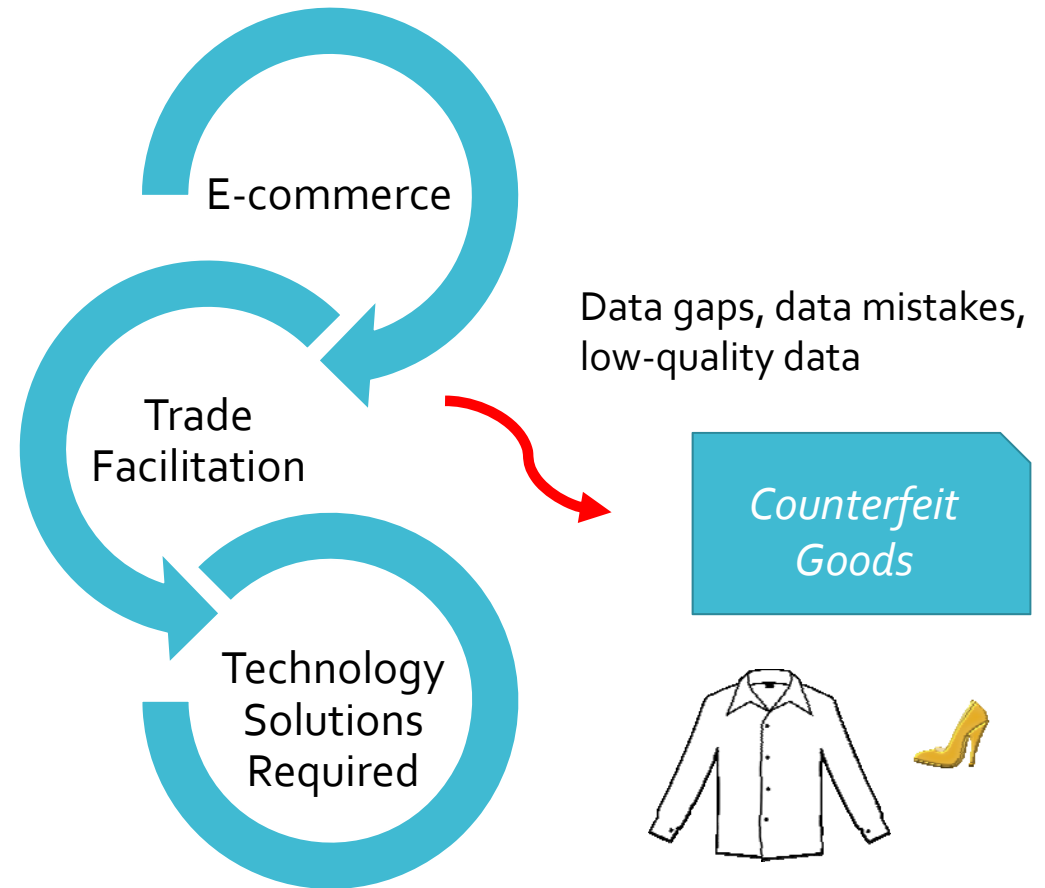
The explosive growth of e-commerce

Small parcels sent by post or express courier are a prime and growing conduit for counterfeit goods. Small parcels accounted for 69% of total customs seizures by volume over 2014-2016 (57% via post and 12% via courier), up from 63% over the 2011-2013 period.
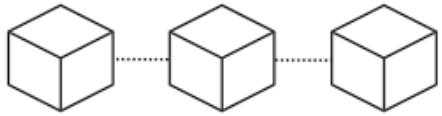
OECD, 18 March 2019
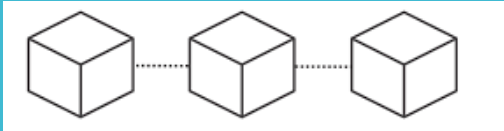
The Role of Blockchain Technology in Reshaping IP Protection and Ownership

