Department of Justice
The Government of the Hong Kong Special Administrative Region

Legal issues on the use of Artificial Intelligence and other modern technology in cross border cases

Dr. James Ding
Commissioner
Inclusive Dispute Avoidance and Resolution (IDAR) Office
Department of Justice
Hong Kong Special Administrative Region of the People's Republic of China

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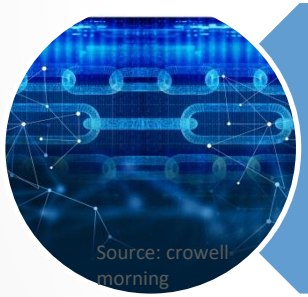
Modern technological advancement in the legal sectors

Artificial Intelligence (AI)



Distributed Ledger Technology (DLT)

Smart Contracts

Artificial Intelligence (AI)

- A **software** and **computer system** that **perform tasks** that previously require human intelligence.
- Can **process** and **analyze information** at a speed and scale **far beyond** any **human capabilities**.
- e.g. Machine learning, voice recognition, question answering, and text extraction and classification

Advantages of AI

Error reduction	• Help to reach accuracy with a greater degree of precision
Multi-tasking and repetitive	• Machines think faster than humans and can be put to multi-tasking
Non-stop	• Machines are programmed for long hours and can continuously perform without getting bored, distracted or tired

Legal issues concerning AI

(1) Creating legal risks and uncertainty on the validity of contracts entered into by AI

- might not be sufficient meeting of minds between the actual contracting parties concerned

(2) Civil liability caused by the fault of AI

- Responsibility (AI robots / Manufacturer / Users of the AI robot / Data provider?)
- Measurement of product defect of an AI robot

Distributed Ledger Technology (DLT)

- A **decentralized** public ledger
- **Duplicated** across a **network of computers**, which is **not controlled by** any **single entity**
- **Regularly updated** and the copies of it compared for consistency, so that it cannot be tampered with

Source: incpyts


Source: DATAFLOQ

Advantages of DLT

No central entity

- No central entity with direct access to users' private information
- Reduce the risk of data leaks resulting from cyberattacks or human error in the centralized platform

Encryption

- Protect data privacy on a DLT network
- Nobody other than the holder of the decryption key is able to unlock the encrypted data

Greater transparency

- Distributed log of records
- Making fraud and manipulation more difficult

Legal issues concerning DLT

(1) Application and enforceability of laws for cross border DLT networks

(2) Mechanisms for handling liability and dispute resolution if there is no centralized party administering a DLT network

(3) Compliance with personal data protection principles in relation to data sharing and perpetual storage

(4) Problems as regards conflicts of law between jurisdictions in insolvency proceedings as digital assets can be held and transferred in multiple jurisdictions

(5) Propensity of DLT networks to be used for conducting sham transactions (such as money laundering and tax evasion) without prior identity check

Smart Contracts

- Building on DLT, smart contract has been developed as a **special protocol** intended to contribute, verify or implement the negotiation or performance of the contract
- **Without the interference** of third parties in a traceable and irreversible manner

Advantages of Smart Contracts

Autonomy	• Execution is managed automatically by the network, rather than by an individual who may make mistakes
Trustworthy	• The contract is encrypted on a shared ledger. So, it cannot be misplaced or lost by any party
Backup	• The contract is duplicated many times over
Safety	• The data are encrypted and therefore more safe
Speedy	• Uses computer code to automate tasks
Save money	• No need to rely on a broker, lawyer or other intermediaries to confirm the contract
Accuracy	• Since it is an automated contract, human errors in preparing the contract will not arise

Questions for Smart Contracts

(1) Whether the contractual terms embodied in the computer code of a smart contract are conclusive?