Context: Cross-border Trade

E-commerce

Trade Facilitation

Technology Solutions Required

Data gaps, data mistakes, low-quality data
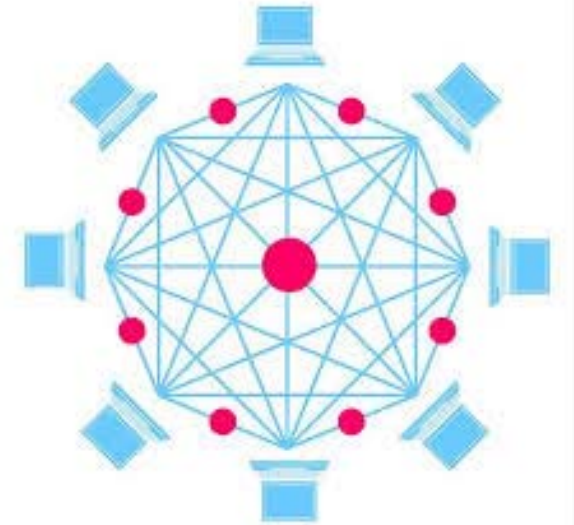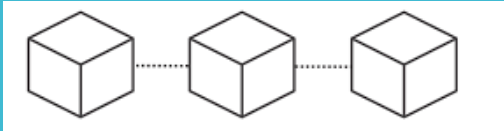
Counterfeit Goods

Interesting Features of Blockchain Technology

- Digital 'ledger' of 'blocks' added onto a 'chain'
- Decentralized
- "Immutability"
- Public/Permissioned
- Encryption
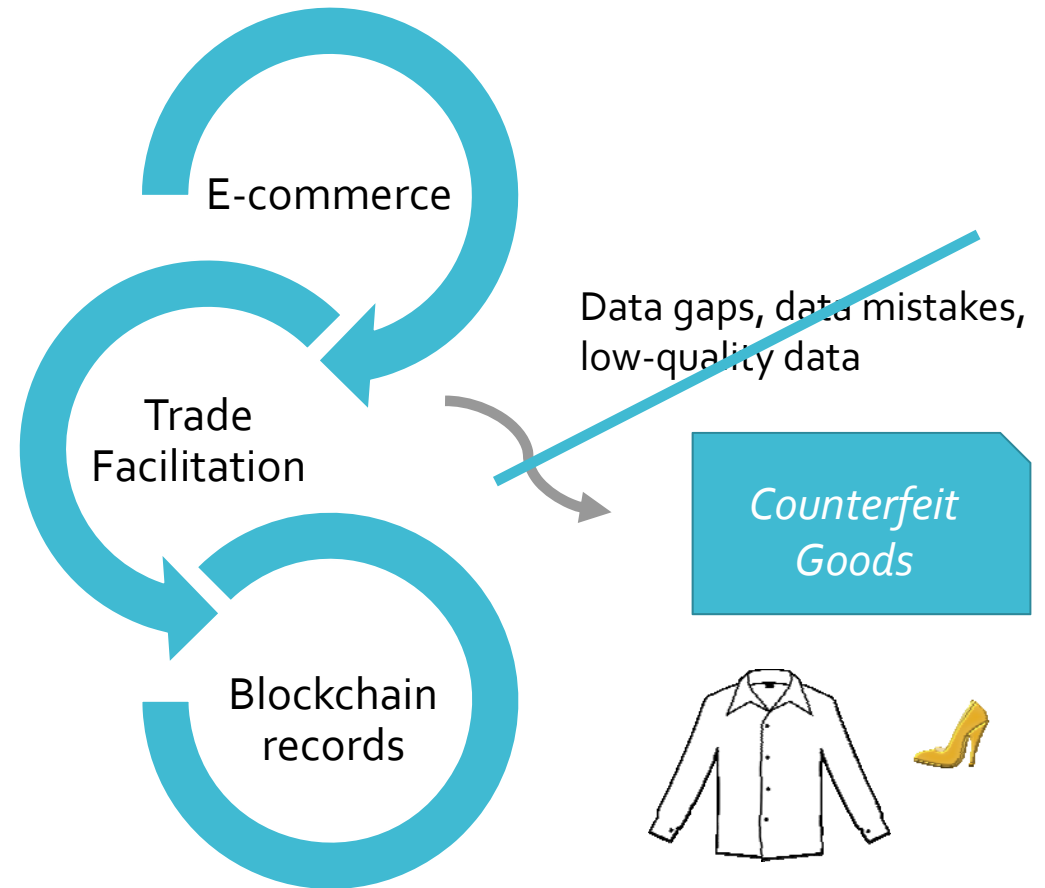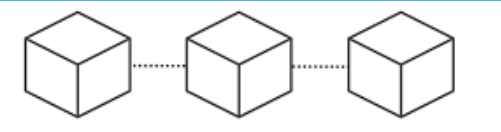
Source: medium.com

The Role of Blockchain Technology in Reshaping IP Protection and Ownership

Context: Cross-border Trade

E-commerce

Trade Facilitation

Blockchain records

Data gaps, data mistakes, low-quality data

Counterfeit Goods

The Role of Blockchain Technology in Reshaping IP Protection and Ownership

Context: Cross-border Trade

Example: Thai-UK project to promote blockchain in IPRM (2019)

trade ecosystem.

TPSO believes that blockchain can be applied in many use cases under the aegis of the Ministry of Commerce, especially those that involve registration, traceability, ownership, e-commerce and trade facilitation, among others. Pimchanok said blockchain has great potential in reducing fraud risk or contractual disputes between contracting parties, and also lowering transaction costs for SMEs and traders. Therefore, TPSO has initiated study projects that explore the feasibility of using blockchain technology in several area, including trade facilitation, intellectual property and agriculture.

Source: The Nation, 6 February 2019

Tech-Trade: Treaty Nexus

US Customs and Border Patrol (CBP)

CBP working group: 14 possible use cases

Trial use of blockchain in relation to Certificates of Origin for NAFTA and CAFTA goods – 2017-8

Next Steps:
- With the results of the POC complete, next steps include collecting recommendations from the COAC.
- CBP is also in the process of developing a blockchain POC to facilitate the tracking of intellectual property rights (IPR) licenses. Introducing blockchain into IPR licensing process would allow CBP to track licenses from the rights holder to the licensee, as well as facilitate licensees' ability to become licensors. CBP will be testing this proof of concept technology later in 2019.

Submitted by: Vincent Annunziato
Date: Tuesday, February 12, 2019
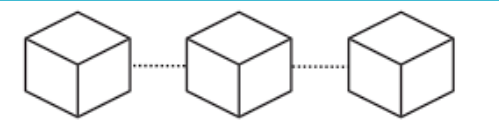
Other technology

Law and Crime

Hong Kong customs using AI to track down counterfeit goods – and seizures are up 30 per cent in six months

The analytics system can scour social media and shopping sites 24 hours a day

SCMP, 6 August 2018

The Role of Blockchain Technology in Reshaping IP Protection and Ownership

Context: Cross-border Trade

- Digital collectables (e.g. 'Cryptokitties') – uniqueness aspect and technology

- Ethereum's non-fungible tokens (NFT)

CryptoKitties itself isn't so much an elaborate "game" as it is a visual representation of data stored on the Ethereum blockchain. "Cats" are actually strings of data that the CryptoKitties platform interprets and presents visually with the corresponding proprietary cat artwork. The underlying data can be manipulated to form new, unique strings of data in a process known as "breeding," leading to about 4 billion possible unique variations of cats. To keep it safe for work, there's no official artwork depicting the cats breeding.
Each cat is unique, as shown in the CryptoKitties search dashboard.

Ian Agar, Pitchbook, 14 March 2019

Dapper Labs Terms of Use – an excerpt

B. Ownership

i. You Own the NFT. Each CryptoKitty is a non-fungible token (an "NFT") on the Ethereum blockchain. When you purchase a CryptoKitty, you own the underlying NFT completely. This means that you have the right to trade your NFT, sell it, or give it away. Ownership of the NFT is mediated entirely by the Smart Contract and the Ethereum Network: at no point will we seize, freeze, or otherwise modify the ownership of any CryptoKitty.

ii. Dapper Owns the App. You acknowledge and agree that Dapper (or, as applicable, our licensors) owns all legal right, title and interest in and to all other elements of the App, and all intellectual property rights therein (including, without limitation, all Art, designs, systems, methods, information, computer code, software, services, "look and feel", organization, compilation of the content, code, data, and all other elements of the App (collectively, the "Dapper Materials")). You acknowledge that the Dapper Materials are protected by copyright, trade dress, patent, and trademark laws, international conventions, other relevant intellectual property and proprietary rights, and applicable laws. All Dapper Materials are the copyrighted property of Dapper or its licensors, and all trademarks, service marks, and trade names associated with the App or otherwise contained in the Dapper Materials are proprietary to Dapper or its licensors. Except as expressly set forth herein, your use of the App does not grant you ownership of or any other rights with respect to any content, code, data, or other Dapper Materials that you may access on or through the App. We reserve all rights in and to the Dapper Materials that are not expressly granted to you in these Terms. For the sake of clarity, you understand and agree: (a) that your purchase of a CryptoKitty, whether via the App or otherwise, does not give you any rights or licenses in or to the Dapper Materials (including, without