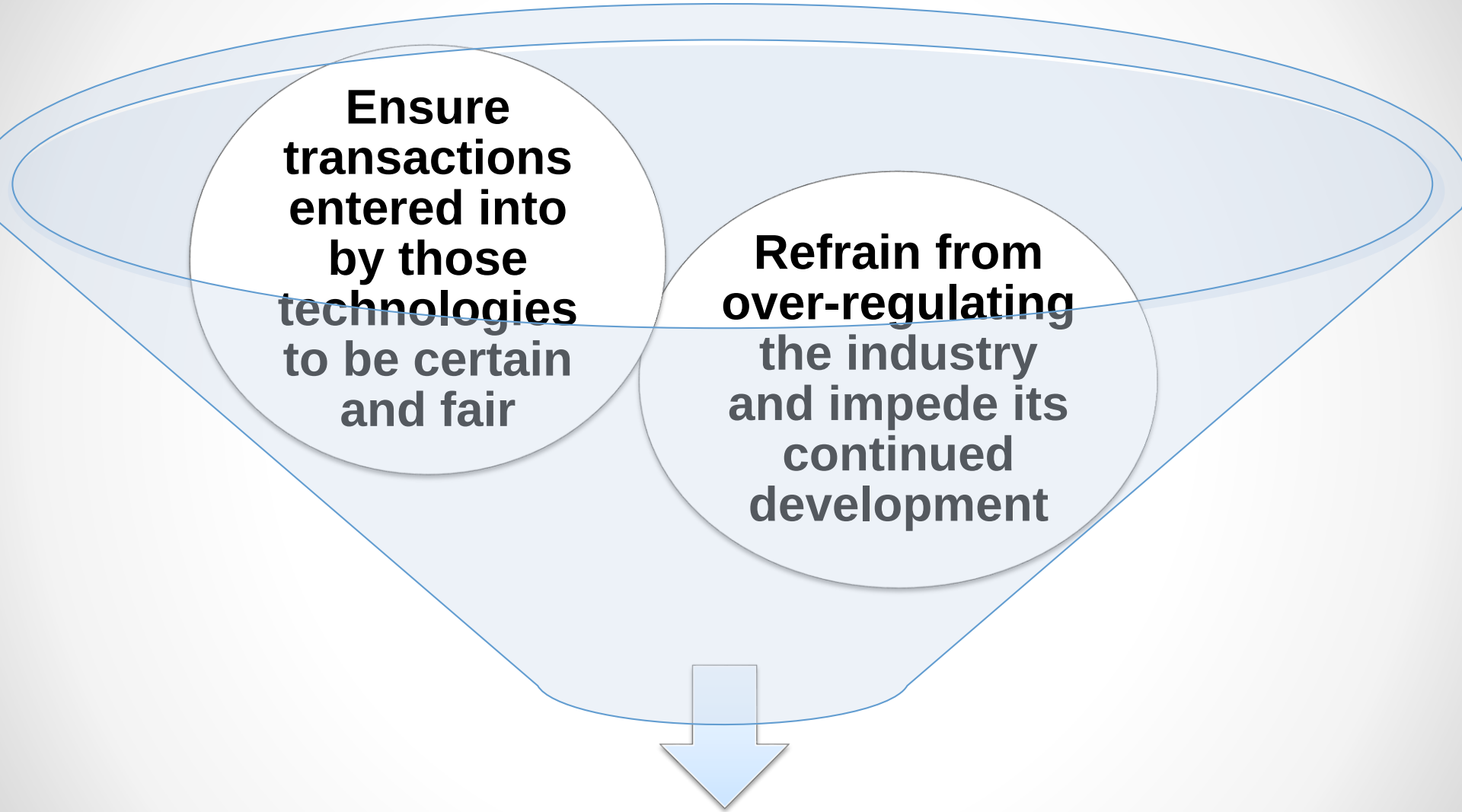
(2) What if there is no suitable automated remedy provided by a smart contract to resolve parties' disputes in a particular situation?

(3) In what ways should data stored in a smart contract to be admissible evidence at court? Any specified standard?

(4) In what manner should data stored in a smart contract be admitted at court? Witness statements on the content of the data or the data themselves?

(5) Are the automated enforcement mechanism of smart contracts always fair?

Core question should be considered



How to strike a delicate balance in conducting regulatory oversight to govern this vast and fast evolving digital ecosystem?

The work required at the international level

- **International community** would need to **work together** and develop some **standards, rules and principles** for **governing** them
- Such efforts would

  (i) enhance **uniformity** of treatment of smart contracts and DLT in **different jurisdictions**

  (ii) enhance the **legal certainty** and **reliability** of smart contracts conducted in DLT networks and benefit their users
- e.g. **Expert Workshop** jointly organized by **UNCITRAL** and **UNIDROIT** in Rome on 6-7 May 2019

Online Dispute Resolution (ODR) Initiative in Hong Kong (Background)

Sound legal and judicial systems with our common law system

Pool of talents

International legal and dispute resolution services centre in the Asia-Pacific region

ODR promoted by the Inclusive Dispute Avoidance and Resolution Office, Department of Justice

- Deploying **modern technologies** to further advance **Hong Kong's status** as an **ideal hub** for **deal-making** and **dispute resolution**
- Developing **online dispute resolution services**, and an **e-arbitration** and **e-mediation platform**

Advantage of ODR

Reduce costs	• Cost-effective
Resolving linguistic and geographical barriers	• Easily resolving their disputes through the use of negotiation, mediation and arbitration
Secure platform	• Facilitating online deal-making and resolving disputes among parties in any part of the world, including commercial and investment disputes involving B&R countries and within the Greater Bay Area
Attractive and useful for MSMEs	• The mechanism for online dispute resolution is particularly attractive and useful for MSMEs

eBRAM Centre

- **eBRAM Centre** – Electronic Business Related Arbitration and Mediation Centre
- Developing an **internet-based online platform** integrating **state-of-the-art technologies** (Neural Machine Learning on Translation, AI, IoT, Blockchain and Smart Contract, etc.)

Functions of eBRAM Centre

- Facilitating the provision of **cross-border one-stop dispute resolution services** to enterprises worldwide including the **B&R region**, member economies of Asia Pacific Economic Cooperation (**APEC**), as well as the **Greater Bay Area**, and **Mainland-focused enterprises**
- Providing **deal-making services** to **assist parties** to enter into **business deals** on a **secure** and **user-friendly online platform** as well as a full spectrum of Online Dispute Resolution (**ODR**) services

Advantages of eBRAM Centre

(1) Low-cost and affordable for enterprises of any size

(2) Provision of business opportunities and enhancement of training opportunities

(3) Enhancing Hong Kong's role as an international city of business in Asia

(4) Showcasing Hong Kong's unique status and capability under the "One country, Two systems" constitutional arrangement

(5) Promoting the use of various forms of Alternative Dispute Resolution in Hong Kong

eBRAM Centre (in the future)

- Will **launch** the online platform by the **end of 2019 or early 2020**
- Planning to **participate** in an **APEC ODR pilot project** for **resolving cross border disputes** for micro, small and medium size enterprises (**MSMEs**)

THANK YOU!