Dapper Labs Terms of Use – an excerpt

C. License to Art

i. General Use. Subject to your continued compliance with these Terms, Dapper grants you a worldwide, non-exclusive, non-transferable, royalty-free license to use, copy, and display the Art for your Purchased Kitties, along with any Extensions that you choose to create or use, solely for the following purposes: (i) for your own personal, non-commercial use; (ii) as part of a marketplace that permits the purchase and sale of your Purchased Kitty, provided that the marketplace cryptographically verifies each Kitty owner's rights to display the Art for their Purchased Kitty to ensure that only the actual owner can display the Art; or (iii) as part of a third party website or application that permits the inclusion, involvement, or participation of your Purchased Kitty, provided that the website/application cryptographically verifies each Kitty owner's rights to display the Art for their Purchased Kitty to ensure that only the actual owner can display the Art, and provided that the Art is no longer visible once the owner of the Purchased Kitty leaves the website/application.

ii. Commercial Use. Subject to your continued compliance with these Terms, Dapper grants you a limited, worldwide, non-exclusive, non-transferable license to use, copy, and display the Art for your Purchased Kitty for the purpose of commercializing your own merchandise that includes, contains, or consists of the Art for your Purchased Kitty ("Commercial Use"), provided that such Commercial Use does not result in you earning more than One Hundred Thousand Dollars ($100,000) in gross revenue each year. For the sake of clarity, nothing in this Section will be deemed to restrict you from (i) owning or operating a marketplace that permits the use and sale of CryptoKitties generally, provided that the marketplace cryptographically verifies each Kitty owner's rights to display the Art for their Purchased Kitty to ensure that only the actual owner

Dapper Labs Terms of Use – an excerpt

B. As users breed their CryptoKitties, new and unforeseen generations of CryptoKitties will come into existence! Using our proprietary genetic combination algorithm that we have designed as part of the App, each newly-bred CryptoKitty will have some of the genetic traits of its parents. At the same time, other, new genetic traits may be expressed. Unique and surprising traits may be expressed when CryptoKitties are bred in the right combinations. The Smart Contracts have total control over the pseudo-random elements of our breeding process, which means that we cannot manipulate or influence them.

C. How you breed your CryptoKitties is entirely up to you. You may breed your own CryptoKitties with one another, or offer to breed your CryptoKitties with other users' CryptoKitties. CryptoKitties have no fixed gender, which means that in any particular breeding transaction, the CryptoKitties' owners can choose which cat will be the sire, and which will be the matron. When the new kitten is born, it will always be assigned to the owner of the matron cat. The breeding of two CryptoKitties will always produce a kitten.
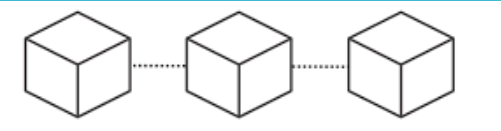
The Role of Blockchain Technology in Reshaping IP Protection and Ownership
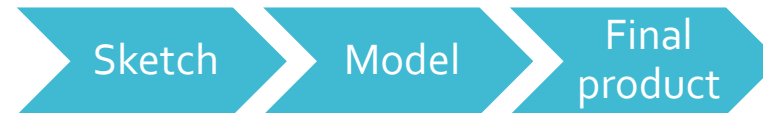
- **Provenance of goods**

  ➢ Provenance 'plus'? Industry platforms

  Example: 2018-2019 developments

  - LVMH's platform AURA

  - Compare with the IBM-Maersk shipping platform

- **Record of creatorship** – especially useful for non-registered rights?

  Sketch ➤ Model ➤ Final product

Blockchain Technology and IP

Context: IP Litigation

Example - China:

- Hangzhou Internet Court decision
- Supreme People's Court's provisions

> "…当事人提交的电子数据，通过电子签名、可信时间戳、哈希值校验、**区块链**等证据收集、固定和防篡改的技术手段或者通过电子取证存证平台认证，能够证明其真实性的，**互联网法院应当确认。**…"

Other emerging questions:

- Patenting of Blockchains
- Blockchain IP Registries

Tech-Trade: Treaty Nexus

IP-related trade developments

- ASEAN – Agreement on Electronic Commerce
- CPTPP

L Hsu, April 2019

Tech-Trade: Treaty Nexus

CPTPP's ASEAN signatories:

Brunei Darussalam, Malaysia, Singapore and Vietnam

Examples

E-Commerce Chapter

Article 14.4 – Non-discriminatory treatment of digital products
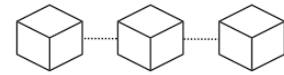
Article 14.17 – Source Code protection

Competition Chapter

Article 16.6

IP Chapter

Article 18.68 – Technological Protection Measures

What will be ASEAN's response?

L Hsu, April 2019

Thank you.

L Hsu, April 2019